

Teacher Education in Austria: Description, Analysis, and Perspectives

In 1994 the European Commission had entrusted different consortia of higher education institutions (e.g. SIGMA) (i) to prepare descriptions and evaluations on various academic disciplines and/or fields of study at higher education level in the member states of the European Economic Area, (ii) to evaluate the impact of European Commission (education) programmes (e.g. ERASMUS) and (iii) to develop perspectives for the further development of these fields of study both at the level of the different member states and at European (Commission) level. It may be interpreted that the importance attached and the many problems perceived in the field of teacher education (TE)/Lehrerbildung might have influenced the decision that it had been selected for description and evaluation. In-depth descriptions and analyses of the different TE systems of the member states of the European Economic Area had to be prepared by experts of TE in the different member states. Subsequently (after an intensive discussion at an all-European conference held in Osnabrueck in 1995) these reports had formed the substance for comparative analysis and the drawing up of recommendations for the further development of TE (F.BUCHBERGER et al. 1996). Research done and recommendations developed have then been very well documented in a comprehensive publication (cf. T.SANDER et al. 1996). Within this context F.BUCHBERGER/K.-H.GRUBER (1996) had submitted their report on TE in Austria reflecting both the recent state and the problems of TE in Austria in 1995 as well as perspectives for its development.

Since the first production of this article in 1994/1995 changes in the context of education policy may be observed. Neo-liberal and to some extent neo-conservative ideologies have increasingly won ground in Austria. Closely related to (sometimes narrowly conceived) theories of human capital (cf. World Bank 1995) education and training have increasingly been bound to economic and social policy issues (e.g. NAP 1998). Having become a member of the European Union in 1995 problem definitions and education policies of the European Union have strongly begun to impact on the education discourse and on education policy in Austria. Against this background it seems to be challenging to analyse (i) which problems of TE perceived in the first half of the nineties could find solution(-s) until 1998, (ii) which new needs have emerged in the meanwhile, and (iii) which solutions are discussed recently to meet these adequately. In dealing with these issues the article will mainly follow the guidelines set for the initial report to the European Commission.

0 Preliminary remarks on the Austrian school system

The legal base for modern education laws (School Organization Act/Schulorganisationsgesetz) has been established in Austria by a completion of the constitution in 1962. This act has replaced regulations dating back to the Hapsburgian Monarchy (until 1918) and the First Republic (1919-

1938). Any major decisions in education and training (e.g. concerning school organisation or the organisation of TE) rest with Parliament and need to be passed by a majority of two thirds of all parliamentary votes, which presupposes consensus among the leading political parties of the country (Social Democrats, Christian Democrats/Oesterreichische Volkspartei) on matters of education and training. Additionally, because of the federal structure of the Republic supplementary acts for compulsory education have to be made by the Parliaments of the (nine) federal states/Landtage der Bundeslaender. Since 1962 several amendmets to the basic School Organization Act/Schulorganisationsgesetznovellen have been made.

Till now the most salient features of the Austrian education system are its pronounced centralism in legislation (despite of its federal structure) and its bureaucratic form of administration focussing on the principle of legality/Legalitatesprinzip of the constitution. State administration is legally bound by law with schools as institutions being subject to state administration. There are further characteristics peculiar to the Austrian education system:

- (i) The Ministry of Education and Cultural Affairs possesses far-reaching authority and independence (e.g. syllabi).
- (ii) The same applies to Local Education Authorities in the nine federal states/Bundeslaender of the Republic (e.g. influence on TE at Colleges of Education and the continuous education of teachers).
- (iii) Policy in Austria in general and education and training policy in particular follow a consensus model where many institutions, organisations and groups have to play important roles (e.g. as regards the development of national syllabi). This consensus model adopted reflects the political culture of Austria. Owing to the particular nature of Austrian politics, a preparliamentary space is of considerable importance. As regards TE in addition to the bodies mentioned above the following groups/"actors" are involved in this preparliamentary space (cf. "social arena of TE", T.POPKEWITZ 1993): Churches (esp. the Roman Catholic Church because of the treaty between the Republic of Austria and the Holy See/Konkordat), various chambers (e.g. federal chamber of economy/Bundeswirtschaftskammer, chamber of employees/Arbeiterkammer) and the association of industrialists/Industriellenvereinigung, the trade union/Oesterreichischer Gewerkschaftsbund and its different organisations for different groups of teachers (e.g. for teachers educated at Colleges of Teacher Education, teachers educated at University), teacher associations/Lehrervereine of the different political parties, Universities (e.g. conference of rectors), institutions of initial teacher education and administration (e.g. staff of Ministries and Local Education Authorities).

Main regulations of the School Organization Act (1962) may be described as follows:

- (i) Students are obliged to participate in instruction/Unterrichtspflicht for nine years (nine grades) beginning at the age of six.
- (ii) Two opportunities have been established to fulfil this obligation: (a) at public compulsory schools/Pflichtschulen: primary school (grades 1-4), lower secondary school/Hauptschule (grades 5-8), polytechnical school/Polytechnische Schule (grade 9), schools for special education/Sonderschulen (grades 1-9); (b) at an optional type of school/Wahlschule named "Allgemeinbildende Hoehere Schule" consisting of a lower secondary part/Unterstufe (grades 5-8) and an upper secondary part/Oberstufe (grades 9-12) which may be finished with a qualified school leaving examination/Reifepruefung. Public compulsory schools and Allgemeinbildende Hoehere Schule are defined as the general education sector of the Austrian school system/Allgemeinbildendes Schulwesen.

- (iii) The vocational sector of the education/Berufsbildendes Schulwesen consists of four different types of schools: (a) compulsory vocational education/Berufsbildende Pflichtschule (grades 9-11/12) organized as part-time school in a dual system for apprentices; (b) vocational schools at intermediate level/Berufsbildende Mittlere Schule (grades 9-11); (c) vocational schools (e.g. specialized in business or technical education and training) at higher level/Berufsbildende Hoehere Schulen (grades 9-13) which may be finished with a qualified school leaving examination/Reifepruefung; (d) "Kollegs" (grades 13-14) providing programmes to obtain vocational qualifications for students holding a qualified school leaving certificate of "Allgemeinbildende Hoehere Schule".
- (iv) Colleges of Teacher Education/Paedagogische Akademie have been established as schools at post-secondary level for the initial education of teachers (ITE)/Lehrerausbildung for primary school with a programme of a duration of two years. Subsequent amendments to the School Organization Act have brought about changes in the duration of the programme and expanded the mission of Colleges of Teacher Education to the education of teachers for lower secondary school/Hauptschule, polytechnical school/Polytechnische Schule and special education/Sonderschule.

Without being subject to the School Organization Act and separated from ITE at Colleges of Teacher Education ITE at University could find a new legal base in 1971. For more than hundred years Universities had only been obliged to provide the theoretical foundations in two academic subjects and pedagogy for (prospective) teachers who after completion of their studies at University had to take a state examination/Staatspruefung ("Lehramtspruefung fuer Hoehere Schulen") with school administration responsible for this examination. Having passed this state examination graduates had to take practical training at schools organized and supervised by school administration and excluding University. For the first time the new regulations of 1971 have introduced ITE at University as (i) a masters programme/Diplomstudium (comparable to other branches of research-oriented fields of study) lasting 4.5 years, (ii) ending with a final exam at University and (iii) leading to an academic graduation. ITE has been constructed as a one-phase model of TE consisting of studies in (two academic) subjects, educational studies and studies in subject didactics/Fachdidaktiken as well as school practice of a short duration. This model came into force then in 1985.

1 Contextualizing Austrian teacher education

1. It was in the late sixties that education and training were given political priority in Austria because of a growing awareness of the important role played by education and training in social and economic development as well as to the recognition of severe shortcomings in the field of education and training. Until mid of the nineties great efforts have been made to improve and to expand the Austrian education and training system. Enormous financial investment had since led to the evolution of an education and training system that may definitely be called efficient even if seen in relation to international standards. The process of school reform till mid of the nineties had resulted in a wealth of both quantitative improvements (e.g. enormous expansion of technical, economic and vocational schools at upper secondary level) and qualitative improvements (e.g. "silent reform" of primary education, introduction of inclusive education or of new information and communication technology). However, except the higher education sector (e.g. introduction of Fachhochschulen/polytechnics) structural reforms of the primary and secondary sector of the education and training system have only become partially effective and that is why there still exist problem areas that are in need of reform such as (i) an early selection after four years of primary education, (ii) problems at lower secondary level (grades 5-8) as regards both structure (e.g. three different types of school)

and content (e.g. modernization of national syllabus), or (iii) an upper secondary sector of education (grades 9-12/13) that is highly differentiated and lacking permeability.

2. Until recently particular care and attention was devoted to teachers (e.g. substantial improvements of working conditions and salaries; cf. OECD 1995) and to TE - to initial teacher education (ITE)/Lehrerausbildung as well as to the continuous education of teachers (INSET)/Lehrerfort- und Lehrerweiterbildung. As a result Austria has got a competent and (until recently very) committed teaching force. Under the leitmotif “professionalization” (of teaching and TE) and aiming at improving the quality of education reforms have been made in most areas of TE: (i) Step by step almost all forms of ITE (except that for kindergarten staff) were transferred into the post-secondary sector of the education system with almost all courses now lasting a minimum of three years. (ii) ITE programmes for teachers at lower secondary level/Hauptschule and polytechnical course/Polytechnischer Lehrgang (grades 5-8/9), (iii) in special education/Sonderschule (with a focus on inclusive education), (iv) in compulsory vocational education/Berufsbildende Pflichtschule (grades 10-12/13) or for (v) commercial schools (grades 9-11/13) were established. (vi) ITE at University for teachers at lower and upper secondary level/Lehramt fuer Hoehere Schulen (grades 5-8 and 9-12/13) was subject to main reforms: After its first reform (see introductory chapter) it was supplemented by a period of practice at school (“Unterrichtspraktikum”) lasting one year. Additionally, a very recent change of law (Universitaetsstudiengesetz 1997) may bring about some major changes. (vii) Finally, a dense network of INSET institutions/Paedagogische Institute had been established.

These changes outlined followed mainly a “more of the same”-strategy (cf. similar trends in most member states of the Council of Europe, G.NEAVE 1987). Having adopted this strategy improvements and reforms have mainly been made within different (sub-) systems of TE. As a result Austria has now got different and rather fragmented (sub-) systems of TE and most of them may definitely be called efficient.

3. There was and still is a close link between measures aiming at school improvement and those aiming at a reform of TE with TE being mainly a successor of the former. That is why TE shares both the strong points and the shortcomings of the former. Whereas the favourable conditions referred to above until mid of the nineties have led to enormous quantitative and qualitative improvements in most fields of TE, far-reaching structural reforms are still pending (e.g. ITE for teachers at lower secondary level of the education system, cf. K.H.GRUBER 1990, 1998). Amongst other this also means that at the present moment teachers for different types of schools are undergoing different forms of education in different institutions with variations in the duration of courses and an implied difference in status later on. There exist (i) more than eight different types of ITE bound to different types of schools, (ii) organised at separate institutions (e.g. Colleges of Teacher Education/Paedagogische Akademie, Colleges of Vocational Teacher Education/Berufspaedagogische Akademie, different faculties of Universities, INSET institutes/Paedagogisches Institut), (iii) at different levels of the education system (upper secondary, post-secondary, higher education), (iv) following different rationales (e.g. concurrent/integrated, “sandwich” and consecutive) and (v) rooted in different traditions (e.g. “seminaristic” or “academic traditions”; cf. F.BUCHBERGER 1994). (vi) These differentiations are also carried over into INSET. On a structural level three features are generally considered problematic: (i) the high degree of separateness, (ii) the lack of permeability among existing TE programmes (although some recent changes intend to increase permeability), and (iii) the ensuing lack of integration that also makes itself felt between ITE and INSET.

Except for teachers in special education and for teachers of technical subjects at upper secondary level of the education system there is an increasing surplus of (young) teachers for all the other types of school. At the same time the average age of Austrian teachers is approximately 42 years

and frequent retirements may not be expected the near future. This fact implies that all new tasks school is confronted with in a rapidly changing society have to be achieved with a “greying profession”. Coherent measures to tackle this problem have not been taken yet (e.g. making continuous education of teachers compulsory, introduction of effective support structures, cf. P.POSCH 1996). At the same time most institutions of ITE (especially Colleges of Teacher Education and Colleges of Vocational Teacher Education) had to begin to react to a rapidly decreasing number of students and they have introduced additional study programmes/Zusatzstudien for (prospective) teachers, become more active in the further education of teachers or by stronger involvement in educational research. However, coherent measures how to make sufficient utilization of too large capacity available have still to be missed.

4. Increasingly since mid of the nineties discussions and activities on school improvement have focused on the following issues:
 - (i) human resource development and its improvement especially as regards education and training at upper secondary and at post-secondary level - education and training issues have increasingly become subject to economic and social policy (cf. NAP 1998);
 - (ii) restructuring the administrative and organizational structure of the education system by focussing on principles of “deregulation”, “decentralization” and “autonomy” and of measures of a “New Public Management”;
 - (iii) economic restructuring of the entire education system with the State taking reduced financial responsibility asking at the same time for private investment by economy and by introducing again fees (from parents/students) as has been the case until the early sixties;
 - (iv) increased focus on quality evaluation and quality management (cf. P.POSCH/H.ALTRICHTER 1997) rather closely related to administrative, organizational and economic issues, but less to content issues;
 - (v) modernization of the national syllabi/Lehrplaene focussing on deregulation (“lean syllabi”) and on the autonomy of schools as regards procedural issues and on “core qualifications”/ Schluesselkompetenzen as well as competence for life-long learning as regards content issues;
 - (vi) restructuring the lower secondary level of the education system (cf. organizational structure);
 - (vii) restructuring the upper secondary sector of the education and training system with focus on programmes of study, permeability and aptness to life-long learning and training;
 - (viii) restructuring the post-secondary sector of education and training (e.g. ITE at Colleges of Teacher Education) and higher education (cf. C.EINEM 1998);
 - (ix) “internationalisation” of the education and training system and implications of having become a member of the European Union (e.g. recognition of academic diploma), and
 - (x) dealing adequately with the multimedia revolution and its implications for teaching and learning.

Most of these issues may be seen in close relationship with education developments in other member states of the European Union. Within Austrian education politics they reflect a neo-liberal shift of the education policy of the leading Social Democrat Party and a growing influence of both neo-liberal and neo-conservative ideologies represented by the Christian Democrat Party/Oesterreichische

Volkspartei being partner of the Social Democrat Party in Government for more than a decade. Because of the close links between school reform and TE these issues and activities mentioned above will have strong influence both on teachers (e.g. aggravation of conditions of work) and TE (e.g. substantial reform of its curricula). In addition to problems persisting in the different programmes/(sub-) systems of TE, these issues may be seen as important elements of the problem-space for improvements and reforms within the different (sub-) systems of ITE as well as its overall structure, and for INSET.

5. Since mid of the nineties the “actors” in the “social arena” are involved in sometimes heated discussions on the administrative and economic restructuring of the education system in general and TE in particular. These discussions may be explained both (i) by changed/changing perceptions as to which role the State and the public sector ought to play in education and (ii) by (contemporary) budgetary constraints the State seems to be confronted with (cf. critical remarks on this rhetoric U.BECK 1997). As regards economic restructuring Government, the chamber of merchants or the association of industrialists claim (i) that public expenditure for education has become too high (e.g. salaries of teachers because of a civil servant system bound to bi-annual increases of salary and the age structure of the teaching force), (ii) that the cost effectiveness of the education system had to be improved (e.g. too small class sizes), and (iii) that public expenditure for education and training had to be reduced in general by introducing measures of new public management and quality control in particular. Most other “actors” involved argue that an education system of highest quality calls for best resources possible. Teachers as well as staff at institutions of TE and their Trade Union view the attempts of the Government outlined as an attack against their professional status and against the high quality of the Austrian education system. At present it is debatable whether perceived problems of administrative and economic restructuring (necessary) can be solved within the consensus model outlined or education policy in Austria will increasingly become subject to a conflict model (cf. political factors affecting change in TE, H.SIMOLA/T.POPKEWITZ 1996). Additionally, it may be feared that the recent focus on administrative, organizational and economic issues might lead to omissions as regards education and training issues being in strong need to be improved.

2. Description of the Austrian system of teacher education

Following an overview of the entire system of ITE in Austria this chapter will present a detailed description of the main (sub-) systems of ITE in Austria. A second part will deal with the continuous education of teachers/Lehrerfort- und Lehrerweiterbildung. In a third part descriptions will be given on the impact of European Commission co-operation programmes on TE in Austria.

2.1 Initial teacher education/Lehrerausbildung

Decisions as to the structure and organization of ITE in almost all aspects (institutions, duration of programmes, course structures, exam regulations, certificates) are taken by Parliament and Government (e.g. Ministry of Education and Cultural Affairs, Ministry of Science and Traffic). Colleges of Teacher Education/Paedagogische Akademien as well as Colleges of Vocational Teacher Education/Berufspaedagogische Akademien (and even institutions of INSET/Paedagogische Institute) have to follow national laws (e.g. School Organization Act/Schulorganisationsgesetz) and decrees (e.g. syllabus for Colleges of Teacher Education/Lehrplan der Paedagogischen Akademie), which define structure, aims, subjects and content of TE programmes (cf.

F.BUCHBERGER/J.RIEDL 1987a,b, 1989a,b). Although law guarantees (academic) freedom (of teaching)/*Freiheit der Lehre* to Universities national laws and decrees by the Ministry of Science and Traffic define the basic structure, aims and fields of study of ITE programmes at University (e.g. *Universitaetsstudiengesetz* 1997). Thus all institutions of ITE in Austria are fairly similar in structure yet (changes may be expected for ITE at University when new regulations decreed by *Universitaetsstudiengesetz* mentioned above will become to impact). And to add one more characteristic of TE in Austria, structure and organization of TE are geared to the different types of schools and the categories of teachers required there.

Colleges of Teacher Education and Universities are the two main providers of ITE. Colleges of Teacher Education have their origin in former teacher seminars/*Lehrerbildungsanstalten* which were located at the upper secondary level of the education system. They have been established in 1967/1968 and have to educate teachers for compulsory schools. Rooted in a “seminaristic tradition” (“*ecole normal tradition*”) they follow (i) a concurrent model of ITE, at which the four components of the programme (educational sciences/*Humanwissenschaften*, academic studies/*Fachstudien*, subject didactics/(*Fach-*) *Didaktiken*, teaching practice/*Schulpraktische Studien*) have to be studied in parallel, and (ii) a one-phase approach which implies that graduates of Colleges of Teacher Education have the status of fully-fledged teachers (a “probationary period” was abolished by the School Organization Act in 1962). ITE for teachers of general subjects at lower and upper secondary level of the school system/*Allgemeinbildende Hoehere Schule* (grades 5-8 and 9-12) and for teachers of general subjects at commercial and technical schools/*Berufsbildende Mittlere und Hoehere Schulen* (grades 9-11-13) (“*Lehramt an Hoeheren Schulen*”) at University is rooted in an “academic tradition” oriented on the Humboldtian principle of “*Bildung durch Wissenschaft*” (literally translated as “education through science”) and focusing on the study of “academic disciplines”. This model of ITE is divided into two parts. A first part is organized by University and a second one by Local Education Authorities. Students may obtain a masters degree upon successful completion of the programme at University. The second part focuses on teaching practice and it is only a positive assessment of teaching practice that then gives the status of a fully-fledged teacher.

Many concepts such as “academic training”, “professional studies”, “educational sciences”/*Erziehungswissenschaften* or “subject didactics”/*Fachdidaktik* frequently used in descriptions of (European) systems of TE have different meanings in different cultural contexts. This fact may be seen in close relationship with confusion and misunderstanding produced sometimes by publications on TE in Europe (cf. F.VANISCOTTE 1989). To avoid misunderstanding as far as possible the following description of ITE in Austria will (i) adopt concepts used in main recent publications on TE in Europe (cf. F.BUCHBERGER 1994, EURYDICE 1998, T.SANDER et al. 1996), (ii) make use of OECD terminology in describing education systems, (iii) follow main structures of the system of ITE in Austria (different types of schools and categories of teachers required there), and (iv) use both Austrian and - as far as possible equivalent - English concepts (cf. H.VAN DAELE 1997).

Figure 1: Systems of ITE

Programme/ Schools/Levels	Entrance requirements	Location	Course structure/ Duration	Qualification/ Title
Kindergarten (age 3-6)	Lower secondary school leaving certificate (after 8 years of schooling)	Upper secondary level; Bildungsanstalt fuer Kindergarten- paedagogik	Integrated model; 5 years	Kinder- gaertner/in
Primary school/ Volksschule (grades 1-4)	Qualified school leaving certificate of an upper secondary school /Matura or special entrance exam (Studienberecht- igungspruefung)	Post-secondary level; Colleges of Teacher Education	Concurrent/integrated model (25% educational sciences, 50% subject didactics in all subjects of primary school, 25% teaching practice) 168 weekly units of tuition minimum duration: 6 semesters one-phase approach	Lehramts- zeugnis fuer Volksschulen; Certificate for Teaching/ Volksschul- lehrer/in
Lower secondary school/ Hauptschule (grades 5-8) and Polytechnischer Lehrgang (grade 9)	see primary school	see primary school	Concurrent/integrated model (25% educational sciences, 50% academic studies in in 2 subjects; 25% teaching practice) minimum duration: 6 semesters one-phase approach	Lehramts- zeugnis fuer Hauptschulen; Certificate for Teaching/ Hauptschul- lehrer/in
Special education/ Sonderschule (grades 1-9)	see primary school	see primary school	see primary school; main parts of educational sciences and subject didactics are devoted to special education; specialization in one field of special education; 168 weekly units of tuition; minimum duration: 6 sem. one-phase approach	Lehramts- zeugnis fuer Sonderschulen; Certificate for Teaching/ Sonderschul- lehrer/in
Lower and upper secondary school/Allge- meinbildende Hoehere Schule (grades 5-8/9-12) and general subjects in vocational schools at upper secondary level / Berufs- bildende Mittlere und Hoehere Schulen (grades 9- 11/12/13)	see primary school	1st part: University 2nd part: Practicum/ Unterrichtspraktikum (Local Education Authorities, schools, Pedagogical Institutes)	1st part: study of 2 academic isciplines including subject didactics; educational studies including school practice (appr. 12 weekly units of tuition/sem.) duration: 4.5 years (9 sem.) 2nd part: teaching at schools, courses in education, science of teaching, subject didactics, school administration duration: 1 year two-phase approach	Masters degree Certificate for Teaching/ Lehrbe- rechtigung fuer das Lehramt an Hoeheren Schulen

Vocational school/Berufsbildende Pflichtschule (grades 10-12/13 and practical subjects at upper secondary level/Berufsbildende Mittlere und Hoehere Schulen (grades 9-11/13)	Qualification as a master craftsman, two years of experience in a trade and participation in special introductory courses; or: qualified school leaving certificate of a (technical/commercial) school at upper secondary level and practical experience	Post-secondary level;Colleges of Vocational Teacher Education/Berufspaedagogisch Akademie	Concurrent/integrated model (subject studies, methodology, teaching practice); duration: (normally) 2 years one-phase approach	Lehramtszeugnis fuer Berufsbildende Pflichtschulen; Berufsschullehrer/in Certificate for Teaching
Commercial schools (grades 9-13)	see primary	University, two years of experience in enterprises	Diploma programme; integrated model (academic studies, business education, educational sciences, teaching practice); duration: 4.5 years (9 sem.)	Masters degree Lehrer/in an Berufsbildenden Mittlere und Höheren Schulen
Technical schools (grades 9-13)	see primary	University, two years of experience in enterprises	Academic studies (min. 9 sem.) at University; INSET programmes	e.g. Dipl.Ing. (diploma) see commercial schools

A simplified overview of the main subsystems of ITE in Austria will be presented below in figure 1. Subsequent descriptions will focus on six categories: (i) institutions, (ii) staff, (iii) entrance requirements, (iv) organization of studies, (v) examinations/certificates, (vi) research). For detailed descriptions of the various (sub-) systems of Austrian TE see F.BUCHBERGER (1996).

2.1.1 Personnel for pre-primary education (kindergarten)

Education at pre-primary level (age 3-6) is mainly provided in kindergarten. Austrian law defines that education at kindergarten is not part of the school system. This implies that the education of personnel for kindergarten education is separated from ITE and its institutions and may not be seen as (an integral) part of ITE in Austria.

1. *Institutions:* The education of (prospective) personnel for kindergarten is organised at separate schools at upper secondary level (Bildungsanstalten fuer Kindergartenpaedagogik). These schools have training schools of their own (Uebungskindergarten), where students do their teaching practice and teachers of these schools are involved in the development of innovative practice.

2. *Staff:* Staff at these institutions consists of two different groups. General subjects are taught by teachers who have to hold a masters degree obtained at University. The same applies to teachers for educational studies or psychology. Methodology lessons and clinical supervision of (kindergarten) practice are given by experienced staff of kindergarten.

3. *Entrance requirements:* Admission is possible earliest after eight years of schooling after successful completion of lower secondary school at the age of fourteen.

4. *Organization of studies:* These schools have to follow a national syllabus. This national syllabus integrates general education, professional education (e.g. pedagogy, educational psychology, methodology), and kindergarten practice.

5. *Examinations/Certificates:* The programme lasts a duration of five years and may be finished with written and oral examinations/Reifeprüfung. This qualified school leaving certificate (equalling five A-levels) permits both to apply for a post at kindergarten and to study at institutions of higher education (e.g. ITE at Colleges of Teacher Education, University).

2.1.2 Teachers for compulsory education

1. *Institutions:* Colleges of Teacher Education/Paedagogische Akademie have responsibility to educate (prospective) teachers that intend to obtain a teaching certificate/Lehramtszeugnis for compulsory education either (i) in primary school/Volksschule (grades 1-4), (ii) lower secondary school/Hauptschule (grades 5-8), (iii) polytechnical courses/Polytechnischer Lehrgang (grade 9) or (iv) special education (grades 1-9). Austria has a dense network of Colleges of Teacher Education. There is one State College of Teacher Education/Paedagogische Akademie des Bundes per federal state. In addition to these 9 institutions another 5 colleges are run by the Roman Catholic Church (Paedagogische Akademie der Dioezese). With a total number of about 4500 students at all of these colleges it is not surprising that there should be some educating no more than 200 students. This means that ITE for teachers for compulsory education is organized in the regions/federal states in small units. In addition to ITE Colleges of Teacher Education may offer INSET programmes.

2. *Staff:* Staff of Colleges of Teacher Education consists of three groups: (i) professors of educational sciences/Humanwissenschaften and academic disciplines/Fachwissenschaften have to fulfil the following requirements to be appointed: doctors and/or masters degree, research documented by publications and six years of teaching practice assessed with very good; (ii) lecturers in subject didactics/(Fach-) Didaktik have to hold either an academic diploma of a University or two teaching certificates of a College of Teacher Education, document research and development with publications, and six years of teaching practice assessed with very good; and (iii) teachers at training/model schools/UebungsschullehrerInnen that have to fulfil similar criteria for appointment as lecturers.

3. *Entrance requirements:* Applicants have to fulfil the following requirements: Qualified school leaving certificate of an upper secondary school/Reifeprüfung which may be obtained earliest after 12 years of schooling. Other applicants with experience in various occupations and who do not hold a school leaving certificate of an upper secondary school may take preparatory courses and then take an entrance examination (Studienberechtigungsprüfung). Although the percentage of the second group is increasing ("mature students") the majority of students decides at the age of 18/19 for the teaching profession. In addition to these entrance requirements other criteria are tested for both groups, but these are only of limited importance. Numerus clausus regulations do not exist.

4. *Organization of studies:* Colleges of Teacher Education offer separate programmes for prospective teachers for the four types of schools mentioned above. These programmes have to follow a national syllabus (Lehrplan der Paedagogischen Akademie). They last a minimum of 3 years (6 semesters) and consist of 168 weekly units of tuition which equals around 2500 units (45 minutes each) of tuition. The programmes follow a concurrent model. This means, that (i) educational studies/Humanwissenschaften (appr. 25%), (ii) subject didactics/(Fach-) Didaktik, (iii) academic disciplines/Fachwissenschaften, and (iv) teaching practice (approx. 25%) have to be studied in parallel (cf. F.BUCHBERGER/J.RIEDL 1987).

Student teachers in each of the four programmes have to study educational studies/Humanwissenschaften (e.g. pedagogy/Erziehungswissenschaft, science of teaching and general didactics/Unterrichtswissenschaft, educational psychology, educational sociology, and special education/Sonderpaedagogik). The same applies to teaching practice/Schulpraktische Ausbildung.

Each College of Teacher Education has a training/model school/Uebungsschule of its own, where students do part of their teaching practice and many teachers are involved in research and the development of innovative practice (e.g. new methods of teaching and learning). In addition, each College of Teacher Education has a network of (training) schools with co-operating teachers specially trained/Ausbildungslehrer. Student teachers do there their weekly teaching practice/Tagespraktikum and practica of a longer duration/Blockpraktika. Teaching practice is organized in small groups, where one supervisor of the college, three co-operating teachers and around eight students form a quality circle (cf. H. BRENN et al. 1997, F.BUCHBERGER et al. 1997).

(Prospective) Teachers for primary school train in subject didactics/(Fach-) Didaktik for all learning domains given at primary level. The same applies to teachers for special education, but with focus on inclusive education and special needs. (Prospective) Teachers for lower secondary school/Hauptschule and polytechnical courses/Polytechnischer Lehrgang train in two (school) subjects. Subject studies consist of academic studies (around 450 units of tuition per academic subject) and subject didactics (around 150 units of tuition per subject). Students have to choose a first subject (either German, English or Math) and a second subject (out of a list of another 12 school subjects).

In addition to the four programmes outlined Colleges of Teacher Education may offer programmes for additional studies/Zusatzstudien (e.g. multicultural education, information and communication technology, adult education). These programmes are open to prospective teachers as well as to teachers of schools and may lead to additional teaching certificates.

5. *Examinations/Certificates:* Studies at Colleges of Teacher Education may be finished with a final examination (Lehramtspruefung) which consists of the following components: (i) two oral examinations both in educational sciences and the academic subjects (including subject didactics), (ii) a written thesis/Hausarbeit which has to deal with a professionally relevant topic and to integrate educational studies, academic studies in the subjects and subject didactics as well as teaching practice, (iii) written examinations/Klausuren in the subjects/subject didactics, and (iv) the positive assessment of teaching practice. The successful completion of the programme permits to apply for a teaching post without being obliged to take part in induction programmes (= one-phase approach).

6. *Research:* Staff of Colleges of Teacher Education may be involved in research and development (Paedagogische Tatsachenforschung). The focus of research activities is on subject didactics, science of teaching, methodology of higher education/Hochschuldidaktik, teaching practice and educational psychology. Additionally, many professors and lecturers are involved in school development projects. In preparing a written thesis/Hausarbeit student teachers get to know (scientific) research both of “academic” and “professional” relevance. These frequently adopt an action research approach.

2.1.3 “Lehramt an Hoeheren Schulen”

ITE for teachers for “Allgemeinbildende Hoehere Schule” (lower and upper secondary school; grades 5-8 and 9-12) and general subjects at commercial and technical schools/Berufsbildende Mittlere und Hoehere Schulen (grades 9-11/13) qualifies to “Lehramt an Hoeheren Schulen”. This model follows a two-phase approach. The first part of a duration of nine semesters (4.5 years) takes place at University as a masters programme. The second part of a duration of one year (“Unterrichtspraktikum”) is organized under the responsibility of Local Education Authorities and takes place primarily at schools and at (non-university) INSET institutes/Paedagogische Institute.

2.1.3.1 First part

1. *Institutions:* As mentioned above the first phase of ITE for teachers for “Allgemeinbildende Hoehere Schule” and general subjects at commercial and technical schools takes place at Universities. Universities do not have training/model schools (“Uebungsgymnasien”) of their own.
2. *Staff:* Staff consists mainly of two groups. Lessons in (academic) subjects and subject didactics related to them and in educational sciences/Erziehungswissenschaften are given by professors and lecturers of the various (subject) departments. Staff of centres for school practice/Zentrum fuer das Schulpraktikum (professors, lecturers, teachers) is responsible for school practice. (Scientifically highest qualified) Personnel teaching in ITE is neither obliged to have experience in teaching at schools nor to hold a teaching diploma or certificate.
3. *Entrance requirements:* Applicants have to fulfil the following requirements: Qualified school leaving certificate of an upper secondary school (Reifepruefung) which may be obtained earliest after 12 years of schooling. Other applicants with experience in various occupations may take preparatory courses and then take an entrance examination (Studienberechtigungspruefung). As with all other programmes of study at University students of TE have to take seminars (around 30-90 units of tuition in the first two semesters at University) which aim at an orientation to the teaching profession.
4. *Organization of studies:* ITE at University is defined as a diploma programme consisting of the following components: (i) a combination of studies in two (academic) disciplines and related subject didactics (appr. 85 % of the study period, (ii) educational studies, and (iii) school practice. It is structured in two parts and lasts 9 semesters (=4.5 years). A first part of a duration of 4 semesters is (mainly) devoted to academic studies in (two) disciplines and finishes with the first diploma examination. During the first year of study students have to attend special seminars for orientation (see above). A second part lasts 5 semesters. It consists of (i) academic studies in (two) disciplines which ought to focus on needs of the teaching profession and school (subjects), (ii) subject didactics (90-180 units of tuition in each of the two subjects) organized under the responsibility of subject departments, (iii) educational studies (appr. 150 units of tuition) under the responsibility of departments of educational sciences, and (iv) school practice/Schulpraktikum (four weeks of preparation and eight weeks of experience in the two subjects) organized by centres for school practice/Zentrum fuer das Schulpraktikum.
5. *Examinations/Certificates:* This second part of universitarian studies may be finished with the second diploma examination after completion of a diploma thesis (which has to be written in one of the two academic disciplines and might include subject didactics). Students successful may obtain a masters degree (Lehramt an Hoeheren Schulen).
6. *Research:* Staff of subject departments and departments of educational sciences is obliged to do scientific research, but topics of research do not very frequently relate to teaching, the teaching profession or TE. The highest academic qualification/Habilitation in the Austrian university system which requires the preparation of a “habilitation thesis” has only in very few cases been written on problems of subject didactics. This fact may be brought into close connection to deficits in the development of a science of teaching and the teaching profession. As mentioned above (prospective) teachers have to prepare a diploma thesis in one of the two subjects/disciplines they study. This implies that (prospective) teachers are actively involved in scientific research in one of their subjects. Because of this and the limited amount of time devoted to studies in educational sciences (prospective) teachers have only very limited opportunity to get to know or to be involved in research on professionally relevant topics in educational sciences or subject didactics.

2.1.3.2 Second part

Having obtained a masters degree from University does not yet fully qualify the graduate for definite employment as a teacher. University graduates must take an additional year/Unterrichtspraktikum in the course of which they are (i) teaching at school with a reduced teaching load and they are (ii) supervised by a specially trained teacher/Betreuungslehrer/in. (iii) Parallel to this they must attend courses organized by INSET institutes which deal with pedagogy, general didactics/Allgemeine Didaktik, subject didactics/Fachdidaktiken and school administration. Personnel for running these courses is (mainly) recruited from a pool of experienced teachers. The overall responsibility for this one-year course rests with the Local Education Authorities. It is only after the successful completion of that one-year practicum (e.g. positive assessment of teaching practice) that the trainee has reached the full status of a teacher.

The introduction of this second part (“Unterrichtspraktikum”) has restored an important influence of school administration on ITE at University which ought to become fully academic as law of 1971 indicated. School administration had criticized ITE at University (legally reformed) before it has been materialized. It also has to be mentioned that there was big interest with prospective teachers to enter the (compulsory) second part because of the payment of a reduced salary during this part.

There exist sometimes very strict separations both within the different components of ITE at University and between the two parts of this model of ITE. At University fragmentations may be explained by the fact that responsibilities have to be shared between two subject departments (sometimes) attached to different faculties, the department of educational sciences and the centre for school practice. As regards the relationship of curricula of the first and the second part there seems to be a lack of coordination. The curricula seem to follow different rationales rooted in a set of sometimes implicit and hidden assumptions (cf. the Humboldtian principle of “Bildung durch Wissenschaft”, “superiority” of knowledge in academic disciplines compared to knowledge in educational sciences and professional competence).

2.1.4 Teachers for vocational education

ITE for the sector of vocational schools is highly differentiated and the three main programmes only can be outlined here in the nutshell.

2.1.4.1 Teachers for compulsory vocational education and practical subjects at commercial and technical schools

Teachers for vocational schools/Berufsbildende Pflichtschule (grades 10-12/13) and practical subjects in vocational schools at upper secondary level/Berufsbildende Mittlere und Hoehere Schulen (grades 9-11/13) are educated at Colleges of Vocational Teacher Education/Berufspaedagogische Akademie. There are four Colleges of Vocational Teacher Education in Austria.

A prospective teacher has to fulfil the following requirements for entry into these colleges: either a qualification as a master craftsman or a school leaving certificate after at least thirteen years of schooling/Reifepruefung, at least two years of experience in a trade and participation in special introductory courses at INSET institutes for vocational teachers/Berufspaedagogisches Institut. This implies that Colleges of Vocational Teacher Education have opportunity to deal mainly with “mature students” having experience in enterprises.

Programmes for the different types of teachers normally last two years and have to follow a national syllabus. They consist of subject studies, methodology and teaching practice which have to be studied in parallel (= concurrent model). Courses end with a major examination (Lehramtspruefung) and students successful may get a teaching certificate for vocational school.

2.1.4.2 Teachers for theoretical subjects in commercial schools

Teachers for (theoretical) commercial subjects in upper secondary schools (grades 9-11/13) are educated at University. Institutes for Business Education/Institute fuer Wirtschaftspaedagogik at University have to play a prominent role in this form of ITE.

Requirements for entry are similar to those of teachers for primary and secondary schools outlined above. Programmes at University have a duration of nine semesters (=4.5 years). They consist of theoretical studies in the disciplines, subject didactics, educational sciences and teaching practice. On successful completion of the diploma course including the preparation of a diploma thesis students receive a masters degree (Magister) either in economics, business education or educational sciences. Employment as a fully-fledged teacher is possible only after two years of experience in a profession being of relevance to the subjects to be taught in these types of schools.

The fact that student teachers may submit their diploma thesis in business education as well as in educational sciences implies that they get to know recent research of professional relevance.

2.1.4.3 Teachers for theoretical subjects in technical schools

Teachers for theoretical subjects in technical schools at upper secondary level (e.g. engineering) have to hold university degrees in their fields of specialization which can usually be obtained after five years of study at University. An employment as teacher requires experience of at least two years in a profession and a short introductory course organized by institutions of INSET. Professional ITE is not available for this type of teacher.

2.1.5 Teachers for other subjects

Besides the types of ITE mentioned above there are institutions for the education of teachers for religious instruction (e.g. Colleges of Religious Teacher Education/Religionspaedagogische Akademie, faculties of theology) or for the sector of agriculture (grades 9/10-12/13). ITE for teachers at higher education level does not exist. Although not part of the school system, staff in health education receive their education at University in special programmes ("Hochschullehrgaenge").

2.2 Continuous education of teachers/Lehrerfort- und Lehrerweiterbildung

Like in many other European countries TE in Austria may be characterized by a certain "rucksack" mentality (cf. F.BUCHBERGER 1993), which means that the focus is still with ITE, and the continuous education of teachers (INSET and further education) have not yet been given the important position they ought to occupy. This view is corroborated by a clearly felt imbalance between resources and funds available for ITE compared to those for the continuous education of teachers. Yet it must

be pointed out that the past twenty years have seen the emergence of a comprehensive system of institutions for INSET so that by now all nine federal states have the instruments vital in organizing INSET, namely the so-called Paedagogische Institute. These institutes comprise four different departments for the continuous education of teachers of the different types of school. There are other institutions available for INSET, among them the Colleges of Teacher Education, which have now got an increasingly important role to play in further education in preparing teachers for new tasks of the teaching profession (e.g. multicultural education), the Institute for Interdisciplinary Research and Distance Education (cf. K.KRAINER/P.POSCH 1996) or Universities.

Paedagogische Institute have to fulfil the following tasks: (i) It is their main task to organize INSET. In Austria the term INSET refers to sessions that provide professional education and aim at supporting teachers professional development (Lehrerfortbildung) but do not lead up to any certificates. (ii) It is an additional task of these institutions to organize further education for teachers. The term "further education"/Lehrerweiterbildung basically refers to education courses after which the teacher eventually receives a certificate (e.g. a teaching certificate/diploma in an additional subject or a certificate for special tasks such as school management, inclusive education or information and communication technology). (iii) Furthermore Paedagogische Institute are also involved in ITE of teachers for "Lehramt an Hoheren Schulen" in their one-year school practicum/Unterrichtspraktikum and some forms of ITE of teachers for vocational schools. (iv) Finally these institutes may also carry out certain research and development projects (Paedagogische Tatsachenforschung) and provide support in school improvement projects (cf. P.POSCH 1996).

Although law defines taking part in INSET as a must for teachers, it is normally undergone on a voluntary basis. When main innovations are introduced into school, INSET can be made compulsory (e.g. introduction of a foreign language in primary school or introduction of information and communication technology at lower secondary level). Teachers attend about one third of their INSET during their holidays, the other two thirds during their regular working time. Many teachers have developed a highly positive attitude towards INSET so that the overall impression one gets is that there is a high degree of participation in INSET, particularly among primary school teachers/VolksschullehrerInnen and teachers at lower secondary school/Hauptschule. About 80 % of teachers of these types of schools participate approximately 4.5 days per year in INSET courses (cf. F. BUCHBERGER 1996).

Offers of INSET sessions are extremely varied in both form and content. There are courses in the school holidays. Teacher working groups/Lehrerarbeitsgemeinschaften for different subjects usually offer two afternoon sessions per year with participants themselves deciding on the course content in advance. There are compact one-week courses/Kompaktseminare or intermittent training sessions. It is also worth mentioning that school-based INSET has been developed increasingly. Topic areas are extremely varied as well with didactics/methodology being a particular favourite. But other areas such as school management, computer studies, classroom management or multicultural education have increasingly become popular. Particular emphasis is being placed upon frequent INSET of teachers actively involved in ITE as co-operating teachers. A new focus has been set on quality management especially at schools at upper secondary level. INSET seems to be oriented on a personalistic model focusing on individual (professional) needs and interests of teachers. More coherent models of INSET which focus on the school as unit of improvement (e.g. organization development) can only be observed to a limited extent (cf. F.BUCHBERGER 1997).

2.3 Impact of European Commission co-operation programmes

In the past few years much activity has been taken to overcome a national or even regional introversion in the field of TE in general and at Colleges of Teacher Education in particular. These moves may also be seen in the context of a growing internationalization of Austria and of having become a member of the European Union in 1995. Developing a European awareness/European Dimension (cf. Y.BEERNAERT et al. 1993) a concept contained in all national syllabi for many years has been given greater emphasis both in schools and in ITE. Long-standing contacts and programmes of foreign language learning for teachers have been intensified. The study of comparative education though long part of the syllabus of Colleges of Teacher Education has been given greater prominence. Increased efforts towards multicultural education have been made. In ITE as well as in the continuous education of teachers of history and social studies or geography and economic studies questions of a European integration have been given even more prominence. And a variety of exchange programmes have lately been supported by the authorities (cf. J.LEIDENFROST 1998).

In the ongoing process of the internationalization of ITE education and training programmes of the Commission of the European Union (e.g. SOCRATES, LEONARDO) have become of special importance and they are given particular support at the national level (especially by the Ministry of Education and Cultural Affairs through its Office for European Education Cooperation/Buero fuer Europaeische Bildungskoooperation). In the very first year of a possible participation in the former ERASMUS programme (1992/1993) 9 out of 14 Colleges of Teacher Education have been successful with their applications. From the very beginning on some Colleges of Teacher Education have acted as coordinating institutions for various programmes (student mobility, staff mobility, curriculum development, intensive programmes). Since 1994/1995 all 14 Colleges of Teacher Education are involved in the SOCRATES programme in most of its chapters (ERASMUS COMENIUS, LINGUA, ODL) in addition to education co-operation projects with former Communist countries funded nationally. The percentage of students participating in ERASMUS programmes has increased from 2.1% in 1992/1993 to 4.1% in 1993/1994 and 6.5% in 1994/1995 (cf. M.FRIED 1995). This steadily increasing percentage may be seen as a leading one compared to other institutions of TE in the European Union (cf. J.LEIDENFROST 1998). The very high percentage of projects accepted by ERASMUS and the high percentage of students as well as staff involved in European Commission education co-operation programmes may be explained by intense efforts and a highly positive attitude towards mobility at national level and may also be seen as proof of the high quality of ITE at Colleges of Teacher Education.

The participation of Colleges of Teacher Education in the SOCRATES programme may be seen in close relationship with improvements in the curricula of the different institutions (e.g. modularization of curricula) and the high quality of teaching methodologies adopted. Both aspects unanimously receive highest appreciation of partner Universities all over Europe. The participation in curriculum development projects implies that most of the students have opportunity to benefit from the SOCRATES programme although they are not involved in student mobility components of this programme. To make optimal use of the opportunities provided by the SOCRATES programme more investment into curriculum development projects, more investment into multimedia actions and more frequent participation in the thematic network on teacher education in Europe (TNTEE) seem to be necessary.

Problems of institutions of ITE participating in the SOCRATES programme frequently reported at European level (e.g. unflexible curricula, duration of student mobility, recognition of achievements and credit transfer; cf. M.DELMARTINO/Y.BEERNAERT 1996) did occur to a very limited extent only. Curricula and exam regulations at Austrian Colleges of Teacher Education (did) allow flexibility necessary. Additionally, the active participation in the European Credit Transfer System (ECTS)

proved to be of big support. In turn, this participation in ECTS has put some pressure on national TE policy. While leading European Universities fully recognize studies done at Austrian Colleges of Teacher Education, Austrian Universities find only very limited opportunity to recognize studies done at Colleges of Teacher Education. Similar as with ECTS applies to the fact that the modernization of curricula oriented on best practice of partner universities all over Europe has been given priority and been incorporated at many Colleges of Teacher Education into institution-wide improvement strategies (cf. F.BUCHBERGER/P.SCHUERZ 1997). Combining opportunities offered by the different chapters of SOCRATES (especially ERASMUS, LINGUA and COMENIUS) might be seen as an “example of best practice” for the development of TE in Europe.

Austrian universities have long-standing traditions in exchange activities. Many ITE programmes for teachers of different subjects (e.g. foreign languages, history and social studies, geography and economic studies) contain in their curricula contents of relevance to a European Dimension and call for (short) periods of study abroad. Detailed information on the impact of European Commission education co-operation programmes (e.g. ERASMUS) on the first phase of ITE at University is not available. This fact may partially be explained by the fact that responsibilities for ITE are split up into three different departments (two subject departments and the department of educational sciences). Although (prospective) teachers may take part in student mobility programmes as part of their studies in the subjects, the percentage seems to be rather low. The small amount of time devoted to studies in educational sciences and subject didactics may be seen as another obstacle against student mobility. Curriculum development programmes (under ERASMUS or LINGUA) do exist so far to a very limited amount only and Universities will have to explain this reluctance. As regards the second phase of ITE (“Lehramt an Hoheren Schulen”) rather strict regulations at a national level may be seen as an obstacle against more frequent (student) exchanges.

As regards INSET Austrian schools and teachers frequently participate in European Commission education programmes both as co-ordinating institutions and as partner institutions. This applies to all chapters of COMENIUS (e.g. European Education Projects) and the relevant chapters of LINGUA. Again, the percentage of participation is far beyond European Union average (cf. M.HEISSENBERGER 1998). Similar applies to the ARION programme for head teachers and the school inspectorate.

3. “New” needs in teacher education

Depending on aims and criteria, problem-sensibility, ideologies, opinions and attitudes of different persons and lobbies, issues and topics selected descriptions of “new” needs in TE will bring about different results (“new” has been put into quotation marks because of the relativity of this concept and the fact that some “new” needs recently discussed have a long history; cf. the first version of this article written by F.BUCHBERGER/K.-H.GRUBER in 1994 and this second version written in 1998). Although there seems to be fairly broad agreement in Austria on some “new” needs in TE in general (e.g. transforming Colleges of Teacher Education from the post-secondary sector of the education system into the higher education sector, increasing the professionalization of ITE at University, relevance of continuous education of teachers), the problem-definitions of different groups involved in or concerned with TE clearly express differentiations and differences. At this place it will only be possible to outline some of these lines of argument.

The following descriptions and analyses will consider issues discussed in (international) research on TE as well as in recent European Commission education policy documents (e.g. the white book “Teaching and learning: towards the learning society”, 1996 or the green paper on “The European

Dimension in education”, 1993) and relate them to problems and needs perceived in TE in Austria. Firstly, issues will be discussed that apply to the entire system of TE in Austria. Secondly, problems and needs in the different (sub-) systems of TE will be described.

3.1 “New” needs - entire system of teacher education

1. G.NEAVE (1987) has presented a comprehensive analysis on the situation and problems of TE in the member states of the Council of Europe. Adopting the issues and criteria used in this analysis an evaluation of TE in Austria in the late eighties might result as follows: (i) very good (economic, material and human) resources, (ii) well developed system of vocational TE, (iii) well developed system of ITE for special education, (iv) very well developed system of teaching practice at Colleges of Teacher Education, (v) comprehensive system of INSET, (vi) too short duration of programmes of ITE for teachers of compulsory education, (vii) problems regarding the transformation of ITE for kindergarten teachers and for teachers of compulsory education into the higher education sector of the education system, (viii) deficits as regards the professionalization of different types of ITE: ITE for teachers at primary level seemed to lack a coherent academic education component. The same seemed to apply to ITE for teachers at lower secondary level educated at Colleges of Teacher Education, although to a smaller amount. ITE at University seemed to lack a coherent professional education component (e.g. subject didactics, educational studies, teaching practice).

2. Again in 1992, G.NEAVE (1992) has presented an analysis on the situation and problems of the teaching profession and TE in the member states of the European Union. Adopting the issues and criteria of this analysis to evaluate TE in Austria mid of the nineties could give the following results: Improvements and reforms have been made in most of the (sub-) systems of TE (e.g. prolongation of ITE for teachers of primary school, infusion of more professional components into ITE at University). But it is debatable whether these improvements and reforms may have met the needs of a rapidly changed environment of schooling and education. The following issues seemed to be of problematic nature: (i) orientation on static conceptions instead of an orientation on dynamic conceptions of teaching and learning, (ii) orientation on “traditions” (e.g. “seminaristic or academic tradition”), (iii) fragmentations between the different (sub-) systems of TE, (iv) a lack of mobility and flexibility as well as (v) a lack of permeability between the different (sub-) systems of TE.

3. Since Austria has become a member of the European Economic Area, and even stronger since 1995, when Austria has entered the European Union, education policies and education policy documents of the European Commission (cf. F.BUCHBERGER 1999) have influence on Austrian education policies. Although education policies of the European Commission mainly operate in an indirect way, they have strong impact on definitions of problem-spaces and rhetorics adopted in the education discourse (cf. A.NOVOA 1996). Education policies as well as education policy documents of the European Commission may be seen in close relationship to the generation of “new” needs (for and in education as well as TE) in Austria.

The basic rationale of European Commission education policies may be seen in theories of human capital with an instrumental perspective on education and training and a subordination of education and training under economic as well as social policy issues. In combination with predominating neo-liberal ideologies the education discourse seems to be dominated i.a. by the following issues: (i) “quality” especially of human resource development including the notion of life-long learning; (ii) organizational, administrative and economic re-structuring of the education sector adopting formulae such as “quality management”; (iii) internationalization, globalization and mobility perceived to be necessary; (iv) making maximum use of new multimedia technology; and (v) developing a European Dimension mainly by competence in (three) Community languages.

Adopting issues and criteria defined in the main education policy document of the European Commission (“Teaching and learning: towards the learning society”) to define “new” needs in Austrian TE might lead to the following result: (i) lifelong - learning, the continuous education and training of teachers and flexible models of qualification necessary to approximate to these have to become more than lip - service; (ii) curricula and programmes of study of TE have to be restructured oriented more than recently on dynamic qualifications and have to become more flexible; (iii) curricula have to become more compatible to European standards (cf. with the European Credit Transfer System ECTS) and problems of academic as well as professional recognition of (teacher) diploma are in need of clarification; (iv) better use has to be made of multimedia technology, especially as regards telestudying (open distance learning) and its adoption in creating powerful learning environments; (v) vocational, economic and technical education and training had to be improved and efforts in TE had to be taken (although Austrian solutions are seen as very well developed within the European Union persisting problems may not be hidden); (vi) measures to combat failure at school seem to be imperative and TE had to contribute to reach this aim (again Austrian solutions seem to be well developed without neglecting existing problem areas, cf. F.BUCHBERGER 1998); (vii) promoting a European Dimension i.a. by improved competence in (three) Community languages may be seen as another target and linguistic competences of Austrian teachers had to be improved substantially.

Action programmes of the European Commission such as SOCRATES aim to meet needs defined. Austrian institutions of TE in general and Colleges of Teacher Education in particular make pro-actively use of opportunities offered. This fact may be seen in close relationship with an emerging “critical mass” competent to cope with perceived “new” needs. At the same time coherent action of education policy makers in general and of TE policy makers in particular has still to be missed.

4. TE in Austria may be characterized by an orientation on a static conception (of TE) based on the hidden assumption that ITE could be able to qualify (prospective) teachers adequately for a professional career lasting more than thirty years even in dynamic environments and a rapidly changing society. This orientation implies that (i) the focus is still on ITE. (ii) Questions of an appropriate induction into the professional cultures of schools and (iii) of lifelong learning and development (continuous education, INSET) are frequently suppressed. Although the shortcomings of an orientation of TE on a static conception are obvious, systematic action to restructure TE oriented on a dynamic conception is still pending. There is only some discussion focusing on a redefinition/modification of the aims and curricula of ITE, an introduction of (soft) models of compulsory INSET or on an introduction of incentive models for participation in continuous TE. Opportunities for sabbaticals for teachers have been opened up in 1998, but these are not necessarily bound to INSET. Other opportunities for continuous professional development have been described in the National Action Plan for Employment (1998), but are not materialized yet.

5. It might be argued that theoretical and research-based argument as well as rational system planning or the expertise of those involved in TE have not always played the most prominent roles in constructing and developing systems and models of TE - and many of the recent problems of TE may be explained by this fact. H.JUDGE (1990) states that “TE in England and Wales is a product of history rather than of logic” and this statement seems to hold true for TE in Austria too. It is possible to point to some long-standing “traditions” which consist of a blend of not always consistent (and sometimes hidden) assumptions, beliefs and opinions on the professional role of teachers and the acquisition of professional expertise, and which have had strong influence on the development of institutional as well as curricular patterns of TE. Although (i) education, schooling and the professional role of teachers have been subject to substantial changes, and (ii) reforms of TE have been made oriented on the leitmotif of “professionalization”, these traditions even nowadays have strong influence on TE in Austria - a “seminaristic tradition” on ITE at Colleges of Teacher Education

and an “academic tradition” on ITE at University (cf. F.BUCHBERGER 1994). Reforms of TE have infused more academic components into the “seminaristic” model and some professional components into the “academic” model, but they did not lead to substantial change (necessary). Different groups (e.g. teachers, parents, students) perceive very well the shortcomings and deficits that may partially be explained by this fact. Recent discussions and activities on reforms of ITE seem to follow (again) a “modification approach” or a “more of the same rationale” and try to avoid (more) substantial change (cf. Entwurf eines Akademiengesetzes 1998, Entwicklungsausschuss 1993, E.MAYR 1994). Comparable seems to apply to a very recent change of ITE at University (Universitätsstudienengesetz 1997).

6. The entire system of TE in Austria may be characterized by a high degree of fragmentation and separateness of the different (sub-) systems which seems to be of problematic nature in several ways: (i) Fragmentation may be seen in close relation with a lack of permeability between the different programmes for different types of teachers. (Prospective) Teachers have to make (final) decisions on a professional career in one of the different types of school at the age of eighteen (“one-way street” model). This may be seen as a main obstacle against more flexibility and mobility. Only recently some slight modifications have been made to increase the permeability between the different programmes of ITE at Colleges of Teacher Education and University. (ii) Teachers for the (two main different types of) lower secondary schools are educated at different institutions (Colleges of Teacher Education, University), although these schools have to follow the same syllabus. (iii) This fact outlined may be brought in relation with a suboptimal use of resources which at the same time are defined by some policy makers as scarce. (iv) Strict separations and fragmentations between ITE and INSET may be made accountable that positive effects of ITE are “washed out” when graduates of ITE enter into schools. In addition, these separations correspond with an inadequate use of resources available.

7. Problems are perceived as regards the legislative, administrative and economic structures of TE. Institutions of TE claim that deregulation (e.g. reducing the number of binding laws) and decentralization (e.g. increasing responsibilities of institutions of TE for programmes and curricula; increasing economic independence of institutions of TE) seem to be necessary. Some measures in this direction have been taken recently which may be seen as first steps. Closely related to these needs of institutions of TE Government thinks that the (cost) effectiveness of TE had to be increased. Quality management focusing on organizational, administrative and economic dimensions is in a first phase of introduction (cf. F.BUCHBERGER/K.BYRNE 1995, P.POSCH/H.ALTRICHTER 1997).

8. Improvements and reforms of the education system in general and TE in particular have mainly focused on particular (sub-) systems, but did not follow an overall plan/strategy which applied to the entire system of education. Although this strategy has brought about many positive results in particular areas, its limitations have become obvious. Mid of the nineties there was an attempt to develop an overall plan/Bildungsgesamtplan for the reform/development of the Austrian education system (cf. H.ALTRICHTER/P.POSCH 1992, PELZELMAYER 1996) and. TE ought to play a prominent role in such a plan (cf. F.BUCHBERGER 1996), but coherent work on this plan has been stopped in the meanwhile.

3.2 “New” needs - (sub-) systems of teacher education

In addition to “new” needs that apply to the entire system of TE in Austria mentioned above this chapter will discuss “new” needs of ITE at Colleges of Teacher Education, at University and in INSET. Due to the fact that there are no recent discussions on improvements of ITE for pre-primary

education (kindergarten), of ITE at Colleges of Vocational Teacher Education and of ITE for teachers of theoretical subjects in commercial and technical schools, these types may be excluded at this place.

3.2.1 Teachers for compulsory education

ITE at Colleges of Teacher Education seems to be confronted with five main clusters of problems:

(a) Although Colleges of Teacher Education are recognized as institutions of higher education in the European Union within Austria they possess the legal status of schools at the post-secondary level of the education system only. The following problems correspond with the legal status outlined: (i) Studies and certificates of Colleges of Teacher Education may to a very limited extent only be recognized by Austrian universities. Fragmentations and a lack of permeability outlined above may be seen in close relation to this fact. (ii) The legal status implies that Colleges of Teacher Education are subject to rather strict legislation and administration at a national level. This reduces opportunity for autonomy. (iii) Schools are subject to the treaty between the Republic of Austria and the Holy See. This treaty guarantees to the Roman Catholic Church many rights in ITE at Colleges of Teacher Education and may be seen as one major obstacle to transform ITE for teachers of compulsory education to the higher education sector. (iv) Although staff at Colleges of Teacher Education are frequently involved in research and development, these institutions have no clear mandate for doing research. Staff does not frequently combine research and development with programmes of study aiming at increasing their formal qualifications (e.g. preparation of dissertations necessary to obtain a doctors degree).

(b) The programmes last a minimum of three years (6 semesters) and students have to attend appr. 2500 units of tuition. This implies that independent, problem-oriented and research-oriented learning of students has to be rather restricted (“too much in too short time”). Core-qualifications (“Schlüsselqualifikationen”) cannot be developed to a level perceived to be necessary. Recent discussions on this problem may be seen as rather discrepant and focus i.a. on the following issues: (i) redefinition of aims and tasks of the curricula of ITE or (ii) the introduction of an induction period.

(c) Expectations on the different programmes seem to be (unrealistically) high: (i) Teachers for primary school have to train for all subjects of primary school. This fact may be seen as an obstacle against a profound academic education in the subjects. Proposals are discussed which aim at an introduction of specialization studies in two subjects of primary school (“Schwerpunktlehrermodell”) in addition to (reduced) education in all other subjects of primary school. This proposal does not aim at an introduction of a model of subject teachers instead of an existing model of class teachers. (ii) The same applies to ITE for teachers in special education. In addition, a prolongation of the programme up to four years and/or a transformation of this type of ITE to a post-graduate level is under discussion. (iii) Teachers for lower secondary school are obliged to study two academic disciplines in addition to educational studies, subject didactics and teaching practice. It is debatable whether a profound education in two academic disciplines may be achieved adequately within the short duration of the programme outlined. Some observers have suggested a stronger orientation as well as closer links of the subject studies with the first part of the diploma programmes at University (1. Studienabschnitt). On the contrary representatives of school administration especially in rural areas have suggested to increase the number of subjects to be studied by prospective teachers from two to three with a focus on subject methodology/Fachmethodik.

(d) Problems with an optimal utilization of capacities available have been outlined above (e.g. decreasing number of students). Colleges of Teacher Education are in strong need to find a new profile to be able to survive as institutions of ITE the coming years.

(e) Staff of different components of the programmes (e.g. subject didactics for primary school) seems to hold rather low (formal) qualifications. Coherent ITE and INSET for staff of Colleges of Teacher Education does not exist, although staff frequently expresses strong needs for participating in programmes to upgrade their qualifications.

3.2.2 “Lehramt an Hoheren Schulen”

ITE for these types of teachers seems to be confronted with four main clusters of problems:

(a) A first problem consists of the strict separation of a first and a second phase of ITE introduced in the late eighties. The introduction of this two-phase approach may be explained by existing power structures. The influence of Local Education Authorities and of the professional associations of teachers of these types of schools has been stronger than University and research-based argument. The separation into a first and a second phase applies to the curricula, the organization and staff involved.

(b) A second problem consists of unclear structures of responsibility for ITE. Within University four institutes/departments have to share responsibility for ITE. Subject departments have the main responsibility for the programmes. In addition departments of educational sciences have to take responsibility for educational studies and centres for school practice for this component of the programme.

(c) On a curricular level the following problems may be analyzed: (i) Study time devoted to the “professional” components of the programmes seems to be rather restricted. This applies to educational studies as well as to school practice and subject didactics. (ii) Subject didactics have been so far parts of the academic studies and been organized by these. They have been separated from the other “professional” components (educational studies, school practice). This separation is perceived as problematic. It frequently corresponds with rather narrowly conceived conceptions of subject didactics reduced to subject methodology/Fachmethodik. (iii) (Prospective) Teachers have to prepare a diploma thesis in one of the subjects they study. New law prescribes that diploma theses have to deal with an academic problem including perspectives of subject didactics (Universitätsstudienengesetz 1997). This regulation implies that (prospective) teachers do not find opportunity to prepare their diploma theses in educational sciences/pedagogy nor in subject didactics. (iv) These three facts outlined may be made accountable that (prospective) teachers have only very limited opportunity to get to know knowledge of professional relevance and to be involved in research on topics/problems of professional nature. (v) In addition deficits in the development of subject didactics as sciences of the teaching profession may be (partially) explained by these facts (cf. H. SEEL 1998). (vi) The amount of time devoted to school practice seems to be rather low. Because of this school practice organized by University can only give some orientation. A sound teaching practice component has still to be missed. (vii) Studies in the academic disciplines in the second part of the programmes ought to be oriented on needs of schools and their syllabi. In fact models oriented on structures of academic disciplines seem to dominate and it remains unclear whether this aim mentioned above can be met in ITE at University properly. (viii) And to add a curiosity: ITE at University is not obliged to offer courses in multimedia education, which implies that someone may obtain a teaching diploma without being able to use basic information and communication technology.

(d) The second part of ITE has to follow a national syllabus. Aims and contents are in need of restructuring and redefinition. The same applies to its organization. Another problem seems to exist as regards staff involved. It is debatable whether lecturers at institutes of INSET as well as co-operating teachers at schools always do possess the high qualifications necessary to fulfil the aims of the national syllabus. Similar problems seem to exist with lecturers for subject didactics working in the first phase of ITE.

3.2.3 Continuous education of teachers/Lehrerfort- und Lehrerweiterbildung

Six main problems of INSET may be analyzed:

(a) INSET may be characterized by a lack of coherence both at a national level and at the level of schools. Priorities as regards contents/topics and the use of resources have not been defined yet. Coherent strategies and action schemes for the continuous education and training of teachers are still pending. Issues of highest relevance such as school administration or net-based learning are not adressed coherently (cf. F.BUCHBERGER 1997).

(b) INSET seems to be oriented on individual (professional) needs and interests of teachers. More systemic approaches (e.g. school-based INSET, organization development) have only found limited attention so far, but success of school improvement activities will to a large extent depend on systemic approaches. Much might be expected with a concept of establishing “supportive infrastructures” developed by P.POSCH (1996).

(c) A flexible and permeable system of INSET and further education has not been developed yet. Especially further education seems to follow fragmented models (with a lack of mutual recognition of various courses) and/or a principle of “blind alley”. Universities have still developed a culture of continuous education and training rather rudimentary. Additionally, the adoption of open and distance learning in INSET as well as in the further education of teachers may be seen as suboptimal.

(d) “Incentives” for participation in INSET (and school development activities) may be seen as a fourth problem. Conditions for participation in INSET have been outlined above. Recently the problem is discussed how to motivate a sufficient number of teachers to participate actively in INSET so that teachers and schools will be in a position to meet the needs and tasks of education in a rapidly changing society. The demographic structure of the teaching force in Austria (cf. mean age of teaching force around 42 years) calls for giving highest priority to this issue.

(e) The evaluation of INSET activities and quality management in INSET have been neglected in the past. The fact that resources available for INSET could not always be used in the most effective way may be explained by a lack of quality management.

(f) Problems of realizing a global/international/European Dimension (and their relations to teachers and INSET) may be seen as another issue. Three facts seem to be of high relevance: (i) Syllabi of all schools contain many topics relevant to international/global/European education, but a coherent concept in INSET has still to be missed. (ii) Competences of teachers and students in foreign languages (mainly in English only) seem to be in strong need to be improved (e.g. “Fremdsprachenoffensive”). (iii) Although a majority of teachers holds a critical attitude towards the European Union, they have strong interest on questions and problems of European integration. Many components of this critical attitude may be explained by a lack of information. Therefore it seems to be necessary to pay particular attention to these issues.

4. “New” measures for “new” needs

Problems and needs of TE in Austria have been outlined in chapter 3. The following description of “new” measures for “new” needs will mainly focus on issues recently discussed in the “social arena” of TE in Austria. The chapter will be structured into ITE (4.1) with a separate discussion on developments in the two main types of ITE (4.1), continuous TE (4.2), and “new” measures to be taken at European Commission level (4.3). This structure reflects the fact that coherent and comprehensive measures to improve the entire system of TE in Austria recently are subject to discussion and action very peripherally only. Measures to tackle persisting and/or “new” needs are mainly discussed and developed in rather fragmented circles of the different subsystems of Austrian TE.

4.1 Initial teacher education/Lehrerausbildung

4.1.1 Teachers for compulsory education

1. Very recently a working group responsible to the Minister of Education and Cultural Affairs has presented a draft for a new law aiming at a re-organization of studies at Colleges of Teacher Education/Akademiestedengesetz (1998) which in British terminology might have the status of a green paper. Although this draft of this law seems to contain a number of discrepancies and has gradually been subject to sometimes substantial changes, the main rationale may be described as follows:

(i) Colleges of Teacher Education and Colleges of Vocational Teacher Education should receive the legal status of institutions of higher education within Austria. This change of the legal status should guarantee the professional recognition of the graduates of Colleges of Education in the member states of the European Union as well as the academic recognition of studies done at Colleges of Education at Universities both within Austria and in the European Union. It remains uncertain whether both motives hold true considering legal regulations of the European Union.

The draft of the law mentioned states that Colleges of Education legally have to remain schools governed by the national school organization act/Schulorganisationsgesetz. Much discussion will be necessary how a change of the format drafted may be made operational.

(ii) Colleges of Teacher Education and Colleges of Vocational Teacher Education should be preserved as independent single-purpose institutions. In addition to their mission for ITE they should get more responsibility for the continuous education of teachers.

(iii) These institutions should receive organizational and administrative structures comparable to Fachhochschulen (cf. Fachhochschulstudienganggesetz 1993) as well as to Universities (cf. Universitaetsorganisationsgesetz 1993, Universitaetsstudiengesetz 1997). This would imply more autonomy as regards structure, organization and content.

(iv) The basic structure of the study programmes should be preserved (duration of studies, concurrent model and one-phase approach).

2. The draft of Akademiestedengesetz may be interpreted as an outcome of a neo-conservative shift of education policy in Austria outlined above, and the spokesman for education of the Social Democrats has declared that his party will not be able to accept main components of this draft of a law (this statement reflects long-standing attempts of the Social Democrats aiming at ITE for all

categories of teachers at University level). At the same time the draft considers some components contained in a reform paper for TE for teachers of compulsory education produced by a committee (cf. Entwicklungsausschuss 1993) responsible to the former Minister of Education, but the draft of *Akademiestudiengesetz* remains in many respects behind it. The proposal of Entwicklungsausschuss may be described as follows. Building on the many strengths of Colleges of Teacher Education (e.g. supervised teaching practice, educational studies, subject didactics and methodologies, training/model schools, network of co-operating schools with specially trained co-operating teachers) and aiming at preserving them this proposal had intended to take the following main measures: (i) transformation of Colleges of Teacher Education into the higher education sector and preservation of their independent status as *Paedagogische Hochschule*; (ii) increasing the permeability between its programmes and those of ITE at University (realized in the meanwhile to a limited extent by changes of law); (iii) increasing the autonomy of institutions of ITE and introducing modern structures of administration and management (slight changes have been made with decrees mid of the nineties); (iv) orientation of the curricula on core qualifications and an integrated/concurrent model; (v) definition of an explicit mandate for research and development; and (vi) definition of an explicit mandate for INSET and the further education of teachers.

3. As regards institutional issues the following measures are discussed to deal with existing problems and needs: (i) Some actors in the “social arena” (e.g. proponents of *Akademiestudiengesetz*, Roman Catholic Church) are convinced that ITE at Colleges of Teacher Education should remain part of the school system and that increasing their autonomy would be sufficient to solve problems outlined above. (ii) The model of the national committee for the reform of TE (cf. Entwicklungsausschuss 1993) has been outlined above. Considering some of the main components of the model developed by Entwicklungsausschuss the Social Democrats are recently preparing a concept of “*Lehrerhochschule*” with focus on TE at institutions of higher education having universitarian status. (iii) A third model intends to increase the permeability between ITE at Colleges of Teacher Education and University. Certificates of Colleges of Teacher Education should be accepted by University as a first part of their (ITE-) programmes. (iv) A fourth model focuses on partnerships between Colleges of Teacher Education and University. Modularized programmes should offer opportunities for students to take different components of ITE programmes at different institutions. (v) Another alternative would be the full incorporation of all forms of ITE into Universities. (vi) Faculties of education at University may be seen as a sixth model. These faculties of education should integrate ITE for all types of schools and INSET as well as the further education of teachers, TE and school development, and TE and research and development (cf. F.BUCHBERGER 1996).

4. The duration of the programmes seems to be too short. Four measures to prolonge ITE are discussed: (i) prolongation by one year without changing the structure of the programmes and curricula (cf. “more of the same”); (ii) prolongation of one semester by introducing a “practice semester” devoted to teaching practice at schools integrated in the programme; (iii) introduction of an induction period of one year at schools supervised by staff of institutions of ITE and specially trained co-operating teachers; (iv) introducing compulsory INSET in addition to ITE without prolonging the latter.

5. The curricula at Colleges of Teacher Education may be characterized by a high percentage of “professional” components and the integration of studies of its different components. This integrated/concurrent model may be seen both as an advantage (e.g. integration of theoretical and practical components) and as a disadvantage (e.g. lack of flexibility). “Modularization” is discussed as one measure to reach better balance between these elements. Many problems of ITE may be explained by the fact that (prospective) teachers for primary school and special education have to train for all subjects given in these types of schools. Discussions on how to solve these problems focus on the

introduction of “specialization studies” in two or three subjects. Discussions on the programmes of ITE for teachers at lower secondary schools focus on the problem whether an appropriate education in two academic disciplines might result in effects expected within the short duration of time available. Different measures are discussed to deal with this problem (e.g. study of one academic discipline, its subject didactic and two other methodologies; problem-oriented and integrated study of combinations of academic disciplines).

6. Other new measures discussed to meet new needs of ITE at Colleges of Teacher Education may be described as follows: (i) Improving administrative and organizational issues by a strict programme of quality management. Beginning in September 1998 Colleges of Teacher Education will make themselves to subject of institution-wide quality management procedures which may be interpreted as adaptations of models adopted in enterprises. (ii) Developing (additional) programmes of study/Zusatzstudien in fields where a strong (new) need seems to exist (e.g. multimedia education, business education, training of trainers). These programmes might be open to student teachers, teachers and non-teaching staff. (iii) More intense participation in the European Credit Transfer System (ECTS) combined with a restructuring of the curricula: (iv) Establishing research units/departments and research and development programmes focusing on areas of subject didactics. (v) Developing and participating in all-European curriculum development programmes (i.a. masters programmes for multimedia education and consulting). (vi) Developing training/model schools to professional development schools involved in ITE, INSET, school improvement as well as research and development. (vii) Introduction of a national programme aiming at increasing the (formal) qualifications of staff at Colleges of Teacher Education (“Habitationsfoederungsprogramm”). (viii) Establishing programmes for staff focusing on methodology of higher education (“Didaktikerqualifikation”).

4.1.2 “Lehramt an Hoheren Schulen”

1. ITE for this category of teachers has been subject to two main reforms in the eighties. Firstly, ITE has been established as particular programme of study at University. Secondly, this model has been changed again in the late eighties with the introduction of a “two-phase approach”. Problems and new needs may be seen as driving forces that again in 1993 a national commission has been established (by the Ministry of Science and Research and the Ministry of Education and Cultural Affairs) to develop a concept for reform of ITE at University and of the second part of ITE. Following changed paradigms of higher education (cf. C.EINEM 1998) changes of the act governing the organization of University/Universitaetsorganisationsgesetz (1993) and of the act governing studies at University/Universitaetsstudiengesetz (1997) have brought about changes of ITE at University in the meanwhile.

2. As regards the first part of ITE the national committee mentined above has presented a proposal focusing on six issues (cf. E.MAYR 1994): (i) establishing faculties of education/Paedagogische Fakultaeten at the Universities and giving responsibility for TE to these faculties; (ii) integrating centres for school practice into the faculties of education; (iii) introducing a course of study TE/“Lehramt” under the responsibility of faculties of education; (iv) subject didactics should be transfered from subject departments to the faculties of education; this transfer may be seen in close relationship with attempts to increase the quality of the different subject didactics and to offer opportunity for subject didactics to increase its scientific base; (v) responsibilities regarding programmes of TE should be reduced at a national level and should be given to faculties of education; (vi) establishing partnerships between TE at University and schools (second part) as well as establishing training schools/“Uebungsgymnasien”.

3. Again in 1997 ITE at University has become subject to reform (cf. *Universitaetsstudiengesetz*). Regulations of this new law may be described as follows:

(i) ITE is defined as a particular masters programme/Diplomstudium of a duration of nine semesters (4.5 years) and oriented towards the teaching of two subjects of school. This implies that ITE may not be conceived any more as a branch of studies of scientific disciplines.

(ii) The programmes consist of studies in two subject areas with a minimum of 900 units of tuition per discipline and a maximum of 2100 units of tuition per discipline depending on the fields of study chosen, studies in pedagogy and subject didactics related to the academic disciplines amounting 20-25% of the numbers given above for tuition, and school practice. Legally the “professional” components pedagogy and subject didactics/*Fachdidaktik* have been combined, but institutionally they remain separated with the latter bound to the (academic) subjects.

(iii) Law prescribes that the particular programmes of study/*Studienplaene* have to be materialized by special commissions/*Studienkommissionen* at the faculties of Universities involved in the subject study component as well as the educational study component of the ITE programmes with the representatives of the subject study component forming a majority in the respective commissions and the latter a (non-protected) minority.

(iv) Additionally, *Universitaetsstudiengesetz* prescribes school practice as compulsory. An exact amount has not been defined, but school practice should not be less than defined in a previous law (*Gesetz ueber geistes- und naturwissenschaftliche Studien*). The concrete amount of school practice has to be decided in co-operation with the school administration.

(v) Graduates of Colleges of Teacher Education holding a (teaching) certificate for lower secondary school/*Hauptschule* may enter the second part of Universitarian TE study programmes/*2.Studienabschnitt* (without teaching certificates being recognized as first diploma examination/*1.Diplompruefung*). This regulation is in strong need to be revised.

(vi) Additionally, Universities are obliged to recognize particular examinations taken at institutions at the post-secondary level of the education system in case they are of comparable quality.

4. Measured decreed by the acts mentioned before may be seen as ambivalent. On one side they consider only some (and in no case the most relevant issues) of the proposals made by the national committee aiming at a more professional ITE. On another side they may open up a broad space for curriculum reform in ITE, but without considering existing power structures in the “social arena” University which eventually might be counter-productive to professionalization aimed at.

5. As regards the second part of ITE reforms have recently be introduced aiming at closer relationships between the two phases of ITE (e.g. curricula, staff). Regulations decreed by *Universitaetsstudiengesetz* call for even more co-operation. Measures will have to be taken to increase qualifications of staff involved (e.g. co-operating teachers).

6. Substantial reforms of the first as well as of the second part are still pending although different groups (e.g. students, parents, industry) clearly express discomfort.

4.2 Continuous education of teachers/Lehrerfort- und Lehrerweiterbildung

1. During the past 25 years Austria has developed a comprehensive system of INSET. The introduction of reforms (e.g. introduction of a new type of school at lower secondary level) and innovations of the curricula (e.g. new syllabi at primary level, new information and communication technology) has been supported effectively by institutions of INSET. A flexible management of institutions of INSET has (very often) been open to new needs expressed by different groups (e.g. chamber of merchants, trade union) and by teachers and has provided programmes to meet these needs. However, an offensive of INSET and the development of a plan with priorities for INSET seem to be imperative (e.g. Community languages/"Fremdsprachenoffensive", multimedia education/"Multimediaoffensive").
2. Law defines that teachers are obliged to take part in INSET. Measures necessary to organize compulsory INSET have been developed only to a very limited extent. More appropriate support structures will have to be established. Recently there are attempts to provide measures necessary for school-based INSET (e.g. specially trained staff at institutions of INSET). Some federal states have established local/regional centres for INSET.
3. INSET has to be related more closely both to innovations at a national level and to school improvement activities at the level of particular schools (e.g. development of "school development plans").
4. INSET is financed by the Ministry of Education and Cultural Affairs. Schools themselves do not have resources to finance INSET. There is a strong need to reorganize this system and to give resources to the schools which then themselves take decisions on how to spend resources available.

4.3 European Commission level

As has been outlined above the participation of Colleges of Teacher Education in the ERASMUS programme has brought about many very positive results both within these institutions of ITE (e.g. improvements in the curricula) and for students and staff who have had opportunity for studying abroad. Similar applies to the SOCRATES programme both for most institutions of ITE and INSET. Rich experience of Austrian institutions of TE participating in European Commission education co-operation programmes permits to consider some items of relevance to the recent process of developing a new big European Commission education co-operation programme (SOCRATES II, 1998).

ERASMUS with all its chapters has proved to be a big success. The establishing of thematic networks (e.g. for TE) has been of considerable importance and Austrian institutions of TE could take a leading role. In SOCRATES II more efforts might be taken to promote networks of high quality Universities of TE. Within ERASMUS even more attention had to be given to curriculum development projects. Similar applies to LINGUA as well as to open and distance learning (ODL) where increased efforts at Commission level seem to be indispensable. European Education Projects under COMENIUS and ARION have brought about input of highest relevance. Problems seem to exist with COMENIUS/chapter 3 (INSET). More shape and coherence seems to be indispensable. Additionally, this chapter had to be brought into relation to a permanent system of accrediting qualifications acquired by teachers within such programmes ("All-European INSET-based masters programmes").

At European Commission level it seems to be necessary to support five large research and development programmes (including measures of the targeted socio-economic research programme) which might have highest impact on the improvement of TE and the process of social and economic restructuring of the member states of the European Union:

- (i) An optimal development of human resources calls both for an appropriate selection of contents to be taught and the use of the best methods of teaching possible. Teachers have to possess competence and expertise in both areas, and TE has to offer learning situations in which (prospective) teachers may be able to acquire qualifications necessary. A highly developed science - subject didactics/Fachdidaktik - seems to be a necessary condition that these goals may be reached properly. The actual state of this science may be characterized by a host of problems and deficits (cf. H.SEEL 1998). Therefore it seems to be necessary to establish and to support both at European Union level and at national level large research programmes dealing with the development of subject didactics.
- (ii) The same applies to the optimal use of new information and communication technology in teaching and learning. Large research and development programmes of a coherent nature seem to be imperative. Action taken with the Joint Call Multimedia Education may be seen as a first step in this direction.
- (iii) An introduction of a “European Dimension” into the curricula of TE as well as into the curricula of schools seems to be confronted with a host of problems (e.g. problems in the theoretical base of this concept; problems of appropriate teaching methodologie). Again, research and development programmes at European Commission level seem to be indispensable. As a result different modularized curricula may be expected.
- (iv) Life-long learning and continuous professional development have been “blind spots” of the different systems of TE in most member states of the European Union so far. Research programmes analyzing conditions (e.g. in ITE) to reach these goals and developing measures to promote them seem to be necessary.
- (v) It is frequently stated that the quality of teaching depends on the quality of teachers. The same seems to apply to TE. The quality of TE depends on the quality of teacher educators. At European Commission level an introduction of a programme for teacher educators to obtain a European diploma “Teacher Educator” might bring about substantial improvements.

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