Tuning

Tuning Educational Structures in Europe

Final Report
Pilot Project - Phase 1

Carried out by over 100 Universities, coordinated by the University of Deusto (Spain) and the University of Groningen (The Netherlands) and supported by the European Commission

Education and Culture

Socrates

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Final Report
Phase One

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Robert Wagenaar

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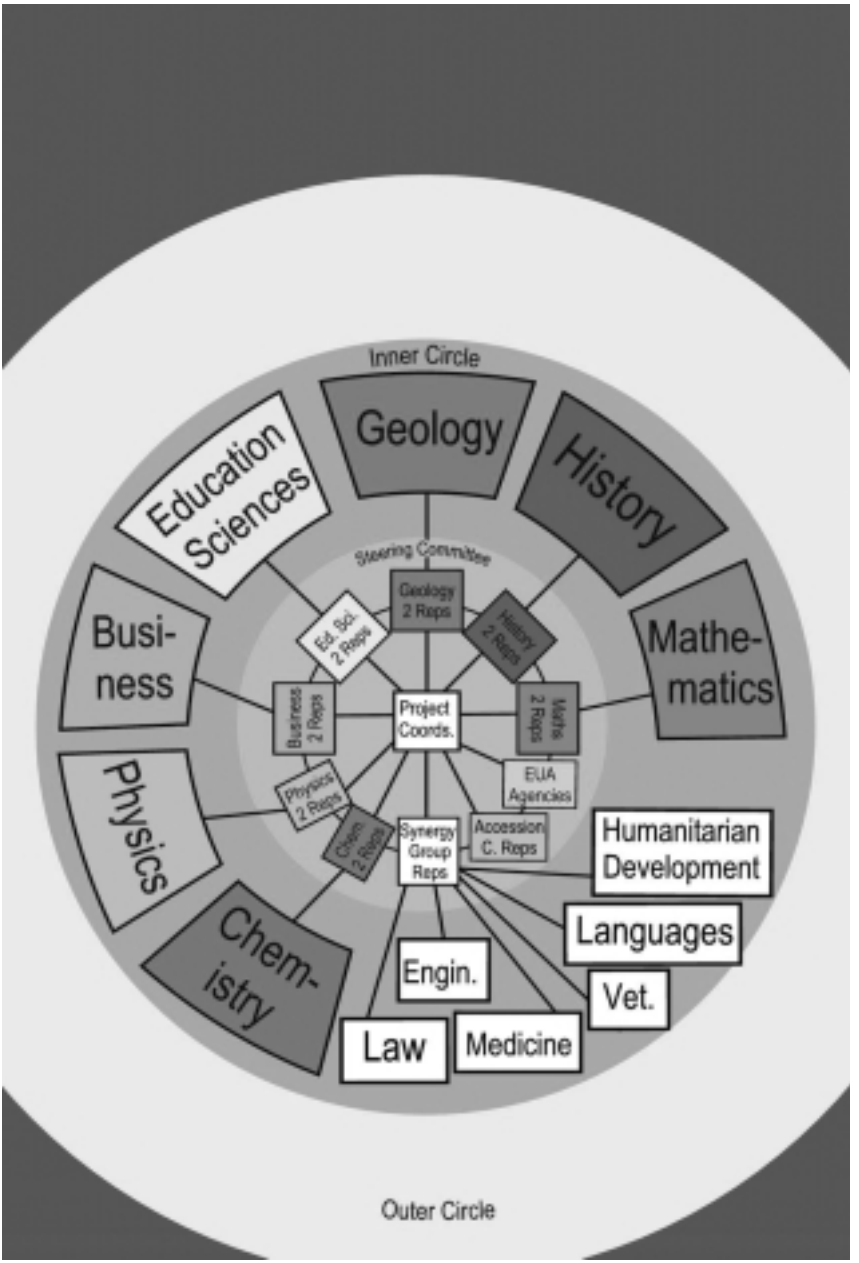

Structure of the Tuning Project Organisation

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PART ONE

PART TWO

PART ONE

Education Sciences Subject Area Group: *Subject-Specific Competences*

Six preliminary remarks

A first preliminary remark will relate to the relevance of European Union education policies for both education- and teacher education studies. Education and training have become priorities of policies of the Council of the European Union within the framework of more comprehensive economic and social policies (cf. Lisbon process). Strategic objectives for the development of education and training systems in the European Union have been defined (Lisbon 2000, Stockholm 2001) and decision has been taken on a detailed work program at European level stressing actions to be taken at the level of the Member States of the European Union (Barcelona 2002). The important role teacher education has to take in educational reform has been explicitly mentioned. «Investing in competencies for all» (OECD 2001) has become a top priority. Knowledge —based and dynamic learning societies would depend on highly qualified education staff in a rich variety of contexts (e.g. lifelong learning, @-learning, inclusive education). As a consequence, the initial education and continuous professional development of education staff has become subject to rapid expansion, diversification and professionalization —and (productive?) uncertainties with the adequacy of solutions for the professional education of staff for the education sector developed yet. Against this background the paper will deal with problems with «knowledge / core curricula / content» for education— and teacher education studies.

A second preliminary remark will relate to the rationale of innovation for higher education studies in general and educational studies in particular. In his paper for line four of the Tuning project («Teaching methods, knowledge, technology and assessment: an interlinked field») J. Lowyck has highlighted problems with an orientation on the status quo or the «state of practice» and discussed some challenging implications for higher education studies. Although acknowledging the relevance of the «state of practice» of programs of study, a restriction to it would imply a (repeated) tapping into an innovation trap (i.e. the focus on the development of solutions on already existing / persisting problems within predefined problem - spaces, which takes time and which —in times of rapid change— may meet these existing / persisting problems, but seem to be inappropriate as problems themselves have changed in the meanwhile or do not exist any more). This seems to apply especially to teacher education studies which reflect more opinions, beliefs, traditions and implicit assumptions rather than research - based argument, and do reflect changes of the context of education as well as research - based knowledge on teacher education to a limited extent only («Teacher education is more a product of history rather than of logic», H. Judge 1990). Against this background and confronted with the many challenges of change a more innovative and research - based perspective will be adopted in dealing with problems with the «knowledge / core curricula / content» of educational science studies.

A third preliminary remark will relate to the definition of educational sciences. As agreed upon at the Copenhagen Tuning meeting (September 2001), educational sciences will be split up into the closely related areas education studies and teacher education. As a consequence, these areas are discussed separately searching for links wherever reasonable.

A fourth preliminary remark: This paper is primarily based on the more general Tuning documents. While focusing on «knowledge / core curricula / content» of education- and teacher education studies, it will consider in an integrative format the other three lines of the project (learning outcomes; ECTS as an accumulation system; methods of teaching and learning, assessment and performance). Papers submitted by the members of the area working group on educational sciences may be seen as a rich source in preparing this paper. In addition, the Q.A.A. document on education studies has been considered. The part on teacher education has strongly been influenced by work of the Thematic Network on Teacher Education in Europe (TNTEE) (cf. F. Buchberger, B. Campos, D. Kallos, J. Stephenson: Green Paper on Teacher Education in Europe. Umea 2000) and continuous work of the European Network of

Teacher Education Policies (ENTEP) —both projects supported by the European Commission (DG XXII).

A fifth preliminary remark: While all these sources may be seen as highly relevant in dealing with programs for education sciences studies, they refer at the same time to a «missing link». Both for educational studies and teacher education more «in - depth» knowledge on programs of study of different providers would be necessary. Do the many differences especially of teacher education studies exist at a surface level only? Which (deep - level) communalities do exist between different programs of study? Thanks to the efforts of participants of the Tuning project more detailed information on programs of study has been made available for educational studies in seven European countries and for teacher education studies in five European Union Member States.

A final preliminary remark: This paper does not provide answers, but will address some key issues and raise a number of questions. Problem —solutions would call for collaborative problem— solving (at an institutional, national and European level).

In dealing with «knowledge / core curricula / content» of teacher education studies / educational studies, this paper will be structured into five chapters:

- —How generally / specifically should «knowledge / core curricula / content» be defined?
- —Can modularization be an option?
- —Do educational studies have a common core?
- —What are key components of teacher education programs?
- —How necessary is a comparative in-depth study of educational- and teacher education studies?

How generally or specifically should «knowledge / core curricula / content» be defined?

The concept «curriculum» has usually been used in an inflationary way, and this situation may be seen as source of much misunderstanding and confusion both in institutional, national and transnational discussions.

In a strict meaning «curriculum» can be defined as «plan for learning» consisting of a coherent and integrated set of learning situations with

- —explicit aims and objectives for learning,
- —content,
- —teaching/learning strategies («methodologies») and cultures of learning,

—teaching/learning material, and
—procedures for assessment/evaluation of learning and teaching;
—in addition curricula structure learning situations (place, time, sequence), and
—have to be adapted both to the needs and learning pre - requisites of learners.

Adopting a constructivist perspective the focus is first of all on learning and the provision of learning situations («powerful learning environments»). Secondly, aims and objectives, contents, teaching/learning strategies and the other components of the definition have to be seen both as mutually dependent and integrated avoiding e.g. a perspective of «curriculum» reduced to a list of contents/concepts.

Adopting this definition, a curriculum may be seen as «plan for learning» specifying main components of intentional learning. In this strict meaning the concept «curriculum» is usually restricted to rather small entities of learning (e.g. a particular institution of higher education). One may ask:

—Can «curricula» be feasible at a macro-level such as «national systems of higher education» or the level of the European Union.
—Which components of a «curriculum» can be considered in such «curricula» or «core curricula» (e.g. aims and content, teaching/ learning strategies, assessment procedures, learning environments at which degree of specification)?

«State of the art - knowledge» accumulated in educational sciences suggests to restrict the concept «curriculum» to «plans of learning» adopted at a micro - level (e.g. particular institution of higher education).

Presenting a model for «knowledge / core curricula / content» for another field of higher education studies, one of the area working groups within the Tuning project has submitted a proposal based on three categories:

—concepts in curricula,
—course elements/examples and
—main achievement.

This approach might provide a general framework and orientation for particular fields of study. It offers ample space for interpretation. However, it might run the risk to lead to surface level agreement on one side and, because its general nature, to misunderstanding on another. Explicit statements how these three categories have to be materialized in concrete curricula have to be missed.

A number of other mechanisms for tackling problems of «knowledge / core curricula / content» of (higher) education systems has been developed such as the (British) Q.A.A. document on education studies. This document explicitly stresses that it is not a curriculum, but defines «benchmark statements» describing assumptions on the structure of the discipline. In addition this model focuses on «demonstrated achievements» (learning outcomes) of students. The Q.A.A. approach might provide input for problem solving within the Tuning project:

- Definition of a basic frame of the discipline (nature of the subject)
- Definition of some basic content areas and concepts including «transferable skills» (defining principles and subject strands)
- Definition of some basic principles for learning, teaching and assessment
- List of benchmark statements

One may ask a number of questions as regards an adoption or adaptation of the approach submitted by Q.A.A.:

- Does this structure defined remain too general on one side and at the same time too specific on another?
- Has this model a cultural bias?
- Who (which interest- and power groups) decides on the «nature of the subject» and the «defining principles and subject strands»?
- How can benchmark statements be combined with curriculum development at an institutional level?

As discussed in the Green Paper on Teacher Education in Europe, the following components need consideration when planning «knowledge / core curricula / content» in the field of teacher education- and education studies:

- Analysis of the professional roles teachers and graduates of educational studies are expected to fulfil depending on normative decisions within particular cultural and social contexts.
- Analysis of professional tasks of teachers and graduates of educational studies (e.g. teaching, educating, counselling, evaluating, innovating, researching)
- Analysis of qualifications necessary to fulfil professional roles and tasks (e.g. subject - specific or transferable qualifications)
- Adoption of explicit models of how these qualifications may be acquired (e.g. learning cultures and learning environments, teaching/learning strategies)
- Orientation of programs of study on professional roles, tasks and qualifications analysed.

Against this background and following at the same time the intentions of the Bologna process and the Tuning project one might ask:

—Which components of «curriculum planning» can best be achieved at which levels (transnational, national, and institutional), and how can these levels be interrelated to make optimal synergies?
—In which areas and to which extent can shared structures of «disciplines» (aims, contents, organizing principles, methodologies) be defined both in general terms and at a European level?
—Is it possible to define at a European level main aims and contents of educational studies and teacher education studies (common core) that would have potential to be shared?
—How can diverse normative conceptions underpinning different «curricula» be considered in «core curricula» at European level?
—Is it feasible to work on the development of entire «curricula» or more appropriate to work on the development of particular (shared) modules within entire «curricula»?

Modularization as an option?

Modules can be conceived as coherent components of programs of study in particular fields or disciplines. Modules usually comprise some 6-15 ECTS credits. They consist of the following components:

—Description of aims and objectives related to content.
—Description of learning outcomes (knowledge, skills, transferable competencies).
—Teaching/learning strategies, learning situations and learning cultures.
—Evaluation/assessment procedures.
—Description of the workload of students.
—Entry requirements.

A recent discussion paper within the Tuning project has made explicit the many advantages as well as risks of modularized programs in higher education. As regards educational- and teacher education studies the following advantages seem to be related to modularized approaches:

—The focus on learning outcomes and the workload of students may help to increase the transparency as well as the efficiency of study programs.
—Modularization might contribute effectively to make study programs and learning of students within these more flexible.

— While a number of conditions may be seen as obstacles towards a coherent materialization of a European Credit Accumulation System both for educational- and teacher education studies, one may be rather optimistic that for substantial parts of educational studies and for a certain part of teacher education studies quality - assured modules can be developed. A (substantial) number of such modules could be integrated into particular entire programs of study depending on aims of an institution as well as personal needs of learners / students. The transparency and flexibility provided would permit to consider different structures and needs of different European higher education systems.

Against this background two questions will be raised:

— Accepting the duration / work load of first cycle and second cycle higher education studies, it needs clarification for which domains of knowledge, «core curricula» and content is it feasible to develop modules (of a working load between 6 - 15 ECTS credits) in educational- and teacher education studies?
— What would be the opportunities, challenges, constraints and effects of infusing different modules into existing and/or new programs of study in educational studies as well as teacher education especially as regards the «sequencing» of programs of study?

Do educational studies have a common core?

Higher education «education studies» in many European countries provide education and training for a rich variety of professional profiles including

— adult education,
— community work,
— counselling,
— curriculum development,
— education administration,
— health work,
— human resource management,
— inclusive education,
— information management,
— school pedagogy,
— special needs education or
— social pedagogy.

Despite the many differences specific to different countries (e.g. scope of programs, structural features of programs as cycle I or cycle II programs, learning cultures) the similarity of programs with their underpinning knowledge base (-s) may surprise. In addition similarities as regards the structure of programs seems to be remarkable. Many programs consist of general education studies (up to two years) followed by specific studies in a particular field chosen by the student and in - depth education studies.

With slight differences only in Finnish, German, Greek, Irish or Spanish contexts, the defining principles of education studies programs may be found in the above mentioned British Q.A.A. document. Programs for education studies should

—draw on a wide range of intellectual resources, theoretical perspectives and academic disciplines to illuminate understanding of education and the contexts within it takes place,
—provide students with a broad and balanced knowledge and understanding of the principal features of education in a wide range of contexts,
—encourage students to engage in fundamental questions concerning the aims and values of education and its relationship to society,
—provide opportunities for students to appreciate the problematic nature of educational theory, policy and practice,
—encourage the interrogation of educational processes in a wide variety of contexts,
—develop in students the ability to construct and sustain a reasoned argument about educational issues in a clear, lucid and coherent manner, and
—promote a range of qualities in students including intellectual independence and critical engagement with evidence.

As regards the knowledge base similarities may be observed in the following «core components» (cf. Q.A.A. document):

—processes of learning including some of the key paradigms and their impact on educational practices,
—relevant aspects of cultural and linguistic differences and societies; politics and education policies, economics, geographical and historical features of societies and contexts, moral, religious and philosophical underpinnings,
—formal and informal contexts of learning, and
—the complex interactions between education and its contexts, and its relationship with other disciplines and professions;

—orientation on transferable skills,
—courses in research methodology and
—(field) practice are common to most of the models.

Oriented on these «core components», the «common core» e.g. for the University of Leipzig (Germany) has been structured into five broad areas: (i) Education (Bildung und Erziehung), (ii) Development and learning, (iii) Societal conditions of education, (iv) Education systems (institutions, structures, legal aspects), (v) Problems of general didactics under multidisciplinary perspective.

Considering differences at a surface level and the many similarities as well as communalities at the deep —level structure of a shared knowledge base the development of shared cross— European modules seems to be feasible.

What are key components of teacher education programs?

«Teacher Education in Europe: Diversity versus Uniformity» has been the title of the contribution of F. Buchberger in the «Handbook of Teacher Training in Europe» (eds. M. Galton, B. Moon 1994). This title has reflected the fact that

—at a surface level structures, models and programs of study of teacher education seem to differ very much both within and between the different European countries,
—while some core components seem to be common to most of these.

Without going into detail comparisons of models of teacher education show that programs of study for primary level teacher education differ very much from those for secondary level teacher education. The main distinctive feature is the amount of study time devoted to the study of academic disciplines in particular academic disciplines.

As regards primary level teacher education the following components are represented in the programs of study of most teacher education institutions in Europe:

—Education studies (e.g. pedagogy, general didactics, educational psychology, ed. sociology)
—Subject-specific and/or domain-specific didactic studies in the different learning domains of primary school
—Teaching practice

As regards secondary level teacher education the following components are represented in the programs of study of most teacher education institutions in Europe:

—Studies in academic disciplines (usually two) other than educational sciences perceived to be indispensable for the teaching of corresponding «school subjects». These studies take most (usually some 90 %) of the study time available for students.
—Studies in Fachdidaktik / subject-related didactics. Studies in academic disciplines and subject-specific didactics usually take around 90 % of the entire study time.
—Education studies (see primary level teacher education).
—Teaching practice (which is not offered by all institutions of teacher education within their programs of study.

Although considered as enormously important (cf. European Network of Teacher Education Policies, Green Paper on Teacher Education in Europe) a research component with professional relevance has not become an integral component of most of the models of teacher education in Europe yet.

We will not claim at this place on the problematic situation with the knowledge base, «core curricula» and contents of programs of teacher education in a number of European countries. Many programs have to be characterized as opinion - based collection code curricula reflecting power games in the «social arena» of teacher education. Less political and lobbyist argument and more orientation on both research - based and professional argument might contribute to more adequate solutions (cf. for the USA the ambitious project of the National Commission for Teaching and Americas Future).

While developments in e.g. Finnish teacher education might provide ample input for the definition of problem spaces and problem solutions, or recent discussions e.g. in Germany on the necessity of a «core curriculum» for teacher education reflect an increased problem awareness with problems of the knowledge base of teacher education, we will raise at this place the following questions:

—What are the aims and contents of education studies within teacher education both at primary and secondary level, and the education of other types of teachers (e.g. business studies, technical schools, special education, pre-primary level)?
—Which components are represented in different European programs of study of teacher education (education studies, academic studies, Fachdidaktik / subject-related didactics /

curricular studies / teaching practice) to which extent, with which aims and contents as well as organizational formats?
- —Which evidence is available for the effectiveness of different models of teacher education?
- —How well is a science for teaching / for the teaching profession developed?
- —How would it be possible to define coherent modules for teacher education studies?
- —How could modules be made comparable in order to allow a cross - European accreditation and transfer of modules?
- —A final question: How can research be implemented into programs of study and modules of teacher education?

How necessary is a comparative in-depth study of educational sciences studies?

Work done yet within the Tuning project has brought about very valuable information on different structures of study programs in educational sciences. This information may supplement items of work produced by the Thematic Network of Teacher Education in Europe or the European Network on Teacher Education Policies.

However, descriptions at a structural level on one hand and a definition of requirements for (teacher education) reform have to be supplemented by more accurate information on the current state of education studies and teacher education in the different Member States of the European Union. Making next steps towards a European Education Space and a European Credit Accumulation System seem to require as one of the many necessary conditions information on the recent state of education studies and teacher education studies.

Against this background this paper suggests as a next in the Tuning project a comparative in - depth study on programs of educational science studies in the Member States of the European Union. This study should provide a detailed overview and critical analysis of programs for educational- and teacher education studies (e.g. aims, contents, assessment/evaluation, learning cultures, models and structures, principles of governance). This study should be seen complementary to work on teacher education programs started already by EURYDICE in 2001.

As a result, components common to most (all) as well as differences in the programs could be made more explicit. The outcomes of this study could then form the basis for the development of programs of study

and/or modules that could meet the expectations of the Bologna process, the Tuning project, and the education community (e.g. definition of some «common core elements» as a basis for developing «European» modules within a European Credit Accumulation System).

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