# The European Dimension of Dental Education

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# Introduction and history

Dear Dean of the Dental School, colleagues, ladies and gentlemen, it is a great honour and privilege to be invited and to celebrate in your midst the 100 year anniversary of your famous Dental School here in Athens. I am here as representative of the European Dental Education community, as united in the Association for Dental Education in Europe (ADEE). Let me first bring back some history. It was in 1975 in Strasbourg, that representatives from your dental school, namely the professors Angelopoulos and Mitsis were among the founding fathers of ADEE. Prof. Angelopoulos was an active member in the Executive Committee of ADEE from 1975 until 1985. He was involved in 1978 in the development by the EU Commission of the "European Directives for the profession of Dentistry", leading to his membership and participation in the Advisory Committee on the Training of Dental Practitioners (ACTDP). In being here, I learned with sadness that he passed away last year. Much later In 1995, this Advisory Committee published a document on proficiencies for the practice of dentistry in the EU, the first in its kind. This committee comprised representatives from universities, ministries of health and national dental associations from all the EU member states. Your school can be realy proud to have played such an important and crucial role in the initial years of ADEE in the EU.

In my presentation I will now summarize and explain what has happened and has been accomplished over the last 15 years in the European Union as far as dental education is concerned.

## DentEd

In 1999 the Ministers of Education of 29 countries in the EU signed the so-called Bologna Declaration. The ultimate aim of this agreement was to establish a European Higher Education Area in which staff and students can move freely and easily and have recognition of their qualifications. One of the objectives was "to tune" the curricula in terms of structures, programmes and actual teaching in order to make the programmes more comparable.

What has been achieved by the <u>dental community</u> in view of this Bologna Declaration? Let me try to summarize what European dental schools, and Athens Dental School specifically have contributed to harmonize and converge the curricula of the dental schools.

Already in 1997 the European Union's Directorate for Education and Culture funded the first Thematic Network Project (TNP) which was called **DentEd** (1998-2000). This project was initiated by a group of dental educators mainly from the ADEE. DentEd under the leadership of prof. Dairy Shanley from Dublin in Ireland was designed to facilitate convergence towards higher standards in dental education. DentEd was followed by a second Project named **DentEd Evolves** (2000-2003). The Association for Dental Education in Europe (ADEE) together with DentEd obtained further funding from the European Commission for a third TNT project **DentEd III** (2004-2007). The aim of this project was to develop a curricular model in dentistry to be compliant with the principles of the Declaration of Bologna. It also aimed to harmonise the various dental curricula and to transfer to ADEE all expertise and activities, including the site-visitation and quality assurance systems, as developed by DentEd. I was Principal Investigator of DentEd III.

In all three *DentEd* projects we tried to achieve the objectives by involving all dental educators across Europe. Working Groups and task forces met to deliberate and formulate draft documents which were then widely circulated for feedback. The final versions were approved at the General Assembly of ADEE. Interactive websites as well as a variety of meetings, and questionnaires were utilised to facilitate on-line exchange of views. Members as well as students from your dental school have always actively and constructively participated in these activities.

I will now focus on the main documents that were produced. I will explain how we developed these documents, what the content and meaning is and how they contribute to further convergence and harmonisation of dental education in the Firstly the Profile and Competences Document (PCD)

The first step in the DentEd III project was to agree a professional profile with a defined set of generic and specific professional competences for the new dental graduate. In other words what should a graduating dental student from an EU dental school be able to accomplish professionally, in order to safeguard that patients from all EU countries can rely on the quality of the dental health care as provided by the graduates from EU Dental schools: the same standards and high level of dental care.

A Taskforce drafted the first version of a document called "Profile and Competences for the EU graduating Dental Student". In the spring of 2004 this draft was sent to all European dental schools with the request to note those areas where there was consent and, if there was disagreement with any statement, to give criticisms or suggestions for improvement. All reactions were used for the revision of the draft document. Athens Dental School was of course one of the active participants. All comments, suggestions and criticisms were discussed and amended where appropriate by the taskforce. The final Profile and Competences (PCD) document was unanimously approved by the General Assembly of ADEE at the Annual Congress in Cardiff, Wales, September 2004. The document was published in the European Journal of Dental Education in 2005 and was thereby accepted by the European Dental schools as the leading document in national and internal debates on the profile and competences of the undergraduate dental curriculum. All dental schools were asked to take care of and coordinate the (authorized) translation of the document into the local language. Translations of the document were made available on the ADEE website in: Estonian, Finnish, French, German, Greek, Hungarian, Polish, Romanian, Russian, Slovak, Spanish and Turkish.

It was envisaged that this document would:

- Act as a leading document in curriculum revisions in European dental schools in harmonizing and converging towards a European Dental
- Assist deans of dental schools in internal and national discussions
- Be used by curriculum coordinators, teachers and students in dental schools in Europe

EU.

- Help to facilitate staff and student exchange within Europe
- Be used in global meetings on dental education in order to converge globally
- Help to raise the quality of dental care provided by dentists educated in the European context
- Serve as basic document on activities towards benchmarking and best practice

It can now be concluded that this document has and still is playing the role as envisaged at that time. By adopting the PCD the European educators have agreed on the **profile** of the graduating dentist. It reads as follows: The new graduating European dentist should:

- Have had a broad academic and dental education and be able to function in all areas of clinical dentistry;
- Be trained sufficiently in dental science;
- Be able to work together with other dental and health care professionals in the health care system; should have good communicative skills;
- Be prepared for life-long learning and continuing professional development;
- Be able to practice evidence-based comprehensive dentistry based on a problem solving approach, using basic theoretical and practical skill

Needless to say that students graduating from Athens Dental School, according to their curriculum, meet the requirements of this profile.

In the PCD document all competences have been defined as the basic level of attitudes; behaviour, knowledge and skills necessary for a graduate student to respond to the full range of circumstances encountered in general professional practice.

**Competences** support integration and merging of all disciplines, which should benefit students and also patients. Their definition will give schools a benchmark with which it is possible to firstly, review, redefine, and restructure the undergraduate curriculum; secondly, review and improve student evaluation processes; and thirdly, establish and apply outcome measures to assess the effectiveness of the undergraduate programme. The Profile and Competences document is structured from the general to the more specific for each section of seven domains. They are interdisciplinary in orientation: I name them:1. Professionalism, 2. Communication & interpersonal skills, 3.Knowledge base, information handling and critical thinking, 4. Clinical information gathering, 5. Diagnosis and treatment planning, 6. Establishment and maintenance of oral health, 7. Health promotion

Within each of these seven domains, one or more "Major Competences" were identified as relating to that domain's activity or concern. A major competency is the ability to perform or provide a particular, but complex, service or task. In total 17 major competences were defined. The more specific abilities could be considered subdivisions of the "Major Competence" and were termed "Supporting Competences". Achievement of a major competency requires the acquisition and demonstration of all supporting competences related to that particular service or task. A full list of 127 supporting competences was included in the document. In making this subdivision into major and supporting competences, ADEE envisaged that all European Schools would adhere to the major competences, but the supporting competences may vary in detail between schools giving space for local and cultural differences to meet particular national or regional needs.

Although the PCD document was approved in 2004 we realised that the document would be of more value if it had been shared with, adopted and/or agreed upon, by Ministries for Health and/or Education, the national competent authorities, national professional associations, and specialist associations. To that end the document was sent in December 2005 to all these organisations and associations. Subsequently an advisory conference was planned in Dublin in April 2007.

Representatives from ministries, national professional associations and European specialist associations were invited. The conference had contributed considerably to the understanding and acceptance of the document among all participating delegates.

Right from the beginning it was planned that the document had to be reviewed every five year in order to be up-to-date and meet changes in society and in developments in the profession.

To that end all dental schools were asked how the PCD document was used in the school. Thereafter discussions were held on the draft revised document at the

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annual ADEE meeting in 2008. At the ADEE General Assembly in Helsinki in September 2009, this revised and up-dated version was approved and therafter published in EJDE in 2010. This concluded the first revision cycle of the PCD document, five years after its first appearance in 2004.

## Curriculum structure, content and ECTS

A **second important document** was developed following the same methodology as with the PCD. This document concerned aspects relating to outcomes, content and structure of the European Dental Curriculum for the undergraduate dental student, including guidelines and recommendations regarding student exchange and the European Credit Transfer System.

At the annual meeting of ADEE and DentEd III in Athens in September 2005, the General Assembly of ADEE approved the first part of the document *Curriculum Structure and the European Credit Transfer System (ECTS) for European Dental School, Part 1.* This document was subsequently published in the European Journal of Dental Education in 2005. Part 2 dealt with methods of learning and teaching, assessment procedures and performance criteria. It also provided examples of some curriculum models currently in use in Europe. This document was approved by t the General Assembly at the ADEE meeting in Krakow, Poland in September 2006 and published in the EJDE in 2007 The first update after five years was published again in the EJDE in 2011.

The main reason to converge the dental curricula of the EU dental schools and to agree on the curriculum structure, the ECTS, methods of learning and teaching, assessment procedures and performance criteria, was to facilitate student and staff mobility in the European context. The exchange of dental students over the last 20 years, since the launch of the Erasmus project has grown substantially. Most dental schools in Europe have a student exchange programme in place giving dental students the opportunity to study for a period of on average 3 months in another European dental school. Networks of Erasmus/Socrates partners have been established and students in general very much appreciate the given opportunities. They experience these exchanges as a life changing event in their personal development as student. They learn to understand cultural differences, the importance to master at least two European languages and of course to appreciate the differences in knowledge, skills and methods as far as clinical dentistry is concerned.

However in order to further converge or harmonise the curricula to facilitate easy exchange, not only students but also academic staff has to exchange. This will create a much wider movement of learning, understanding and improvement of dental education in the EU. There has been some movement of members of staff learning from each other but certainly not enough.

#### Quality Assurance

The **third important document** developed in DentEd III was the document "Quality Assurance and Benchmarking: an approach for European Dental Schools".

Definitions of Quality, Quality Assurance, Quality Management and Quality Improvement were given and put into the context of dental education. The possible process and framework for Quality Assurance was outlined and some basic guidelines and recommendations were suggested. It was recognised that Quality Assurance in Dental Schools has to co-exist as part of established Quality Assurance systems within faculties and universities, and that Schools also may have to comply with existing local or national systems. Perhaps of greatest importance are the fourteen 'requirements' for the Quality Assurance of Dental Education in Europe. These, together with the document and its appendices, were unanimously supported by the ADEE at its General Assembly in 2006 in Krakow and published in the EJDE in 2007 (Jones et al).

The documents that were developed by extensive discussions in dental schools and at ADEE meetings in and outside Europe may already be outdated in a few years. It was therefore agreed that the three DentEd/ADEE documents mentioned above need to be revised every five years.

This revision process follows the steps of a well defined planning cycle. The discussions at all levels on the issues covered by the content of these documents will gradually lead to more convergence, harmonisation and quality improvement of dental education in the EU. This in turn will facilitate student and staff mobility within the European area.

The methodology of drafting documents and sending them to dental schools for discussion and feedback created ownership by dental schools throughout the EU right from the beginning. Even the European Dental Student Association (EDSA) was involved in this process. Students from Athens Dental School have been very engaged in this respect. Instead of a central top-down approach a more democratic bottom-up process was followed.

Another very positive side effect of the procedure to seek participation from all dental schools was the steep increase in membership and participation from the EU-dental schools in ADEE. At the beginning of DentEd III in 2004 there were some 90 dental schools participating as ADEE members. It is estimated that in the larger Europe there are altogether some 200 dental schools. Now at the end of DentEd III, in the fall of 2007 the number of ADEE member schools has increased from 90 to some 160 dental schools out of the approximately 200. Thus, ADEE through DentEd can now be considered to really represent the European dental schools.

For the first time in the history of dental education in Europe a core document was approved and accepted on the profile and competences of the undergraduate European dentist where at all levels, associations and organisations were involved in the discussion. This in itself is a very strong movement towards convergence of dental education in Europe. Not so much the final publication, but more the discussions by all partners involved directly or indirectly in dental education have contributed to the wide use of the document in dental schools for changing the dental curricula.

We must however realise that in the discussions sometimes language and cultural differences have created barriers to understanding. These barriers have always existed but have became apparent and have resulted in learning to understand, which in itself is also a process of convergence and harmonisation. It means that this should be an ongoing process. Therefore the revision of the document every five years is essential to keep the subject on the agenda and again and again up-date and improve the commonly shared document by learning from best practices and from experiences. We may summarize the results as described above, as follows:

- 1. The profile and competences document has and still is serving its purpose as a leading document in the discussions at all levels to further converge and harmonise dental education in the EU.
- All three documents have to be used not as static but as evolving documents to be amended on the basis of new developments, experiences and insights and growing convergence by all those whom are involved in dental education.
- The Bologna Declaration, signed by all ministries of education in Europe has been an important driving force in this convergence process for dental education in Europe
- 4. It is considered to be essential to also involve regularly the European Dental Student Association in all these activities.
- 5. The discussions held at all levels within dental schools, at annual meetings of ADEE, in all institutions and associations at the European and National level have to be continued as the most important movement to learn and improve, to converge and harmonise dental education in order to provide the best possible dental health care to the populations in and outside European countries.

## **Continuing Professional Development**

The undergraduate education, which delivers a dentist at a particular level of competence, should act as a springboard which engenders the concept of continuing professional development (CPD) and life long learning. Athens Dental School, in the person of Dr. Argyro Kavadella has played a decisive role in launching a new initiative regarding CPD.

A 2-year EU funded project by the name of DentCPD started in the fall of 2010. The project was entitled '*Harmonisation and standardisation of European Dental Schools programs of continuing professional development for graduate dentists*'. This project aimed at identifying agreed essential CPD requirements of an EU graduate dentist and provide guidelines for the management and delivery of high quality CPD by European dental schools.

The project, initiated by the Association for Dental Education in Europe was cofunded by the EU under the Lifelong Learning Erasmus sub-programme, '*Modernisation of higher education*'. The project began on October 2010 and ended last September 2012 but will hopefully be prolonged. Professional Development (CPD) is essential to the maintenance of dentists' knowledge and skills, underpinning safe clinical practice. In the context of free movement, EUcitizens need assurance that dental practitioners have a license to practice that meets EU-standards. There is a need for harmonisation of CPD across the EU. supporting the safe management of patients and promoting mobility of practitioners. Currently, dental CPD is provided by a range of bodies and the quality of courses is variable and unregulated. EU Dental schools have a strategic role to play and this innovative CPD project, which was the first of its kind in the global educational arena, supports the modernisation of their role in postgraduate education. There are six partner institutions: Cardiff University Dental School, U.K. as Main applicant and Coordinator; Athens University School of Dentistry with Dr. Argyro Kavadella and and Professor Anastasia Kossioni; Helsinki University Institute of Dentistry; ACTA, Amsterdam, The Netherlands; Rīga University Dental School, Latvia and finally the ADEE - Association for Dental Education in Europe . The work of the DentCPD Project is accomplished through a WorkPackage structure and resulted in three publications: A review of continuing professional development for dentists in Europe (EIDE 2012); An inventory of CPD activities for graduate dentist across the EU; Guidelines for CPD managers and educators for the strategic organisation and delivery of CPD programs.

#### I now come to my concluding remarks

Over the last four decades Athens Dental School has had an active participating role in the building and growing of the Association for Dental Education in Europe. An important achievement of the DentEd and ADEE activities have been the growing participation of almost all dental schools in Europe in the joined efforts to harmonize dental education and at the same time appreciate the differences and local flavors and culture.

The DentEd projects have made a major brake-through in this convergence of dental education. Representatives from Athens Dental School have played a pivotal role in the early years of ADEE and in the last ten to fifteen years. We all keep still fond memories of the wonderful annual meeting of ADEE which was held under my presedency here in Athens in 2005 and so well organized by members of Athens Dental School.

Now, at present, it has to be recognized and commended that Dr. Kavadella is serving in the Executive Committee of ADEE.

And now the Dental School is actively involved and providing strong leadershiop in the EU funded DentCPD roject in the persons of Dr. Argyro Kavadella and prof. Anastasia Kossioni.

Mister Chairman, Dean, ladies and gentlemen, you live in very difficult times here in Greece, where the financial crises is hitting hard and effecting the entire country including the Dental school, its personel and students.. The more it is to be commended that you have the will and the strength to celebrate your hundred years existence, looking positively into the future. Please accept my personal congratulations also in the name of ADEE and the European dental community.

Thank you for your attention