

# Towards the Education of “Universal Dentist” in the Age of Globalization

**K. Eto**

Tokyo Medical and Dental University Graduate School, Faculty of Dentistry  
1-5-45, Yushima, Bunkyo-ku Tokyo 113-8549, Japan

## 1. Core Educational Objectives in Japan

It had been a while since graduate dilution of the quality and quantity of undergraduate clinical education in Japanese dental schools was pointed out as a major issue. Various reports full of recommendations and guidelines lacking in an appropriate evaluation system thereof did not seem to bring about expected results. The Committee on Medical and Dental Education established by the Japanese Ministry of Education, Culture, Sports, Science and Technology (MEXT) issued a report entitled “Measures for Improving Medical and Dental Education for the 21st Century - Restructuring Undergraduate Medical and Dental Education-” in March, 2000.

[[http://www.mext.go.jp/b\\_menu/houdou/13/03/010330.htm](http://www.mext.go.jp/b_menu/houdou/13/03/010330.htm) (in Japanese)]

The report consisted of recommendations on the following major issues: curriculum reform; evaluation system; infrastructure for undergraduate clinical training; and promotion of faculty development. It was hallmarked by the Model Core Curriculum in undergraduate medical and dental education as well as the proposal for the Common Achievement Test.

### 1) Japanese Model Core Curriculum

In the past decades, simple accumulation of educational contents resulted in an overly crowded undergraduate medical and dental curricula. It was therefore crucial for educators to identify core educational contents to be learned by every single medical or dental student regardless of his/her future career choice and at the same time to allocate more time for clinical education. After including such nationally established core educational contents in mandatory courses, it was required for each medical/dental school to design elective courses corresponding to different needs of its students. In order to facilitate identification of the core educational contents, the above Committee compiled the Medical/Dental Model Core Curriculum which was an assembly of general instructional objectives and specific behavioral objectives which should be attained by all medical or dental students by the time of graduation. The time allocated for the educational objectives included in the Model Core Curriculum was supposed to occupy around 60 to 70% of the total curriculum hours. It was up to each medical or dental school to decide how to deliver the educational contents in the Model Core Curriculum; however, the report strongly recommended that they should be taught through a curriculum integrating basic and clinical subjects as much as possible rather than a traditional disci-

pline-based one.

### 2) Common Achievement Test before starting undergraduate patient care

Undergraduate dental education in Japan, which used to be skill-oriented and patient-care-oriented, had been gradually focused more on the instruction of knowledge in the past decade or so. Dental educators felt it necessary to reinstate the quality and quantity of undergraduate clinical education (patient care). Though the background of the demand of improving clinical education was different between undergraduate medical and dental education, educators in both fields agreed on the necessity to enlist patients’ understanding and cooperation for clinical education. The Common Achievement Test (CAT) was introduced to both undergraduate medical and dental education in order to demonstrate to patients that student physicians/dentists have acquired a certain level of knowledge, skills and attitude. Under this system, only those students who pass this examination will be able to proceed to clinical education (patient care). Since the Model Core Curriculum is expressed as a set of specific behavioral objectives (SBOs), the attainment of SBOs can be assessed by evaluators. Based on SBOs which should be attained prior to treating patients, questions in CAT are prepared. CAT comprises of Computer-Based Testing (CBT) and Objective Structured Clinical Examination (OSCE). The SBOs related to knowledge are mainly evaluated by CBT, while skills and attitude are partly evaluated by OSCE. The official implementation of CAT is scheduled for December, 2005.

## 2. Core Educational Objectives in Europe

In Europe, academic degrees and certificates are mutually recognized among the member nations of the European Union. Dental practitioners are included as one of the health care professionals whose basic right for free movement within the area is guaranteed. Therefore, in principle a graduate from dental school of a member country is able to move to another member country and work there as a dentist. Faced with differences in the quality and quantity of undergraduate dental education in Europe<sup>1)</sup>, the Association for Dental Education in Europe (ADEE) took the lead in the efforts geared toward more harmonization and convergence to a higher standard of dental education in Europe<sup>2)</sup>. In September, 2004, ADEE officially adopted “Profile and Competences for the European Dentist” [<http://adee.dental.tcd.ie>], which indicated the profile of the graduating dentist and the core competences every graduate from dental school

in member countries must attain. This document was expected to serve as a facilitator in more harmonization and convergence of dental education in Europe.

### **3. Comparison between Japanese and European Core Educational Objectives**

The Japanese Model Core Curriculum (JMCC) and the Profile and Competences for the European Dentist (PCED) had apparently different goals and objectives; however, they share a characteristic of defining core educational objectives all dental graduates have to fulfill. The purpose of this study was to compare mainly the con-

tents and the expected level of achievement without getting hung up too much on details. JMCC tended to focus on the cognition level of students, which could be explained by the fact that questions in the Computer-Based Testing (CBT) in CAT were prepared based on the SBOs in JMCC. PCED was characterized by competences covering a wide range of knowledge base and those concerning students' attainment on the behavioral level. There were also some competences of importance which were not enunciated in JMCC. The results of this study were expected to offer useful information for the future revision of JMCC.