

TEMPLATE FOR EXTERNAL EVALUATION REPORTS

The structure of the “Template” proposed for the External Evaluation Report mirrors the requirements of Law 3374/2005 and corresponds overall to the structure of the Internal Evaluation Report submitted by the Department.

The length of text in each box is free. Questions included in each box are not exclusive nor should they always be answered separately; they are meant to provide a general outline of matters that should be addressed by the Committee when formulating its comments.

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ΑΡΧΗ ΔΙΑΣΦΑΛΙΣΗΣ ΠΟΙΟΤΗΤΑΣ	HELLENIC QUALITY ASSURANCE AGENCY
ΑΝΩΤΑΤΗΣ ΕΚΠΑΙΔΕΥΣΗΣ	FOR HIGHER EDUCATION

EXTERNAL EVALUATION REPORT

DEPARTMENT: Dental School

UNIVERSITY: National & Kapodistrian University of Athens

Version 2.0

January 2010

External Evaluation Committee

The Committee responsible for the External Evaluation of the Department of Dentistry of the University of Athens consisted of the following four (4) expert evaluators drawn from the Registry constituted by the HQAA in accordance with Law 3374/2005 :

1. Professor Heikki Murtomaa
University of Helsinki, Helsinki, Finland
2. Professor Imad About
Université de la Méditerranée, Marseille, France
3. Professor Peter Berthold
University of Minnesota, Minneapolis, USA
4. Professor Deborah White
University of Birmingham, Birmingham, UK

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Introduction

The External Evaluation Committee (EEC) consisting of Professor Imad About, Université de la Méditerranée, Marseille, France; Professor Peter Berthold, University of Minnesota, Minneapolis, USA; Professor Heikki Murtomaa, University of Helsinki, Helsinki, Finland; and Professor Deborah White, University of Birmingham, Birmingham, UK visited the National and Kapodistrian University of Athens School of Dentistry (hereafter referred to as NKUA SoD) in Athens, Greece during March 15 - 20, 2010.

The EEC was charged by the Hellenic Quality Assurance Agency for Higher Education (HQAA) to evaluate the Doctor of Dental Surgery (DDS) program, the NKUA SoD’ post graduate programs in dentistry, and its PhD program. The HQAA, a government related but independent quality assurance committee, has recently begun an evaluation of all of Greece’ University departments and schools. This is the first visit of the School of Dentistry NKUA.

The following report contains the observations of the EEC based on the information provided to it by NKUA SoD, the on-site visit, discussions with the Dean, Vice-Dean, Self Assessment Committee, members of the faculty, member(s) of the University of Athens Higher Administration, School of Dentistry’s students and support staff.

The EEC members reviewed the following documents before the visit; the NKUA School of Dentistry Self-Assessment Report 2007-2008, the Self-Assessment Update Report 2008-2009 & 2009-2010, the HQAA’s Guidelines for the Members of External Evaluation Committees, and HQAA’s External Evaluation Report template.

The guides for the review have been the HQAA’s template for the report and various Association for Dental Education in Europe (ADEE) documents.

All of the EEC’s comments, recommendations, and suggestions are offered with the intention of ensuring that the programs achieve the highest level of quality consistent with its high aspirations. It has to be remembered that the EEC visit is not an accreditation or ranking, but an evaluation of the current status of the school, its self-evaluation and findings, and proposed remedies.

The EEC felt that the submitted documentation was sufficient and as thorough as could be expected. However, the 320-page long and supplement self-assessment documents could have been condensed and reorganised. The internal self assessment committee had identified several issues and seems to be progressing in its attempts to address them.

The EEC has recognised that the included template is not developed for health profession schools, but is rather a standard template primarily for non-healthcare profession schools. The term “Department” in a health science school such as Dentistry or Medicine indicates a smaller unit within a “School or Faculty”. Thus EEC refers to the evaluated unit as the “School” and to the individual subject related entities within the school as “Departments”. In addition, this type of template hardly allows for comments on clinical care issues in the

education.

The Post-doctoral programmes in the School of Dentistry are divided into two stages with a total of 14 fields. Ten of these programmes are directly related to clinical disciplines and they are aimed to develop advanced clinical skills. The duration of study for all ten programmes is three years. Additionally, they are for two year programmes related to Basic Dental Sciences, focussing mainly on research. All fourteen programmes are leading to a Master's degree after completion of a thesis on a research protocol. All these programmes belong to the first cycle of graduate studies. After successful completion of one of the 14 programmes, a graduate student can apply to become a PhD candidate in one of the Dental Basic Science areas. The PhD programme has a limit of at least three years of study and the students in the programme have to participate in courses, literature reports, essays on specific topics, and complete a dissertation in a specific research project. Thus it is neither feasible nor beneficial to complete an external evaluation report for each of these graduate and doctorate programs. Instead, the report is primarily addressing the undergraduate education.

Postdoctoral programs aim for proficiency in a discipline and include advanced didactic coursework, advanced clinical care and a teaching component. Any other major dissimilarity between the educational levels (DDS vs. MS) in the same discipline will be discussed separately.

The non-clinical disciplines, which are focused on research, and the PhD education in clinical disciplines, are both addressed in the Research section

A. Curriculum

The Mission and goals of the University of Athens School of Dentistry are described in the self-assessment document. However the mission is not clearly separated from the Goals and is instead described in a one-paragraph narrative:

“... to provide every student with the knowledge and the competencies to help him practice for a graduate of our school to know that all his abilities must evolve from a sound biological the dental profession and restore the oral and general health of the population. It is important background, preventive direction of treatment, social awareness and understanding of the need for continuing education and learning. The biological foundation is necessary for the practice of dentistry since without it, dentistry would remain an art and not a science. The preventive direction is a stepping-stone for the medical profession and the primary goal is not the treatment of the diseases but their prevention and the maintenance of any therapeutic result. Social awareness not only makes the dentist a professional but also makes him a person sensitive to the needs of the population. The will to continue learning refers to the mentality, which must develop in every student during his tenure at our school so that he constantly improves his abilities throughout his professional career. This is an important condition in a dynamic and progressive dental scientific environment”.

University of Athens School of Dentistry is about 100 years old and its curriculum has evolved over time. The curriculum is discussed and modified when appropriate through a process including the Dean, The Dental Education Committee (Curriculum Committee), and the General Assembly (GA). Committees and the GA have both faculty and student representation. It is unclear if other stakeholders such as community representatives and dental associations are involved in any of the discussions. The EEC noted that much of the education is rooted in University regulations and State laws. The School has limited opportunities to create new programs, curriculum innovations, and incentives for the faculty. The School also has limited means to enforce accountability among its faculty. The current economic crisis in the country is also impacting on all

education.

The EEC noted that the presented curriculum meets the expectations for a European dental school curriculum. It is also noted that the curriculum seems to meet the combined Mission and Goal statement (see above). None of the EEC members is Greek and can thus not address the Greek society's expectations. Having said this, it is noted that there is an ongoing paradigm shift in many countries in Europe and in the US, Canada, and Australia. It is becoming expected that dental schools should provide outreach programmes serving diverse, underserved communities, and the less fortunate, often rural communities, in need of oral health care. Most of these communities also have a number of access issues. Outreach programmes also introduce students to the important aspects of their responsibilities of community service as a health care provider.

An ADEE team of experts in dental education visited NKUA SoD in 1999. The major aims of the site visit were to assist NKUA SoD in curriculum change and to reach a harmonisation of dental education across Europe. The site visit report alerted the School of the need to address several curriculum issues and a process to review and change the curriculum began. The curriculum is continuously discussed and modified when appropriate through a process including the Dean, The Dental Education Committee (Curriculum Committee), and the General Assembly (GA). Committees and the GA have both faculty and student representation. It is unclear if other stakeholders such as community representatives and dental associations are involved in any of the discussions.

The School has completed a 4-year strategic planning process cycle with a report to the Main University and the Ministry of Education. It was unclear to the EEC whether a new cycle had been started or if the suggestions in the report were being implemented. The EEC did not have access to the Strategic Planning Report. The self-assessment process has alerted the School to several issues that need to be addressed. The recently introduced electronic Course Evaluation has also demonstrated both weaknesses and strengths in the curriculum. These two events have set a process in motions to address curricular and care issues. The lead has been taken by the School's Dental Education Committee (Curriculum Committee) and final decisions will be made, as outline above, by the Committee, the Dean and the General Assembly.

IMPLEMENTATION

The EEC noted that the school has not implemented an outcomes process using quantifiable measures to appropriately evaluate its own education, curriculum and the students' *knowledge, skills* and *attitude* upon graduation. It is not possible to determine if the School is meeting its own goals or not until an appropriate outcomes evaluation is established. In addition, the Mission and Goals statement must be phrased in quantifiable terms.

The School and its leadership have a good understanding of modern dental curricula and are making attempts to address whatever weaknesses it has observed through the current self-assessment process. It may take some time before School wide policies penetrate through the School due to what seems to be a heavy handed bureaucracy in the School, the University and the Government, combined with the strong independence of the departments.

The School is in the process of establishing competences following ADEE's recommendations in the document *Profile and Competencies of the European Dentist*. The EEC noted that the curriculum could benefit from greater flexibility by increasing both horizontal and vertical integration. The EEC also believes that the introduction of ECTS credits and using a modular education would improve flexibility. A European compatible credit system, as recommended in the Bologna Declaration, would allow students to experience

education at schools in other European countries.

The information on the curriculum is primarily based on the 2007-2009 self-assessment document. The curriculum is spread over five years (ten semesters). The education consists of both theoretical and practical education comprising 1731 contact hours (51.3%) of theoretical education, and 1716 contact hours (48.7%) of practical education. The practical education of 1716 hours is further divided into 667 hours of laboratory exercises and 1049 hours of clinical patient care. It was noted that the self-assessment report includes tables indicating contact hours for each course.

The curriculum is reported to consist of 95 courses of which 88 courses are mandatory and seven electives are offered. The students must complete at least 2 elective courses. A further distinction of the courses was made in courses of General Knowledge (2), Basic Sciences courses (4) and Biomedical courses (16). Sixty eight courses are in oral health/dental subjects. The self-assessment includes a further distinction of the courses and report that 60 courses are clinical courses.

The dental school does not offer separate courses in the basic medical sciences. Instead 17 courses are taught primarily by the medical school faculty both as dental school courses or combined courses for medical and dental students. Changes have occurred in the basic Anatomy and Biology education that caters to the Dental School's need.

The distribution of the courses within the entire curriculum structure follows the traditional dental education model with the first three years devoted to basic sciences (didactic lectures) and preclinical education as lectures, seminars and skills learning laboratory exercises in the various dental disciplines. The final two years are mainly dedicated to clinical education practices including comprehensive care (Total Patient Care Clinic). A shift is occurring with an introduction of the students to the clinics in the second semester of the third year. The student representatives indicated that this has been very helpful in learning the procedural steps in the clinic before the actual patient interactions.

A weekly schedule for each semester was included in the self-assessment document from 2007-2008. The EEC noted that the daily schedule for the first four years does not include any lunch breaks. In the first three years a few days have open times between the hours of 12-13 that would allow for a lunch break. The EEC felt that more time with fewer breaks does not enhance the students' learning. On the contrary it is contradictory to all philosophies of learning. Students need breaks to be able to fully absorb material. Lack of a lunch hour also creates a liability in patient care delivered in the latter parts of the day.

The EEC's overall opinion on the curriculum is positive and the EEC feels that it is functional, logical, appropriate, and the rationale for the courses is clearly articulated. The committee could not evaluate the individual Syllabi since they were only available in Greek. However, each course has been listed in the self-assessment report. The EEC, after its careful evaluation, felt that the strength of the implementation of the curriculum varied between the departments with some stronger than others. However, this is not anything unusual and should not be seen as a criticism of the curriculum, education, or faculty.

There is a weakness in student assessment, particularly in the clinical courses. This is also noted in the self-assessment report. A few of the departments have established quantifiable assessment methods of student competence. There is also a lack of standardisation among the faculty within a specific discipline. This creates a very common but nevertheless critical problem in a consistent evaluation of both pre-clinical and clinical procedures.

The EEC understood that the students were generally pleased with the education but they felt that the basic

science education was clearly dominated by the medical school. There seems to be a lack of willingness on the medical school's part to adjust or even discuss its education to better meet the dental school's needs and desires. This has resulted in that unnecessary time is spent in medical school courses that are primarily developed for medical students. The medical school schedule and other factors have led to an unfortunate situation in the use of time resulting in the above-mentioned lack of a lunch hour and a crowded curriculum. The EEC did not fully understand the advantages of the five Sections. It seems that this structure, as it is implemented, only adds an additional layer of bureaucracy. However, the EEC envisages an opportunity for departments in the same section to increase collaboration, leading better use of resources, time and opening up avenues for research. A good example of this would be a closer collaboration between the Departments of Paediatric Dentistry and Prevention and Community Dentistry. Both these departments teach prevention but in one of them the education is mostly didactic and in the other the education is both didactic and clinical. Both departments would benefit from allowing their students outreach experiences into the communities and participating in smaller research projects. Both these departments are in the Community Dentistry Section. Another possible advantageous situation would be a closer relation between the Departments of Hospital Dentistry and Oral Pathology, within the Section of Oral Pathology and Oral Surgery.

In addition, EEC believes that a better cooperation between the medical and dental schools, and between the sections/departments could release time for student self-studies and exposure to research.

The School is dependant on volunteering faculty to implement its curriculum. Additional financial resources would allow for a modernising of the curriculum and its delivery. For example, the School is in need of an improved student computer facility. Many support staff individuals are employed on short-term contracts. The School would benefit from having a stable workforce on an appropriate salary.

RESULTS

The implementation of the curriculum seems to meet the predefined Mission and Goals. However, as mentioned above, this cannot be fully determined until an outcomes process is implemented and outcomes data can be analysed. Until then, any statements on a successful implementation will be a guess.

The School is in the process of addressing this issue and the School and its leadership fully understand the need for an expedient resolution.

IMPROVEMENT

The School has, through the self-assessment, established areas of priorities in its education. The School has a very well educated faculty. Several new appointments of young faculty with extensive education from other countries bode very well for the future. The EEC could feel, and also noted the excitement, among the faculty to improve and advance the School's education to reach its goals of becoming a leading Dental Education Institution in Europe and globally. They certainly seem to have the potential, provided there is increased University and State support and a less stifling bureaucracy. Heavy-handed bureaucracy in education only slows development, decreases accountability and both people and institutions may never reach their potential.

B. Teaching

APPROACH:

The School of Dentistry has set their missions and goals to be in harmony with the standards of dental

education derived from internationally accepted concepts. This does not, however, include a clearly defined educational philosophy. There is a heavy reliance on lectures as the main method of teaching.

The clinical teaching is in many disciplines supported by part-time general practitioners and specialists. Additionally, there is a considerable number of volunteer dentists, who like the full time clinical academics, are dedicated to their teaching roles and proud to be members of the faculty at the School of Dentistry. The staff student ratios for clinical teaching are generally good but some newly developed clinics might need more faculty. By virtue of the nature of clinical dental education, the EEC deems a sufficient number of clinical faculty important for high quality clinical education.

The undergraduate students seem to have an appreciative attitude towards their teachers. The post graduate students were also mostly satisfied with the collaboration with their supervisors. The students appreciated the opportunities to interact with the staff members and of having their opinions and feedback taken seriously.

The patient pool for education purposes seems to surpass the commonly available patient pool at most dental schools in Europe. A high quality dental care can be delivered because of the modern dental equipment which includes excellent radiology technology with 3D imaging options. The library at the school provides an excellent source of learning and reference materials with broad band access to information technology which is available to all the students but with a limited number of work stations.

Several traditional examination methods are used for assessing student knowledge and progress.

IMPLEMENTATION

Dental staff in universities is expected to perform three major roles: research, teaching and clinical service. They require clinical service to deliver care to the local population but also to maintain their clinical skills. In addition, they are different from medical academics in needing to provide close support in teaching where irreversible techniques are performed on patients by students. All this is reflected in a heavy workload to the faculty.

Students must be able to perform adequately in all aspects of general dental practice upon graduation. This is usually assessed by meeting established competences for dental graduates. This also reflects the local school's educational methodology and the organisation of its curriculum. Moreover, it reflects the desired capabilities that the new dentist should possess in order to be able to successfully address the specific oral health problems of their local community. The School of Dentistry has not yet created a complete list of competences for the dental graduates that was available for review by the EEC.

Some of the faculty members have been active in producing teaching materials such as compendia, text books and Greek translations of international textbooks. Most of the senior faculty has been trained abroad and have substantial experience in their disciplines. There seems to be a sufficient number of dental units and dental materials related for clinical undergraduate training. All postgraduate students share core courses after which all teaching is done on respective departments. According to the postgraduate clinical students their situation is not as good as the undergraduates regarding their learning tools for clinical training. Doctoral students stated that they are in many cases responsible for financing their own research materials.

There is a multitude of assessment methods used to evaluate different outcomes both in didactic and clinical teaching. These include both formative and summative assessments and a mini OSCE based system (Objective Structured Clinical Examination) in the Radiology department. The clinical education includes a required number for each clinical procedure. A faculty member evaluates every step of each clinical procedure following an evaluation form. The number of assessments seems very high, and this could be addressed by

verticalising the curriculum and introducing learning modules.

The School of Dentistry's methods for assuring the quality of the education are not clear, although the EEC was told that the development and implementation of quality assurance methods are currently under consideration. The initial focus has been on clinical quality assurance including infection control, which seems appropriate. It is essential for every institution that provides education to be able to evaluate its quality and outcomes. The school has developed a digital Course Evaluation procedure for the students. This is an appropriate procedure allowing pre-clinical and clinical students to evaluate the departments and academic staff in practical and theory-based courses. Feedback from students on their perceptions of strengths and weaknesses in training can thus be achieved and analysed on a yearly or semester basis. There were neither any "staff satisfaction" questionnaires and/or interviews nor any patient surveys, which may prove useful and reveal weaknesses in the educational system.

Despite the presence of research laboratories in the School, they seem to play a minor role in undergraduate education. Increasing interaction between researchers and undergraduates might also facilitate adoption of an evidence based dentistry approach into everyday teaching and learning. The potential of learning, for example preventive practices, in real life situations such as schools and outreach locations remains underused.

It can be assumed that the teachers with foreign training are able to maintain their international contacts facilitating exchange of up-to-date scientific knowledge and increase mobility. The high number of research active faculty members and those active in different international scientific and professional organisations have kept the school visible and well represented internationally.

There are some foreign students in the school and their number has stayed stable in recent years. Actual exchange of undergraduate students has been mainly through local students going abroad. To facilitate exchange programs within European dental schools a credit system according the Bologna Declaration, as developed by the School and also indicated in the self assessment report, should be implemented. This credit system should be expanded to include all areas of dental education and be focused on student work rather than on lecture hours.

RESULTS

The school seems to have well-motivated and active students. The students enter the school through the National Entrance Examination system with good credentials giving a solid basis for self-directed learning. This approach should be given more time in the curriculum. Through the whole curriculum there should be further integration of the basic sciences with a clear reference to dentistry which would be beneficial to facilitate undergraduate students learning. The perception of the students that the curriculum is overloaded with medical content could be due to a real overload or a lack of motivation of the students towards the preclinical sciences. Integrated activities would possibly enhance students' motivation and reduce dental staff time with these subjects.

According to the self assessment data in one third of the courses the success rate in examinations was lower than 75%. Nearly all the courses in this category were basic science courses giving a further reason for revising these areas. The graduation rate for undergraduates is high but the situation is not the same with Masters' programs let alone with PhD students. The distribution of final grades for graduates of years 2006-2009 follows a fairly normal distribution with the median of 6.5-6.99.

The availability of patient treatment categories is by and large excellent and all students seem to have access to a good case mix. However, the role of preventive dentistry and its integration with the clinical disciplines

remained obscure. It seems that there is no routine recall strategy for patients treated except those with periodontal diseases.

External evaluation of the school is useful in establishing a framework for the development of quality assurance and international benchmark mechanisms. The Dean and his staff are to be commended for their work producing good results and positive developments in the School. The self-assessment report facilitated the work of the ECC and has enhanced high quality dental education and research.

IMPROVEMENT

The School has the overall potential to be a very good dental educational facility according to the international standards and documents set out by the Association for Dental Education in Europe. The factors that make this possible are the well-educated staff, the plans and ideas on adapting the present curriculum and the potential that a new building provides. However, to make this happen serious effort is needed to achieve improvement of the infrastructure, financial security and education adaptations. The School has provided a detailed list of plans for improvement in the self-assessment report. The EEC shares the School's views on the majority of those. However, regardless of good momentum for improvement, executing some of these plans is beyond the School's control. Besides the financial situation of the University and the State, several administrative obstacles seem to exist in terms of legislation hindering execution of the School's well justified plans. For example, centralized administration and lack of independent budgeting reflect negatively on long term planning of educational activities. Furthermore, the present situation does not allow an adequate exposure to dental team work since the students do not have opportunity to work with dental assistants. Due to legislation also the educational experiences in delegating duties (to dental hygienists) are not available.

C. Research

APPROACH

An important research activity is carried out in the School of Dentistry of Athens resulting in about 40 Master degrees per year over the past 10 years and 5-6 PhDs per year over the past 5 years. In spite of the potential for developing high quality research in the School as demonstrated by the high number of publications, there is a need for a general research policy and an internal research assessment.

IMPLEMENTATION

Two types of research activities are performed. The first is carried out in well identified laboratories: Dental Materials, Microbiology and the recently founded laboratory of Basic Sciences and Oral Biology.

The second type is carried out in the departments as graduate students' research projects. These projects are conducted on topics which depend on individual researchers' involvements and interests and could be improved by an overviewed strategy. This type of research activity is related to the clinical department and the graduate students' specialisation and appears mostly as compartmentalised graduate education projects rather than a group research project.

The outcomes of the research activities are published as Masters and PhD theses and also as scientific publications in recognised reviews.

The research laboratories collaborate internally and externally with other research departments and institutions

and also have collaborations with the industry.

The Dental School supports research by providing the infrastructure and the proposed new building is scheduled to house laboratories on the first floor. There are also plans to create a new laboratory of basic biology within the building supported by two new faculty members and limited financial support.

RESULTS

The laboratory of dental materials and the laboratory of microbiology in the periodontal department are performing good quality research and producing international publications. The first produces the most significant part of the faculty publications. It is well equipped thanks to several grants and provides precious support to projects of graduate students and researchers from other departments.

Many of the papers published from both laboratories are well-ranked in the speciality field which translates the quality and quantity of the research work and its international recognition.

Some of the work performed in the dental materials laboratory is in the applied research field: material surface roughness and fracture investigations are clinically relevant to establish collaborations with other departments.

The research projects of the microbiology and dental material departments are visible outside the dental school and at the international level and the latter received several awards.

Besides, many research projects are conducted in the dental school leading to a high number of publications in Greek and English. Many of these research projects are conducted separately in the different clinics with no overview of what is done at the dental school level.

IMPROVEMENT

The Dental School is supporting research through modern equipment acquisition for the microbiology laboratory and the planned installation of the research laboratories into a larger space in the new building. These actions will create a more favourable environment for conducting a high quality research work.

D. All Other Services

APPROACH

Within a Health Sciences course, such as Dentistry, an additional range of services are required to support the clinical aspects of learning, teaching and research.

These encompass provision and maintenance of materials and clinical equipment as well as patient services including clinical records and appointments. Clinical services supplement secretarial, technical, library and information technology support which are in line with those needed for other university courses.

The School recognises the need for these services and also recognises that it has a responsibility to the oral health demands of the community within Athens by providing a high level of sophisticated clinical treatment.

Many procedures within the school are processed electronically; however there is scope for increasing this and ongoing work is taking place to do so.

The number of undergraduate students has reduced over a number of years to a steady number of around 130, from almost 160 in 2002-3. This has facilitated the clinical teaching and there are no plans for this number to

increase again.

IMPLEMENTATION

The administrative structure of the School is pyramidal, headed by the Dean, Vice-Dean, Heads of Sections and Departments. A number of committees exist (Education; Graduate programs; Research; Financial; Strategic Planning; Infection Control; Public Relations; Maintenance; Self-Assessment; New Technologies; Student Activities and Library) to discuss and propose changes to various aspects of the School which are then taken to the major decision-making body, the General Assembly. Secretarial support is provided for all functions of the School, including education, research and clinical.

Students are provided with clinical facilities and core materials, which are determined by each Head of Department. Within postgraduate clinical studies, students reported that they may be asked to purchase additional materials and equipment themselves. Within the clinical areas, support staff is allocated to instrument handling and sterilisation. However, there are no dental assistants to support clinical students, when they are not working together in pairs.

Library facilities are available within the Dental School, which provides easy access for staff and students, during busy schedules. A range of books is available in Greek and English as well as periodicals provided either in hard or electronic copy (over 200 subscriptions). Textbooks are provided free of charge to students. These are supplemented by some course materials which are provided electronically, but this is variable and at the discretion of the Head of Department.

A small number of computers are provided in the building; mainly in two computer cluster rooms adjoining the library. These are available for all students and used for independent study and group work. Besides these, postgraduate students may have access to one or two computers in seminar rooms adjacent to clinical areas. Free internet access is available. Digital radiography was introduced to the School less than a year ago and has resulted in an excellent quality of images to support clinical decision making. This is slowly being introduced into the clinical teaching areas.

Technical support within the laboratories is provided. This appears to be adequate for the current activities, although some staff is reported to carry a heavy workload.

Because of the heavy timetabling for students, there is little opportunity for them to participate in activities outside the dental school and students did not indicate that they were able to do this. The exception was involvement in political party activities which led to the election of the student council members. Although student representatives are included on most committees, it was reported that very few take the opportunity to attend, in particular at the General Assembly.

It was not apparent to the EEC that any form of student counselling was available in the Dental School.

RESULTS

Administrative services appear to support the range of activities that are undertaken within the School. However, there is a need for a review of these services as new developments and initiatives are put in place.

IMPROVEMENTS

A number of improvements have been made to clinical areas within the school recently which will improve

efficiency and reduce the need for ongoing maintenance in some areas. For example, replacement of many old dental units and the provision of an impressive suite of digital radiography equipment. In addition, moves towards a central instrument sterilisation facility and the proposal for another building will further streamline working arrangements.

There is a need for additional computing capacity to support electronic developments, both clinically for patient notes and radiographs and also in terms of educational developments in e-learning.

Support from other dental professionals (hygienists and dental nurses) could also further support clinical activity although the EEC recognised that at this time, training for these members of the dental team is not provided in Greece.

Collaboration with social, cultural and production organizations

There is a potential for collaboration with other healthcare providers outside the dental school, in order to support the community in oral healthcare provision, but at the moment this is quite limited.

E. Strategic Planning, Perspectives for Improvement and Dealing with Potential Inhibiting Factors

The Committee has identified inhibiting factors which are outlined in the conclusions of the report.

In most European universities there is a trend that emphasises the accountability of all academic activities resulting in increased resources or recognition for units or individuals. The EEC is concerned about the sporadic lack of accountability amongst faculty members for their activities, and the non-existence of incentives in the School and University structure. The allocation of funding for individual and departmental activities remained unclear to the EEC.

The School has outlined plans for short and mid-term actions in their self-assessment document. The committee concurs with most of these and have discussed them further in the body of the report and refer to them in the recommendations.

F. Final Conclusions and recommendations of the EEC

There has been a considerable amount of progress since the ADEE visitation and evaluation in 1999, in particular the integration of clinical patient care in the Total Patient Care clinics. The momentum for this has resulted from the enthusiasm of the faculty in spite of the difficult financial climate. The EEC understands the difficulties in creating change due to historical institutional culture and administrative and legislative restrictions, which are beyond the control of the School. Regardless of these obstacles, it is admirable that the School is on the verge of an expansion of their activities to a new building.

The School has an excellent clinical facility with modern equipment and materials, a good number of enthusiastic and very well-trained faculty members, a varied and plentiful patient base which creates a good educational environment for students to carry out a range of clinical activities. Research activities are well recognised through a significant number of high quality national and international publications. Students

admitted to the School are of the highest academic ability and are generally satisfied with their education.

Educational methods are generally of a traditional nature and heavily focussed on lectures. There seems to be an opportunity for the further introduction of student centred learning and use of virtual learning environments. The curriculum is lacking in integration and departmental collaboration. The clinical education has no set standards for assessing procedures and there is a need for outcome and competence based educational principles. Research activities are fragmented and would benefit from a more strategic approach including further collaborations.

The School has started quality assurance procedures from an infection control perspective. However, this should be extended to cover other aspects of care delivery as well as educational aspects of the courses. Course evaluation by students and self-assessment of clinical work has been introduced and this provides a foundation for further development of educational quality assurance processes.

The detailed recommendations by the Committee are as follows:

- It is within current educational concepts that a list of professional competences should be established in every dental school and that the curriculum should be modified according to these desired competences (ADEE document: Profile and Competences of the European Dentist). It is strongly advised by the Committee that a competence approach to dental training should be developed.
- Students can learn by active learning and self-study. All the assessment processes should include an element of self-assessment. The relevance of methods used for assessment should be re-evaluated and also directed to cover content students can learn by active learning and self-studies. The common rules for satisfactory performance applied to all the departments would bring equality and transparency to the assessments. Objective Structured Clinical Examination (OSCE) should be put to use for the whole School.
- A quality assurance system should be developed by the School based on commonly accepted standards, and should be applied continuously, on a regular basis. In the future, emphasis must be directed towards quality development of the curriculum, clinical procedures, and an educational strategy with measurable outcomes (ADEE document European Quality Assurance Guidelines & Benchmarking).
- As recommended in ADEE documents students should learn the basic science and medical subjects in an integrated way. This can only be done if the curriculum is not based on the discipline or departmental structure of the School but on learning themes or problem orientation, possibly using the existing section structure. In addition to this approach the EEC recommends actions to modify the curriculum to reflect educational principles which are student and patient centred (ADEE document: Curriculum Structure & European Credit Transfer System for European Dental Schools Part II).
- A multidisciplinary research course, building on existing courses and research facilities, is recommended for all students, concluding with a minor research project in small groups. This would increase critical and scientific thinking of the future oral health professionals.
- It is recommended that a complete interdisciplinary recall system should be organised as soon as possible for all patients completing treatment in the Total Patient Care clinic. The recall patients could be used to allow earlier patient contact for younger students and opportunities for research.
- To allow for increased flexibility and European exchanges, the School should adopt the ECTS European academic credit system (ADEE document: Curriculum Structure & European Credit Transfer System for European Dental Schools Part I).
- The students' schedule should be reviewed and revised to identify and include student self-study time and

appropriate breaks in their schedule. It is recommended that a midday break should be incorporated for all classes.

- It is recommended that the School increases its outreach services to the communities in and around Athens, in particular for children of all ethnicities. This will provide student driven education and research opportunities.
- The very low and unpredictable financial support from the Ministry, University and School to the laboratories doesn't allow a well organised research schedule. It is recommended that an increased and more predictable level of funding should be allocated to externally assessed projects.
- Some graduate students are self-funding in order to carry out the research work mandatory for Masters or PhD degrees. It is recommended that financial support is provided to these programmes to enhance the graduation rate as well as the quality of the research projects.
- The small research groups do not have a critical mass to conduct a research work on a precise driven hypothesis and the research conducted in the clinic for the Masters degrees is highly compartmentalised. The scheduled new building provides a good opportunity for a well established and harmonised research group. In order to maximise the potential of this group, it is recommended that the School establishes a overviewed research strategy, encouraging cross-departmental and inter-laboratory collaboration.

The Members of the Committee

Name and Surname	Signature
1. Imad About	_____
2. Peter Berthold	_____
3. Heikki Murtomaa	_____
4. Deborah White	_____