

ΕΛΛΗΝΙΚΗ ΔΗΜΟΚΡΑΤΙΑ

Α.ΔΙ.Π. Αρχή διασφαλισής της ποιοτήτας στην ανωτατή εκπαιδεύση HELLENIC REPUBLIC

**H.Q.A.A.** HELLENIC QUALITY ASSURANCE AGENCY FOR HIGHER EDUCATION

## **EXTERNAL EVALUATION REPORT**

DEMOCRITUS UNIVERSITY OF THRACE (DUTH)

## DEPARTMENT OF ENVIRONMENTAL ENGINEERING

November 2008

The Committee responsible for the External Evaluation of the Department of Environmental Engineering of the Democritus University of Thrace consisted of the following five (5) expert evaluators drawn from the Registry constituted by HQAA in accordance with Law 3374/2005:

1. Prof. Spyros Pavlostathis (President)

Georgia Institute of Technology, Atlanta, GA, USA

2. Prof. Agamemnon Koutsospyros

University of New Haven, CT, USA

3. Prof. Isaac Meir

Ben-Gurion University of the Negev, Sede Boqer Campus, Israel

**4.** Prof. Evan Vlachos

Colorado State University, CO, USA

5. Prof. Simos Yannas

Architectural Association School of Architecture, London, UK

The structure of the "Format" proposed for the External Evaluation Report is dictated by the requirements of Law 3374/2005 and generally corresponds to the structure of the Internal Evaluation Report submitted by the Department.

#### Introduction

#### Preface

This report on the Dept. of Environmental Engineering of DUTH, composed by a fivemember Committee from overseas academic institutions:

- identifies and recognizes the Department's positive aspects and points out its potential, and
- identifies the program's weaknesses and suggests feasible ways for clarifications and possible corrective steps.

This Committee is pleased to state that the Department being assessed in this report was found to include internationally renowned and acknowledged senior academics; eager and hard working junior academics; highly motivated undergraduate students; motivated and mature students who have entered a path the implications of which academically, professionally and socially are clear to them and they have embraced them willingly; postgraduate students who seem eager to pursue further research and academic work within internationally accepted limitations and constraints; all of these under institutional, budgetary and infrastructural constraints often hard and difficult to deal with.

This report was prepared by a five member committee comprising:

Prof. Agamemnon Koutsospyros, University of New Haven, CT, USA

Prof. Isaac Meir, Ben-Gurion University of the Negev, Sede Boqer Campus, Israel

Prof. Spyros Pavlostathis, Georgia Institute of Technology, Atlanta, GA, USA

Prof. Evan Vlachos, Colorado State University, CO, USA

Prof. Simos Yannas, Architectural Association School of Architecture, London, UK

#### Dates and brief account of the site visit

The Committee travelled by air from Athens on the afternoon of Monday 24<sup>th</sup> November and was met at Kavala Airport by the Head of the Department of Environmental Engineering. Later that day the committee met over dinner with other members of staff including the Deputy Chair of the Department of Environmental Engineering and the Dean of the Faculty of Engineering. The site visit took place on the 25<sup>th</sup> and 26<sup>th</sup> November 2008. The Committee visited all of the laboratories and other facilities located on the campus of the Department of Environmental Engineering, as well as those shared with the Department of Civil Engineering on the main campus of the Polytechnic School. Over the two days of the visit the Committee met all of the members of the Department's academic and administrative staff, as well as a number of undergraduate and graduate students including doctoral candidates and recent alumni.

#### Meetings

#### Academic & Technical Staff

The Committee met the Department's academic staff on several occasions and held both formal and informal interviews with different groups as well as individual members. These included meetings with the members of the Internal Evaluation Team (OM.E.A.), a meeting with the whole faculty (attended by some 20 full-time members of academic staff), and with support staff (researchers and laboratory assistants). Subsequently, the Committee met with 8 members of staff who asked to be seen individually.

#### Students

The Committee held four separate meetings with current students, alumni and doctoral candidates. These included meetings with  $2^{nd}$  year students (14 students on their  $3^{rd}$  semester), with  $5^{th}$  year students (4 final year students on their  $9^{th}$  semester), a meeting with 8 recent alumni, and with 10 current doctoral (Ph.D.) candidates.

#### Administrative Staff

The Committee held individual meetings with the Departmental Secretary and Librarian and with the Chair of the University's Research Committee.

#### Reports, documents and other data examined by the Committee

- Internal Evaluation Report (2007-2008), DUTH School of Engineering, Dept. of Environmental Engineering
- Program Study Guide 2007-08
- Documents provided by faculty with results of one previous evaluation process of the program undertaken by two independent external assessors (2005) with specific recommendations, as well as statistics

- Laboratory reports and brochures
- Examples of student capstone design reports (Diploma Dissertation Projects)
- Class notes
- Published paper abstracts and samples of papers
- CD comprising course descriptions and student feedback

This committee is under the impression that the documentation made available to it, and within the time constraints and limitations, lacked data that should otherwise have been included, often leaving the committee to make inferences based on personal information.

#### Facilities visited by the External Evaluation Committee

#### Laboratories

Visits to the Department's laboratories were led by the directors of each laboratory who presented the research and teaching carried out by their laboratory and introduced the members of teaching staff, doctoral students and technical staff participating in the work of the laboratory. These included the following:

- Laboratory of Atmospheric Pollution & Climatology (Prof. S. Rapsomanikis)
- Laboratory of Environmental Chemistry (Prof. K. Ouzounis)
- Laboratory of Solid and Hazardous Waste Management (Prof. V. Voudrias)
- Laboratory of Ecological Engineering and Technology (Prof. V. Tsihrintzis)
- Laboratory of Treatment & Technology of Liquid Waste (Prof. A. Aivasidis)
- Laboratory of Environmental and Energy Design (Prof. P. Kosmopoulos)
- Pilot outdoor experimental facilities and field demonstrations (various faculty members)

#### Other Facilities

- IT Room on the campus of the Department of Environmental Engineering
- Faculty of Engineering Library on the campus of the Polytechnic School.

# A. Curriculum and Teaching

#### A1. Curriculum

#### APPROACH

The goals and objectives of the curriculum are consistent with those given as representing the mission of the academic unit, and those described for the professional role of the environmental engineer. However, a plan for achieving the educational goals other than the curriculum is not specifically provided. The curriculum is implemented through a series of mostly independently taught courses, of one semester in duration each. There is currently a total of 72 courses that must be taken by students over five years of study for the degree. Descriptions of the objectives, contents, learning outcomes and assessment methods for each course were provided to the Committee in electronic form at the end of the visit. There are no explanations of how this number, combination and delivery sequence of taught courses had been arrived at or how it might be reviewed and calibrated in the future. The curriculum is consistent with the unit's objectives and current societal/professional requirements. Relative to the subject matter covered by the courses, there is a high degree of fragmentation, i.e., several currently taught courses could be grouped together to create fewer, more in-depth courses.

In developing the curriculum objectives the following factors were taken into account:

- need for Environmental Engineering as a subject matter and as a professional specialization;
- potential research and applications in this area;
- the urgency of environmental issues and challenges.

However, there is no clear evidence of benchmarking as well as any indication as to how other groups of stakeholders were consulted.

#### IMPLEMENTATION

The unit's academic staff has appropriate qualifications to teach the courses. There is an identifiable set of core courses that characterize the unit's specific subject matter. The current curriculum reflects the evolutionary process of a relatively young Department and its formative processes and forces. Overall, the process of curriculum implementation is fragmented and influenced by the emphasis on labs and sub-units. The curriculum structure is cumbersome and not well integrated. Laboratory resources are not adequate for systematic and sequential training. Teaching is restricted by the limited laboratory infrastructure, often dictating multiple teaching of the same subject matter for class sub-groups fitting existing capacity. Various courses are not functionally related and often offered out of sequence as they are based on satisfying requirements for faculty to fulfill minimum teaching load as dictated by the Ministry of Education (two courses per faculty per semester).

#### RESULTS

The driving goal is to train a new generation of environmental engineers. The objectives of the program are clearly defined, but not systematically assessed. The Committee could not detect systematic documentation or quantifiable data. At present, and due to administrative staff constraints, there is no follow up after graduation, or review which could provide data for the success of program graduates, and their professional fitness to this new field.

#### IMPROVEMENT

The academic unit has occasionally assessed the program, but not in a comprehensive, continuous, systematic manner. There seems to be a lack of follow-up and feedback from assessments to improvement (i.e. changes, adaptations and calibrations of educational targets). There are endemic limitations of material resources for appropriate improvements. The committee notes that in 2005 two assessment reports were invited by the Department on its initiative from external assessors-colleagues (Internal Evaluation Report, p.13). The implementation of the conclusions and suggestions in these reports is not apparent. The Internal Evaluation Report vaguely mentions these reports, but provides no details as to any actions taken. This Committee is under the impression that at the time specific actions were recommended by the two reports, they were either misinterpreted or ignored.

#### A2. Teaching

#### APPROACH

A variety of methods are used, ranging from "chalk and blackboard" to multimedia to web instruction. These are seemingly appropriate for each specific subject matter. The ratio of faculty to students (1 to 10) is definitely satisfactory. However, staff-student collaboration is inadequate mainly because of extremely high class absenteeism. Such collaboration has been commented as good in the first years of study, and very good in the final year dissertation project, among the students that take advantage of the faculty's high accessibility. The imposition of a higher than recommended intake of 1<sup>st</sup> year students is of concern. Both staff and students are also concerned about acceptance of students who lack fundamental knowledge in certain areas (e.g., chemistry).

Absenteeism is also attributed to lack of student workspace on campus, as well as other reasons. Moreover, the Department suffers from lack of access to adequately equipped classrooms that are sufficiently large to accommodate its classes. Use of information technology is made by most staff members. However, the appropriate equipment (computer, data projector, screen) is not available in many classrooms and needs to be borrowed and carried individually by the instructors concerned.

Students take written examination at the end of each semester and are assessed on written work and practical projects. There seems to be serious lack of periodic feedback, continuous assessment and monitoring of student performance and achievements.

#### IMPLEMENTATION

The committee was not provided with direct documentation in order to evaluate the quality of teaching procedures and techniques. There is adequate provision for printed documentation of course materials, but assessment is not possible at this moment due to the lack of sufficient time to review relevant material. Both printed and digital resources are used, but there is greater emphasis on printed material. This has economic significance for the university budget and creates certain rigidity in terms of renewal and update on the basis of current research results and professional practices. Course material is occasionally repetitious and not up-to-date.

Mobility of academic staff and students appears to be adequate. Faculty is partly educated abroad, undertake sabbaticals and engage in research in collaboration with foreign academic institutions.

Since faculty members are constantly involved in research, there is opportunity to bring concrete results to class. A limited number of undergraduate students have also been involved in lab and fieldwork. In meetings with this committee students expressed their interest in and desire for strengthening experiential learning, i.e. invited speakers, case study projects, field trips, and hands-on laboratory work – connection with praxis.

The periodic evaluation of courses and instructor assessment is problematic since so far the sample is not representative because of poor student attendance.

A very limited number of Diploma Dissertations (Diplomatikes Ergasies) were made available to the Committee. Thus, the Committee was not in a position to accurately evaluate their quality. In discussions with both students and faculty, it was stressed that the goal and expectation of the dissertations is to result in at least one peer reviewed publication.

#### RESULTS

The committee identifies adequate efficacy of teaching methods as manifested by relevant evaluations. Nevertheless, no significant differences over time have been observed or recorded. There is also lack of documentation providing a grade versus graduation time correlation. The academic unit understands the problematic situation associated with this matter, but it seems that no steps towards remediating this have been taken, not least because of limitations and restrictions imposed by the higher education system and practices.

#### IMPROVEMENTS

The Department is aware that a number of improvements are needed, but no particular initiatives have been outlined and/or sequence of steps has been indicated.

What is discussed in the Internal Evaluation Report refers to:

- coordination of syllabi and curricula;
- creation of a coherent core of courses;
- limiting the number of mandatory courses and expanding the availability and diversity of electives;
- using continuously updated internationally produced research and theoretical material, which implies a potentially wider use of foreign languages in everyday work.

## B. Research

#### APPROACH

The research facilities are being shared by undergraduate students for teaching and graduate ones for research. The Department appears to have had originally adequate temporary facilities, which are inadequate for the current number of students. The Internal Evaluation Report states that "research policy of the Department is defined by the research objectives of the laboratories" (see p. 26). This identifies a basic problem of lack of coherence and unity. There are no apparent goals at the departmental level.

Research is primarily promoted by actively pursuing competitive funding from National and EU sources. Industrial and other private support was not apparent.

The laboratory space and equipment are both seriously limited. However, specific deficiencies have been pointed out by the individual researchers, e.g., lack of local support for maintenance and production of custom made equipment, which calls for establishment of local workshops. Also noted was the lack of advanced, specialized instrumentation (e.g., ICPMS). Lack of work space in laboratories seems to be a general problem both for teaching and research, and ad hoc physical solutions dictated by the current conditions are often problematic and even create safety problems (e.g., sliding doors in subdivided chemistry labs moving on floor-adjusted aluminum profiles, and lack of adequate separation between air and water pollution labs enabling smell, gas and probably particle movement between the two).

#### IMPLEMENTATION

There is a sufficient number of scientific publications, across the faculty disciplines, published in a variety of international peer reviewed literature, including journals, books, conference papers and posters, etc. The degree of activity is evident from the number of citations and cross references.

Research programs and lab output present some impressive results despite insufficient infrastructure in some cases. There is also diverse research activity in various areas, but with inadequate documentation in self-evaluation, little visible promotion of new faculty towards new directions, and little groundbreaking work in collaborative fields of the faculty areas, this despite the individual researchers' high professional status in their specific fields.

The individual researchers are collaborating in both research and publications with foreign colleagues. However, at the departmental level there is lack of visible formalized collaboration with foreign institutions (e.g., memorandum of understanding; MoU). The extent of collaborative work is not spelled out either in the Internal Evaluation Report, or the goals and objectives stated in the Department's mission statement.

A list of organizations with which individual researchers are collaborating is provided in Appendix 11 (p.108) of the Internal Evaluation Report.

Research work undertaken both by research students, and by undergraduates, is expected by the Department to be promoted by active conference participation, and peer reviewed journal publications. Research students are expected to expose their work to the international academic community through at least one peer reviewed publication. This committee sees such practices as highly commendable.

A complete list of publications appears in Appendix 2 of the Internal Evaluation Report (p.60). This includes on average 40 publications per year in the last 5 years.

Appendix 6 shows increasing research volume over the last five years (p.88).

#### RESULTS

There is no clear, coherent research plan and direction at the departmental level. However, individual labs have well defined research objectives. Their output and specialized grants indicate successful, even excellent work and professionally acknowledged output, as detailed in the Internal Evaluation Report (p.30).

The Department is active in the specific fields of the individual laboratories, and their work seems to be known, acknowledged and recognized, based on the number of publications and presentations, as well as the faculty's participation and/or membership in scientific committees of relevant organizations and conferences. Their presence in the academic world is evident from the involvement of the faculty on peer reviewed journal editorial boards (p.107).

<u>Efficacy of research work</u>: The committee has found no discernible evidence of patents, industrial applications, involvement in national public works and active significant consultancy of public and/or private bodies involved in planning and realization of projects within the Department's mission statement. The committee is aware of "grudges" mentioned by various faculty members regarding their interaction with the National authorities on matters of their ongoing research and applications, but no documentation was provided, thus we cannot comment further.

This committee would have expected to see more evidence of the departmental faculty's presence and activities on the national and international arena, such as invited lectures in other institutions, and membership in other academic institutions (joint appointments, fellowships). On the other hand, at the institutional level, for those faculty members who are well recognized overseas there is no internal recognition system to boost and promote them, such as prizes and awards for high quality papers and publications, diploma theses, and excelling work.

#### IMPROVEMENT

This academic unit does not appear to have a coherent plan of needs and/or improvements that are central in the area of research. Interviews with faculty, research personnel and students highlighted demand for improvements that mainly focused on infrastructure and personnel. Infrastructure improvements suggested (and partly endorsed by the committee) range from basic (main access road, space, equipment) to more specific (seed money, additional positions). The research assistants interviewed, stated that their work is not solely focused on research, thus their potential is relatively underutilized. The limited number of initiatives that are undertaken in that direction are on an individual rather than on a collective scale.

Essentially, intergroup (interlab) communication and collaboration seems to be imperative for a number of reasons: best use of the Department's available know-how and expertise; strengthening the Department's capabilities, and pooling of resources available for the collective benefit.

# C. All Other Services

#### APPROACH

Facilities were visited on both this Department's campus and the main one, the latter used by the Department due to lack of other appropriate solutions.

The Department faces a significant problem with respect to the organization and operation of administrative services. There is only one administrative secretary whose time is divided between the Department and the Polytechnic's Library, and she is located on the main campus. Deficiencies related to registrar and records services were voiced by the students, and acknowledged also by the faculty.

Overall systematic advising and counseling is lacking, students are not aware of what is available, and thus peer advising is the norm. Advising and counseling was clearly stated by faculty and students as needed and positively considered by all students, junior and senior.

#### IMPLEMENTATION

The secretariat is located on the main campus, remote from the Department. Whereas this is considered temporary, until all activities and structures are moved to the new campus currently considered, intermediate solutions should be found facilitated by IT, in order to help with faculty chores and student activities and needs.

On the level of the laboratories and the Department faculty, help and solutions are found in an ad hoc way, usually inadequate and often time-consuming for personnel, which should otherwise be devoted to research and teaching.

Students seem to be generally pleased with the IT infrastructure including hardware, software and internet access. Accessibility of faculty was stated as a very positive aspect of the specific Department, though faculty complained that hours set aside for tutoring were not sufficiently utilized by the students.

Poor infrastructure seems to impede proper teaching (lack of gloves was stated as an indication of problematic lab work). So does the division of teaching on two separate campuses served by public transportation (1 bus per hour) which causes students to miss classes while commuting. The Department is serviced by an internal road which is dug and unpaved for over two years. Being unlit it poses safety and security problems, and forces students to use the premises as dictated by daylight.

Students are expected to attend classes on the main campus, too, where they use four classrooms. These are poorly equipped and maintained, including damaged furniture, lack of heating and cooling, faulty (or missing!) audiovisual equipment, in a building which seems to raise a number of safety concerns (such as corridors glazed from floor to ceiling, and staircases with significant gaps between landings and wall). Students and faculty complained

about lack of adequately large classrooms in which a whole year (appr. 50 students) could be accommodated. On the Department's campus most buildings in use are prefabricated structures, consisting of small classrooms and posing acoustic, heating and cooling problems throughout the year.

Similar concerns were voiced by students and faculty regarding laboratory work and exercises, where high density and faulty infrastructure often pose safety problems, and impede actual involvement.

Outreach has been detailed in the Internal Evaluation Report (p.31) and includes interaction with educational, social, community, administrative authorities and economic/production institutions and bodies. Activities include raising public awareness on environmental issues and concerns, this achieved though activities, meetings, presentations for the wider public, promotion of ethnic minorities and others, incl. interdepartmental connections.

#### RESULTS

Administrative and other services are not adequate, as indicated in the relevant parts above.

The Department is aware of the needs and deficiencies, the faculty is vocal about their needs, but there is no master plan for the School of Engineering, which encourages opportunistic actions from different departments, often pushing actual needs behind those promoted in a more aggressive fashion. This "ownership" of teaching classrooms by departments within the same school and university points to a problematic practice (maybe even policy!) which prevents the pooling of public resources and facilities for the benefit of the public (in this case, students and faculty). This points to lack of central planning at institutional level impeding departmental operation.

Classrooms have no multimedia capabilities.

The master plan for the new campus was mentioned a number of times, but no member of the Department's faculty has even seen drafts or been consulted on it. It is our strong belief that the department's specialization and specific knowledge must be taken advantage of within the planning and design process.

#### IMPROVEMENTS

Page 34 of the Internal Evaluation Report has a lean section relating to ways to improve services provided. Nevertheless, during discussions held with the faculty we became aware of the following:

- poor physical condition of facilities due to lack of maintenance budget;
- lack of priorities in the upgrading process;
- physical infrastructure such as the main access road to the Department's campus, unpaved and unlit for over two years and posing serious safety and security concerns.

# D. Strategic planning, perspectives for improvement and potential inhibiting factors

The four-year plan is outlined on p. 33 of the Internal Evaluation Report, which identifies six areas of action, covering all aspects of academic and infrastructural components, including human resources and quality assurance. There is no vision/mission statement.

None of the six specific action items discussed in the Internal Evaluation Report has been elaborated, other than the need for additional staff and the concern for increasing student numbers.

This committee particularly identifies lack of long term goals and appropriate actions stated towards these.

There is a discussion of the reduction of the number of courses which, however, seems to be conducted irrespective of EU practices and intentions, such as creating a 4+1+3, or 3+2+3 framework of undergraduate, graduate and post-graduate studies.

The committee has already commented positively on the rigorous processes commonly used for the promotion of academic and applied research undertaken by both the undergraduate and post-graduate students and considers such practices to be highly commendable.

For the creation of a post-graduate program of study on Environmental Science and Engineering three directions are proposed: atmospheric pollution and pollution control technologies; treatment of liquid waste and water resources management; and, energy design and sustainable development. This is expected to run from the 2009-2010 academic year and for the next 10 years. However, it is not entirely certain how the proposed program will differentiate itself from the existing undergraduate one. Although it is obvious that the proposed program may benefit graduates of other engineering disciplines, it is unclear how it might benefit the department's alumni (in terms of professional expertise). It is advised that the curriculum towards these areas of concentration be reassessed and redesigned to include post-graduate oriented subjects.

This committee urges the department to re-consider and re-assess its mission statement within existing constraints and framework:

- its national goal as a new direction in research and education environmental engineering;
- its position within the regional context Thrace, trans-boundary water and other environmental concerns and issues, interactions between countries, communities and institutions in the specific region etc;
- costs related to the improvement of infrastructure and supporting facilities;
- the requirement for extra technical staff which seems to be justified, but no explanation is given for the demand for extra teaching staff;

• there seems to be a shared aspiration for the Department to become a Center of Excellence (Section 9.2 of the Internal Evaluation Report), however no specific actions are stated towards achieving this goal or regarding the further development of research activities.

Impeding and inhibiting factors at State, Institutional and Departmental level include:

The Department's emphasis on traditional courses and labs rather than cross cutting interdisciplinary comprehensive courses. Future fragmentation will only exacerbate the current isolationist format of the current program.

A certain preoccupation with professional accreditation seems to be one of the major concerns of the Department, overtaking emphasis on professional and scientific development.

Tracking and attracting high quality candidates at all levels has been identified by the Department as one of the basic steps that must be taken, but has not been implemented. This should be one of the most urgent actions, considered also as a means for upgrading education and research programs.

On the institutional level, elected administrators (e.g., Chair of Research Committee) are not receptive towards faculty's needs. This contrasts what this Committee perceives as their role: innovative efforts and monitoring of research through personal and immediate involvement in the actual processes and practices, and active promotion of researchers.

An impeding factor on the State level is concerned with multi-level involvement of State frameworks in daily processes, especially economic ones. The main involvement of the State seems to be restricted to hiring and budgeting the personnel and institutions, but not active research, upgrading of programs, promotion of high standard checks and balances, as well as opportunities.

Imposition of higher number of students and lack of choice by the students to select the particular department is a top-down imposed policy which affects this department (as well as the whole higher education system) in adverse ways. Nevertheless, this committee was pleased to observe that, among the students we met, over 50% had chosen the specific Department as their first choice, an indication of the department's highly respected status.

Increased bureaucracy partly imposed by the Ministry and partly by the University's inertia and rigidity impedes efficient work and does not allow flexibility on the departmental level.

This committee also notes a certain resistance to change stemming from the concerns for professional accreditation.

## E. Conclusions

To this date the Department has followed a continuous process of expansion in both personnel and curriculum activities. This however has not followed a well predefined road map, and thus has created discrepancies between partly specified goals and targets and actual practices. There also seem to be discrepancies between the high standards and academic reputation of the faculty members and the departmental cooperation and work as an academic unit.

Evaluation has been attempted a number of times through internal and external independent assessment, both initiated by the Department itself, in response to State requirements. However, external assessors' suggestions were either misunderstood or ignored. Given the National and International competition, this committee encourages the Department to aim for a rigorous self-evaluation and proceed with implementation actions (i.e., follow up).

This committee is compelled to stress the following issues which are of vital importance for the realistic evaluation of the current situation and its potential remediation. These are not concerned with the specific Department assessed by this committee, but rather with the broader Hellenic academic environment and institutions.

An anti-academic, anti-pedagogical, anti-democratic atmosphere seems to prevail. This hinders and impedes meritocracy, personal development of the students and the fulfillment of their academic aspirations. This atmosphere was evident by the fears voiced by the faculty throughout the visit stemming from the students' plausible active obstruction of the committee's work. The committee was told – and is aware from the current state of affairs in the Hellenic academic institutions – that the institutions themselves and the academic personnel are apprehensive due to the students' ability to obstruct lectures, occupy the campuses, and physically remove faculty from offices, labs and campuses. The defacing of the physical environment (not of the specific campus, but rather that of the main one) is indicative of the negative attitude of students towards their academic institutions, as well as of the lack of appropriate treatment of those responsible for vandalism and intimidation of students and faculty alike.

This committee made a point of meeting not only with the specific Department's faculty (both in groups and on an individual basis) but also with undergraduate (2<sup>nd</sup> and 5<sup>th</sup> year) and graduate (Ph.D. candidates) students. In all cases we were extremely pleased to meet mature young people, with academic aspirations, anxious about the level and quality of studies and not least, about the actual value of their degree, nationally and internationally. We were more-often-than-not confronted with the terms "credits" (moria), "public servant" and "public employment" in the context of the reasons behind the large numbers of students undertaking more than one master's degree. Whereas any academic institution and system should be concerned with the graduates' actual employment possibilities and personal fulfillment, it is the academic integrity, level and quality that should be the primary concerns.

Educational material should also be evaluated and re-assessed. We believe that in the current state of affairs it is vital that students be exposed to as much international bibliography as possible, which should be continuously updated and revised based on concurrent research. This demands the use of papers from international peer reviewed journals and

internationally accepted books, alongside the material produced in Greek by the academic personnel. Phasing out the distribution of hard copies may eventually free precious budget for other purposes vital. Electronically available material, already in use by the specific Department and probably by all universities, should be extensively expanded and made the primary educational material for the students.

Such considerations seem to point clearly towards a re-evaluation of both the entrance examination system which should encourage students to make educated decisions regarding their future studies (as opposed to being addressed to departments and faculties solely on the basis of scores), and not least on a meritocratic assessment system during the studies, which should encourage those academically concerned and inclined and screen out those otherwise concerned.

Last but not least, we consider the academic asylum to be a term that has been misinterpreted and abused for purposes foreign to the main *raison d'etre* of the academic establishment. In a country such as Greece, where education is free and accessible to all – free meaning studies, books and notes, accommodation, food, transportation – these should be allocated to those among the students directly and solely aimed at academic matters.

The effort of our committee was to understand the context of fast changing professional challenges and opportunities. Given the absence of earlier systematic evaluation efforts of the Department, we adopted a posture of "critical" analysis that could combine "ideal" conditions and the "reality" of existing circumstances. We want our colleagues to understand the above text as a reasonable approximation between ideal educational models and the context of ongoing socioeconomic transformations.

#### The Members of the Committee

	Name and Surname	Signature
1.	Prof. Spyros Pavlostathis (President)	
2.	Prof. Agamemnon Koutsospyros	
3.	Prof. Isaac Meir	
4.	Prof. Evan Vlachos	
5.	Prof. Simos Yannas	