











qae

Peer Visit to Faculty of Mining and Geology (Shtip)

SHTIP, 21 OCTOBER 2003

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Preface

In the framework of the Austrian Project "Support for Higher Education at the Ss. Cyril and Methodius University" (thereafter referred to as "the University" or "UKIM"), sponsored by the Austrian Ministry of Foreign Affairs, peer visits to 6 Faculties (selected by the UKIM leadership) took place on 21-22 October 2003. These peer visits had been requested by the project coordinator at UKIM, and took place in combination with the complex external evaluation of the Faculties executed by three Macedonian experts. The visits benefited greatly by the comprehensive self-assessment reports produced by the Faculties, which were made available to the international visitors beforehand.

The primary purpose of these visits was to provide an independent outside opinion by international experts regarding the quality assurance (QA) and institutional assessment provisions that have been introduced into the higher education system of the Republic of Macedonia in the course of the last year. Moreover, a focus on the theme of Study Programmes had been chosen by UKIM.

"Evaluation is to determine the significance or worth of something by careful appraisal and study ... it is a developmental process that illuminates or enlightens the specific policies, processes and practice of its stakeholders and contributes to collective learning" (CERN - Capitalisation and Evaluation Research Network). Thus, rather than "examining" these UKIM Faculties, the international experts engaged in fruitful, profound and mutually beneficial exchange of experiences and ideas. The accumulated and horizontal findings of the international experts from Austria, Bulgaria, Croatia, Germany, and Serbia during their visits to the Faculties of Architecture, Civil Engineering, Economics, Technology and Metallurgy, Mining and Geology, and Philosophy will be contained in a Comprehensive Opinion paper, to be produced under the project. Selected horizontal findings are attached to this report as well.

The preface and the annex are common to all 6 reports, the main text is written by the visiting expert.

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Introduction

The visit was very professional prepared, as can be seen from the protocol prepared – including many positive surprises. Two colleges of the internal-external evaluation team picked me up in Skopje – even though I did come to Skopje by car to be able to drive to Stip and Ohrid.

The next surprise was on the impressing road to Stip when after some nervousness I found out that it is save to drive on the left side because the other line of the autoput is on the other side of the mountain.

Finally, I was handed over the copy of a very well done and documented Study Program, developed by the Faculty in the past two years in the framework of the TEMPUS program.

In the introduction meeting I learned about the development of the faculty during the last 25 years of their existence and the fears and hopes in the present situation. The faculty is split into two departments: Mining and Geology. In the past there had been 100 students per year, now this number is down to 50.

With the **Commission for self-evaluation** we had a very constructive discussion on the basic questions for curriculum development and the specific challenges in the mining industry in post war Macedonia.

With the selected representatives from professors, assistants and students we went shortly through all the questions prepared in the documentation (UKIM Doc qae 14 * Version2 * Navreme * 01.10.2003).

Summary of the Discussion with Commission for self-evaluation

Questions

What do we want to achieve?

- For the students
 A small number of elite researchers, or
 A large number of employed academics
- For the institution, our jobs, in our country, in the world

What attracts students and teachers in Macedonia and international?

 excellence in research or job guarantee (which is a result of research and cooperation with industry)

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What are the constraints:

- the current law which prescribes 90% of budget to be allocated exclusively for teaching pruposes and education, and only the remaining 10% for research, innovation and development;
- cooperation with Industry is a problem because there is no more industry in the field in Macedonia;
- preparation of a Curriculum following the law, and the Bologna process at the same time, posed a problem before the recent Macedonian signature of the Bologna Process.

Observations

The job situation in Macedonia is not existing, the international market for jobs in mining and geology is decreasing or in stagnation.

The solution that has been found here is the best possible result in the given situation: There is an international market for engineers with a sound education in mining and geology in special areas – water resource – environment protection and other specific areas.

To be able to compete as university and as a student from this university one needs to be compatible with the international players in this field. This is what the faculty accomplished in the Tempus project with three of the most famous institutions in Europe: Ecole des mines (France), University of London (UK) and University of Padua (Italy).

Questions

Are curricula updated regularly?

Observations

Yes, there is a clear procedure for updating defined.

A Commission is charged to produce a draft, which is sent to the senate, then the Rector, finally to the Ministry. I was informed that for basic modules, this is happening every 2 years – a practice which is to be commended.

Questions

How is the duration of the curricula decided?

Observations

Then duration is still a compromise because the number of hours defines the budget from the Ministry of Education.

Ouestion

Is it possible for students to individualise the curriculum – with a view to the Bologna Process?

Observations

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Yes, a small degree of individualisation is possible, although only for certain sequences within the programme, and based on certain conditions ("if - then rules").

Questions

How is the quality of the curriculum ensured?

Observations

It is reviewed every 2 years (see above). A very basic evaluation is done through the re-election of teachers by the teacher's council (without vote of the students) every two years. However, the quality of teaching is not specifically measured and there is yet no procedure in place at the Faculty for the inclusion of feedback from students.

Questions

How are relevance and scope of the curriculum defined?

Observations

The Faculty is aware and developed ideas about the involvement of the community. As well, the need to teach students to be become responsible and democratic citizens is in teachers minds yes, but there are yet no procedures to ensure this input and output criterion.

Questions

How is long-term planning for the future carried out?

Observations

Planning for the future is very difficult in the present situation, therefore no final steps have been taken.

The Bologna papers have been signed in the meantime (2 weeks ago).

ETC is implemented in a pilot study.

Summary of the discussion with professors, assistants and students **Observations**

Professors are well aware of all international developments in education and research and there is a balance between challenging ideas for the future like playing a role in the international development of the university and some kind of hopeless survival strategies.

Assistants and Students seem not to be really involved in the curriculum development process and partly as a result of this it looks like they do not have strong ideas about the future of the faculty. There involvement in the evaluation process is "underdeveloped".

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Challenges and Recommendations

As the local "market" will not support the existence of this institution, the main challenge for the Faculty in Stip is globalisation. Efforts should be undertaken and upgraded to be an active part in the international development of Mining and Geology research and education.

Additional Suggestions

The suggestion is to continue with the process that has started with the Tempus project, and – after the recent signature of the Bologna Declaration - to implement the new curricula swiftly. Moreover, the Faculty should actively identify criteria to make Stip an interesting place for students and teachers from all over the world. The geological structure, the price/quality relationship, new teaching methods, cooperation projects with international industry and other universities could be areas to be evaluated with such purpose.

Annex: Horizontal Findings

Observations

High commitment and enthusiasm on the side of internal self-evaluation commissions, and openness and interest of Faculty management for the process resulted in a solid diagnosis, thorough analysis, and a long list of recommendations for change. Moreover, in some cases measurable change was already reached at as a direct result of the self-evaluation process.

Challenges and Recommendations

The over-aging of staff was identified as a time-bomb for UKIM. Filling this gap with young brilliant staff, and use their capacity instead of that of inactive professors without knowledge or practice in modern teaching techniques. There is a urgent need to increase the number of positions for assistants and young faculty at all the Faculties visited.

Study Programmes need to be broader, less, and shorter. Broader programmes are requested by the labour market, where flexible graduates are requested who can swap from one field of action to another, applying so-called core skills and inter-disciplinary experience to a rapidly developing job market.

Continuing training offers, a variety of post-graduate programme (to be organised also jointly with and for industry and commerce), and specialisation courses for employed people are both a growing request from society and a possible source of income. Every University needs to react to the trend towards Life-Long Learning across Europe.

Innovation in teaching is badly needed across faculties. Despite individual successes, on average far too much inefficient ex-cathedra teaching takes place. It is to be substituted by contemporary, interactive and project-like and practice-oriented training and learning styles. Training of staff in this field, and tools for measuring the outputs of the teaching units should be developed therefore. Students' ability to cope with their challenges after graduation is the most important criterion to be used in this respect.

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Additional Suggestions

Alumni organisations should be set up. Far beyond their immediate function of telling the Faculty/University what happens to their graduates, in many countries they have been found an extremely helpful source for inspiration, innovation, information on labour market requirements, sponsorship and political contact.

The budget allocated to research is too small at present. Regulations on a 90% percentage allocated to teaching (= staff costs) are counter-productive to innovative and updated curricula. Attractive teaching is key to attract the best students, and to guarantee to them success in their professional life, as competent individuals, and as democratic citizens.

The initiated process of self-evaluation should be re-launched with new tasks, and triggered with new responsibilities. The Commissions should be empowered to undertake further prioritisation and operationalisation of necessary change. Moreover, in order to be acceptable partner for international cooperation, to attract foreign students, and to be visited by top scientist and educators from other countries, the University as a whole needs to be seen. At the end, an institutionalised and regular system of continuous self-improvement and external advice will enable Faculties and UKIM as such to keep the speed of development in international Higher Education.

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