**SS. CYRIL AND METHODIUS UNIVERSITY IN SKOPJE**

**Evaluation Commission**

# Summary of the Self-evaluation Report of the Ss. Cyril and Methodius University in Skopje (In the period 2002/03 - 2005/06)

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# SUMMARY OF THE SELF-EVALUATION REPORT OF THE SS. CYRIL AND METHODIUS UNIVERSITY IN SKOPJE (In the period 2002/03 - 2005/06)

Within the scope of the processes of change being implemented within the Ss. Cyril and Methodius University in Skopje as part of the European program for institutional evaluation, particular attention has been paid to activities related to assessment, consolidation and increasing of the quality in higher education.

The quality assurance issue in higher education is closely linked to the Common European Framework of higher education, which involves catering for the mobility of both students and university staff within the European academic market. Moreover, it should ensure mobility in the European labour market, which has been one of the top priorities on the agenda and recommendations arising from the Bologna process.

Quality assurance is achieved on an institutional, national and European level. In that respect, the necessity of developing mutually discernible criteria and achieving consistent in our methodology is a *sine qua non* regarding quality assurance. The key factors responsible for securing quality in higher education are the institutions themselves. More precisely, institutions which are capable of laying down the foundations for true quality assurance within the national academic system.

Systems that rely on quality assurance should be transparent and conform to similar systems of other European countries in order to simplify and standardize the recognition and evaluation of achievements in education and research, which shall ultimately lead to mutual recognition of academic degrees and certificates and will augment employment possibilities in the European labour market.

Following the self-evaluation guidelines as well as the groundwork involved for the self-evaluation report, the European association included the Ss. Cyril and Methodius University in Skopje within the program for external evaluation in 2003. Following two successive visits to the Ss. Cyril and Methodius University in Skopje, the expert team, appointed by the association, produced the External Evaluation Report and submitted it for the needs of the University.

Within the framework of effectuating the Action Plan and the Strategy aimed at developing the Ss. Cyril and Methodius University in Skopje for the period of 2004-2010, and considering the guidelines from the External Evaluation Report for 2002, as well as responding to the need for continuous assessment and reexamination of quality assurance issues within all spheres of its development, UKIM embarked upon the self-evaluation process. The self-evaluation proceedings spanned in

the period between 2002-2006. The entire process was given special significance and focused on the following major goals:

- Identifying the changes made since the last evaluation, which was carried out in 2002.
- Screening the current state, conditions, problems and the necessity for modifications.
- Establishing guidelines for effectuating and implementing the UKIM reforms with a clear aim at harmonizing them with the European higher education market.

The entire self-evaluation procedure, together with the written Report was carried out and supervised by the Evaluation Commission which was appointed by the University Senate and consisted of the following professors, lecturers and students: Prof. **Violeta Arnaudova,** PhD, Faculty of Philosophy, Prof. **Kostandina Korneti-Pekevska** PhD, Faculty of Medicine, Prof. **Verica Janeska** PhD, Faculty of Economics, Prof. **Todor Serafimovski** PhD, Faculty of Mining and Geology in Stip, Prof. **Done Gershanovski** PhD, Faculty of Natural Sciences, Prof. **Lazar Sekulovski,** Faculty of Drama Studies, **Nikola Glavinche,** student at the Iustinianus primus Faculty of Law, **Miroslav Labudovic**, student at the Faculty of Electrical Engineering and Information Technologies and **Bruno Nikolovski**, student at the Faculty of Dentistry. In addition, chairpersons of the faculties' and institutes' self-evaluation commissions and members of the administration staff participated in carrying out the self-evaluation process and preparation of the Self-evaluation Report. The administrative and logistics support was given by a team appointed by the University Rector's Office which included the following members: **Kostadina Mokrova, Zoran Kordoski** and **Maja Anastasova.**

In October 2006, the Commission commenced activities leading towards working out a suitable methodology for implementing the mechanisms for self-evaluation. This was executed in two phases: **pilot-self-evaluation**, which included the following faculties: the Faculty of Mechanical Engineering, the Faculty of Philosophy, the Faculty of Pharmacy, the Faculty of Veterinary Medicine and the Faculty of Fine Arts, and the **self-evaluation of the other faculties and research institutes belonging to UKIM.**

Particular attention was given to devising the proper methodology and research instrument which will adequately cater for carrying out the self-evaluation process. To this effect, the European standards and guidelines for securing internal quality values in institutions of higher education and the parameters and indicators recommended by the European Association for Securing Quality Assurance were implemented. In addition, the evaluation procedures specially designed for the evaluation of universities / scientific institutions were made use

of which had already been adopted at the Interuniversity Conference of the Republic of Macedonia in 2002.

On the basis of the data generated from the findings of the self-evaluation procedure conducted by all joining Ss. Cyril and Methodius University in Skopje members, the ensuing excerpt will present a **critical analysis** of the following aspects:

- **The context of change and the external limitations shaping the frame under which UKIM functions.**
- **Internal strong and weak sides of institutions compared to internal quality and strategic management.**
- **The potential of institutions and individual potential in developing strategic policy aimed at gearing Ss. Cyril and Methodius University in Skopje towards a quality European University and its capacity to bring about this change.**
- **Recommendations for overcoming the existing weaknesses and development.**

## The University

The Ss. Cyril and Methodius University in Skopje (UKIM) is the first state University in the Republic of Macedonia, founded in 1949, initially with three faculties: the Faculty of Philosophy, the Faculty of Medicine and the Faculty of Agriculture and Forestry. At the moment of writing up this report, the University represents a functional community of twenty-three faculties, ten scientific institutions and six auxiliary members. Its operations are regulated by the Higher Education Act and the Statute of the University.

To this day, the University has over 120 000 graduated degree holders and highly skilled professionals, around 6 000 Master degree holders, and over 2 500 holders of doctorates in all domains of teaching and research.

The University prides itself in nurturing various sports activities, promoting art and culture, computer science, leisure and other activities organized by university societies, associations and clubs.

## Mission and Strategic Objectives

The mission of Ss. Cyril and Methodius University in Skopje is to promote academic freedom and institutional autonomy as principles that are fundamental to academic life and the functioning and development of the higher educational, scientific and scholarly institutions. The University is dedicated to disseminating its traditional values and heritage around the world. The University constantly builds

on the principles of equal access to higher education on the basis of the intellectual merits and capabilities of the candidates. Furthermore, it guarantees social justice for all, regardless of their religion, political affiliation, ethnic origin or gender. The University strives to harmonize its academic potential to the needs of the social environment.

The University manages the common terms and standards of its operations by monitoring the processes and levels of realization of these activities. UKIM addresses creatively the initiatives and suggestions delivered by joining faculties and institutions which are in line with its strategic objectives. The University regulates its relations towards the state authorities on the principle of academic liberties, trust, autonomy, transparency, responsibility and accountability.

The Ss. Cyril and Methodius University in Skopje has commenced reforms directed towards attaining outcomes defined in the single European market of higher education. Change entails the transformation of the entire organizational system of the University, the setting up of European norms and quality standards, which on their part necessitate harmonization with the needs of the country. The process of change at UKIM began some time before the adoption of the Higher Education Act in 2000, and prior to the Bologna Declaration in 1999.

In the past ten years, the process of change at the University has concentrated on the following aspects: up-dating, modernizing the jurisdiction, which will offer a novel approach regarding the relations between the University and the joining faculties, scientific and research institutions in all spheres of their work; devising a strategy for the development of higher education and research activities; establishing new regulations of study which are student-centered and responsive to students' needs; composing an innovative concept of study according to the principles of the Bologna process by introducing the credit-transfer system; implementing a system of assessment thus securing quality assurance in higher education through self-evaluation, including evaluation of academic staff at the University; intensifying activities to promote participation in international programs and projects, with the aim of a swifter unification with European higher education.

The quality issue in higher education is closely linked to the creation of a common European domain in higher education and, being of utmost importance, occupies a central position in the recommendations arising from the Bologna process. The major goals, which are considered to be of pivotal significance for generating the European domain in higher education, are the following:

- Adopting a system of easily discernible and comparable/compatible degrees; introduction of the Diploma Supplement.
- Introducing a system of study based on three cycles.
- Bringing forward the ECTS (European System for Transfer and Accumulation of Credits).
- Improving mobility among students, lecturers, research and administration staff.
- Cooperation with other countries in Europe so as to continuously provide quality.
- Introducing the necessary European dimension in higher education.

This report includes the synthesized considerations and comments of the Evaluation Commission stemming from the overall UKIM Self-evaluation Report. At the same time, these summarized main points represent an answer to the conclusions and recommendations of the expert team during the external evaluation of UKIM in 2003.

## Organizational Structure

During the course of the evaluation period, UKIM initiated reorganization procedures specifically focused on functional and interdisciplinary integration, as well as the creation of a centralized university management and administration. This was a slow and painstaking process and was not completed in the period between 2002-2006. The new Higher Education Act is still in the phase of parliament proceedings and has not been adopted yet. It is expected that the Act will provide a legal framework which will aid in reforming UKIM into an integrated university. The organizational and functional integration of UKIM shall enable the harmonization of its operations and provide the university with a unique approach towards its joining institutions and the attainment of the projected strategic goals, such as: change in organizational norms and regulations to bring higher education in line with ECTS norms; up-grading scientific research activities and defining the profiles for research; developing and organizing programs of study; developing a system for securing quality control; maintaining teaching standards; increasing the selection and improvement of syllabuses; refining the criteria for the attainment of academic titles and credentials of full-time and part-time academic staff; applicative, scientific and professional activities; a policy for improved mobility of students, lecturers, associate faculty members and administrative staff; cooperation activities with universities within the country and abroad; in the financial domain - investments and development plans; regulations to utilize human resources and tangible assets rationally; Information Technology (IT)

and library resources; system for organizing publishing activities, and much more.

## Teaching and Learning

### *Undergraduate Studies*

The individual faculties develop their programs of study consistent with the University's mission and the economic development needs of the country. These programs of study are firstly approved by the Council for teaching and scientific matters at each Faculty which is comprised of full-time faculty members. The Rector's Board validates the programs following which they are accredited by the Accreditation Board in conjunction with the Ministry of Science and Education.

The programs of study are most frequently profiled from the first year of study, although there are exceptions to this rule due to the availability of resources. This issue remains unresolved within UKIM and its institutions because the new concept of study differs from the European one. Similarly, the existence of highly specialized training within different programs of study, their duration, modularity and the possibility of transfer from one course to another, are issues which in the future will be in the center of our interest and attention in our pursuit for a fresh, modernized approach to the educational system of UKIM.

As can be seen from the separate self-evaluation reports by the faculties, members of UKIM and the appendix tables, it can be concluded that in the period 2002-2006, the Faculties and departments directed their efforts towards up-grading and modernizing curricular programs and syllabuses. There is evidence of a wider scope of professional profiling, greater flexibility of programs of study and concerted efforts directed at reaching compatibility with European programs in similar fields. The introduction of the ECTS is one of the prerequisites for gearing the University closer to the European system of higher education.

In the period between 2002-2006, the Faculties redesigned their programs of study at the undergraduate level in order to achieve the following:

- Decrease student overload due to the excessive scope of subject material.
- Increase the number of elective courses so that students have a greater variety of choices to suit their personal affinities.

- Launch new forms of continuous assessment through homework assignments and seminar papers in addition to the existing preliminary exams (colloquia) and final exams.
- Quantify the scope of knowledge and skills by introducing the system of accumulation and transfer of credits.
- Initiate the realization of the Diploma Supplement project.
- Organize continuous education for graduated students.

We would also like to point out the fact that the joining faculties have expressed their intention to inaugurate programs of study that take less than 8 semesters to complete, namely these kinds of programs usually last from 6 to 4 semesters and are primarily aimed at training professionals specialized in certain skills. The trend towards such programs of study is within the scope of legislation provided the programs remain within the undergraduate study period and as long as there is no need of setting up new institutions.

In conclusion, it is evident that almost all faculties that are going through the process of modernization of their programs of study have introduced modular courses, which entail replacing the existing, fixed courses with obligatory, elective or optional ones.

Generally speaking, the University favours the interdisciplinary approach in its programs of study which engages the involvement of more than one faculty, academic staff and equipment. Quite a number of faculties have already begun this novel experience.

At most faculties, undergraduate studies last up to 8 semesters, although at some faculties they last up to 10, 11 and 12 semesters. The total number of obligatory courses varies, and depends on the faculty. Optional subjects are offered at a smaller number of Faculties. The scope of the content of the courses is also altered as a result of redesigning the existing ones i.e. introducing new subject-matter and content.

It appears that students are overloaded due to the increased number of classes per week, but this could also be the result of numerous other assignments which form part of the courses. Optimizing the number of classes and balancing the various course requirements remains a challenge which demands special attention and is an ongoing process.

Regarding the number of lecturers that carry out the programs of study, in most cases they are full-time faculty members. It is only in a few faculties that the number of part-time lecturers is larger.

In the future, an important part of the activities performed by the UKIM faculties will be the emphasis on continuous education, distance

learning, as well as the concept of life-long learning. To this effect, pilot-projects have already been prepared. Nevertheless, these new concepts are still in the initial phase and have yet to be developed before they are inaugurated. In addition, the process of initiating these new concepts of learning has to be normatively regulated. The general feeling is that UKIM has at its disposal human and material resources to grapple with the new challenges.

The ECT system has been implemented across all UKIM members at the undergraduate level of study (See Table 1.), and some faculties have applied the ECTS as part of their graduate study programs (See Table 1.1). Doctoral studies, with a few exceptions, are carried out on an academic advisor basis. The application of ECTS into practice does not enable the mobility of students to transfer from one program of study to another within UKIM. This is due to the fact that the criteria and regulations allowing transfer have not been sufficiently developed in order to be put into practice effectively.

On the whole, it is imperative that the responsibilities and duties of each faculty member, department and institute should be advocating to students, colleagues and the public the importance of intellectual curiosity and accomplishment, building and sustaining an open, creative and stimulating environment within the University.

The ECTS transition involved the adoption of new study and curricular programs, implying the possibility of continuous innovativeness and improvement. Students were not sufficiently involved in the creation of the new programs of study. Teaching methods have been modernized by inciting interactive participation during lectures and classes, in other words employing the concept of active learning. In such a way, teaching is gradually moving towards becoming student-centered. Furthermore, based on their interests and affinities, students are given the opportunity to choose activities and modes of learning which will assist them in their acquisition of knowledge and skills, at the same time helping each of them realize their individual potential.

The data obtained from the UKIM members regarding the level of acquisition of skills/competences by students during the course of their studies, is quite varied (Table 2). More precisely, the students studying **Engineering, Science and Mathematics,** have demonstrated that they possess: analytical skills, the ability to synthesize information, the aptitude to solve problems, the capacity to work in laboratories, to analyze and interpret research, a high level of computer literacy, team work capabilities and the ability to put into practice acquired knowledge. The students studying the **Social Sciences** excel most frequently in the following domains: skills in managing information - ability to obtain and analyze data from various sources, the ability to analyze and synthesize oral and written communication in the mother

tongue, critical skills, and the skill needed to put knowledge into practice, research skills, the capacity to generate new ideas, creative potential. **The Medical Science** students demonstrated the following results: oral communication skills, the gift to apply acquired knowledge in practice and independent work. **The Biotechnical Science** students excel in the following: independent work, written communication, problem-solving, laboratory work, preparatory work on projects, analyzing scientific literature, team work, as well as applying knowledge in practice. The students studying the **Arts** excel in the following: skills to analyze research publications, oral communication skills, work in a studio, management skills, skills in managing information from various sources, team work, ability to work in an international context and research skills. The **Institutes,** members of UKIM, emphasize the acquisition of general study skills, similar to those acquired by students studying the Arts.

The number of students that re-take the same year of study (due to failing the year the first time) demonstrate a steady decrease at all the faculties (Table 3). Nevertheless, it is an indisputable fact that the effectiveness of studying is still not up to the desired level. In other words, the average graduation period is still relatively long. In spite of the fact that in the recent period, a number of new higher education institutions have been established, both state and privately owned, the interest to study at UKIM remains continuously high.

If we compare 2005/2006 as the year of evaluation, to the academic year 2002/2003, the number of graduated students at UKIM has increased by 35% (Table 4). It is a pity that UKIM does not have any information as to their occupation on the labour market and does not receive feedback from employers, labour representatives, or other relevant institutions. To this effect, the University has realized the alumni data base project in order to monitor UKIM graduates and secure relevant data for long-term planning and meet the needs of the labour market.

The University has a respectable number of Doctors of Philosophy/Doctors of Science and Masters of Arts/Science, both full-time faculty members, as well as part-time associates. In the foreseeable future, the issues requiring our urgent attention are the low number of employments, the rapidly decreasing qualified staff coupled with the crisis in securing qualified academic teaching staff. This state of affairs seems to be the consequence of the sluggish dealings on the part of relevant state organs as well as limited employment possibilities. At the same time the outflow of human resources has intensified due to the natural process of ageing of existing academic and associate staff ( over 70% of full-time professors are older than 55, whereas more than 50% of the associate staff is aged 35 to 45), (see Table 5 and Table 6 ).

The outflow of qualified graduates from the country has continued with increasing intensity, and is primarily the result of the unfavorable circumstances on the labour market, namely the shortage of employment opportunities for university graduates, as well as the lack of measures taken by the state to provide adequate employment for qualified graduates. Other factors also come into play, such as the gradual diminishing of value systems, i.e. disrespect towards diligence and hard work, barriers towards promoting the profession and its valorization, and the absence of work ethics. The outflow of highly qualified graduates has numerous consequences and implications. From the University's point of view this means the reduction of human resources which could be trained as future research and teaching fellows.

### *Postgraduate studies*

Further to the data collected from the faculties and scientific institutes, postgraduate studies are organized either as Postgraduate Degree Studies (attainment of Master of Arts or Master of Science), or postgraduate "Master" programs in the various professions. It is interesting to note that these programs of postgraduate studies have been organized following the ECT system. The terms and conditions of study are regulated in compliance with the Rules and regulations of UKIM for organizing postgraduate and doctoral studies.

Postgraduate degree programs usually last up to 4 semesters, depending on the choice of degree. Some postgraduate "Master" programs last two semesters. The duration of the specialization studies varies; at most faculties it takes three semesters, while in the medical sciences it can take up to ten semesters. The number of compulsory courses in most cases amounts to 10. Nevertheless, the number of available optional courses is rather plentiful and amounts to 30. As already mentioned in the previous section of this report, in its process of modernization, the University has already launched interdisciplinary and multidisciplinary studies.

### *Doctoral studies*

In order to acquire a doctoral degree, candidates at the Ss. Cyril and Methodius University in Skopje are required to submit a thesis proposal and application. As soon as the proposal is approved by the academic board, the candidate prepares the dissertation in the relevant field of scholarship and finally defends it. Work on the doctoral thesis assumes supervision by an academic advisor during a period of 5 years. In line with the Bylaw for the organization of

postgraduate and doctoral studies at UKIM, which is within the framework of implementing the Bologna process, some Faculties have already incorporated the new program of study for the attainment of a doctoral degree. The doctoral degree programs at some Faculties are organized within the scope of international projects and collaboration with universities abroad. The situation at the Faculties of Fine Arts, Drama and Music could be considered an exception to the norm since full-time faculty members are not required to have a doctorate or hold the relevant terminal degree in their fields in order to teach and evaluate student work.

Upgrading the present doctoral study program by making it a part of the graduate studies program will indisputably add to enhancing quality issues. The implementation of these studies is not just a matter of providing a legal framework, rather it calls for advancement of the entire system, clearly defining the duties and responsibilities of all participants in the process, outlining the research goals and achieved results, securing funding for implementation of the projected research, defining deadlines for all activities and sources for raising funds.

The analyses of doctoral programs of study have shown that faculties and institutes possess highly qualified academic potential required for the mentorship and academic advising of candidates. In addition, there appears to be a satisfactory level of academic exchange with research centers worldwide, as well as a fair amount of participation in international research projects. However, the other side of the coin is that lectures are not obligatory and are rarely held for the applicants, and some of the laboratory equipment for research is outdated. Also, the outflow of faculty members working in research centers abroad is a recurring phenomenon.

### Classroom facilities and educational resources

At some faculties joining members of UKIM, the teaching and learning process takes place in a limited number of classrooms and educational facilities. This problem is being solved by teaching in morning and afternoon shifts, holding exams on Saturdays, introducing preliminary-exams (colloquia) on Sundays, organizing individual activities in periods when classrooms are free, and more often than not using available classrooms belonging to other UKIM members. The whole didactic space available to UKIM faculties amounts to 81 560 square meters, according to which the standards and norms for performing higher education activities have been satisfied (See Table 7).

In the period between 2002-2006, almost all UKIM members – Faculties and Institutes, participants in the evaluation process achieved significant improvements in the teaching and learning as well

as in scientific research, by incorporating the latest information technology. More or less, all faculties and institutes are equipped with one or more computer rooms with internet connections installed which satisfy the needs of the students and employees to a great extent. However, the equipment is rapidly becoming outdated and requires constant updating, particularly in view of the speed and accessibility of information transfer. The equipment necessary for maintenance of the network and IT unit is located in adapted classroom rooms normally used for teaching purposes. The institutions are doing their best to provide access to information data-bases which are indispensable for teaching, learning and research.

In order to respond to members' needs, UKIM should constantly modernize its University computer network so as to provide linking services to members who currently do not have suitable access to the network.

The analysis demonstrates that the Faculties and research Institutes have enriched their library holdings during the course of the evaluation period providing textbooks, resource materials, books and magazines, for the students (See Table 8). Some faculties, apart from the central library, have also access to libraries that cater for specialized programs of study. The sale of textbooks and resource materials produced by faculty staff is organized through the Faculty administration services.

The supply of additional literature is in most cases managed by the funds provided from domestic and international projects. The Ministry of Education and Science does not allocate funds for this purpose. Evidently, the need arises to start up activities that will stimulate publishing operations which in turn involves coordinating activities with the faculties and institutes that have set up their own in-publishing facilities, weighing up the possibilities of starting a university publishing house and so on. There is a need to standardize and categorize textbooks, buy off copyright ownership, introduce incentives for the academic staff, take over the control of pirated editions and the unauthorized photo-copying of whole textbooks.

During the course of the monitoring process, in spite of the exceedingly unfavorable financial situation, faculties and institutes managed to publish a sizable number of textbooks, resource materials, books, monographs, surveys, anthologies, scientific research papers and periodicals. In order to assist students in their accumulation of knowledge the quality of publishing as well as the number of library holdings, has to continue to improve and grow. To this effect, it is highly necessary to provide on-going funding for subscriptions to periodicals, international scientific journals (textbooks, resource

materials, atlases, dictionaries, manuals, monographs), and find adequate storage conditions for library holdings.

### Research and scholarly work

A centralized research body was not established during the monitoring period at UKIM. The curbed amount of assets from the relevant ministries in the government caused a decrease in the number of research projects initiated on a national level. The evaluation results, however, indicate that certain faculties and institutes, members of the University, have intensified their research activities as a result of utilizing international grants and funding (Table 9).

The involvement of full-time faculty members and research associates in projects varies and is dependent upon the program of study and according to the study discipline. In the domains of the Technical **Sciences and Mathematics** 17% of the projects have been included in the programs of study, and 20.8% of projects include the participation of faculty members and research associates. This ratio varies in other disciplines, for instance: **Social Sciences** 4.2%-4.2%, **Medical Sciences** 4%-30%, **Biotechnical Sciences** 23.3%-17.4%, **Arts** 0%-30%, with **Scientific Institutes** 31%, and finally at **UKIM** 12.2%-11.6%.

Participation in projects as demonstrated during the last year of the evaluation period shows a sharp downward trend. This could be due to the involvement of research fellows in a number of projects from other study disciplines, thus the actual state of affairs does not appear to be evident from the evaluation data, i.e. the findings do not illustrate the distinguished results achieved by members such as those from the Technical, Biotechnical and Scientific Institutes. The UKIM data fails to give the impression that the majority members have achieved synchronization through their research on programs of study. Furthermore, the evaluation results do not demonstrate the definitely positive movement towards interdisciplinary cooperation, including the transfer of knowledge, professional specialization and improvement.

The funding for projects stems from domestic or internal sources, such as the Ministry of Education and Science, the Ministry of Culture, the Treasury Department, the Ministry of Defense, the Ministry of Agriculture and Forestry, the Water Supply Company, Macedonian Telecommunications, Electricity Distribution Company, the Macedonian Academy of Arts and Sciences, the Institute of Earthquake Engineering, other investment organizations, local self-government organizations. External sources include foreign donors such as the following organizations: UNICEF, UNESCO, DAAD, FIOOM, EU, EC, FEP and FAO. Also, there have been donations from the governments of the following countries, Germany, Austria, Turkey, USA, Canada,

Finland, Japan, Sweden, Spain, Switzerland, Portugal, Italy, Slovenia, Croatia, Romania, Greece, and the kingdoms of Netherlands, Norway and Denmark.

International organizations, foundations and programs (EUC, TEMPUS, COPERNICUS, SOCRATES, FARE, FP5, FP7, USAID, the British Council, TUBI TAC, World Bank, foreign academies of science and others.

Quite a few of the faculties and institutes have initiated interdisciplinary networking in order to expand the amount of research and research fellows involved exploring various programs of study. The outcome of these projects has been monographs, research reports, which have been subsequently published as research papers in international scientific journals. As an example, the European Commission has funded projects to support the introduction of new study programs and upgrade existing ones.

### International cooperation

Ss. Cyril and Methodius University in Skopje in Skopje regards activities directed towards international cooperation as its top priority. First of all, bearing in mind the role that networking plays among international academic communities, as well as the need to develop technological and educational innovations, the international cooperation of UKIM has been focused towards intensifying the activities for crossing the threshold towards the gradual inclusion in European educational programs, research and scholarship. Secondly, regional links have been conducted through the Central and East-European initiatives for cooperation with countries of the Mediterranean region and the Balkans, and thirdly, collaboration with North American universities, particularly partners from the USA has been on-going.

The bilateral long-term cooperation with foreign universities has been achieved in the fields which directly reflect the participating partners' priorities and interests. Bilateral, regional and multilateral forms of academic exchange are a reflection of the kind of direct cooperation that takes place between educational institutions. In other words, the institutions are interconnected and dependent on one another. To this day, UKIM has cooperated with universities and scholarly and research institutes worldwide. This includes the signing of over 70 bilateral cooperation agreements, which include exchange visits of academic staff and students, joint research projects, joint degree programs, workshops and seminars.

The Tempus European Union program has so far had exceptionally distinguishing results in implementing changes in higher education. Since the launch of the FARE program in 1997, universities and higher

education institutes in the Republic of Macedonia have effectuated a large number of projects, coupled with the realization of numerous study visits to university centers of member countries of The European Union. Within the framework of the TEMPUS program institutional cooperation has been carried out through 76 joint European projects (JEPs), 27 compact measures, the utilization of 350 grants for individual mobility within the member countries of the EU and Central and Eastern Europe, and individual study visits to institutions of higher education.

The Joint European Projects were utilized within the period of 3 years, during which successful collaboration was achieved in the following domains: increased work efficiency of university management; upgrading and modernization of existing and the development of new programs of study by way of pedagogical innovations; introducing comparable criteria and maintaining high level of quality; courses for strengthening the institutional structure; networking projects and so on.

UKIM is a member of numerous academic networks and associations in its continuous effort to establish excellence in the academic sphere of teaching and research in the competitive atmosphere of international settings. The above mentioned associations and networks are: IAU – International Association of Universities; EUA – European Association of Universities; CEEUN - Central and East European University Network; CEI- Central European Initiative; NETUSEE – Network of Universities of Southeast Europe; UNICA – Academic Network of Universities of Capitals of Europe; CEEPUS – Central European Exchange Program; EAIE – European Association for International Education; AUF – University Agency for French-speaking Education; BUN – Balkan University Network; UNI-ADRION – Virtual University of Adriatic-Ionian Basin; ITERREG III; CIRCEOS – Interuniversity Center for Research and Cooperation with East and Southeast Europe.

The International Seminar on Macedonian Language, Literature and Culture has been held every year in August in beautiful Ohrid with the participation of professors and students from all over the world. Macedonian language lectors are an integral part of the international cooperation since they promote the study of Macedonian language and culture, the tradition of which is millennium old, at the universities in the following cities: Moscow, Paris, Prague, Naples, Brno, Krakow, Sosnoviec, Budapest, Bucharest, Krajova, Istanbul, Tirana and Nish.

UKIM continues to nurture the tradition of awarding Honorary titles, namely, Honorary Doctor (Doctor Honoris Causa) and Honorary Professor (Professor Honoris Causa) at the Ss. Cyril and Methodius University in Skopje.

## Internal quality assessment

The evaluation commissions of each of the member faculties of UKIM regularly produce evaluation reports in order to gather information and by doing so, promote internal quality within the institution. During the course of the evaluation period, all members of the university prepared annual reports whereby the gathered information was used as a starting point for the creation of their policies. Surveys have become routine practice by UKIM members and they are carried out at the end of the winter and/or summer semester involving students as respondents who follow various programs of study. The management board of the faculties' process the results of the surveys and in cooperation with the students propose measures for overcoming weaknesses.

The Evaluation Commission to the UKIM Senate analyses members' state of affairs by means of a SWOT analysis. A report is prepared on the basis of the results of the analysis and evidenced state, which following verification by UKIM bodies, is subsequently subjected to deliberation according to the procedure for the external evaluation of the University.

In order to adequately address the efficient implementation of the ECTS, UKIM members appointed coordinators (coordinating bodies), who have been engaged full-time in helping to implement the new system of studying. Their experience will be disseminated and utilized in improving the educational process, most importantly to provide transparency at the institutional and university level.

The active role of students in these processes is coordinated by their chosen representative who participates in all activities performed by the bodies and authorities belonging to the University faculties.

UKIM has at its disposal a system for organizing and gathering data regarding a variety of university activities as well as facilities, such as: human resources, enrolment and payment of fees, data regarding the frequency of students passing or failing exams, research publications, interuniversity and intra-university cooperation as well as financial data. These insights regarding the state of affairs of UKIM members are to be made use of in promoting the concept of quality as a notion, not only its maintenance. The advancement of quality mechanisms and adhering to them within the University depend on the ability to apply proven mechanisms for monitoring progress. Therefore, through its autonomous status and academic liberties the University proves it is responsible and accountable towards the wellbeing of the state and the tax payers.

## Expenditures and Funding

Respecting the rules and regulations, as well as the annual realization programs, the main source of funding of UKIM activities is provided by the budget. Programs of study and curriculums are financed by the Ministry of Education and Science and additional back up resources are provided by collecting tuition fees (from 100 to 200 Euro for students in the state quota, and 400 to 1200 Euros for students that co-finance their studies). Hence, the accreditation of other state universities, together with the implementation of the ECTS, could mean that UKIM might be faced with a reduced inflow of assets from the budget for realizing the educational process. Certainly, there is a need to provide sufficient funds for the smooth functioning of the educational process bearing in mind the actual cost of all activities (teaching, finances, technical aspect, laboratory costs, etc). At this point, we need to mention that the modifications and amendments of the Higher Education Act have still not been adopted, specifically in the following sections: the section linked to the implementation of the principles of the Bologna Declaration; the trend of cutting down funds i.e. the incapacity to provide financial resources to cover costs arising from the changes in higher education; failure to set forth criteria for funding activities in higher education; limiting, i.e. the discontinuation of state funding enabling the renewal of faculty staff at both faculties and institutes of UKIM; the prolonged duration of the accreditation process for new undergraduate and graduate programs of study.

Even though the State is bound by the principles of the Bologna Declaration as its signatory, it does not provide additional financial support for the fulfillment of the anticipated tasks. An exceptionally significant factor is securing the financial base for funding the recruitment of junior staff. Currently, funding regarding this aspect is extremely limited and unfavorable, and will gradually bring to a halt the realization of the strategic goals of the Ss. Cyril and Methodius University in Skopje.

## Results of the student survey

Within the framework of the self-evaluation process, The Evaluation Commission in cooperation with each of the UKIM members' Self-Evaluation Commissions carried out a student survey. A total of 2 609 students participated in the survey. All were enrolled in their second year of study at the most representative programs of study. The students responded to a questionnaire which consisted of 41 questions belonging to 7 sections of enquiry. The results are shown according to each section:

**Access to information:** 68% of the respondents are partly informed regarding the rules and regulations pertaining to the organization of class instruction and the regiment of study at the Faculty, 23% are well informed, whereas 9% are not informed. As is evident from the results, UKIM and the member faculties need to improve the ways and means of accessibility to information, and increase its availability to all students. Furthermore, members need to work on motivating and stimulating students to inform themselves.

**Attendance and class participation during the course of one semester:** The majority of students (76%) regularly attend lectures, 23% partly attend lectures. 67% of students complete all the assignments required for the course, while 30% partly complete their assignments. The low percentage could be due to the obligations arising from attending classes on a regular basis with less time allotted for individual study. On the other hand, this could be a result of students' lack of motivation. There is a need for the kinds of mechanisms which will increase attendance and completion of assignments during the semester, as well as raise motivation which is crucial in finalizing any kind of obligation.

**Responses regarding the courses from the Second Year Program of Study:** The courses are on an average level. The majority of answers, 962 votes, or 37% marked them with grade 3. Grade 4 gained 33% of the votes, and grade 2, 14%. This means that most of the faculty members' time, but also that of the administration, should be allocated to class preparation, instruction and evaluation of student work, which will inevitably lead to a successful realization of course objectives.

62% of the respondents share the opinion that the subject-matter is difficult. In order that the students can acquire and consolidate their knowledge in a satisfactory manner, the course content needs to be presented in such a way as to be quickly absorbed by the students and instructors should apply various methods which will facilitate the acquisition of knowledge and skills.

67% of the respondents consider the course content to be extremely voluminous. It is necessary to reduce the core reading lists and introduce gradually new ways and methods for awakening the interest and attention of students. This kind of approach will enable the broadening of the percentage of students who will demonstrate special interest in certain subject areas.

Half of the respondents marked the subjects as interesting, whereas 32% marked them with grade 3. Two thirds of the students responded that the subjects under study *exceptionally promote* the acquisition of

knowledge, 65 % consider that the subjects are *particularly useful*, and 25 % that they are *useful*.

**Time spent on individual study:** Although on average, the time needed for studying and preparing assignments at UKIM is estimated to be 2 – 5 hours per day, results have shown that 27% of respondents spend more than 5 hours a day studying and preparing for assignments. This could be explained by the fact that there seems to be a need for continuous study. Most of the respondents (28%) spend 3 – 5 hours per day studying.

More than half of the students take 5 days to prepare for pre-exam tests (colloquia), whereas 1/3 need more than 3 days.

It can be safely said that the time spent on studying for the colloquia (pre-exams) reduces the amount of time necessary for preparing the final exam.

In light of this fact, 37% of the students answered that they prepare from 15 to 30 days for the colloquium (or pre-exam), and need up to 15 days for the final exam. The percentage of students exempt from taking the exam is 13%, which shows that frequent evaluation of content material releases students from taking the final exam and is a motivating factor in their study.

**Access to specialized literature**: 73% of students have access to the prescribed readings through using photocopied materials. 15% of the students use original, authentic publications, and an almost insignificant number take notes and use the computer, namely only 4% study by taking notes during classes, and 7% use the computer. Urgent steps should be taken to decrease both the prices on books and photocopied material. This way student will be stimulated to start their own private reference library. Photocopying print material is against the law and UKIM should be engaged in eradicating such practices.

There is positive agreement regarding the compatibility of available learning materials with those prescribed in the course program. The results show that 88% have opted for giving an average grade of 3 to 5, whereas 60% or two-thirds of the respondents think that the available materials are in complete harmony with course requirements. As a recommendation, what needs to be done is stimulate the publishing of text books and other learning aids that have a clear content geared towards preparing the students for their exams in the relevant field.

38% of the respondents are of the opinion that the material is easily understood, 36% graded it (3), whereas 13% have given the highest grade. The specialized literature used for preparing the exams should

be designed in a comprehensible way and adjusted to the students' level of knowledge in the relevant subject.

**Responses regarding faculty staff:** The majority of respondents, (82%) answered that faculty staff regularly hold lectures. Instances of non-fulfillment of teaching obligations on the part of instructors should be overcome.

Only 15% of students think that their professors utterly respect their opinion, i.e. grade 5. 30% decided on grade 4, and the majority responded with grade 3 (32%). It may be concluded that some professors are still traditional in their ways and have difficulties in valuing the opinion of their students. The recommendation is to continue building the partnership relationship between students and professors.

It appears that only 10% of students think that their professors introduce interactive methods of teaching and learning. The majority (70%) have graded their professors with grades from 3-4.

Every other student is of the opinion that s/he understands the lectures perfectly, and (38%) have given grade 4. The general impression seems to be that lectures are relatively easy to absorb. Even so, it is advisable for the teaching staff to employ teaching methods and other means which will improve comprehension and facilitate learning. As a result, students will be in a favorable situation and achieve more.

70% of the respondents share the opinion that their professors are exceptionally or well prepared for classes and successfully conduct the lectures.

More than half of the respondents answered that their professors/lecturers are not available all the time, do not exhibit fair-play and tact, show inconsistency and do not seem interested in their work. 47% of the students think that their professors are available when needed, exhibit fairness, and are consistent and dedicated. 31% of respondents have evaluated them with grade 3. Faculty staff, both full-time and part-time, has to adequately address the above student responses and take measures in this domain.

**Responses regarding assistants to the professors:** 88% of the surveyed students answered that the assistants hold classes more frequently than their professors. The assistants positively stand out from their professors in that they are more attentive and responsive to students' opinions and needs. 75% of the surveyed stated that the assistants completely respect students' opinions, whereas 16% of the respondents stated that their opinions were sufficiently respected. Two

thirds, (66%) of the students responded that the assistants successfully employ interactive methods of teaching, which could be explained as arising from the fact that they predominantly teach practical classes. At this point, we would advise all assistants to raise the general level of interactive teaching in their classes.

In answering the question whether assistants are always available to cater for students' needs, four fifths (79%) of the respondents agreed with this, i.e. 43% opted for grade 5, whereas 33% for grade 4.

**Colloquia/Pre-examination Testing:** 73% of the respondents answered that they are absolutely familiar with the way the exams are conducted, whereas 16% are fairly familiar. It is recommended that information concerning examination rules and procedures should be made readily available to the students. Furthermore, the grading scheme should be made clear and transparent prior to the tests and examinations, and any other additional changes should be avoided.

59% of the respondents believe that the grading scheme is objective, whereas only 24% think that it is absolutely objective. One third of the students (33%), opted for mark 4 and a quarter (26%), opted for grade 3. Evidently, there is a need to devise a valid system of criteria to achieve objectivity in the grading system, in line with the specified rules dictated in the ECTS.

The majority of respondents stated that they have ready access to review their output as well as comment and discuss their work with their instructor. 56% answered that they have complete access, 20 % answered by marking grade 3, whereas 24% marked grades 2 and 1. Suffice to say that students have the right to unimpeded access to view their work and test results.

The majority of responses stated that every third question in an exam paper is not clear, even ambiguous, namely 28%. Faculty staff is advised to formulate precise and clear questions so that students have a chance to demonstrate their knowledge.

61% of the surveyed students think that the questions are relevant for the selected material, whereas 25% of the students marked the relevance of questions with grade 3. Selecting those questions which are pertinent to the covered material would be more beneficial for the students.

Fifty-five percent of the respondents are of the opinion that the methods of testing knowledge are satisfactory. Parallel to perfecting the existing methods, new approaches to testing should be sought out tailored to the specificity of the candidates' teaching and learning

milieu in order that they may be assessed using realistic, valid and reliable scores.

**Final exam**: 69% responded that they are absolutely familiar with the modes of taking the final exam, whereas 18% think that they are fairly familiar with them. More work should be done on the clarification of examination rules and procedures. Most importantly, modes of assessment and marking schemes should be made clear prior to the carrying out of the final examinations, perhaps during the colloquia stage in order to avoid ambiguities and misunderstandings.

More than half (55%) of the respondents stated that the grading system is *objective* in comparison with (22%) who stated that it is *totally objective*. The highest percentage, (33%) marked grade 4. These results call for consistent observance of ECTS rules on maintaining objectivity while marking examinations.

The majority of students responded that they are aware of the fact that they have the right to inspect their exam results and comment on them. More than half (52%), responded that the results are always accessible, whereas (23%) of the respondents marked this question with grade 3. Even though the results are positive, students' right to inspect their test results should continue to be respected.

The results show that every third question in the examination paper is not clearly formulated and is ambiguous. Twenty-seven percent (27%) of the surveyed gave the lowest grades, 1 and 2, (29%) the highest grade – 4. It appears that greater attention is paid to formulating the test items in the pre-examination tests (colloquia) than on the final examination. The questions in the exam paper should be clear and concise in order to be a proper measure of the quantity of knowledge that the candidate possesses.

Sixty percent (60%) of the respondents agreed that the test items are completely relevant to the subject matter studied for exam purposes. Further harmonization with the covered material is necessary; the exam questions should also be linked to the additional readings listed in the course requirements. Alternatively, the instructor should specify the learning materials necessary for preparing the exam.

Approximately (55%) of the respondents believe that the way examinations and other modes of testing knowledge are held, is adequate. Twenty-eight percent (28%) of the respondents marked them grade 3, whereas (19%) marked them grade 1 and 2. It is necessary to either greatly improve the existing system, or alternatively, devise new methods of assessment. In both cases the final outcome should be the same: the attainment of reliable, fair and objective assessment methods and criteria.

**Students' mobility:** The percentage of students who have access to information directly influences their mobility. It seems that subjectivity diminishes equality. The highest percentage of respondents (32%) answered grade 3, whereas (43%) marked grades 4 and 5. It is expected that by speeding up activities leading towards adopting the ERASMUS student-exchange program a marked increase in student mobility will ensue. At the same time, faculties should continue to advance their collaboration with other faculties, which may include mutual agreements regarding student exchange.

Sixty percent (60%) of the respondents thought that the acquired knowledge can be put into practice, whereas (26%) marked this question with grade 3. There is a need to introduce practical content in the syllabuses which will train and prepare the students for the real world, so that following graduation they will successfully meet the demands of the labour market.

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The Tables of Results are listed in the Appendix to this report, in the order in which the results were analyzed and interpreted.

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**Evaluation Commission of UKIM**

**Table 1.1**

**Participation in theory classes, practical classes and individual activities in compulsory, elective and optional courses during postgraduate study in the faculties**

| | compulsory | elective | optional |
|---|---|---|---|
| *Technical and natural sciences and mathematics* | | | |
| **Faculty of Architecture** | | | |
| Theory classes | 100% | 100,00% | |
| Practical classes | | | |
| Individual activities | | | |
| **Faculty of Civil Engineering** | *36 elective courses* | | |
| Theory classes | | | |
| Practical classes | | | |
| Individual activities | | | |
| **Faculty of Electrical Engineering and Computer Science** | *Academic Advising* | | |
| Theory classes | | | |
| Practical classes | | | |
| Individual activities | | | |
| **Faculty of Mechanical Engineering** | | | |
| Theory classes | 89,70% | | |
| Practical classes | 6,70% | | |
| Individual activities | 3,60% | | |
| **Faculty of Technology and Metallurgy** | | | |
| Theory classes | 97,60% | 100,00% | |
| Practical classes | 2,40% | | |
| Individual activities | | | |
| **Faculty of Mining and Geology** | | | |
| Theory classes | 100,00% | 100,00% | |
| Practical classes | | | |
| Individual activities | | | |
| **Faculty of Natural Sciences and Mathematics** | | | |
| Theory classes | 93,70% | 99,00% | |
| Practical classes | 2,40% | 1,00% | |
| Individual activities | | | |
| *Social sciences* | | | |
| **Faculty of Economics** | | | |
| Theory classes | 100,00% | 100,00% | |
| Practical classes | | | |
| Individual activities | | | |
| **Iustinianus Primus Faculty of Law** | | | |
| Theory classes | 37,80% | 57,10% | |
| Practical classes | 62,20% | 42,90% | |
| Individual activities | | | |
| **Faculty of Philosophy** | | | |
| Theory classes | 88,50% | 52,10% | 33,30% |
| Practical classes | 7,40% | 11,80% | 16,70% |
| Individual activities | 4,10% | 36,10% | 50,00% |
| **Blaze Koneski Faculty of Philology** | | | |
| Theory classes | 100,00% | 100,00% | |
| Practical classes | | | |
| Individual activities | | | |
| **St. Kliment Ohridski Faculty of Pedagogy in Skopje** | | | |
| Theory classes | | | |
| Practical classes | | | |
| Individual activities | | | |
| **Goce Delcev Faculty of Pedagogy in Štip** | *postgraduate study is not available* | | |
| Theory classes | | | |
| Practical classes | | | |
| Individual activities | | | |

| | compulsory | elective | optional |
|---|---|---|---|
| ***Medical sciences*** | | | |
| **Faculty of Medicine** | | | |
| Theory classes | 93,30% | 100,00% | |
| Practical classes | 6,70% | | |
| Individual activities | | | |
| **Faculty of Dentistry** | | | |
| Theory classes | 68,90% | 50,00% | |
| Practical classes | 31,10% | 50,00% | |
| Individual activities | | | |
| **Faculty of Pharmacy** | | | |
| Theory classes | 44,60% | 100,00% | |
| Practical classes | 55,40% | | |
| Individual activities | | | |
| **Faculty of Physical Education** | | | |
| Theory classes | 100,00% | | |
| Practical classes | | | |
| Individual activities | | | |
| ***Bio-Technical sciences*** | | | |
| **Faculty of Agriculture and Food** | *Academic Advising* | | |
| Theory classes | | | |
| Practical classes | | | |
| Individual activities | | | |
| **Faculty of Forestry** | *Academic Advising* | | |
| Theory classes | | | |
| Practical classes | | | |
| Individual activities | | | |
| **Faculty of Veterinary Medicine** | | | |
| Theory classes | 31,40% | 47,40% | |
| Practical classes | 31,40% | | |
| Individual activities | 37,20% | 52,60% | |
| ***Arts*** | | | |
| **Faculty of Dramatic Arts** | | | |
| Theory classes | 100,00% | 100,00% | |
| Practical classes | | | |
| Individual activities | | | |
| **Faculty of Fine Arts** | | | |
| Theory classes | 32,30% | | |
| Practical classes | 67,70% | | |
| Individual activities | | | |
| **Faculty of Music** | | | |
| Theory classes | 100,00% | 100,00% | |
| Practical classes | | | |
| Individual activities | | | |
| ***Institutes*** | | | |
| **Institute of Economics** | | | |
| Theory classes | 93,40% | 93,30% | |
| Practical classes | | | |
| Individual activities | 6,60% | 6,70% | |
| **Institute of Sociological, Political and Juridical Research** | | | |
| Theory classes | 90,60% | 88,40% | 98,20% |
| Practical classes | 8,30% | 10,00% | 1,10% |
| **Institute of Earthquake Engineering and Engineering Seismology** | | | |
| Theory classes | 90,60% | 88,40% | 98,20% |
| Practical classes | 8,30% | 10,00% | 1,10% |

**Table 2**

**Frequency of skills/competencies of students enrolled at UKIM**

| NO. SKILLS/COMPETENCIES | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | 32 | 33 | 34 | 35 | 36 | 37 | 38 | 39 | 40 | 41 | 42 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Technical and natural sciences and mathematics | 2 | 3 | 5 | 7 | 2 | 1 | 5 | 4 | 2 | 5 | | 1 | 3 | 5 | 2 | 1 | 1 | 3 | 2 | 1 | | 5 | | | 2 | | 1 | 1 | | 4 | 3 | 2 | 3 | 1 | 3 | 1 | 2 | | | 3 | | |
| Social sciences | 3 | 3 | 3 | 4 | 2 | 4 | | 3 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 | 3 | 4 | | 2 | 1 | | | 2 | 1 | 2 | 1 | 4 | 4 | 2 | 1 | | 2 | 1 | 4 | 1 | 2 | 2 | | |
| Medical sciences | 1 | 3 | 2 | 2 | | 1 | 2 | 2 | | 2 | | | 1 | 1 | | 1 | 1 | | 2 | | | 1 | 1 | 1 | 1 | | | | | 3 | 1 | 1 | 1 | | 2 | | 1 | | | | | |
| Bio-Technical sciences | 2 | 1 | 2 | 1 | 1 | | 2 | 2 | | 2 | | | 1 | | 1 | 1 | 1 | 1 | 1 | | | 2 | | | | | | 1 | 1 | 2 | 1 | | | | 3 | | 1 | | | 1 | | |
| Arts | | 1 | | 1 | 1 | | 1 | 1 | | | | | | | 2 | | 1 | | | | | 1 | 1 | | 1 | | | | 1 | 1 | 1 | 1 | 1 | 1 | 2 | | 2 | 1 | 1 | | 1 | |
| Institutes | 1 | 1 | | | | | 1 | | | 2 | | | | | | 1 | | 1 | | 1 | 1 | 1 | | | | | 1 | | | | 1 | | | | | | | | | | | |
| T O T A L (frequency) | 9 | 12 | 12 | 15 | 6 | 6 | 11 | 12 | 4 | 14 | 1 | 2 | 6 | 7 | 6 | 5 | 5 | 10 | 8 | 6 | 1 | 12 | 3 | 1 | 4 | 2 | 3 | 4 | 3 | 14 | 11 | 6 | 6 | 2 | 12 | 2 | 10 | 2 | 3 | 6 | 1 | |

Offered Skills/Competencies

| | | | |
|---|---|---|---|
| 1 | written communication | 22 | ability to work in a team |
| 2 | oral communication | 23 | interpersonal skills |
| 3 | problem-solving | 24 | flexibility |
| 4 | synthesizing and analyzing information | 25 | ability to communicate with experts in various fields |
| 5 | ability to plan and organize | 26 | respect for diversity and multiculturalism |
| 6 | mother tongue written and oral communication | 27 | ability to work in an international context |
| 7 | laboratory work | 28 | dedication to ethical norms |
| 8 | preparing projects | 29 | initiative and entrepreneurship |
| 9 | knowledge of foreign languages | 30 | research skills |
| 10 | analyzing specialized and scientific literature | 31 | study skills |
| 11 | knowledge of a second language (foreign) | 32 | ability to work in an interdisciplinary team |
| 12 | knowledge of languages of ethnic minorities living in Macedonia | 33 | ability to adapt to novel circumstances |
| 13 | computer skills | 34 | ability to work autonomously |
| 14 | working with a computer | 35 | quality concerns |
| 15 | group-work | 36 | ability to generate new ideas (creativity) |
| 16 | managing skills | 37 | leadership |
| 17 | decision-making | 38 | understanding the culture and customs of other countries |
| 18 | skills in managing information; the skill needed to analyze information from various sources | 39 | designing and managing projects |
| 19 | problem-solving | 40 | ambition |
| 20 | critical thinking skills | 41 | other |
| 21 | self-criticism skills | | |

**Table 3**

**Structure of the total number of students enrolled for the first and second time**

| | Status | 2002/2003 | 2003/2004 | 2004/2005 | 2005/2006 |
|---|---|---|---|---|---|
| Total in Technical, | first (%) | 52,28 | 54,54 | 65,19 | 69,38 |
| natural sciences | second (%) | 47,72 | 45,46 | 34,81 | 30,62 |
| and mathematics | **total number** | **10 170** | **10 024** | **9 826** | **9 586** |
| Total in | first (%) | 64,86 | 73,00 | 76,48 | 79,38 |
| Social | second (%) | 35,14 | 27,00 | 23,52 | 20,62 |
| sciences | **total number** | **19 253** | **19 647** | **20 812** | **20 046** |
| Total in | first (%) | 73,90 | 77,84 | 86,29 | 88,41 |
| Medical | second (%) | 26,10 | 22,16 | 13,71 | 11,59 |
| sciences | **total number** | **3 437** | **3 579** | **3 595** | **3 090** |
| Total in | first (%) | 61,29 | 82,35 | 87,71 | 89,20 |
| Bio-Technical | second (%) | 38,71 | 17,65 | 12,29 | 10,80 |
| sciences | **total number** | **2 785** | **2 413** | **1 701** | **1 935** |
| Total Arts | first (%) | 90,52 | 98,73 | 99,85 | 97,67 |
| | second (%) | 9,48 | 1,27 | 0,15 | 2,33 |
| | **total number** | **686** | **631** | **653** | **645** |
| **University** | **first (%)** | **62,40** | **69,45** | **75,35** | **78,33** |
| **Ss. Cyril and Methodius** | second (%) | **37,60** | **30,55** | **24,65** | **21,67** |
| **Skopje** | **total number** | **36 331** | **36 294** | **36 587** | **35 302** |

Source: Statistical data of "Ss. Cyril and Methodius" University in Skopje, for the academic: 2002/2003 (January 2004); 2003/2004 (January 2005); 2004/2005 (January 2006) и 2005/2006 (January 2007).

**Table 4**

**Number of graduated students at Factulties of UKIM**

| | Number of Graduated Students | | | | | |
|---|---|---|---|---|---|---|
| | до 2002 | 2002/03 | 2003/04 | 2004/05 | 2005/06 | Total |
| Technical and natural sciences and mathematics | **26 393** | 885 | 1 032 | 863 | 1 007 | **30 180** |
| Social sciences | **43 223** | 2 002 | 2 481 | 3 020 | 2 782 | **53 508** |
| Medical sciences | **13 869** | 398 | 478 | 239 | 620 | **15 604** |
| Bio-Technical sciences | **8 298** | 210 | 246 | 231 | 269 | **9 254** |
| Arts | **2 218** | 119 | 130 | 20 | 182 | **2 669** |
| **Ss. Cyril and Methodius University in Skopje** | **94 001** | **3 614** | **4 367** | **4 373** | **4 860** | **111 215** |

Source: Statistical data of "Ss. Cyril and Methodius" University in Skopje, for the academic: 2002/2003 (January 2004); 2003/2004 (January 2005); 2004/2005 (January 2006) и 2005/2006 (January 2007).

**Table 5**

**Number of full-time and part-time teaching staff, according to their academic-teaching position and credential**

| | ACADEMIC TITLE | | | | | | ACADEMIC CREDENTIALS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Full Prof. | Assoc. Prof. | Assist. Prof. | Senior Lecturer | Lecturers | Total | Ph.D | M.A M.Sc | Special-ists | Higher Degree | Total |
| **Ss. Cyril and Methodius University in Skopje** | | | | | | | | | | | |
| **Full-Time** | | | | | | | | | | | |
| 2002/2003 | 597 | 241 | 354 | 37 | 7 | **1 236** | 1 108 | 54 | 1 | 73 | **1 236** |
| 2003/2004 | 613 | 263 | 354 | 31 | 4 | **1 265** | 1 124 | 63 | 27 | 51 | **1 265** |
| 2004/2005 | 596 | 265 | 344 | 16 | 3 | **1 224** | 1 131 | 53 | 0 | 40 | **1 224** |
| 2005/2006 | 594 | 297 | 296 | 27 | 2 | **1 216** | 1 106 | 70 | 0 | 40 | **1 216** |
| **Part-Time** | | | | | | | | | | | |
| 2002/2003 | 67 | 42 | 41 | 9 | 15 | **174** | 133 | 11 | 1 | 29 | **174** |
| 2003/2004 | 66 | 36 | 40 | 15 | 8 | **165** | 124 | 13 | 1 | 27 | **165** |
| 2004/2005 | 67 | 42 | 47 | 5 | 10 | **171** | 143 | 8 | 1 | 19 | **171** |
| 2005/2006 | 57 | 29 | 36 | 8 | 1 | **131** | 109 | 6 | 0 | 16 | **131** |
| **Total** | | | | | | | | | | | |
| 2002/2003 | 664 | 283 | 395 | 46 | 22 | **1 410** | 1 241 | 65 | 2 | 102 | **1 410** |
| 2003/2004 | 679 | 299 | 394 | 46 | 12 | **1 430** | 1 248 | 76 | 28 | 78 | **1 430** |
| 2004/2005 | 663 | 307 | 391 | 21 | 13 | **1 395** | 1 274 | 61 | 1 | 59 | **1 395** |
| 2005/2006 | 651 | 326 | 332 | 35 | 3 | **1 347** | 1 215 | 76 | 0 | 56 | **1 347** |

**Number of full-time and part-time adjunct faculty members, according to their academic-teaching position and credentials**

| | ACADEMIC TITLE | | | | | | ACADEMIC CREDENTIALS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Lectors | Assis-tants | Junior Assist. | Senior Adjuncts | Faculty Adjuncts | Total | Ph.D | M.A M.Sc | Special-ists | Higher Degree | Total |
| **Ss. Cyril and Methodius University in Skopje** | | | | | | | | | | | |
| **Full-Time** | | | | | | | | | | | |
| 2002/2003 | 23 | 558 | 276 | 0 | 40 | **897** | 124 | 374 | 199 | 200 | **897** |
| 2003/2004 | 30 | 596 | 329 | 1 | 79 | **1 035** | 532 | 263 | 88 | 152 | **1 035** |
| 2004/2005 | 41 | 490 | 309 | 0 | 19 | **859** | 447 | 236 | 37 | 139 | **859** |
| 2005/2006 | 27 | 378 | 315 | 3 | 20 | **743** | 330 | 215 | 6 | 192 | **743** |
| **Part-Time** | | | | | | | | | | | |
| 2002/2003 | 12 | 16 | 40 | 0 | 1 | **69** | 50 | 4 | 0 | 15 | **69** |
| 2003/2004 | 0 | 2 | 7 | 0 | 6 | **15** | 0 | 2 | 0 | 13 | **15** |
| 2004/2005 | 2 | 7 | 7 | 0 | 16 | **32** | 7 | 6 | 0 | 19 | **32** |
| 2005/2006 | 4 | 5 | 5 | 0 | 1 | **15** | 3 | 2 | 0 | 10 | **15** |
| **Total** | | | | | | | | | | | |
| 2002/2003 | 35 | 574 | 316 | 0 | 41 | **966** | 174 | 378 | 199 | 215 | **966** |
| 2003/2004 | 30 | 598 | 336 | 1 | 85 | **1 050** | 532 | 265 | 88 | 165 | **1 050** |
| 2004/2005 | 43 | 497 | 316 | 0 | 35 | **891** | 454 | 242 | 37 | 158 | **891** |
| 2005/2006 | 31 | 383 | 320 | 3 | 21 | **758** | 333 | 217 | 6 | 202 | **758** |

Source: Statistical data UKIM

**Table 6**

**Number of full-time and part-time teaching staff, according to their academic-teaching position and credentials**

| | ACADEMIC TITLE | | | | | | | | ACADEMIC CREDENTIALS | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Scientific Consultant | Senior Scientific Consultant | Research Adjuncts | **Total Research Staff** | Assistants | Junior Assistants | **Faculty Research Assistants** | **Total** | PhD | M.A/M.Sc. | Specialists | University Degree | **Total** |
| TOTAL INSTITUTES | | | | | | | | | | | | | |
| **Full-Time** | | | | | | | | | | | | | |
| 2002/2003 | 66 | 28 | 54 | **148** | 90 | 28 | **118** | **266** | 178 | 71 | 0 | 17 | **266** |
| 2003/2004 | 60 | 37 | 37 | **134** | 74 | 15 | **89** | **223** | 168 | 44 | 0 | 11 | **223** |
| 2004/2005 | 61 | 36 | 51 | **148** | 67 | 27 | **94** | **242** | 165 | 55 | 0 | 22 | **242** |
| 2005/2006 | 64 | 43 | 47 | **154** | 60 | 24 | **84** | **238** | 165 | 52 | 0 | 21 | **238** |
| **Part-Time** | | | | | | | | | | | | | |
| 2002/2003 | 0 | 0 | 0 | **0** | 0 | 0 | **0** | **0** | 0 | 0 | 0 | 0 | **0** |
| 2003/2004 | 22 | 8 | 7 | **37** | 0 | 5 | **5** | **42** | 37 | 0 | 0 | 5 | **42** |
| 2004/2005 | 5 | 2 | 0 | **7** | 0 | 0 | **0** | **7** | 7 | 0 | 0 | 0 | **7** |
| 2005/2006 | 19 | 7 | 9 | **35** | 0 | 0 | **0** | **35** | 35 | 0 | 0 | 0 | **35** |
| **Total** | | | | | | | | | | | | | |
| 2002/2003 | 66 | 28 | 54 | **148** | 90 | 28 | **118** | **266** | 178 | 71 | 0 | 17 | **266** |
| 2003/2004 | 82 | 45 | 44 | **171** | 74 | 20 | **94** | **265** | 205 | 44 | 0 | 16 | **265** |
| 2004/2005 | 66 | 38 | 51 | **155** | 67 | 27 | **94** | **249** | 172 | 55 | 0 | 22 | **249** |
| 2005/2006 | 83 | 50 | 56 | **189** | 60 | 24 | **84** | **273** | 200 | 52 | 0 | 21 | **273** |

**Table 7**

## Didactic Space

| Faculty | Type of Didactic Space | Building/Buildings Total Net Space | Amphitheatres | Lecture Rooms, Halls, Practice rooms | Room for Carrying out Numberical Exercises | Computer Rooms | Total laboratory space | Cabinets | Pre-School, Primary and High School Institutions for Carrying out Observation Classes in Teaching Methodology | Halls, Practical Classes | Cabinets for Faculty Staff | Other | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Faculty of Architecture | number | 1 | 1 | 6 | 0 | 1 | 1 | 35 | 0 | 1 | 35 | 0 | 44 |
| | area in м2 | 1 589,00 | 214,97 | 616,32 | 0,00 | 104,04 | 103,23 | 550,44 | 0,00 | 263,07 | 550,44 | 0,00 | 1 589,00 |
| | number of | 0 | 184 | 180 | 0 | 20 | 30 | 0 | 0 | 100 | 0 | 0 | 414 |
| | seats | | | | | | | | | | | | |
| Faculty of Civil Engineering | number | 2 | 2 | 15 | 0 | 2 | 7 | 61 | 0 | 0 | 61 | 0 | 87 |
| | area in м2 | 1 598,00 | 292,00 | 900,00 | 0,00 | 135,00 | 140,00 | 131,00 | 0,00 | 0,00 | 131,00 | 5 143,00 | 1 598,00 |
| | number of | 1 186 | 314 | 713 | 0 | 79 | 80 | 0 | 0 | 0 | 0 | 0 | 1 186 |
| | seats | | | | | | | | | | | | |
| Faculty of Electrical Engineering and Computer Science | number | 2 | 1 | 9 | 1 | 4 | 21 | 47 | 0 | 0 | 47 | 0 | 83 |
| | area in м2 | 4 000,00 | 280,00 | 1 115,00 | 40,00 | 295,00 | 2 166,00 | 104,00 | 0,00 | 0,00 | 104,00 | 0,00 | 4 000,00 |
| | number of | 0 | 220 | 739 | 36 | 86 | 92 | 0 | 0 | 0 | 0 | 0 | 1 173 |
| | seats | | | | | | | | | | | | |
| Faculty of mechanical engineering | number | 3 | 1 | 25 | | 6 | 21 | 99 | | | 99 | | 152 |
| | area in м2 | 3 350,00 | 198,00 | 1 719,50 | | 418,30 | 500,00 | 514,20 | | | 514,20 | | 3 350,00 |
| | number of | | 180 | 1 159 | | 60 | 375 | 0 | | | | | 1 774 |
| | seats | | | | | | | | | | | | 0 |
| Faculty of Technology and Metallurgy | number | 2 | 1 | 11 | 0 | 3 | 66 | 85 | 0 | 0 | 85 | 18 | 166 |
| | area in м2 | 6 600,00 | 113,00 | 647,00 | 0,00 | 126,00 | 328,00 | 5 386,00 | 0,00 | 0,00 | 5 386,00 | 386,00 | 6 600,00 |
| | number of | 0 | 132 | 531 | 0 | 40 | 0 | 85 | 0 | 0 | 85 | 0 | 788 |
| | seats | | | | | | | | | | | | |
| Faculty of Mining and Geology | number | 1 | 2 | 7 | 1 | 3 | 9 | 22 | 0 | 0 | 22 | 0 | 44 |
| | area in м2 | 1 341,00 | 167,00 | 285,50 | 39,60 | 147,00 | 401,50 | 300,40 | 0,00 | 0,00 | 300,40 | 1 991,40 | 1 341,00 |
| | number of | 0 | 200 | 195 | 15 | 70 | 103 | 41 | 0 | 0 | 41 | 583 | 624 |
| | seats | | | | | | | | | | | | |
| Faculty of Natural Sciences and Mathematics | number | 2 | 6 | 23 | 0 | 10 | 116 | 148 | 0 | 0 | 148 | 15 | 303 |
| | area in м2 | 9 832,00 | 1 100,00 | 117,00 | 0,00 | 1 898,00 | 5 169,00 | 1 548,00 | 0,00 | 0,00 | 1 548,00 | 282,00 | 9 832,00 |
| | number of | 0 | 910 | 1 045 | 0 | 188 | 1 408 | 0 | 0 | 0 | 0 | 0 | 3 551 |
| | seats | | | | | | | | | | | | |
| Technical and natural sciences and mathematics | number | **13** | **14** | **96** | **2** | **29** | 319 | 497 | **0** | **1** | **497** | **33** | 957 |
| | area in м2 | **28 310,00** | **2 364,97** | **5 400,32** | **79,60** | **3 123,34** | 12 175,53 | 5 166,24 | **0,00** | **263,07** | 5 166,24 | **7 802,40** | 28 310,00 |
| | number of | **1 186** | **2 140** | **4 562** | **51** | **543** | 1 943 | 126 | **0** | **100** | **126** | **583** | 9 365 |
| | seats | | | | | | | | | | | | |
| Faculty of Economics | number | 1 | 4 | 9 | 0 | 3 | 1 | 32 | 0 | 1 | 32 | 0 | 49 |
| | area in м2 | 10 062,00 | 810,00 | 768,00 | 0,00 | 240,00 | 60,00 | 8 184,00 | 0,00 | 130,00 | 8 184,00 | 0,00 | 10 062,00 |
| | number of | 1 632 | 802 | 710 | 0 | 85 | 35 | 0 | 0 | 72 | 0 | 0 | 1 632 |
| | seats | | | | | | | | | | | | |

| Faculty | Type of Didactic Space | Building/Buildings Total Net Space | Amphitheatres | Lecture Rooms, Halls, Practice rooms | Room for Carrying out Numberical Exercises | Computer Rooms | Total laboratory space | Cabinets | Pre-School, Primary and High School Institutions for Carrying out Observation Classes in Teaching Methodology | Halls, Practical Classes | Cabinets for Faculty Staff | Other | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Iustinianus Primus Faculty of Law | number | 1 | 12 | 2 | 0 | 1 | 3 | 58 | 0 | 0 | 58 | 0 | 76 |
| | area in м2 | 10 083,00 | 1 646,00 | 53,00 | 0,00 | 132,00 | 240,00 | 8 012,00 | 0,00 | 0,00 | 8 012,00 | 0,00 | 10 083,00 |
| | number of | 2 037 | 1 807 | 40 | 0 | 50 | 140 | 0 | 0 | 0 | 0 | 0 | 2 037 |
| | seats | | | | | | | | | | | | |
| Faculty of Philosophy | number | 3 | 3 | 22 | | 1 | 4 | 39 | | | 39 | | 69 |
| | area in м2 | 3 147,00 | 464,00 | | | | 0,00 | 2 683,00 | | | 2 683,00 | | 3 147,00 |
| | number of | | 358 | 1 071 | | 40 | 100 | 0 | | | | | 1 569 |
| | seats | | | | | | | | | | | | |
| Blaze Koneski Faculty of Philology | number | 1 | 3 | 21 | 0 | 2 | 1 | 42 | 0 | 1 | 42 | 0 | 69 |
| | area in м2 | 3 037,00 | 586,00 | 933,00 | 0,00 | 127,00 | 85,00 | 1 306,00 | 0,00 | 0,00 | 1 306,00 | 0,00 | 3 037,00 |
| | number of | 0 | 560 | 768 | 0 | 82 | 50 | 509 | 0 | 0 | 509 | 0 | 1 969 |
| | seats | | | | | | | | | | | | |
| St. Kliment Ohridski Faculty of Pedagogy in Skopje | number | 2 | 2 | 16 | 0 | 2 | 0 | 16 | 9 | 0 | 16 | 0 | 36 |
| | area in м2 | 1 641,00 | 454,00 | 953,00 | 0,00 | 106,00 | 0,00 | 128,00 | 0,00 | 0,00 | 128,00 | 0,00 | 1 641,00 |
| | number of | 0 | 660 | 753 | 0 | 50 | 0 | 32 | 0 | 0 | 32 | 0 | 1 495 |
| | seats | | | | | | | | | | | | |
| Goce Delcev Faculty of Pedagogy in Štip | number | 1 | 2 | 7 | 0 | 2 | 0 | 11 | 4 | 2 | 11 | 0 | 22 |
| | area in м2 | 816,00 | 93,00 | 428,00 | 0,00 | 79,00 | 0,00 | 216,00 | 1 600,00 | 1 600,00 | 216,00 | 0,00 | 816,00 |
| | number of | 0 | 120 | 400 | 0 | 56 | 0 | 30 | 400 | 500 | 30 | 0 | 606 |
| | seats | | | | | | | | | | | | |
| Social Sciences | number | 9 | 23 | 55 | 0 | 10 | 5 | 159 | 13 | 4 | 159 | 0 | 252 |
| | area in м2 | 25 639,00 | 3 589,00 | 3 135,00 | 0,00 | 684,00 | 385,00 | 17 846,00 | 1 600,00 | 1 730,00 | 17 846,00 | 0,00 | 25 639,00 |
| | number of | 3 669 | 3 949 | 2 671 | 0 | 323 | 225 | 571 | 400 | 572 | 571 | 0 | 7 739 |
| | seats | | | | | | | | | | | | |
| Faculty of Medicine | number | 15 | 9 | 8 | 8 | 1 | 49 | 300 | 0 | 0 | 300 | 0 | 375 |
| | area in м2 | 4 638,00 | 1 150,00 | 530,00 | 35,00 | 40,00 | 1 596,00 | 1 287,00 | 0,00 | 0,00 | 1 287,00 | 0,00 | 4 638,00 |
| | number of | 0 | 840 | 400 | 24 | 30 | 380 | 140 | 0 | 0 | 140 | 0 | 1 814 |
| | seats | | | | | | | | | | | | |
| Faculty of Dentistry | number | 3 | 2 | 4 | 0 | 1 | 2 | 25 | 0 | 12 | 25 | 0 | 34 |
| | area in м2 | 1 400,00 | 250,00 | 200,00 | 0,00 | 30,00 | 80,00 | 840,00 | 0,00 | 1 163,00 | 840,00 | 0,00 | 1 400,00 |
| | number of | 140 | 250 | 200 | 0 | 6 | 15 | 25 | 0 | 110 | 25 | 0 | 496 |
| | seats | | | | | | | | | | | | |
| Faculty of Pharmacy | number | 3 | 1 | 2 | 1 | 1 | 23 | 15 | | | 15 | | 43 |
| | area in м2 | 2 000,00 | 200,00 | 180,00 | 180,00 | | 1 380,00 | 60,00 | | | 60,00 | | 2 000,00 |
| | number of | | | | | 10 | 0 | 0 | | | | | 10 |
| | seats | | | | | | | | | | | | |
| Faculty of Physical Education | number | 3 | 2 | 5 | 0 | 1 | 16 | 20 | 3 | 2 | 20 | 0 | 44 |
| | area in м2 | 4 110,00 | 0,00 | 326,5 | 0,00 | 0,00 | 0,00 | 3 783,50 | 0,00 | 833,00 | 3 783,50 | 0,00 | 4 110,00 |
| | number of | 0 | 400 | 240 | 0 | 16 | 0 | 0 | 0 | 0 | 0 | 0 | 656 |
| | seats | | | | | | | | | | | | |

| Faculty | Type of Didactic Space | Building/Buildings Total Net Space | Amphitheatres | Lecture Rooms, Halls, Practice rooms | Room for Carrying out Numberical Exercises | Computer Rooms | Total laboratory space | Cabinets | Pre-School, Primary and High School Institutions for Carrying out Observation Classes in Teaching Methodology | Halls, Practical Classes | Cabinets for Faculty Staff | Other | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Medical Sciences | number | 24 | 14 | 19 | 9 | 4 | 90 | 360 | 3 | 14 | 360 | 0 | 496 |
| | area in м2 | 12 148,00 | 1 600,00 | 1 236,50 | 215,00 | 70,00 | 3 056,00 | 5 970,50 | 0,00 | 1 996,00 | 5 970,50 | 0,00 | 12 148,00 |
| | number of | 140 | 1 490 | 840 | 24 | 62 | 395 | 165 | 0 | 110 | 165 | 0 | 2 976 |
| | seats | | | | | | | | | | | | |
| Faculty of Agriculture and Food | number | 1 | 6 | 29 | 0 | 3 | 46 | 180 | 0 | 0 | 180 | 10 | 264 |
| | area in м2 | 6 784,00 | 680,00 | 1 600,00 | 0,00 | 90,00 | 2 495,00 | 1 919,00 | 0,00 | 0,00 | 1 919,00 | 350,00 | 6 784,00 |
| | number of | 0 | 700 | 900 | 0 | 50 | 1 195 | 900 | 0 | 0 | 900 | 0 | 3 745 |
| | seats | | | | | | | | | | | | |
| Faculty of Forestry | number | 2 | 2 | 10 | 1 | 1 | 25 | 55 | 0 | 9 | 55 | 0 | 94 |
| | area in м2 | 1 500,00 | 300,00 | 673,34 | 0,00 | 50,00 | 374,50 | 102,16 | 0,00 | 630,00 | 102,16 | 0,00 | 1 500,00 |
| | number of | 0 | 300 | 334 | 0 | 30 | 763 | 0 | 0 | 305 | 0 | 0 | 1 427 |
| | seats | | | | | | | | | | | | |
| Faculty of Veterinary Medicine | number | 5 | | 3 | | 1 | 21 | 15 | | | 15 | | 40 |
| | area in м2 | 1 304,00 | | 158,00 | | 30,00 | 711,00 | 405,00 | | | 405,00 | | 1 304,00 |
| | number of | | | | | | 0,00 | 0,00 | | | | | 0,00 |
| | seats | | | | | | | | | | | | |
| Bio-Technical Sciences | number | 8 | 8 | 42 | 1 | 5 | 92 | 250 | 0 | 9 | 250 | 10 | 398 |
| | area in м2 | 9 588,00 | 980,00 | 2 431,34 | 0,00 | 170,00 | 3 580,50 | 2 426,16 | 0,00 | 630,00 | 2 426,16 | 350,00 | 9 588,00 |
| | number of | 0 | 1 000 | 1 234 | 0 | 80 | 1 958 | 900 | 0 | 305 | 900 | 0 | 5 172 |
| | seats | | | | | | | | | | | | |
| Faculty of Dramatic Arts | number | 7 | 1 | 4 | 0 | 1 | 9 | 18 | 0 | 1 | 18 | 1 | 33 |
| | area in м2 | 1 529,00 | 92,00 | 125,00 | 0,00 | 0,00 | 414,00 | 898,00 | 0,00 | 90,00 | 808,00 | 126,00 | 1 529,00 |
| | number of | 0 | 120 | 104 | 0 | 12 | 0 | 0 | 0 | 0 | 0 | 16 | 236 |
| | seats | | | | | | | | | | | | |
| Faculty of Fine Arts | number | 3 | | 1 | | 1 | 23 | 5 | | | 5 | 4 | 30 |
| | area in м2 | 2 800,00 | | 20,00 | | 30,00 | 2 100,00 | 650,00 | | | 650,00 | 120,00 | 2 800,00 |
| | number of | | | 15 | | 20 | 0 | 0 | | | | | 35 |
| | seats | | | | | | | | | | | | |
| Faculty of Music | number | 1 | 0 | 10 | 0 | 0 | 0 | 1 | 2 | 0 | 1 | 0 | 11 |
| | area in м2 | 1 546,00 | 0,00 | 513,00 | 0,00 | 0,00 | 0,00 | 1 033,00 | 0,00 | 0,00 | 1 033,00 | 0,00 | 1 546,00 |
| | number of | 464 | 0 | 184 | 0 | 0 | 0 | 30 | 0 | 0 | 30 | 0 | 214 |
| | seats | | | | | | | | | | | | |
| Arts | number | 11 | 1 | 15 | 0 | 2 | 32 | 24 | 2 | 1 | 24 | 5 | 74 |
| | area in м2 | 5 875,00 | 92,00 | 658,00 | 0,00 | 30,00 | 2 514,00 | 2 491,00 | 0,00 | 90,00 | 2 491,00 | 246,00 | 5 785,00 |
| | number of | 464 | 120 | 303 | 0 | 32 | 0 | 30 | 0 | 0 | 30 | 16 | 485 |
| | seats | | | | | | | | | | | | |
| Ss. Cyril and Methodius University in Skopje | number | 65 | 60 | 227 | 12 | 50 | 538 | 1 290 | 18 | 29 | 1 290 | 48 | 2 177 |
| | area in м2 | 81 560,00 | 8 625,97 | 12 861,16 | 294,60 | 4 077,34 | 21 711,03 | 33 989,90 | 1 600,00 | 4 709,07 | 33 989,90 | 8 398,40 | 81 560,00 |
| | number of | 5 459 | 8 699 | 9 610 | 75 | 1 040 | 4 521 | 1 792 | 400 | 1 087 | 1 792 | 599 | 25 737 |
| | seats | | | | | | | | | | | | |

**Table 8**

**Library Information**

| Library Information | | Number | | Number |
|---|---|---|---|---|
| Scientific publications in the relevant program of study (books, learning aids, manuscripts, compendiums, dictionaries, atlases, illustrations...) both printed and electornic versions. | Technical sciences | 108 015 | Arts | 22 982 |
| Number of library units supplied in the period between 2002-2006. | | 3 912 | | 5 377 |
| a) national | | 2 312 | | 1 530 |
| б) foreign | | 1 600 | | 3 847 |
| Number of journals supplied in the period between 2002-2006. (both printed and electronic versions) | | 1 365 | | 5 000 |
| a) national | | 106 | | 400 |
| б) foreign | | 1 259 | | 4 600 |
| Number personal computers in the library | | 22 | | 9 |
| Number printers in the library | | 22 | | 9 |
| Number of Internet connections in the library | | 22 | | 9 |
| Number of photocopiers in the library | | 2 | | 0 |
| other | | 2 | | 4 |
| Scientific publications in the relevant program of study (books, learning aids, manuscripts, compendiums, dictionaries, atlases, illustrations...) both printed and electornic versions. | Social sciences | 244 777 | Total Faculties | 381 294 |
| Number of library units supplied in the period between 2002-2006. | | 43 617 | | 56 359 |
| a) national | | 21 882 | | 27 524 |
| б) foreign | | 21 735 | | 28 835 |
| Number of journals supplied in the period between 2002-2006. (both printed and electronic versions) | | 5 617 | | 16 273 |
| a) national | | 2 812 | | 3 538 |
| б) foreign | | 2 805 | | 12 735 |
| Number personal computers in the library | | 338 | | 388 |
| Number printers in the library | | 338 | | 388 |
| Number of Internet connections in the library | | 338 | | 388 |
| Number of photocopiers in the library | | 33 | | 40 |
| other | | 16 | | 22 |
| Scientific publications in the relevant program of study (books, learning aids, manuscripts, compendiums, dictionaries, atlases, illustrations...) both printed and electornic versions. | Medical sciences | 3 825 | Total Institutes | 0 |
| Number of library units supplied in the period between 2002-2006. | | 2 209 | | 3 348 |
| a) national | | 932 | | 1 898 |
| б) foreign | | 1 277 | | 1 450 |
| Number of journals supplied in the period between 2002-2006. (both printed and electronic versions) | | 3 400 | | 477 |
| a) national | | 61 | | 213 |
| б) foreign | | 3 339 | | 264 |
| Number personal computers in the library | | 15 | | 7 |
| Number printers in the library | | 15 | | 7 |
| Number of Internet connections in the library | | 15 | | 7 |
| Number of photocopiers in the library | | 4 | | |
| other | | 0 | | |
| Scientific publications in the relevant program of study (books, learning aids, manuscripts, compendiums, dictionaries, atlases, illustrations...) both printed and electornic versions. | Bio-Technical sciences | 1 695 | Ss. Cyril and Methodius University in Skopje | 381 294 |
| Number of library units supplied in the period between 2002-2006. | | 1 244 | | 59 707 |
| a) national | | 868 | | 29 422 |
| б) foreign | | 376 | | 30 285 |
| Number of journals supplied in the period between 2002-2006. (both printed and electronic versions) | | 891 | | 16 750 |
| a) national | | 159 | | 3 751 |
| б) foreign | | 732 | | 12 999 |
| Number personal computers in the library | | 4 | | 395 |
| Number printers in the library | | 4 | | 395 |
| Number of Internet connections in the library | | 4 | | 395 |
| Number of photocopiers in the library | | 1 | | 40 |
| other | | 0 | | 22 |

**Table 9**

**Frequency of participation in international conferences and the methods used in presenting them**

| Frequency of participation in international conferences and the methods used in presenting them | | | | | | | |
|---|---|---|---|---|---|---|---|
| | Internationa | National | Total | Oral | Poster | Announcement | Abstract |
| Faculty of Electrical Engineering and Computer | 2 114 | 903 | 3 017 | 2 435 | 405 | 82 | 95 |
| Faculty of Agriculture and Food | 1 129 | 570 | 1 699 | 1 295 | 271 | 46 | 87 |
| Faculty of Philosophy | 943 | 731 | 1 674 | 956 | 89 | 422 | 207 |
| Faculty of Medicine | 484 | 886 | 1 370 | 284 | 401 | | 685 |
| Faculty of Mechanical Engineering | 957 | 135 | 1 092 | 983 | 44 | 39 | 26 |
| Faculty of Music | 485 | 451 | 936 | 36 | | 900 | |
| Faculty of Dentistry | 494 | 378 | 872 | 142 | 294 | | 436 |
| Faculty of Natural Sciences and Mathematics | 465 | 333 | 798 | 319 | 266 | 34 | 179 |
| Faculty of Technology and Metallurgy | 518 | 262 | 780 | 193 | 285 | 75 | 227 |
| Blaze Koneski Faculty of Philology | 350 | 192 | 542 | 396 | 7 | 133 | 6 |
| Faculty of Forestry | 313 | 200 | 513 | 440 | 22 | 9 | 42 |
| Faculty of Physical Education | 174 | 262 | 436 | 348 | 88 | | |
| Krste Petkov-Misirkov Institute of the Macedonian | 128 | 300 | 428 | 428 | | | |
| Institute of Macedonian Literature | 128 | 300 | 428 | 428 | | | |
| Faculty of Civil Engineering | 269 | 141 | 410 | 101 | 225 | 2 | 82 |
| St. Kliment Ohridski Faculty of Pedagogy in Skopje | 128 | 234 | 362 | 156 | 14 | 136 | 56 |
| Faculty of Pharmacy | 170 | 70 | 240 | 62 | | 178 | |
| Institute of Earthquake Engineering and Engineering Seismology | 174 | 37 | 211 | 114 | 26 | 62 | 9 |
| Faculty of Veterinary Medicine | 153 | 50 | 203 | 51 | 82 | | 70 |
| Faculty of Mining and Geology | 149 | 36 | 185 | 114 | 52 | 8 | 11 |
| Faculty of Economics | 110 | 59 | 169 | 114 | 4 | 1 | 50 |
| Institute of Agriculture | 65 | 55 | 120 | 64 | 42 | 4 | 10 |
| Institute of South Crops | 65 | 55 | 120 | 64 | 42 | 4 | 10 |
| Institute of Economics | 45 | 63 | 108 | 69 | | | 39 |
| Iustinianus Primus Faculty of Law | 18 | 47 | 65 | 36 | | 24 | 5 |
| Faculty of Architecture | 39 | 15 | 54 | 20 | 15 | 9 | 10 |
| Goce Delcev Faculty of Pedagogy in Štip | 16 | 7 | 23 | 23 | | | |
| Faculty of Fine Arts | 1 | | 1 | 1 | | | |
| Faculty of Dramatic Arts | | | | | | | |
| Institute of National History | | | | | | | |
| Marko Cepenkov Institute of Folklore | | | | | | | |
| Institute of Sociological, Political and Juridical | | | | | | | |
| Institute of Cattle-Breeding | | | | | | | |

EUA
European University Association

**European University Association**

**Institutional Evaluation Programme**

# Ss. Cyril and Methodius University
# EUA Follow-up Report

Henrik Toft Jensen
Jacqueline Smith
Virgilio Meira Soares

**May 2008**

## TABLE OF CONTENTS

# I - INTRODUCTION

## 1 - The EUA follow-up reviews

Since 1998 EUA (at the time CRE) has offered as an extension to its Institutional Evaluation Programme-IEP the possibility of a follow-up review, combined with a follow-up visit. The rationale is that the follow-up review can assist the institution in evaluating the changes that have been made since the original review: What was the impact of the original review? What use has the institution made of the original review report? How far has it been able to address the issues raised in the report? The follow-up review is also an opportunity for the institution to take stock of its strategies for managing change in the context of internal and external constraints and opportunities.

In line with the EUA institutional evaluation programme as a whole, the follow-up process is a supportive one. There is no prescribed procedure, and it is for the institution itself to set the agenda in the light of its experiences since the original review. The institution is expected to submit its own self-evaluation report, which will describe the progress made, possibly indicating barriers to change.

Monitoring the impact of the recommendations presented in the original report is one of the primary aims of the follow-up process. However, and since the overall review process is a dynamic and not a static one, the follow-up review should take into account new developments and reforms, both within the institution and within its wider environment, and adapt its recommendations accordingly.

Furthermore, the follow-up process could also review and give feedback on the problems that may have occurred in the implementation of the recommendations.

Finally, as for EUA, the follow-up reviews provide in fact valuable information on the relevance and the adequacy of the Institutional Evaluation Programme itself, indicating areas of consolidation and improvement that would benefit all EUA members.

## 2 - The UKIM follow-up review

In 2003 the Ss. Cyril and Methodius University – abbreviated UKIM from its name in Macedonian – in Skopje requested an institutional evaluation by the European University Association - EUA. The preliminary and the main visit to UKIM took place in June and in October 2003 and the report was finalised in November 2003.

Four and a half years later, UKIM requested EUA for a follow-up review. The request was made by the new Rector of the University, Professor Gjorgji Martinovski.

A summary of self evaluation reports produced by the university subunits, faculties and institutes, was provided in February 2008. The follow-up visit took place from 2 to 4 April 2008. During this visit the Team met members of all the components of the academic community: the Rector, the Vice Rectors, Senate members, Deans, teachers, members of the administration and students.

At the end of the visit, the Chairman on behalf of the Team presented an oral report on its findings. This written report builds upon the oral report. The report is prepared especially for the leaders of UKIM. They are free to decide on its use and publication.
The follow-up team, referred to as "Team" in this report, consisted of:

- Professor Henrik Toft Jensen, Chair, former Rector, University of Roskilde, Denmark
- Ms Jacqueline Smith, Secretary, former Deputy Head, OECD/IMHE
- Professor Virgilio Meira Soares, former Rector, University of Lisbon, Portugal

Professors Henrik Toft Jensen and Virgilio Meira Soares were also members of the original review team in 2003.

The Team would like to thank the Rector and all the staff and students of UKIM, for their warm welcome and for many helpful and open discussions during the visit. Special thanks are due to Ms Kostadina Mokrova the liaison person, and her colleagues, in particular Ms Maja Anastasova, for support and efficiency in arranging the programmes and liaising with the team.

## 3 - The context of the follow-up review: major changes since 2003

As already mentioned in the 2003 report, UKIM is by far the largest university in the Republic of Macedonia1[1] with over 36 000 students, or about half the number of students enrolled in higher education in the country. However, while there were three state universities at the time, there are now four – UKIM, St Clement of Ohrid in Bitola, the

[1] As in 2003, for the purpose of this report, the Team has chosen to use "Republic of Macedonia" or "Macedonia" to refer to the country also known as the "Former Yugoslav Republic of Macedonia" (FYROM).

State University in Tetovo, and the new State University in Stip. In addition nine private institutions of higher education are now in operation. The status of the largest private institution, the South East European University, may soon evolve to state university status. The increased number of higher education institutions, both public and private, reflects the growing participation in higher education, which is positive, and may contribute to developing inter-university relations. However, it also has an impact in terms of funding: if the overall state funding for higher education does not increase, or increases only minimally, then each institution entitled to receive public funds will see its share decrease. In 2003 UKIM comprised 24 faculties and 10 institutes. Since then two of these faculties were formally "detached" from UKIM to form the new state university in Stip; most of the functions of the Faculty of Security have been transferred to the Police Academy as a part of the University in Bitola, and some of its functions are now part of the postgraduate study programmes of the Iustinianus Primus Faculty of Law at UKIM; the Veterinary Institute merged with the Faculty of Veterinary Medicine. Thus, in 2008, UKIM is composed of a slightly reduced number of units (21 faculties and 9 institutes) but its composition remains essentially unchanged.

In 2003 the Republic of Macedonian formally joined the Bologna process. Rector Martinovski and a number of UKIM professors contributed to the national report in 2006.

The most recent change, which will have a major impact on UKIM and all the other institutions of higher education in the Republic of Macedonia, is the enactment of a new Law on Higher Education. This law was enacted only four weeks before the Team visited UKIM for the follow-up review; therefore it is still too early to fully appreciate its effect. There is no doubt, however, that it will have a major impact and may substantially modify the higher education environment. Essential points are: 1. the definition of independent higher education institution, which applies to all legally established institutions, whether public or private; 2. the "capacity of legal person" granted to the university itself, while its units derive their legal functioning from the authorisations determined by the University Senate; 3. the competences of the Accreditation Board and the Quality Assurance Agency and the legal status of their presidents who are appointed by Government. These points and others are further examined later in this report, in relation to their consequences for UKIM.

In addition a new Law on Research and Scientific Activities was enacted just a few days before the Team's visit. The text of this law was not yet available so the Team could not learn how it might affect research activities at UKIM, nor take it into account in this review.

## II - FOLLOW-UP ON 2003 RECOMMENDATIONS

In 2003 the review team offered a detailed set of recommendations. Part of the follow-up review process consisted in trying to evaluate the degree of implementation of each of these recommendations, taking into account the obstacles or constraints that may have arisen along the way, and offering suggestions to continue the process. The 2003 recommendations and changes are reviewed below. Each recommendation is summarised here, the full text being available in the original report, followed by the current Team's findings and updated recommendations if indicated.

### 1 - Concerning structural reorganisation

Recommendation n°1: *Devising a new internal structure for UKIM as an integrated university*

This recommendation has not been implemented yet as the previous law on higher education did not provide the adequate framework for integration. However the period between 2003 and 2008 was very useful to build consensus around the reform. The Team realised that most staff members met understood the benefits that can be gained from a well integrated institution although some anxiety may remain regarding potential loss of autonomy, especially in the use of what has been regarded as each faculty's own funds. The process of integration will now start with the new law which grants the status of "legal person" to the university. The new law provides for the legal operations of the university units – the faculties and institutes – as determined by the university senate, the responsibility for overall functioning resting with the "university" itself. The process of integration is to be completed by the end of 2008. This process entails new statutes and new governing bodies for the university as an entity and for the subunits, faculties and institutes. UKIM anticipated this process and has already set up commissions involving staff members and students to prepare the new statutes.

**The Team commends the initiatives of the Rector to set up these commissions**.

The Team notes that the integration process applies to the student unions as well. As of now, each faculty has its own student union, which is not part of the University student union. With the integration process under way, the leaders of the various unions have already requested advice and help from leaders of student unions which have undergone an integration process, in Slovenia. **The students are to**

**be commended for their initiative and for their thorough approach.**

Recommendation n°2: *Devise a long term strategic plan for the university; develop appropriate quality assurance mechanisms*

The University has produced a strategic plan for the period 2004-2010. The committee that prepared the plan worked on several issues, focusing particularly on complying with the Bologna process requirements and implementing its recommendations. The Team feels that the plan takes into account the recommendations of the EUA 2003 report among other things. Starting from an analysis of the situation in 2004, the committee defined 11 goals which are further detailed in clearly stated steps to be achieved by 2005 and by 2010. The Team agrees that this development strategy plan does indeed represent "a frame with concrete directions showing the way how the mission and vision of the Ss. Cyril and Methodius University in Skopje should be carried out" (document *Ss. Cyril and Methodius University in Skopje – Development Strategy for the Period 2004-2010*, p.5). During its visit the Team was able to see that many of these steps have already been achieved. They are described below in the comments on how the recommendations were implemented, and the rest of the report. **The Team commends the University for having produced this useful plan and for having diligently followed it**.

Recommendation n°3: *Institutes and faculties need to be merged*

Two faculties became part of the new university in Stip. The functions of one faculty were transferred to another institution and another UKIM unit (see above). A faculty and an institute have merged. Otherwise no mergers were attempted. Considering the task at hand to integrate the university, a task which will mobilise a considerable amount of talents, energies and time, and possibly other factors that were not identified, it is unlikely that any merger will be considered soon. And yet the current integration context could offer a good opportunity to consider merging some units. Therefore, the recommendation remains, to be implemented at the appropriate time in the future.

Recommendation n°4: *Central services are needed*
and Recommendation n°7: *Generate systematic organisation of data collection*

A central data collection system was put in place and seems to be functioning well. In fact, the extent of detailed statistics produced was impressive. The system is seen as useful by the faculties: it gives them more complete and more accurate pictures of their situation; it

offers basis for decisions. Some faculties even wish to see the system more developed and more suited to their individual needs. Actually, although extensive, the data collection system appears to be not fully developed yet; it could be extended to also cover internationalisation for example.

UKIM is in the process of creating a university-wide information system; pilot case cases were set up in 5 faculties and have functioned very well. Fibre optic lines are being drawn between the various university buildings. The process is nearing completion.

**Efforts need to continue to establish other central services**, where appropriate: for example, although the size of the institution and its geographical dispersion justifies the continued existence of a few topic focused libraries, a central library would serve more "customers" and would avoid unnecessary duplication of services and staff ; a central registry for enrolments and student files would again avoid duplication and allow for a more systematic data collection; an international department to administer and monitor all international exchanges, etc.

## 2 - Concerning internal quality assurance development

Recommendation n°5: *Decision on how the self evaluation reports are to be used for implementing required changes*

Each faculty has its own evaluation commission which regularly produces "evaluation reports in order to gather information and [….] promote internal quality within the institution." (*Summary of the Self-evaluation Report*, November 2007, p. 11) These reports serve to formulate proposals for improvement.

In 2006 the University set up an evaluation commission that started working with EUA 2003 recommendations and developed its own way of following up what was happening since the original evaluation. The Team was impressed by the commission's systematic approach: deciding to initiate the process with a pilot self evaluation with 5 faculties, then adapting it and extending this process to all faculties and institutes.

As a result of these activities the commission produced a self evaluation report analysing the period between 2002-2003 and 2005-2006. The report was discussed and approved by the competent bodies; it became the basis for the present follow-up visit.

Recommendation n° 6: *Discussion on how student questionnaires are to be used*

In addition to the regular questionnaires, at the time of the comprehensive self evaluation mentioned above, the commission launched an extensive survey of second year students to explore their views about important issues related to the quality of services delivered to them. 2609 students participated in the survey. Thus students provide a major input in the evaluation process, through their answers to questionnaires, their participation in the survey, and their involvement in the commissions via their representatives.

The Team learned that in some cases these questionnaires lead to direct results: for example, providing more teaching books. **The Team commends the University for responding positively** to the needs expressed by the students.

The Team encourages the university to continue to do its best to meet the students' aspirations and to continue to adopt a more systematic approach to the use of the questionnaires so that the consequences are always visible.

## 3 - Concerning teaching and learning

Recommendation n°8: *University-wide implementation of ECTS with internal credit transfer first*
In the past five years, the University has devoted a great deal of its improvement efforts to implementing the guidelines to meet the Bologna Process requirements, particularly as regards the implementation of ECTS, with remarkable results. This was obvious throughout the self-evaluation report, the strategic plan, and all the meetings that were held with the Team at UKIM. Implementation of ECTS has been extended to all faculties.

However, while a *cursus* structure allowing credit accumulation and transfer appears to be in place in all faculties now, a university-wide credit transfer system does not exist yet. Starting from a rigidly compartmentalised system, faculties have not all implemented a new study structure and ECTS at the same pace; there are still cases of overlapping competencies that need to be resolved. In addition, some staff members remain reluctant to adopt this new structure. Consequently intra-university transfers are still very rare.

**The Team encourages the staff to focus some of their efforts towards improving transferability within the university**, which is one of the goals for the near future as was stated in a meeting.

Recommendation n°9: *Continued reform of curricula is also a high priority. Syllabi need to be an integrated part of a curriculum*

UKIM initiated curricula reforms both to respond to the Bologna process recommendations and to meet the new challenges of a changing environment. Courses are often now taught in modules, a *cursus* includes required, elective and optional courses. However, these reforms led to what one professor called "subjectomania": at this point, the offer of new courses often means an increased workload for both teachers and students, and this may impact negatively on quality. Curricula need to be rationalised. In addition, the university recognises that the students were not sufficiently involved in the development of new programmes of study. During the meetings the Team found that students are very much committed to the application of the Bologna process. Therefore, **it is recommended that the university involves them much more from now on** in necessary continued reforms of the curricula.

Recommendation n°10: *Change the system of student assessment and examination*

The Team notes with approval that the system now includes, among others, on-going assessment with different types of assignments, colloquia, and that it takes account of attendance. It is also important to note the efforts to reduce subjectivity in student assessment through the increasing use of computerised tests. **The Team commends the University for taking improvement of the system of student assessment and examination very seriously**. In this respect **it wishes to underline as a very positive step the approval of a code of ethics and its distribution to all academic staff and students.** But at the same time the Team must draw the attention of the University to the **need of avoiding unnecessary risks in going too far in automatisation of the examination process**: there are some subjects which do not lend themselves to automatic processes.

Recommendation n°11*:* *Teaching methods need to be modernised*

The Team notes that student centred learning is now at the heart of all faculties; increasingly, modules are the format for delivery of courses, colloquia are used in the learning process as well as in assessment, students become actively involved rather than remaining passive recipients of knowledge. The University encourages teachers to visit foreign institutions to familiarise themselves with student centred methods of teaching.

The Team realises that it may be difficult to put student centred teaching and learning in practice in large classes. Nevertheless, it encourages the University to continue and extend the interactive approach to teaching and learning. As in 2003, **the Team recommends that more academic staff development programmes be organised to assist staff in developing their teaching methodology,** besides study visits abroad.

Recommendation n°12: *The University needs to take steps to ensure that more students progress through the higher education system*

Between 2002-2003 and 2005-2006 the ratio of first enrolments in courses to second enrolments (as a consequence of failing the first enrolment year) has consistently shifted in favour of first enrolments, in all faculties: overall from 62/38 in 2002-2003 to 78/22 in 2005-2006. Although the ratio needs to be further improved, as the University recognises, the consistent improvement over the past four years shows that more and more students are able to complete a normal course of studies. This improvement is partially the result of external factors. However the **efforts made by some faculties to put in place mentorship and remedial measures obviously have a significant impact in increasing the success rate of the students.**

The Team encourages these faculties to pursue their efforts, and all faculties to adopt and extend these measures. Not only the students themselves benefit from a shorter duration of studies, but the University does too, in terms of efficiency of the process and probably in its reputation too. As noted in the SER and confirmed during the Team's meetings at UKIM "In spite of the fact that, in the recent period, a number of new higher education institutions have been established, both state and privately owned, the interest to study at UKIM remains continuously high".

Recommendation n°13: *Reduce brain drain: smooth the transfer of recent graduates into the labour market*

Unfortunately, the overall conditions in Macedonia have not allowed for a significant reduction of brain drain, if any. Other South East European countries are also still struggling with this problem. Efforts made by some faculties to develop measures to provide better employment opportunities within the country, by adapting the curricula to what the Macedonian society needs currently, disseminating information about labour market conditions, etc., are beginning to produce results.

It is also important to refer to the publication of two books or manuals by the Rectorate and by the student organisation *How to create your own business* and *How to find a job*.

The University (central administration, students union) should monitor the development of these measures and their impact on employment of its graduates.

## 4 – Concerning research

Recommendation n°14: *Establish a centrally organised research body*

The university has not yet established a centralised research body, but has nevertheless appointed a vice rector for science who has been quite active already, in collecting then disseminating information about available research funds, application procedures, among others, with the difficulties encountered in a country where funds are scarce. Besides continuing along those lines and establishing a central research office, further efforts should be directed at trying to convince the government to **increase its funding of research from the current level of 0.25 % of GDP – The European Union goal for research funding is 3% of GDP although few countries in Europe have reached that level yet**.

However it must be said that the University is trying to do its best to expand its research capacity and to benefit from international funds, in particular European Union and NATO programmes. **The Team encourages the University to take advantage of the special programme for South East European countries within the EU Framework Programme 7.**

It is also important to note that the university is involved in partnerships with higher institutions abroad to award joint degrees. These steps are important since this is also a way to increase the international research performance.

The Team can only hope that the present situation and the new legislation on research and scientific activities will allow Macedonian universities to increase their research capacities.

Recommendation n°15: *Expand and support interdisciplinary research*

A positive trend was noted in 2003, however the Team feels that **interdisciplinary research remains limited and should be developed**.

## 5 – Concerning spending and finance

Recommendation n°16: *Reform the State allocation system to one where the performance of the university is used as basis.*

The team was dismayed to learn that the financing system of Macedonian universities still seems to be arbitrary. It is unacceptable that the criteria for allocating funds are not clearly stated, that a university is not informed of its level of funding until well into the year and does not retain the use of funds unspent because they were not available in time. Therefore, **the Team reiterates the recommendation of 2003: the State allocation system should be reformed to a transparent one based on the performance of the institution**.

Recommendation n°17: *Increase state funding and give the university a better planning horizon*; and
Recommendation n°18: *The current system of student co-financing should be re-evaluated*

The same applies to the level of state funding. Without discussing the existence or non-existence of tuition fees, it seems unacceptable to ask the state funded students to increase the level of co-finance of their studies at the level they are being asked while the state is not increasing its share.

It is distressing to realise that, as of now, the state does not make provision for capital investment. Due to the increase in the number of students, facilities are becoming insufficient to accommodate all students. Staff and students described how lack of space leads to cramped classes and thus contributes to the difficulties in implementing student centred teaching. The university describes in its self evaluation how the problem is being dealt with. **Nevertheless the Team is convinced that providing teaching in morning and afternoon shifts, the way the university is doing, is only a temporary remedy and not a solution. It is recommended that this problem be discussed between the rector and the Ministry in order to find a solution.**

In addition **the present system of not informing the university on time about their real funding levels prevents long and medium term planning, sometimes even short term planning**.

## III - FUTURE CHALLENGES

Throughout its contacts with leaders, staff, students, the Team was impressed by the University's accomplishments between 2003 and 2008. A dynamic university will never run out of challenges. This section of the report discusses the main current challenges identified by the Team: the continuing implementation of the Bologna Process, issues concerning human resources, and in the immediate future the integration of the University.

### 1 - Continuing implementation of the Bologna Process

UKIM achieved remarkable results in implementing ECTS, in modifying the degree structure, in starting to reform the curricula, in adopting more interactive methods of teaching and in fostering student centred learning. The diploma supplement will become part of the degree award. However, the Team also noticed that **the level of understanding of the Bologna process**, in particular the concept of learning outcomes and the new paradigm of student centred learning, are not equally spread among the faculties. In addition, the Bologna Process involves several dimensions besides degree structure and ECTS, all equally important. European universities and other institutions of higher education are all at different stages in the implementation of these different aspects. Certainly UKIM is well placed among South Eastern European countries in this respect. **The Team recommends that the University pursue its efforts along the lines already underway and devise a plan to implement the other dimensions as well.**

Some faculties are much more advanced that others in their development of the Bologna process and this suggests that **some overarching coordination should be established at central level.** A central coordination would keep the University community informed about developments in the Bologna Process and identify ways to apply them to UKIM[2].

[2] Regarding the Bologna Process, all information, current developments, documents, Ministerial Communiqués and Trends reports are available at www.ond.vlaanderen.be/hogeronderwijs/bologna/

## 2 - Issues of human resources

There are several complex issues. One aspect of the present problems of UKIM is the ageing of the academic staff. This is a common situation in many European countries that have undergone major political and economic changes in the last two decades. However, at UKIM the problem is compounded by the almost impossibility to replace those who retire as the government does not allow it. During the present 2007-2008 academic year the government has only allowed the contract of a certain number of assistants. Again, this can only serve as a stop gap measure. **The present policy should be revised and clear criteria to decide the number of admission of new contracts should be defined. In the long run, the final decision concerning staff matters should be left to the university**.

Again, as a fairly common problem, unfortunately, the issue of brain drain adds to staffing difficulties. Well-qualified staff will leave the institution to find better working conditions abroad, or better salaries in the private sector. Finding a long term solution implies not only improved economic conditions, but also policies to encourage staff either to stay in or return to the institution or the country3[3]. Already some faculties at UKIM have put in place various measures to help students find meaningful employment in the country (see *Recommendation 13* above). **The Team also recommends developing networks to keep in contact with staff and students abroad,** to encourage these staff and students to contribute their expertise from wherever they are, and to set up conditions to facilitate their return: for example a trip back home every year or so with a duty to deliver a couple of lectures and seminars at the university, a promotion, increased degree of autonomy in research, wide recognition within the institution and society at large, and other measures that could be devised.

It is recommended that UKIM also approach the question of staff development in a holistic fashion. The University has already initiated various measures to facilitate the implementation of the Bologna Process, for example by encouraging staff to learn about methods in universities abroad (see *Recommendation 11* above) and by sharing successful approaches among faculties. **The mention of staff development in the Development Strategy for the Period 2004-2010 could be expanded to include specific measures for a training programme and a career improvement plan.**

[3] See UNESCO-CEPES international round table on Brain Drain and the Academic and the Intellectual Labour Market in South East Europe
(or www.cepes.ro/hed/meetings/brain%20drain/Default.htm )

### 3 - Ethics

The 2003 report referred to the need to change the privileges which allowed for some mal-practices. The Team notes with approval that measures were taken to make the selling of text books more transparent within the university. Books are now sold in the university bookstore only. The selling of books ex-cathedra seems to have been stopped. The preparation of a code of ethics widely disseminated throughout the university – and presumably applying to both staff and students -, the opening of a hotline to cover cases of corruption, efforts to make all processes more transparent, all these measures demonstrate the university determination to establish a healthy atmosphere of openness. **The Team congratulates the University for the results achieved in this direction. In addition the Team recommends that the University remains very vigilant about possible breaches of ethics in order to maintain high ethical standards**.

### 4 - Integration of the University

This is a major task lying ahead for the immediate future. The new law on higher education has been a long time in preparation with significant input from the university. It may not be entirely satisfactory, in particular in that the President of the Accreditation Board and the President of the Evaluation Agency are to be nominated instead of being elected by the Board or the Agency, which raises questions about their independence. But overall, the law provides the proper framework for needed changes to be made. Integrating the University as one legal entity rather than being composed of 30 quasi autonomous units will give UKIM more weight in supporting each of these units, not only within the Republic of Macedonia, but perhaps even more so in the wider European context. It will become easier to create synergies and foster collaboration between/among faculties concerning: new degrees, combination degrees, interdisciplinary education and research, reduction of duplication of staff and teaching in disciplines at different faculties, establish collaboration between researchers from different faculties to make common applications in trying to obtain means from European sources. In the current difficult economic environment, integration gives the opportunity to rationalise the administrative structure, thus eliminating wasteful duplications, facilitating the dissemination of information and the sharing of experience.

**The University is to be commended in having anticipated the enactment of the law by setting up ahead of time the commissions that will prepare the new statutes.** As required by

the law, the integration process should be completed by the end of 2008 which does not leave much time for such a major overhaul. While congratulating the University for the work already accomplished, the Team wishes to express a few words of caution.

The Team has seen several cases where the real effect of creating a university on the basis of former legal entities, such as faculties, has been negligible: the university received state funds and allocated them to the faculties in the same way as the government did before, the faculties continued to act as legal entities, nothing had changed. At UKIM the process must now be carried to successful completion.

The evaluation team has also seen examples of centralisation killing initiatives and creating unnecessary bureaucracy. It is important to make sure not to take the ownership away from academics who are involved in services because they are dedicated to other functions besides research and teaching. If they like the activities and carry them out well, it is usually a mistake to take these activities away from them. Instead it is often more productive to invite those academics to contribute to a new division of labour where some parts are solved at the central level and other parts are solved at the decentralised level.

One should be careful to ensure that integration **is not** centralisation. Some functions are best carried out at the central level: such as regulations of the educational programmes, appointment procedures, student registration and the registration of examinations; but it proves difficult to carry out tasks properly at central level if the decentralised level does not deliver the right information. It is important to realise that decentralised well-functioning systems should not be destroyed before it is certain that a better centralistic structure has been created. **The Team suggests that the commission consider all activities, responsibilities and duties to be central and then analyse the functions and determine what should be kept central and what should be left decentralised.**

It is important to create a transparent and agreed system for allocating funds to faculties and to keep a minor part of the funding at central level for financing interdisciplinary initiatives and common activities at the university. In the overall model for allocating funds the amount earned by the university, based on the activities in the faculties, should also be taken into account in the funds allocated to the faculties. However, the process should make sure that only the necessary amount is retained at central level leaving the most important part with the faculties, so that faculties benefit from their own earnings and to secure continuing initiatives.

To summarise: all centralised solutions are not always the best solutions, but, on the other hand, if it is possible to create better service with lesser use of human resources it should be done. Negotiations, analyses and thoughtful comparisons of centralistic and decentralised solutions will yield the understanding of what is best for the university and lead to the implementation of the best solutions.

## IV - CONCLUSIONS

At the end of the 2003 evaluation, in 2003, the Team left wondering whether this University would be able to overcome the difficulties that lay ahead and feeling that the internal atmosphere was not prepared for major changes.

After these four and a half years, the Team is happy to acknowledge that these fears were unfounded. The Ss. Cyril and Methodius University of Skopje proved up to the challenge of facing the difficult situation it was in. With the EUA recommendations, or without them, quality assurance has become part of the university's daily concerns, the Bologna process is being implemented, with some expected difficulties but it is happening, the drop-out rate has decreased sharply, the issue of integration seems near to be consensual (despite the usual resistances and doubts), the data collection system is centralised and available to all, the university-wide information system is nearing completion, the university has established numerous and active international collaboration, the issue of eventual corruption was dealt with positive measures.

The Team is happy to congratulate UKIM for what has already been achieved.

Nevertheless the Team would like to warn the University, its leaders, staff, and students, about some dangers.

The first warning has to do with the *momentum*. Much is undertaken; a dynamic of continuous improvement has gathered momentum. It is essential not to lose this momentum; it is essential to take the chances to continue to improve.

The second warning concerns the *implementation of the new legislation*. In 2003, the EUA evaluation strongly recommended that the integration of the University should be seriously considered. The opportunity now exists. But it is important to realise that integration is not the same as centralisation: integration means to have in common what is common to all; centralisation means a central power deciding on all major issues. The Team would advise caution about

centralisation in such a large University. A central power is needed for managing the central matters of the university. A degree of decentralisation is desirable to keep the democratic atmosphere that any HEI should embrace while, at the same time, it reduces the risk of a possible bureaucratic paralysis. To reach a desirable equilibrium, the various university communities must be able to discuss the pros and cons of their opinions. Those who are for a strong centralisation should consider the effect on the efficiency of the institution. Those who are for the fullest decentralisation should consider the waste of time, money and personnel involved. There is no magic solution. The only way is to follow good practices and not to forget good sense.

The Team is confident that UKIM will meet the challenges successfully. It wishes the university community all the best in this sensitive task.