

HIGHER EDUCATION IN EURAS COUNTRIES - GEORGIA

1.Higher Education in Georgia

1.1.Introduction

Modern priority for Higher Education and Education generally is development of knowledge-based society. Bologna process with its aims, goals, objectives and realization ways serves to the implementation of the aforementioned priority. We are expecting from the knowledge-based society that the world will become more just and humane. The nearest result of the process is to provide such knowledge to the society that will increase the rate of employment (naturally reduced workplaces because of increased population and science and technology progress) at national/regional/European space. Modern and future educational programs should consider: what does society/economy/market need and such up-to-date programs should make the bases for increasing employment opportunities of graduates.

The aim of this article is to review (1) some aspects of Higher Education in Georgia – current challenges and needs, participation in EU programs, (2) modern curriculum and the ways of its future development that will be discussed in this framework, also some issues that, by our point of view, are important in Georgian context and will be required to be improved/developed in the future. (3) DTMU – what is it, its MD program, in what direction it is developing.

1.2.Legislation Covering the Field of Tertiary Education

The Law of Georgia on Higher Education, adopted in December 2004, created a legal basis for reforms, defining the roles and responsibilities of all players involved in higher education, the levels of higher education, rules for admission, licensing/authorization and accreditation procedures, types of educational institutions, introduction of credits etc. Several changes and amendments to the law enacted in the last years, including changes in the legal status of public higher education institutions (HEI), reflect the dynamic process of reforms in the field of higher education. All of the main principles set out in the legislation have been implemented so far.

1.3.Types of Tertiary Education Programs and Qualifications

The three-cycle higher education (HE) system has been implemented in Georgia. Bachelor, master and doctoral programs have already been introduced in all accredited higher education institutions. All students below doctoral level are enrolled in the two-cycle degree system (except for certain specific specializations such as medicine).

Higher professional programs (since September 2010 referred to as level IV and V of professional

education) have been introduced as a short cycle within Bachelor studies for students who are interested in acquiring practical skills. Upon completion of this type of program, they receive a qualification from a certified specialist. These programs correspond to 120 to 180 ECTS credits. These credits can be recognized for Bachelor programs if students continue their education. Bachelor programs cannot comprise less than 240 ECTS credits, whereas Master programs comprise 120 ECTS and doctoral programs 180 ECTS.

There are three types of higher education institutions in Georgia:

- research universities: authorized to award all three academic degrees (Bachelor, Master and PhD);
- teaching universities: without a notable research function, implementing first and second cycles of higher education;
- colleges: higher professional and Bachelor programs

Currently, there are 57 HEIs recognized by the state: 20 public and 37 private. 64 % of HEIs are located in the capital city, Tbilisi. The total number of students in all HEIs is 99 003 (as at April 2012). 62 % of students are enrolled in the five biggest public universities. The breakdown of students in the different higher education cycles is given below.

1.4. Distribution of Responsibilities

The principle of autonomy of the higher educational institution is stipulated in the Law of Georgia on Higher Education as one of the leading principles of the national HE system. New amendments to the Law on Higher Education (2011) provide for different legal status of HEIs and responsibilities of state authorities differ respectively. There are three legal forms of HEIs: legal entity of public law, legal entity of private law and non-commercial non-profit legal entity (NNLE) (the last can be also established by the state).

1.5. Governing Bodies of the Higher Education Institutions

The Academic Council, Council of Representatives, and the students' selfgoverning body are elected from within the HEI on the basis of general, direct and equal elections. Private HEIs, as well as stately founded HEIs with the NNLE status, are free to structure their own governing bodies.

Through the authorization mechanism an institution is granted the status of a higher education institution if it complies with defined standards in certain areas of performance. The standards for authorization are in:

- a) Educational programs,
- b) Material resources,

c) Human resources.

The state recognizes diplomas, issued only by authorized HEIs. Authorization is granted for five years.

Regulated programs and PhD programs can only be established if the HEI successfully passed accreditation. Accreditation standards and processes are the same for public and private HEIs, whereas quality assurance processes on the institutional level can be different: the Law on Higher Education obliges public HEIs to establish and operate internal quality assurance services (Article 25), defining its status and responsibilities, while private HEIs are not obliged to do so. But since the self-assessment report is a main precondition for accreditation, private HEIs also establish internal structures and units responsible for quality assurance.

A special state authority – the National Centre for Educational Quality Enhancement (NCEQE) – has been established to ensure authorization and accreditation processes. It operates in compliance with the Standards and Guidelines for Quality Assurance in the European Higher Education Area, although there is still some room for improvement. This is essential for ENQA membership and registration in the European Quality Assurance Register (EQAR).

1.6. Admission

One of the main achievements of the reform of higher education in Georgia was the establishment of the system of Unified National Examinations.

1.7. International Cooperation

There is no explicit policy to promote mobility of students from or to Georgia, although the number of incoming and outgoing students is steadily increasing. The vast majority of Georgian students study in the USA, Germany and the UK, followed by other EU countries.

The majority of incoming students are from Turkey, followed by India, Russia (students from Russia are mostly ethnic Georgians with Russian citizenship), Azerbaijan, Pakistan and Kazakhstan.

The main obstacle for attracting international students is the language of instruction – most study courses are in Georgian. Only ten Georgian universities offer programmes in EU languages (mostly English, followed by German and French).

1.8. Trends and Challenges

Programs and projects supporting reform implementation

- o Twinning – Capacity Enhancement for Implementing the Bologna Action Lines in Georgia

(CEIBAL, Germany & France)

- o University Curriculum Development Program
- o National Qualifications Framework (NQF) for the Higher Education Project
- o University Textbook Development Program
- o University Infrastructure Development Program
- o Higher Educational/Research Program
- o Higher Educational/Research Institutions Supporting Program
- o Scientific Grants and Awards Program

The current policy objectives at national level include:

- Supporting of financial autonomy of HEIs via establishment of endowment funds
- Internationalization of the accreditation process
- Establishment of joint program and joint research projects

Currently, the main problems and challenges are the following:

- Limited time to implement the reforms
- Lack of resources for implementation
- Low level of involvement of social partners and other stakeholders
- Shortage of educational managers and leaders at university level

Insufficient recognition of the HE system of Georgia in other countries and consequently lack of trust in its performance

1.9 Teaching Programs

All modern teaching programs need following issues:

1. Description of the program profile;
2. Determination of program aims, describing learning outcomes through terminology of competencies, knowledge and skills;
3. Determination of generic and specific competencies to be developed through the program;
4. Formation and describing of academic content (themes) and structure (modules and credits);
5. Determination of educational units and activity means to achieve agreed outcomes;
6. Determination of outcomes-corresponding teaching and assessment methods;
7. Developing of the evaluation system for quality assurance and development.

Driving force for outcome-oriented teaching program is profile (quality) of the program i.e. qualified profile. The profile is developed by teachers of the organization through approval of according state agency. The profile could be considered as reflection of the demand realized by the society as actual. While the teaching program is not randomly gathered courses, but interdependent complex, that requires systemic approach. All units of the outcome-oriented teaching programs are interrelated not only for core units/ modules, but also for “secondary” and facultative courses.

Additional courses of the high quality program should enforce general profile of the program.

Profiles could be not only professional, but academic as well. By the opinion of HEIs quality should respond to the requirements of academic society both nationally and internationally. Moreover compatibility (main objective of Bologna Process) differs from homogeneity and that's main favor of the process. Professional profiles should respond to the demand of the society and needs and demands of the society differ. That's why views and opinions of social groups and demands of professional organizations should be taken into account nationally and internationally. Considering abovementioned it is very important to communicate and consult with employers, as well as with society generally. In spite of ongoing reforms in education field that is yet unsolved problem and challenge in Georgia. We think that academic society and HEIs should take responsibility of innovative processes in this regard. Format of such consultation should vary, but most efficient option should be implemented in each case. That is urgent issue for Georgia as we don't have enough human, financial and time resources to "teach for learning" and not take care of: (i) increasing employability of its graduates within country; (ii) develop and implement high technology economy, industry, agriculture etc. considering high competitiveness worldwide, that should be ensured by close link between standards of research and academic activities of our programs.

Issue of responding demands and requirement of employers is not as easy as it could look considering Georgian context. The difficulty is caused by the fact that during last 20 years political and economical formation has been changed in Georgia (as post-Soviet country). In this case employer is not anymore the "State", but more private sector representatives. At the stage relations and links of private sector with education system are weak and at starting point. We should be careful during developing such links considering that there are practically no professional associations (as defined and considered by European tradition) in Georgia. Starting of such consultations comprehensively becomes more important in the "knowledge society" that is "learning society" as well. That is related and linked with global realization of education, as lifelong education exists and everybody should have opportunity to use knowledge and evaluation skill to adapt it to specific, new and changing situations.

Program profile – Considering requirement to the program (new program) and potential of its realization; consultations with stakeholders; target group of the program; place in national and international context etc. Outcome-bases study programs mainly focus on academic quality or qualification profile. Profile should be based on the needs identified and agreed by the society that is more dynamic process. Well-defined profile considers interests and perspectives of different beneficiaries. Practically "internal" stakeholders are students and academic society, while "external" stakeholders are: employers (organizations), graduates, professional organizations. Each of

them has own place in decision-making about which generic and specific competencies should be focused and to what extent. Profiles of each educational program are unique. Finally the profile is based on the conclusions and decisions of academic staff and is approved by according state authority organization.

It is important that additionally to traditional methods of teaching program development, focusing on learning outcomes increases flexibility of the process, which is making “common” background for program`s aims and objectives.

Learning outcomes – Describing fully and accordingly the outcomes at program and its competencies` level; compatibility of learning outcomes with program profile and their distribution; formulation of learning outcomes by generic and specific competencies and their compatibility with according level of the program; according assessment methods; considering teaching and learning approaches in regard to competencies etc.

Learning outcomes and competencies should be used to develop outcome-based and student-oriented curriculum design. They are concentrated on demands of both professional/field and society that ensures development of successful citizen with high employability possibility. Usage of learning outcomes increases flexibility compared to traditionally planned educational program. Content of the educational program should be defined by the knowledge that student should realize and skills that student should demonstrate upon completion of the program. Learning outcomes are expressed by competencies. Competencies are dynamic combination of knowledge, realization, skills and possibilities. Development of different competencies take place upon completion of study course/module and is assess at different stages.

Development of Curriculum content and structure (credits of modules, levels) – Initial level of potential students, rule of modules development – with clearly defined learning outcomes, appropriate criteria for teaching, learning and assessment, considering initial knowledge/experience for studying module and expected level etc.

Key knowledge and skills to be achieved by student during study determine content of study course/curriculum.

Learning outcomes are formulated in education program, as well as at individual course/module level.

Competencies are developed progressively. That means that they are formed at different levels of educational program by the number of course units or modules. During program planning

should be discussed which unit should consider specific competencies.

Student-oriented/outcome oriented educational program considers that each unit interrelates. This is so not only for course units or modules that makes up core of the curriculum, but also additional and elective courses. Elective courses are enforcing the profile of the well designed program.

Credits – It is important to consider the rule of credits` determination and relation with learning outcomes. As well as ensuring program with needed resources and evaluation issues - monitoring, modernization possibilities, sustainability, organizing and etc.

Above mentioned approaches and methods will assist implementation of innovative teaching and learning processes in Georgian HEIs.

In Georgian context additional analysis is needed regarding several issues. Various criteria of quality assessment consider terminology of “Compatibility with Aims” and “Aims Compatibility”. First one is used in quality assurance area and evaluates compatibility of teaching strategy with the aim of the program. The second one evaluates adequacy of the aim itself. It is important to consider both issues in concert. “Aims compatibility” could be ensured through close link with standards of research and academic activities, as well as through market-orientation.

Learning Outcomes – The issue should consider demands and needs of employers. For some regulated professions in addition to specific skills this considers ethical values as well. e.g. for medical education issue of medical professionalism is important issue.

Curriculum Content – program content should ensure reaching learning objectives. As members of European area and Bologna process we have obligation that level of graduates to meet European standards to ensure their competitiveness. It is important to evaluate quality of teaching materials from this point of view.

Program organization – In this regard important recommendation is ensuring of integrated teaching. Though for medical education there is need of further studies in this regards, it is still obvious that (i) integrated curriculum design requires structuring around objectives and (ii) integrated assessment ensures integrated teaching.

Teaching/learning methods should be subject-specific. There is comprehensive list of teaching methods, but practically it is categories of teaching activities and their realization is continually changing even within practice of one teacher based on learning objectives. Lecture should be

changed and adapted as well from methodological and functional points of view: lecture can cover core/key issues, complicated issues or specific problem(s) as well. The same is true for other teaching methods. Accordingly specifying methods themselves is comfortable, but do not reflect what is done by teacher specifically. So clarification what tasks is received and done by student would help clarification of methodology (self-directed learning, professional skills training, preparation of the project or research article etc.).

Above mentioned issues of curriculum planning and implementation, as well as of structural changes will assist implementation of innovative teaching and learning processes in HEIs of Georgia.

A new structural unit at public HEIs defined by law is the Quality Assurance Service with sub-units at faculty level, ensuring systematic evaluation of educational and research activities, as well as upgrading staff qualifications.

2. David Tvildiani Medical University, Tbilisi, Georgia

2.1. History

David Tvildiani Medical University (formerly called as AIETI Medical School up to 2011) started functioning in 1992/1993 academic year. It is one of the first non-governmental higher medical education institutions in Georgia. It has AIETI Medical School and Public Health School and offers postgraduate studies. AIETI Medical School is providing MD undergraduate and PhD education programs in Health and Biomedicine. AIETI is included into the WHO AVICENNA Directory for Medicine-BETA and into FAIMER International Medical Education Directory. , it is a member of the Association for Medical Education in Europe (AMEE), Association of Medical Schools in Europe (AMSE) and Organization for PhD Education in Biomedicine and Health Sciences in the European System (ORPHEUS).

MD curriculum is structured on the base of an alternative model of higher medical education (the copyright No. 1-01/21-34, 1997). The duration of the educational process lasts for 6 years. It consists of three stages: Basic Medical Science (2.5 years), Clinical Science (2.5 years), and Clinical Clerkship (1 year). The curriculum consists of single cycles (modules) each concluded by a test which affects the final results obtained in a given discipline. The duration of an academic year makes up 40 weeks (2 semesters). Basic medicine learning courses are horizontally integrated and are in connection with Principles of Physical Examination and Diagnosis and pharmacology (an element of vertical learning), creating 9 modules for learning organ systems. Learning of each system starts with Embryology and is followed by macroscopic (anatomy) and microscopic (histology) structure and principles of normal functioning of each system (physiology and biochem-

istry), further by etiology and pathogenesis of diseases of each system (microbiology, pathology – pathologic anatomy, pathophysiology), clinical assessment of pathological processes, typical clinical features of diseases, Principles of Physical Examination and Diagnosis and drug treatment (pharmacology).

After the completion of the Basic (theoretical) Medical Sciences learning at the end of the fall semester of the 3rd academic year (V semester) a 400-450- question Examination is held covering all Basic Medical Sciences subjects. Having passed the Summative exams in Basic Medicine the students are allowed to move/transfer from the course of Basic (theoretical) Medicine to the course of Clinical Medicine. At the end of the 5th year a 400-500 - question integrated final exam is held simultaneously in all study courses of Clinical Medicine. The Exams are held in a computer- based or other format. After passing the Summative Exam in Clinical Medicine the students are allowed to move /transfer to the course of General specialization (VI year). On completion of the course in general specialization the students are to pass Final Qualifying oral exams in internal diseases, surgical diseases, gynecology, pediatrics, infectious and nervous disorders/diseases of the nervous system by case-based approach.

Elaboration of Students' clinical skills is performed on the basis of Clinical Skills, of specific courses; (5 academic courses, total of 7 credits) and the credit-hours allocation within the formats of all clinical courses (at least 67 credits). The training of student to research skills is performed based on 5 academic courses of the principles of scientific research , which in total equals to 10 credits, of them 6 credits are devoted to theoretical aspects (the scientific study of 1, 2, 3), and the remaining 4 credits to research work.

Within the education course the most prominent and recognized reference- and textbooks are used that are recommended by and used in the leading medical schools/universities of the world. The educational courses are provided by leading specialists of Georgia.

Educational program envisages an 11-credit course of elective subjects also considering the transparency in opting training bases affiliated with Clinical institutions (in Tbilisi, Sachkhere, Lithuania (Klaipeda) at Clinical Sciences Study).

The rate of DTMU graduates' employment (enrollment in residency etc. programs) is high- about third of MD Program graduates continue their career (working, as well as enrollment in residency/MSc/PhD programs and) in the US and EU countries.

It is increasingly recognized that structured and regular curriculum renewal is an essential element of modern medical education, and therefore requires specialist academic educationalists and a

specialized unit to lead on developing and embedding, requires modernizing to more authentic competency-based learning styles with greater relevance to clinical practice. In order to modernize DTMU system-based MD program curriculum through implementation of PBL and case-based learning in it (modern trend in Medical Education). We are participants of EU-funded TEMPUS project “Establishment of the Supra-Regional Network of the National Centres in Medical Education, focused on PBL and Virtual Patient”(ePBLnet).

2.2. International Cooperation - TEMPUS

ePBLnet Consortium Members:

1. Aristotle University of Thessaloniki, GR;
2. Saint Georges, University of London, UK;
3. University of Nicosia, CY;
4. David Tvildiani Medical University, GE;
5. Akaki Tsereteli State University, GE;
6. Sumy State University, UA;
7. Zaporozhye State Medical University, UA;
8. Karaganda State Medical University, KZ;
9. JSC Astana Medical University Kazakhstan, KZ

Main Activities of ePBLnet:

1. Establish a Supra-Regional Network based on 3 national medical education centers (MECs) in Georgia, Ukraine and Kazakhstan
2. Use MECs to modernize the teacher-based and classroom-orientated biomedical science component of the medicine course in 6 universities in the PCs. Restructure with a focus on competence-based learning and assessment systems built around Problem-Based Learning and Virtual Patients, with increased relevance to clinical practice
3. Link with other medical education networks with similar needs for modernization and cultural preservation e.g the Czech/Slovak MEFANET and the mEducator/eViP network for multi-lingual, multi-cultural resource development
4. Use this ePBLnet ‘string of pearls’ network through KZ, UA, GE, CY, EL, MEFANET, UK and local EC Programs, to generate the critical mass of academics/institutions needed for sustainable development in medical education;
5. Focus this development through self-funded ePBLnet conferences and workshops beyond the project lifetime

In epoch of globalization one of essential arrangements is reformation of National System of Education and Science that will lead to united standard afterwards. Formation of united educational and scientific space in whole continent and/or in world scale is sufficiently difficult task. This in-

tegration process implies to work out united criteria with preservation of variety national system, orientation of training profiles, educational plans etc., which should be the themes for discussion in EURAS format for more deep cooperation in Higher Education.

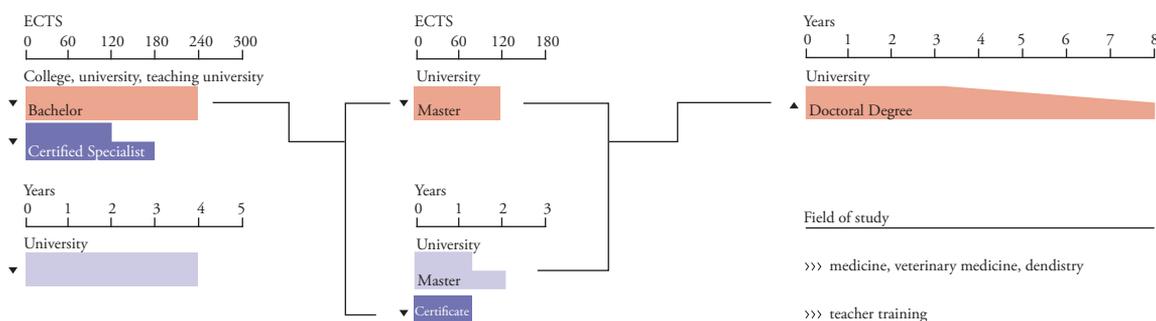
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4. Tables

Table 1. The higher education system in Georgia

(http://eacea.ec.europa.eu/tempus/participating_countries/overview/georgia_tempus_country_fiche_final.pdf)



- Most common length of a Bologna cycle
- Other length of a Bologna cycle
- Programme outside the typical Bologna model
- Professional programme

ECTS
Credits according to the European
Credit Transfer and Accumulation
System

		regulated at national level	decided at institutional level
ALL	programmes have admission requirements	▼	▼
SOME		△	△

Table 2. Number of students at HEI in Georgia 2011/2012

(http://eacea.ec.europa.eu/tempus/participating_countries/overview/georgia_tempus_country_fiche_final.pdf)

Number of students at HEI (academic year 2011/2012)

	99 003
Bachelor	75 820
Higher Professional Education (IV and V levels)	4 525
Medical Education	7 398
Master cycle	8 452
PhD cycle	2 808

Table 3. Number HEI in Georgia

(http://eacea.ec.europa.eu/tempus/participating_countries/overview/georgia_tempus_country_fiche_final.pdf)

Number of HEI	
	57
Public	Private
20	37