

Higher Professional Education – New Stage in Development of Georgian Educational System

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Abstract

It is well known that education is the main opportunity to overcome the social, economic and political inequity in society. From this point of view introducing the high level of professional education takes on special significance, by means of which to get higher education in many countries, first of all in the USA, is not a privilege but is the general right of citizens.

Wishes why students choose to get this type of education are as follows:

- ! to take the programs and courses, which give the possibility in the future to continue study in higher education institution and obtain Bachelor degree (*transfer programs*);
- ! to get the profession of qualified specialist in a desired field (*professional and technical programs*).

In the article is considered the main aspects and stages of introduction of the higher professional education programs, is offered the model of construction and preparation of this program.

Key Words: Inequity in Society; Higher Education; Transfer Programs; Professional and Technical Programs.

“Knowledge Revolution”, as the base of ability to create access and use knowledge, is becoming today a fundamental determinant of global competitiveness. Its seven key elements are:

- ! Increased codification of knowledge and development of new technologies;
- ! Closer links with science base - increased rate of innovation - shorter product life cycles;
- ! Increased importance of education & up-skilling of labor force, and life-long learning;
- ! Investment in intangibles (R&D, education, software) greater than investments in fixed capital;
- ! Greater value added, which comes from investments in branding, marketing, distribution, information management;
- ! Increased globalization and competition, with innovation and productivity as more important factors in competitiveness & GDP growth.

“Knowledge Revolution” allows to build the “Knowledge-based Economy”, which has many definitions. Most of them are emphasizing the role of information technology and high technology. We can use of a broader definition: “An economy that creates, acquires, adapts, and uses knowledge effectively for economic and social development.” The four key functional areas, development of which is necessary for building of Knowledge-based Economy are:

- ! Economic incentive and institutional regime that provides incentives for the efficient use of existing and new knowledge and the flourishing of entrepreneurship;
- ! Educated, creative and skilled people;
- ! Dynamic information infrastructure;
- ! Effective national innovation system.

The Knowledge Revolution and the Knowledge-based Economy are challenges to all countries, but they have special importance for developing countries, because of big risk of falling behind of developed part of world. To avoid this danger, developing countries need to have coherent strategies to take advantage of the potential of new era. The improvement of access and quality of the education

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systems is one of the main elements of such strategies. Simultaneously, retraining and lifelong learning are at the very center of what they have to do to improve their prospects. The process of re-thinking what has to be done in this direction, moves these countries to development and implementation of new policies and increases public and private partnership and investments in R&D.

It is obvious that the educational systems are called to play a main role in building of Knowledge-based Economy. Successful accomplishment of this task requires to have the competitive educational environment as stimulus for improved performance; flexible labor market, including support for up-skilling; effective safety nets to facilitate adjustment to constant restructuring of education; easy access to different levels of education; quality of educational content (core technical & social skills, relevance, creativity); balance among different levels of education; development of life-long learning opportunities; more active role of the Ministry of Education and Science in relationships with labor, market, and economy.

Developing countries need to address to stock and flow challenges. The stock challenge is an effective system for skills assessment and certification. Flow challenge is the requirement to the education system to teach students how to learn through their lifetime, regardless of when they leave. This implies the need for better teaching and learning pedagogies, for core skills with broader interdisciplinary approaches.

Certainly, the gaps remain in basic education, but tertiary education is becoming increasingly critical for effective use of creation and adaptation of knowledge, if Georgia wants to compete globally. *Not only full degrees and PhDs are necessary today, but also shorter degrees from polytechniques and junior colleges, specialized high level technical training in multiple institutional settings and across disciplines.* Without creation of adequate educational programmes, developing countries will be far behind in stock, flows, structure and quality of education.

The aim of dissemination of global knowledge is also connected with growth of more efficient enterprises, suppliers of equipment, technical services and info. It also depends on cost and benefits of usage of knowledge, on education, skills, and complementary inputs, on economic and institutional regime. The increasing globalization of the knowledge creation requires internationalization of research, effective usage of global knowledge and its adaptation to the local needs. But participation in the global knowledge trade is connected not only with technological transfer and knowledge dissemination. For successful building and development of Knowledge-based Economy, it is necessary: to create and adapt one's knowledge, to develop public and private basic and applied R&D; to have systems of creation and promotion of innovation; to provide better interaction among domestic research institutes, universities, and firms and joint researches with foreigners; to pass knowledge flow from specialized research institutions to production.

If we want to consider the influence of new technologies, it is necessary to note that they play an important role not only in economic development (through the spread of innovation and the productivity gains they bring about), but also in human development. For some stagnating developed economies, in the late 1970s, the growth of new technologies seemed like a panacea for many nagging domestic problems, such as education and healthcare for the most underprivileged in the United States, the recurring industrial and monetary crises in Japan and structural unemployment in Europe. For the developing countries, the promise of "technological leapfrogging", of being able to skip the stages of industrial development by adopting the most advanced technologies directly and to capitalize on their tremendous potential, held out special appeal. In emerging knowledge societies, there is also a virtuous circle in which the progress of knowledge and technological innovation produces more knowledge in the long term.

Today knowledge is recognized as the object of huge economic, political and cultural stakes, to the point of justifiably qualifying the societies currently emerging. The upheavals stemming from the Third Industrial Revolution – that of the new technologies – have produced a new dynamic as the training of individuals and groups. Scientific and technical advances and modes of cultural expression

have been constantly evolving since the mid-twentieth century, notably in the direction of growing interdependence.

The educational systems, especially the institutions of higher education, are destined to play a fundamental role in knowledge societies, based on radical changes in the traditional patterns of knowledge production, diffusion and application. Over the past 50 years, these institutions have experienced an explosive growth in student numbers, described by some as a “massification” of higher education. Educational provision is becoming more varied as knowledge advances. As a result, higher education in most countries now consists of a complex network of public or private institutions, with different levels of teaching – polytechnics, engineering faculties, business and management schools, distance education centers, research laboratories, company subsidiaries, etc.

It is necessary to note the certain danger from the “consumerized” attitude to the higher education, which is connected with new demand to the university level of education. The risks of “commoditization” in the field of higher education are very real even if country does not find itself in the same situation in relation to such challenges. Those with a long university tradition are generally less threatened by this diversification of higher educational provision. The most worrying cases are the countries with lack of university tradition: the advent of knowledge societies is often linked to the emergence of full-scale *markets* in higher education. There is a need to ensure that these trends do not lead to a distortion of the original missions of higher education.

Today processes of globalization have created absolute opportunities for construction of a knowledge-based society in any country. In spite of the fact that the greater and developed countries create much more knowledge than less developed countries and will keep on this situation in the nearest future they do not have an exclusive monopoly for its usage. Because of today's unique development of information technologies and means of the communications, knowledge overcomes borders between the countries much easier and more quickly, than people or the capital. Therefore the basic part of that knowledge, which is necessary for development of knowledge-based economy, can be received practically free of charge, or with minimal charges. However, for its perception and use, corresponding readiness of manpower of the country is expected. Ability of experts for independently finding of the necessary knowledge, and its adaptation for the decision of professional problems, defines the rate of development of the country today. Therefore, higher education, whose basic function is the development of graduates' potential of independent perception of knowledge, can play the main role in the construction of Knowledge-based Economy.

As the usage of the information and knowledge lays in a foundation of knowledge-based economy, scientific research becomes the main driving force of a society. Accordingly, the carriers of knowledge - qualified experts, turn into its basic industrial resource. The high level of education, professionalism, creativity and propensity to the further study, are today the main characteristics of "knowledge-based economy's workers". Therefore the higher and professional schools, which are called to bring up corresponding behavior in their graduates and which basic function are to develop and distribute new knowledge, to promote its realization in industry, are considered as one of the main sources of economic development.

The concept of Knowledge-based Economy considers not only directly technologies, but also a whole mechanism of reproduction, distribution and application of knowledge. This mechanism consists of universities and fundamental science, communication and patent systems, applied research and development. The main driving forces of it are industries using modern technologies: informational, high-end and resource-saving technologies, etc. They are microelectronics, software production, manufacturing of materials with special properties, biotechnology, robotics, telecommunication, etc. Therefore, the future of the countries which try to build up Knowledge-based Economy, depends not only on their potential to generate new knowledge, and accordingly, on qualification of the scientific researchers, but also on presence in their workforce of the qualified specialists providing manufacturing of modern goods, processes and services, which are the so-called "containing knowledge products".

It is possible to approve that a reasons brought above, have determined the general direction of reforming of the higher education system in Georgia. Setting up on the its first stage together with a bachelor degree, an alternative form - the Higher Professional Education (HPE), is one of the major elements of changes, who are offered by the Ministry of Education and Science.

By the new Law of Professional Education in Georgia (which has been adopted this year), introduction of new type of programmes is stipulated, particularly for Professional Higher Education short cycles. Graduates of such programmes - the so called Higher Professional Specialists - will be conferred a National Professional Diploma. The teaching aim for Professional Diploma is to train a professional – a practical person and his/her “quick” movement to labour market. So, the duration of the appropriate programs (2-3 years) will be less than for analogous bachelor programmes (4 years) and these programs will be provided for acknowledging only the minimum of theoretical and general educational topics.

The new structure of Georgian higher education system is represented in Fig.1. The system is multilevel. On its first level we have two alternative variants of curriculums: baccalaureate and the HPE. Graduates of baccalaureate programs have an opportunity to continue education on the second - Masters' level of higher education. Its third level - Doctorate, serves for preparation of scientific research and also professors. The possibility to study on doctoral programs will have only those persons, who can successfully finish the second step of higher education and received the Master's academic degree.

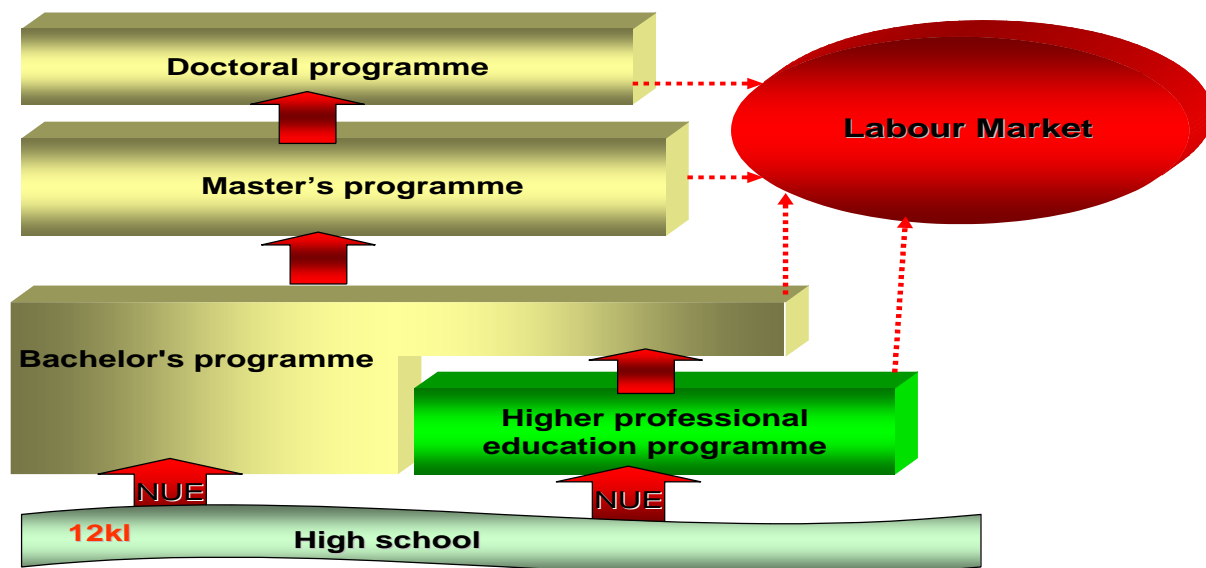
Correspondingly, the admission to HE programmes will be performed in the following way:

- ! To apply to undergraduate (Bachelor, or Higher Professional Diploma) programmes, the future student must hold a secondary education certificate or an equivalent degree;
- ! To apply to graduate (Master's) programmes, the student must hold a Bachelor or an equivalent degree;
- ! To apply to post-graduate studies (doctorate), the student must hold a Master or an equivalent degree in the appropriate field.

The admission to undergraduate programmes of both types, takes place on a competitive basis through passing of National Unified Examination (NUE). But enrolling the students to HPE programmes, will be done with passing of light-weight variant (only one exam) of National Unified Examination. Matriculation on bachelors' programmes will be done only after successful passing of full range of National Unified Examination.

Currently the admission to other cycles (Master and Doctoral) takes place on a competitive basis according to the admission rules set up by the higher education institution and validated by the Ministry of Education and Science. But in the future, these rules will be changed and admission will be performed on the basis of special Masters' Unified Examination.

Georgian Higher Education System



When we say “Higher Professional Education”, we practically use the term “tertiary education” as defined by the OECD as “*a level or stage of studies beyond secondary education which can lead to a qualification recognized on the labor market. It is undertaken in formal tertiary education institutions – universities, polytechnics, colleges; public and private – but also in a wide variety of other settings*”. Therefore we can conclude that as well what is now known in Georgia as HPE can be seen in international practice as tertiary education.

Students in HPE mainly are people looking for a short professional or vocational qualification after secondary education. HPE definitely contributes to diversification in higher education as it expands the range of studies from which students can choose. Next to the wide range of studies offered in HPE will be also a variety of flexible learning paths such as part-time study, adult education, distance and Internet learning which make these studies especially attractive for mature students or students that would otherwise not access higher education. Such flexibility enhances lifelong and life-wide learning.

Many examples from other countries show that HPE swiftly adapts to the needs of the labor market both public and private. Although we are waiting that the majority of students who have finished HPE will prefer to join the labor market as soon as they have graduated, some of them will decide to take on degree studies immediately after graduation or at a later stage in life. This will be possible if HPE have links with academic programmes of universities. Ladders of learning, or even better, networks of learning as they already exist in some educational systems in Europe, will enhance the student’s chances to accumulate credits for the acquired skills and competences and use them whenever he or she decides to continue his or her education.

Institutions offering HPE will use credit systems (maybe ECTS) and Diploma Supplement on a legal basis. The accumulation of credits and the transparency and comparability of contents in HPE will definitely be enhanced by the use of these credit systems and by using the Diploma Supplement.

Programmes in HPE will last for two-three years. The transition from HPE to degree programmes will be relatively easy. It is obvious that when HPE institutions integrate with

universities or when they have close links with them, the transition will be a further step on the ladder of learning. Sometimes the credits earned in HPE will be taken into account entirely when proceeding to degree studies but in other cases they will just grant access to university or degree studies.

To this effect we recommend that HPE institutions and universities both should have very close formal and informal connections and different forms of co-operation between different levels of education ranging from university education to HPE or post-secondary education. It is suggested that HPE and post-secondary education should be fully included in qualification frameworks which will be developed in Georgia.

Thus, since from this year, students of the first level of Higher Education System in Georgia will have an opportunity to make a choice between two educational "trajectories": to study at the bachelor degree's program, or at the program of HPE. The division of teaching materials according to the corresponding purposes of programmes, will allow preparing experts more purposefully. Earlier, higher education had unreal, and inappropriate to the expectations of majority of students task: preparing of the universal specialists, who can working equally well both in science, and in spheres of production of goods and service. Realities of the Knowledge-based Society do not support such an approach of levelling requirement of practice and students. We hope that differentiation of programs of higher education will allow to satisfy better the requirements to qualification of experts which are in the face of knowledge-based economy. Programmes targeted to receive a bachelor's degree, which are focused first of all on preparation of future researchers, will allow to provide the society with those experts who can create new knowledge. Programs of HPE will enable us to prepare specialists with deep understanding of features of modern industrial and information technologies and enable us to organize manufacturing and service with the greatest efficiency.