Competency-Based Education: From Theory to Practice

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ABSTRACT

Modern educational paradigm demonstrates a shift from learning outcomes to practice-oriented competencies. The present study examines the meaning and role of different types of Competency-Based Education worldwide. The key idea of Competency-Based Education can be described as providing student with knowledge and skills of applying it. The definitions of Competency-based approach vary in different parts of the world. The present paper regards the meanings of the term Competency – Based Education, and describes the example of implementation of this approach in Islamic Studies program.

Keywords: competency-based education, on-line, skills, Bologna process.

1. INTRODUCTION

Competence-Based Education (CBE) is a tendency which came into being in 60-ies last century. Nowadays there are a lot of definitions of CBE. Foundation of Excellence in Education explains it as "a system of instruction where students advance to higher levels of learning when they demonstrate mastery of concepts and skills – regardless of time, place, or pace" [1].
The popularity of CBE verifies the fact that a lot of universities worldwide are united in consortia in order to address shared challenges to designing, developing and scaling competency-based degree programs. One of the example of such kind of network is A National Consortium for Designing, Developing and Scaling New Models for Student Learning, which include 17 institutions and two public systems serving 42 campuses [2].
In a competency-based education system, an individual student progresses as learning expectations are met, rather than moving through a predetermined curriculum schedule dictated by fixed, age-based grade levels or seat-time requirements (sometimes expressed as Carnegie Units or credit hours). A student can accelerate through concepts and skills they have mastered when they are ready to move on, and receive more time and support in areas they have not yet mastered [3].
In fact, there was a shift in the implementation of a competence-based approach in historical perspective. Several decades ago it could be really a kind of to-do-list as well as the main idea of education was concentered on the providing students with narrow disciplinary knowledge. The student was just supposed to be aware of the exact field of knowledge, i.e. the key concept of education was to learn by heart the necessary information while now it is necessary to know how to get the information, how to process it, what is the best way to implement it.
Today, there are different interpretations of the concept of "competence approach", but they are all aimed at providing the learner with the skills to independently solve a set of tasks, including tasks of a personal and professional nature.
The present study examines the meaning and role of different types of Competency-Based Education means worldwide. Modern tendencies in education demonstrates a shift in philosophy of education, which consists in the fact that the key goal is to teach how to get information, process and apply it. The key idea of Competency-Based Education can be formulated as to provide student both with

knowledge and skills to implement it. The definitions of Competency-based approach vary in different parts of the world. The conversational panel "Competency-Based Education: Is it a to-do-list or a way to achieve meaningful outcomes?", which was organized in 2017 in terms of The 8th International Multi-Conference on Complexity, Informatics and Cybernatics (21-24 March, 2017, Orlando)[1] demonstrated the fact that there is a difference in understanding of "what the competency-based approach means" in different parts of the world.

2. DIFFERENT APPROACHES TO COMPETENCY-BASED EDUCATION WORLDWIDE

Competence-based teaching in higher education institutions and its evaluation have become a prevalent topic [4]. In USA, it means flexible, personalized, self-placed, skill-based education, one of the advantages of which is the absence of time definition. While the other approach (which is spread in Europe and Russia) is associated with the so-called Bologna system of higher education, in terms of which every educational program must be based on a competence-oriented curriculum, that includes the detailed description of competencies, which students receive after completing the training program. It turns out that the key difference in these approaches lies in completely different issues. In implementation of the first approach attention is paid to the form of education, while in the second - to its content.

The first approach assumes implementation of e-learning methodology as the main tool of education. That is why if we compare the competitive advantages of a competence-based approach and distance learning, we find that they are similar to each other. Thus, during the conversational panel mentioned above panelists Dr. Risa and Dr. Tina M. Serafini (Kaplan University, USA) defined the characteristics of CBE in comparison with tradition education as follows:
- Navigate your courses independently.
- Complete tasks on your schedule with no deadlines.
- Interact with online learning models.
- Make progress through assessments by providing what you know.

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[1] http://www.iiis-spring17.org/imcic/website/about.asp?vc=26.

In fact, all of these characteristics peculiar to the traditional online learning.

While the second approach implies the provision of comprehensive knowledge, regardless of the form of how it was received (on-line, in classroom, etc.). In such a case competencies are generally divided into professional, informational, cultural, linguistic one, etc.

The second definition of CBE associated with the Bologna process is spread in Europe and Russia as well. It has been widely admitted that the Bologna Process with its higher education curriculum reforms as based on the competence framework implies an entire reconfiguration of the European higher education landscape. Within the competence–based curriculum rationale, competence has been designated as a major component within the university curriculum [5].

A phenomenographic analysis using interviews was conducted with three different groups of curriculum coordinator, teachers and students at 26 different educational institutions. Results suggest that CBE is emerging and that the majority of the institutions designed their education through a mix of traditional and competence-based teaching and assessment methods [6].

We believe that the best solution here lies in the sphere of combination of approaches, as far as the competence approach is a set of general principles for determining the goals of education, selecting the content of education, organization of the educational process, and evaluating of educational outcomes.

3. COMPETENCY-BASED APPROACH IN ISLAMIC STUDIES PROGRAM

Speaking about Competence – Based Education we assume that it must be multidisciplinary in its essence. The application of the multidisciplinary approach is one of the key factors for the success of the development of scientific knowledge and its reflection in the educational process.

The most effective that program, which is of a complex nature, ensuring an organic interconnection of different disciplines in the curriculum.

As an example, we can give the case of Islamic Studies program which was launched in Saint Petersburg State University (SPBU) in 2014.

The program includes compulsory disciplines from different fields of science but united by one idea. The study of Islam is always accompanied by a study of its history, Muslim art, culture, ethnography, etc. Interdisciplinarity manifests itself

in the fact that it is necessary to study these areas of knowledge and with the involvement of relevant sources in Arabic.

Besides that, each "humanitarian" curricular is supposed to include some mathematical disciplines. Traditionally these disciples are taught without attention to the main specialization of a student. In the case of the program "Islamic Studies" in SPBU, there is discipline Statistical Methods of Data Processing. Students learn Statistical Methods with their implementation in the processing of texts in Arabic. This approach demands from a teacher to be aware in computer science and in Arabic to some degree. Another "mathematical" discipline in the curricular is "Problems of Digitization and Cataloging of Arabic Manuscripts". In this case, we witness optimal interaction of difference competencies, they are informational competence (computer skills), language competence (processing of material in Arabic), competence in source study. Such an approach can not to be called a fake one.

It is interesting to mention here the fact, that now we are seeing a trend when graduate students on the Department of Mathematics in SPBU study Arabic because their scientific activity relies upon processing documents in Arabic.

The modern educational paradigm can be demonstrated on the implementation of mutual educational program that has been launched between Michigan University and Saint Petersburg University in terms of Islamic Studies program. The program unifies methods of in-classroom activity, use of Blackboard, served as a platform for collaborative work and as a storage of text, audio and video materials. At the same time webinars are implemented in order to provide communication in real time.

In the modern world language skills and abilities are among factors which determine competitiveness in personal and social life, competitiveness in business and labor market. These factors explain the growing interest to the problem of language education both among specialists and common public alike [7]. In the case of the Islamic Studies program, the study of the Arabic language is a prerequisite for the training of a qualified specialist in the relevant field.

Thus, the competence approach in the implementation of this program combines the professional, information and linguistic competencies of students. In addition to this Saint Petersburg is considered to be the cultural capital of Russia. Within walking distance from the Saint Petersburg University there are a lot of museums and libraries, containing exhibits related to Islamic culture. This infrastructure helps to provide students with the cultural competencies in addition to those mentioned above.

4. CONCLUSIONS

1. The competence-based approach supposes the development of students' abilities to solve problems in various spheres and activities based on the use of social experience. The idea of the educational process is to create conditions for the development of students' experience of an independent solution of cognitive, communicative, organizational, moral and other problems. It is the mastery of universal competencies that can meet the challenges of the time, regardless of the specific field of professional activity.

2. The definitions of Competency-Based Education vary in different parts of the world, but they are all aimed at providing the learner with the skills to independently solve a set of tasks, including tasks of a personal and professional nature.

3. Implementation of competency-based approach makes teachers follow the modern trends and be aware of the technologies available on the market, e-resources as well as skillfully apply their computer knowledge on practice. The above-mentioned tendencies created necessity for the development of the advanced training program for teachers.

4. The example of Islamic Studies program demonstrates that high qualified specialist should be competent in different spears. Nowadays significantly expanded the fields of research, adding to the classical humanities such as philological, historical, ethnological, religious studies, cultural studies, philosophy another block of disciplines of social and economic sciences. Imperative of Islamic Studies is a universal and all-encompassing knowledge, which includes both humanitarian and natural science components.

5. ACKNOWLEDGMENTS

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