Challenges of Applying Competence-Based Learning in Higher Education

Rimantas Želvys
Professor, Vilnius University,
Faculty of Philosophy,
Department of Education,
Universiteto Str. 9, 01513 Vilnius,
rimantas.zelvys@fsf.vu.lt

Aliya Akzholova
Doctoral student,
Kazakh National Pedagogical University
named after Abai, Institute of Physics,
Mathematics and Informatics,
Department of Physics,
Mechanics and Professional Education,
Dostyk Str. 13, 050010 Almaty,
Republic of Kazakhstan,
aaa_25.04.79@mail.ru

Abstract. The article analyses the challenges of applying competence-based learning in higher education. The international project “Tuning Educational Structures in Europe” makes a distinction between the learning outcomes and competencies and urges to revise all the study programs in accordance with the requirements of the competence-based approach. However, Western researchers, in particular the representatives of critical pedagogy, point out a number of controversies concerning the competence-based education. There is no commonly agreed definition and structure of a competence. Its ideological basis is neoliberalism and new public management; it relies on behaviorism and is an excessively mechanistic and reductionistic. A competence-based approach could be considered as an attempt to make higher education institutions more standardised, comparable, accountable and cost-effective. Still, others find no sound evidence of the effectiveness of competence-based learning. On the other hand, in post-socialist countries, a competence-based approach was taken for granted as an undisputable attribute of a modern higher education system. The article concludes that the competence-based approach can be useful if we intend to analyse this model more deeply and thoroughly and are ready to consider all its advantages and shortcomings.

Key words: Bologna process, competence-based approach, higher education.

Introduction

The Bologna process – creation of the common European higher education area (EHEA) – is one of the most ambitious projects in the field of education of the last several decades. Initiated by the four EU member states – France, Italy, United Kingdom and Germany in Sorbonne in 1998, today it includes 47 participating countries, the most recently admitted being Kazakhstan and Belarus. Although the Bologna process was initiated as an inter-governmental process, there is an evident and growing convergence with EU pro-
cesses aimed at strengthening European co-operation in higher education. In particular, Zgaga (2003) notes that decisions of the European Council have gradually altered the status of the Bologna Declaration from a voluntary action to a set of commitments in the framework of the follow-up of the report of the concrete future objectives of education and training systems. At least from this point on, the process was no longer merely a voluntary action for the EU Member States, or for the candidate Member States. Even the countries that are not considered as candidate Member States, like Russia, Belarus and Kazakhstan, are increasingly affected by the decisions taken in the process of further development of the common European higher education area. In this respect, it is important to identify and analyse all the possible consequences of implementing the Bologna decisions for the countries involved. The following objectives were stated in the original Bologna declaration:

- Adoption of a system of readable and comparable degrees;
- Adoption of a system essentially based on two main cycles, undergraduate and graduate;
- Establishment of a system of credits – such as in the ECTS system;
- Promotion of mobility;
- Promotion of European co-operation in quality assurance;
- Promotion of the necessary European dimension in higher education.

The implementation of some of the objectives, e.g., adoption of the two-cycle (later – three-cycle) studies or introduction of the ECTS system encountered some difficulties and met certain objections from the side of the Western European academic circles. The former socialist countries, on the contrary, accepted the Bologna ideas unconditionally as a means of faster and more intense integration into the Western academic community which was and still is considered as a benchmark of quality in higher education. Perhaps one of the most problematic areas is the introduction of competence-based learning, which raises a number of questions about definition, ideological background, purposefulness and effectiveness of a competence-based approach in higher education. Ideologists of critical pedagogy, like Ward (2008) and Giroux (2007), consider a competence-based approach as a manifestation of neoliberal ideology in education. Neoliberal ideas provide the ideological basis for new public management, which aims at introducing elements of competition, standardisation and accountability in a public sector. Representatives of critical theory provide many useful insights in describing the consequences of managerialism in education, therefore, we decided to apply the methodological approach of critical pedagogy as a basis for our study on competence-based learning.

The aim of the publication is to analyse the challenges of applying competence-based learning in higher education. The object is a competence-based learning approach in a system of higher education. The research methods are the analysis of scientific literature and educational documents.

“Tuning Educational Structures in Europe” and the definition of competence

“Tuning Educational Structures in Europe” was a project initiated by a number
of European universities in order to offer a concrete approach to the implementation of Bologna process in the field of higher education in general and subject areas in particular. According to the initiators of the project, the introduction of the three cycle system (Bachelor-Masters-Doctor) requires to revise all study programs that were not designed specifically for the system of cycles. Each cycle should be treated as an entity in itself, because the first two cycles not only give access to the following cycle, but also to the labour market. In this respect, the concept of competences becomes of key importance. „Tuning makes distinction between learning outcomes and competences to distinguish the different roles of the most relevant players: academic staff and students/learners. Desired learning outcomes of a process of learning are formulated by the academic staff, preferably involving student representatives in the process, on the basis of input of internal and external stakeholders. Competences are obtained or developed during the process of learning by the student/learner” (Gonzalez, Wagenaar, 2008). Supporters of the Tuning project call this approach a student-centred approach as students’ needs determine the contents of the study program. The Tuning glossary defines competencies as a dynamic combination of cognitive and metacognitive skills, knowledge and understanding, interpersonal, intellectual and practical skills, and ethical values. Fostering these competencies is the object of all educational programmes. Competencies are developed in all course units and assessed at different stages of a programme. In other words, the Tuning approach assumes that the structure of competence is threefold and consists of 1) knowledge and understanding; 2) skills; 3) values. The problem is that there is no commonly agreed definition of competence. Many definitions involve knowledge and skills, and capacity to accomplish certain tasks. Some of them also include attitudes or values. Once we include values into the competence structure, what kind of values should be developed? Universal human values? Professional ethics? Or religious values if, e.g., the course unit is being taught in a Catholic university? The problem of values will also inevitably arise at a stage of assessment of acquired competencies. The competence-based approach “assumes that the personal values and knowledge of the assessor and the tested person are identical or at least similar. This might not be the case. A question might arise as to who is the most competent performer, the assessor or the person being assessed” (Sauce, 1993). Therefore, the component of values is the most ambiguous in the concept of competence-based learning. That’s why educators and trainers often limit themselves to the development of knowledge and skills and prefer to elide the issue of values.

Still another discussion is taking place on whether it’s more adequate to use the words “competence”, “competency”, or “competencies”. Hence, the first problem of introducing a competence-based approach is as follows: in what way should we develop competencies of our students if we are not even sure about the exact meaning of the word?

Ideological background

Ford (2004) assumes that the ideological basis of competence-based approach lies
in behaviorism. One could question the ability of the competencies to capture the complexity and diversity of professional activities. The competence-based approach seems to its critics an excessively mechanistic and reductionistic one. For example, Grant (1999) argues that “behavioural objectives, or competencies, can never describe complex human behaviour. The sum of what professionals do is far greater than any of the parts that can be described in competence terms (Grant, 1999). The competence-based approach might be appropriate for vocational education, but it is hardly suitable for many higher-order professions as they call for higher-order judgements and insights. Other authors relate the competence-based approach with the expansion of new managerialism and accountability. For example, according to Ford (2014), “recent calls for increased productivity, effectiveness, and demonstrable outcomes from the education sector have prompted expanded global interest in the development of major competency-based education initiatives”. New public management and attempts to govern educational institutions in the same way as institutions in the domain of business and commerce have made a great impact on the development of higher education institutions in many countries. A competence-based approach could be considered as yet another example of trying to make higher educational institutions more standardised, comparable, accountable and cost-effective. Though a competence-based education claims to be student-centred, as opposed to a traditional teacher-centred approach, in fact, the most influential group of stakeholders, while generating a list of competencies for study programmes, are not students. The key role in making decisions, which competencies are to be developed during the period of studies, is played by the employers. Usually, a set of specific competencies for a certain profession is identified by interviewing the representatives of professional organisations or by conducting a market research in a related field. Thus, instead of student-centred, a competence-based education may also be named a market-centred one.

**Purposefulness and effectiveness**

Critically minded researchers doubt whether a competence-based approach meets the standards of “fitness for purpose”. The main argument is that certain competencies may be important for today but not for the future, because the needs of the labour market are constantly changing. On the other hand, there are competencies which currently are not in demand in the labour market, but it’s difficult to imagine an educated professional without them. For example, potential employers will hardly require the deep knowledge and understanding of the philosophy of education from the newly trained teachers. On the contrary, competencies of leadership and entrepreneurship are much more demanded in a newly emerging market of educational services. But it’s difficult to imagine a teacher with a university diploma without any knowledge of the origins, development and contemporary trends of education. Competencies of scientific research could serve as another example. Master students learn about methodology and methods of scientific research, conduct scientific experiments, etc., but only few of them proceed further to the doctoral studies and choose an academic career where
these competencies are really required. Does it mean that the faculty should not develop competencies of scientific research for university students of a second cycle? They certainly need to do that as in many countries a Master’s degree is a scientific degree and an academic track is the only available option for a student who wants to proceed with the studies in the third cycle. What concerns the cost-effectiveness, researchers, e.g., Banner (2014) and his colleagues in Canada conclude in their study that “first, and perhaps most importantly, we could find no evidence to support the argument that competency-based education provides a better platform for student success. There are no studies of the success of graduates in the labour market, particularly a comparison between competency-based education graduates and those from traditional programs. There is no evidence that employers, if faced with the choice between hiring a graduate of a CBE program and comparable graduate of non-CBE program, would choose the former. There are no studies where student performance (measured as, perhaps, graduation rates or quality of graduates, or performance in the labour market) is seen as a dependent variable, with the mode of academic delivery as an independent variable” (Banner et al, 2014).

**Research on competence-based learning in former socialist countries: examples from Lithuania, Russia and Kazakhstan**

Former socialist countries undertook many initiatives in higher education sector that were met rather controversially by their Western counterparts. One could name such examples as a research assessment exercise, league tables and university rankings, institutional accreditation, formula funding, etc. All these innovations in post-socialist countries were taken for granted as an undisputable attribute of a modern higher education system. The Bologna process was accepted with a certain caution, but doubts and hesitations were mainly expressed about the need of the transformation to the three-cycle system of Bachelor, Master and Doctoral studies. Other innovations within the framework of Bologna process were welcomed, and a competence-based study model makes no exception in this respect. For example, in Lithuanian journals on educational research, one can find a number of publications describing application of a competence-based approach in higher and further education. Martišauskiėnė (2009, 2014) writes about the development of special needs educators’ and school teachers’ competencies, noting that there are still problems of defining competencies and understanding the structure of competencies. Rosinaitė (2009) presents a research on assessment of students’ career competencies. Teresevičienė, Zuzevičiūtė and Kabišaitytė (2008) describe the process of assessing non-formally and informally acquired competencies. Pukevičiūtė (2007) presents a hypothetical model of the competence of learning to learn in the context of learning foreign languages. Rudaitienė (2004) explores manifestations of emotional competence of the university teachers, while Razmaitė and Dagys (2014) describe students’ expectations towards university teachers’ competencies. Lasauskiенė (2013) presents strategies on
developing generic competencies of the future teachers of music. Monkevičienė and Autukevičienė (2011) review the model of competencies for teachers acting as mentors. These are just few examples of research on various aspects of applying a competence-based model. None of the publications mentioned question the model itself. The only problem raised in several publications is the differences in understanding the definition and the structure of the competencies.

Russian educators also perceive competence-based learning as a more progressive methodological approach and even try to find its origins in pedagogical developments of a Soviet era. For example, Shechonin et al. (2014) write: “Competence is a concept which Russia overtook from an Aglo-Saxon educational tradition (as well as other educational systems). Maybe, in fact, as one can often observe, innovations in European education are just forgotten ‘old things’ from the Soviet past” (Shechonin et al, 2014, 5). Authors claim that similar approaches were developed by Soviet educators in 1980s. Puchkov and Tormasin (2012) also tend to prove that their understanding of a competence-based approach is at least not worse or even more advanced than the “Western” one: “Contrary to an American psychological paradigm where competencies are treated as individual-psychological traits of people… our national sociology maintains the tradition of exploring social functions of people in a context of specific collective activities…” (Puchkov and Tormasin, 2012). Fiodorov et. al. (2012) admit that a competence-based approach in contemporary Russian education is problematic. According to the authors of the publica-

tion, there are two strands of opinion in Russian academic circles. One of them says that there is nothing new in a competence-based approach. The term “competence” is just a new substitute of a term “skill” and, therefore, all discussions about competencies are artificial. Another strand claims that competence-based learning is a new approach and reflects more deeply the processes of modernisation in education. Karpenko et. al. (2004) also note that discussions are still going on whether it’s not sufficient just to proceed with using the traditional term “skill”. However, the authors conclude that the decision to participate in the Bologna process forces Russian educators to use terminology adequate to educational understanding of other Bologna states. Judging from these and other publications, Russian authors do not challenge the adequacy of the competence-based model either. On the contrary, some of them try to trace the origins of this model in Soviet pedagogy and argue that it’s not a new approach in Russian education.

Kazakhstan is the new country to join the Bologna process, hence, no wonder that there was not enough time for a critical reflection of Bologna initiatives. Most of the authors, e.g., Zakirova et. al. (2009) just review the changes that are to be implemented in a national system of education, including the competence-based approach. Others, like Muchametkaliev (2011), present a critical evaluation of forthcoming reforms and express certain doubts whether all aspects of the new system of higher education are suitable for Kazakhstan. However, an adequacy of competence-based learning is not discussed in the publications of Kazakh researchers; the only
challenge mentioned in their publications is the problem of definition.

Discussion
The attitude towards a competence-based education is still another example that Western academic circles tend to perceive pedagogical innovations more critically than their Eastern counterparts. Does it mean that we should reject competence-based learning and question all the related initiatives, including the Bologna process and the Tuning project? Of course not. We just need to analyse a competence-based model more deeply and thoroughly in order to know better all its advantages and shortcomings. We tend to agree with O’Donoghue and Chapman (2010) when they state that “when competencies-based education is defined in broad terms it can constitute a valuable, though not sufficient position for designing a curriculum” (O’Donoghue, Chapman, 2010). Competence-based approach has certain evident and undisputable advantages; e.g., it allows to assess the learning outcomes in a more objective way and enables higher education institutions to develop comparable course units and degrees. In fact, countries – participants of the Bologna process – just have no other alternative than to rearrange their study programmes in a competence-based format. On the other hand, a competence-based approach becomes problematic when we train specialists of higher-order professional activities that require certain individual personal traits, creativity and originality. For example, it’s becoming increasingly difficult to define competencies of leadership in education as educational leadership reflects itself in many very personal and even unique ways. It’s not easy to create tools of developing competencies of scientific research throughout the university studies, because analytical thinking, curiosity and insight are, to a large degree, predetermined by the personality traits of students. However, it does not preclude us from using a competence-based model, if we do not perceive it as a dogma without any right of creative modification and a broad interpretation.

Conclusions
1. A competence-based approach gained its popularity with the introduction of a three-cycle system and involvement of the increasing number of countries into the Bologna process.
2. Western researchers, in particular the representatives of critical pedagogy, point out a number of controversies concerning the competence-based education.
3. In post-socialist countries, a competence-based approach was adopted rather uncritically as an undisputable attribute of a modern higher education system and as a necessary precondition of joining the Bologna process.
4. Competence-based learning can be considered a valuable approach if we study the model more deeply and thoroughly in order to know better all its advantages and shortcomings.
REFERENCES


Kritiškai šio modelio atžvilgiu nusiteikę Vakarų mokslininkai, o ypač kritinės pedagogikos atstovai savo publikacijose mini, kad nėra moksliškai pagrįstų ir patikimų duomenų, leidžiančių teigti, kad kompetencijomis grįstas mokymas yra veiksmingesnis mokymosi forma. Lietuvių autoriai kompetencijomis grįsto mokymosi nekvestionuoja. Vienintelės publikacijose įsakomos abejones yra susijusios su nevienodu kompetencijos termino ir struktūros supratimu. Rusijos mokslininkai taip pat neabejoja kompetencijomis grįsto mokymosi tikslumui. Maža to, jie teigia, kad jau sovietinėje pedagogikoje galima įžvelgti kompetencijomis grįsto mokymosi užuomazgų. Tiesa, kai kurie iš jų svarsto, ar nebūtų pakakę nuo seno žinomos gebėjimų sąvokos, o kompetencijos termino apibrėžimą, bet kaip bandymą suvienodinti Bolonijos proceso šaly-se vartojamą terminiją. Kazachijos autoriai taip pat be išlygų priima kompetencijomis grįsto mokymosi idėją, nors ir sutinka, kad yra kompetencijos termino apibrėžimo problema.

Pagrindinė straipsnio švada – kompetencijomis grįstas mokymasis gali būti sėkmingai įdiegta ir iškomas, tačiau tam būtina gerai išstudijuoti visus jo pranašumus ir trūkumus ir vengti taikyti jį kaip nepajudinamą dogmą, kurios nebūtų galima kūrybiškai interpretuoti.

Pagrindiniai žodžiai: Bolonijos procesas, kompetencijomis grįstas mokymasis, aukštasis mokslas.