

**ROLE OF HIGHER EDUCATION INSTITUTIONS IN SOCIETY:
CHALLENGES, TENDENCIES AND PERSPECTIVES**

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AN OUTCOMES BASED APPROACH TO DEVELOPING A BELARUSIAN QUALIFICATION FRAMEWORK

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Abstract

The Higher Education landscape of Belarus is characterised by high quality institutions offering world class expertise and facilities, and a very high participation rate in higher education. However, it has also been recognised by the state that the degree of individuality and autonomy prevalent in these institutions works against the current mood of globalisation in Higher Education. An obvious example is international exchanges. It is particularly difficult in the case of students since the programmes are usually organised in an insular way and lack a precise specification of the level at which any contributory course is delivered. A stated objective of the Belarusian Ministry of Education is to seek membership of the European Higher Education Area (EHEA). To this end a road map (Eastern Partnership Civil Society Forum, 2017), designed to afford increased international compatibility of the Belarusian Higher Education Framework, has been defined and is being implemented by the Belarusian Ministry of Education. This paper considers how the EU funded project IESED could directly contribute to the realisation of this Road Map.

Keywords: *qualification framework, globalisation, higher education, international exchanges.*

1. Introduction

The Belarusian Ministry of Education Road Map for Higher Education Reform (2015), which was presented at the EHEA in Yerevan (EHEA, 2015), aims at aligning Belarusian Higher Education with the Bologna Process in order to establish EHEA membership. The structural reforms defined at the Yerevan conference were:

- To establish a qualifications framework (QF)
- To establish an independent Quality Assurance Agency
- To formally recognise these structural changes through bringing in new legislation

Range of challenges have hindered the progress through the road map in the intervening years. The process is now well behind the agreed timeline as recognised in the independent report produced through the Eastern Partnership Civil Society Forum (ECPSF) report (2015). This report was also presented at the IESED Lille meeting in summary. It provides details on the various ways in which the Road Map implementation falls short of its commitments, especially in relation to the three structural paradigms referred to from the Yerevan conference:

- The new code complies with the 3-cycle model, but steps back from using ECTS to map credits and levels.
- The New Code introduces inconsistent and incompatible terminology, making integration unnecessarily complicated.
- The New Code only incorporates a continuous programme of higher education for health care professionals.
- Research Oriented Professional Education is not fully integrated into the 3-cycle system defined by the new code.
- There has been no establishment of a legal basis for an independent Quality Assurance Agency, which is not covered by the new code.

In the context of the IESED project, some of these shortcomings of the road are beyond the scope and ability of the project to address, however, in relation to move toward a qualification framework, there is potential for the project to provide some beneficial guidance, in the form of pilot schemes of computing, within the three-cycle system, which propose and assume the nature of framework which may be eventually realised.

2. Addressing the Framework

ECPSF report (2017) makes reference to the fact that the proposed three cycle system that falls short of a framework, since there is no precise specification of the nature of the learning outcomes. There is also no use of ECTS as basis for quantising study units in the new code. The importance of integrating level expectations into any QF, in particular using the well-established taxonomy founded by Bloom (Bloom et al,

1956), which is revised by few, e.g. (Anderson & Krathwohl, 2001). has also been stressed, in particular at the Lille meeting, in relation to this project. On analysis of the individual study programmes, however, there is a notion of an expectation of the amount of effort required for a year of study. There is also a notion of relative time differences to be spent on individual sections with the programme during any particular time period of the programme (i.e. years or semesters). In otherwise, at taught level, there is, at least in some cases, an understanding of the nature of definition and use of an appropriate Higher Education QF, even new code as realised by the Belarusian MoE maybe incomplete and confusingly presented.

It would, therefore, seem to be a useful exercise to take an existing programme, assume QF based on an interpretation of EHEA expectations for the first 2 cycles, and represent this in the context of a reimagined interpretation of the new code, compatible with the Bologna process, and addressing the problems noted by the EPCSF report (2017).

Some of the issues that became apparent during the exercise are:

- Taking the proposed Framework literary presents difficulties in developing generic course templates, limiting the reusability of course design.
- Both level distinction and program function of proposed courses are difficult to identify when the focus is on competencies rather than learning outcomes.
- It is difficult to evaluate credits especially when there is no clear fixed translation of course hours into credits.

3. Developing a Pilot Programme

In consideration of the foregoing, the first steps towards developing a pilot exemplar will be concerned only with the two aspects noted above, namely, mapping to ECTS and establishing level-oriented Learning Outcomes (LOs), which should give clear statements of what will be expected from the students on a given course or unit of study to learn and subsequently will be able to demonstrate when they complete that course or unit of study (Ramsden, 2003) (Biggs, 2003).

The first of these seems fairly straightforward, and a number of programmes in Belarusian higher education institutions have already established credit-based programmes, which align closely to ECTS. The example from Belarusian State University¹ shows a fully worked out programme, with credits roughly aligned to contact hours, indicating around, though not precisely, 30 credits per semester, roughly equivalent to 1 BY credit equal to 1 ECTS credit. Where there is consistency with contact hours, 1 BY credit requires 36 total contact hours. There is some triangulation possible here, since the basic programme organisation evolved from the standard Soviet system, which other former Soviet republics have been modifying to align with Bologna. In particular, a programme at Aleksandras Stulginskis University in Kaunas has developed former Soviet structured programmes into the Bologna aligned Lithuanian credit system (1 LT credit = 1.5 ECTS credits). In some cases, there are great differences between the amount of credits awarded and the formally assigned contact hours.

A difficulty here, is that, although there is a concept of credits in relation to effort, and progress is being made on aligning the amount of schedule study to a consistent amount of credit rewarded (notionally about 27 hours per BY credit), the precise number of credits required to gain a specific award at a given level and status varies between programmes. A 4-year specialist award (about equivalent to a first cycle Bologna award) will vary in the amount of credit required between just over 200 and just under 240 credits, but generally comes in at about 220 credits. The team consider that the lack of precision here undermines the concept of a QF, which clearly needs to be a consequential outcome of the overall road map.

A key issue that became apparent during the discussions and workshops is the subtlety of terms such as learning outcomes, competences and course objectives. The confusion between learning outcomes and competences remained after the discussions. This is partly due to the rigid templates followed in developing courses. Two issues became clear:

1. The lack of measurable outcomes, thus competence descriptions provided fine granularities of what is expected from students but no clear way to assess the achievement of such competences
2. The lack of inter-dependency between these competences to provide interlocutory means between courses within the same level or between levels so a sense of progression and program level objectives can be captured.

Our interest here is the first stage of the team activities in turning competencies into learning outcomes. This activity highlighted another issue related to the previously highlighted issues, that is standardisation of term interpretation. Thus, Bloom's taxonomy (1956) was proposed as a point of reference.

A significant issue that emerged in discussion with Belarusian colleagues during the workshop

¹ http://www.google.co.uk/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwi8hPLYjufaAhUikRQKH5IBVUQFggnMAA&url=http%3A%2F%2Ferasmus-plus.belarus.unibel.by%2Fsm_full.aspx%3Fguid%3D4963&usg=AOvVaw1_1t4IzTIS8nM0YDsklhH

aimed at revising programmes and course to address the learning outcomes approach, was that a number of named courses (modules) had been devised to be addressed differently depending on which programmes they were being incorporated into. This represented a red flag in the development of programmes aimed at progressing the 'Road Map' and highlighted a crucial issue in the concept of adopting the learning outcomes approach to programme development. The modular approach to programme design does not account for the contextualisation of knowledge by award title. If a Business Computing student needs to understand the principles of networking, in order to address aspect of the programme, for example, this should not be modified to relate only to the immediate needs of Business Computing but needs to be presented and consumed with all the essential information included deemed to be necessary for understanding that module, unit or course. The learning outcomes associated with any particular unit need to be aligned with the content of the unit, and not dependent on the specific way in which that unit is being used at a particular time. There is a major educational cultural block to be overcome, that is exemplified by this issue, and perhaps suggests that some modification in the terminology of programme development might be useful, as a means of distinguishing between the approaches. Adoption of the term module, for a fixed independent programme component, rather than course, in this context, could be useful.

4. Case Studies

This is the aspect where there is most scope for development. There is an implicit indication that some of the units are introductory, by the nature of the titles, particularly for those scheduled for the first year, such as Fundamentals of Management. The distinction, however is lost in the subsequent years, and in fact, was a feature confirmed in discussions at the Lille meeting.

There are several examples of study modules from the 2nd and 3rd years of the programme, such as in the case of the specialist programme in Information Resource Management – roughly equivalent to Bologna 1st cycle, but there are complications in that respect. All are specified with competencies, however there is no discrimination between, say, Principles of Algorithmization and Programme, offered in the second year, very much a foundation unit in its title and nature, and Web-Technologies offered in the final year. It is not clear from the title if this is a foundational programme or not, but the list of competencies and syllabus topics indicate that it is a self-contained unit which develops the subject from introductory topics, Basic Concepts of Web Technologies, for example, to those requiring a quite advanced understanding of Data-modelling in XML.

Computer Graphics² is offered in various years (levels) depending on the program within which it is included, as it is the case with many of the units under consideration. It has probably the kind of competencies listed that one would most expect to see in a fully developed QF, though they are rather vaguely drawn, and there is no indication of any introductory stage to this unit, so yet again, it can be assumed that this is designed as a standalone course, contributing the set of technical competencies and knowledge addressed by the programme, rather than seen in the context of a developmental programme.

5. Reflective Remarks

Major progress has been made through IESED meeting and workshop in rewriting pilot course. There remain a number of unresolved difficulties, specifically:

- Establishing the notion of 'levels' within the assumed framework, as building blocks towards developing knowledge. Bloom's taxonomy has been included in much of the discussion, but the sense of intellectual development within a programme, rather the procuring of topic-based information, is yet to be fully integrated.
- Changing a course/programme associated mind set on award design. The use of reusable stand only modules, rather than contextualised courses, not only makes delivery of programmes simpler, but also adds to the educational experience of the students.
- Establishing the notion of equivalency of effort and removing the arbitrariness of credits.

6. Conclusion

We have explored in this paper the BY HE Roadmap and initiatives necessary to achieve it. Following previous workshops associated with IESED project, a number of observations have been recorded and crystallised in the last experts meeting which was held in Belarus in Feb 2018. This paper is motivated and guided by much of the work done at that workshop and reflects on these observations in a practical setting to suggest future progress towards realising the roadmap.

² Computer Graphics description in Russian: <https://www.bsu.by/Cache/Page/401573.pdf>

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Anotacija

MOKYMOŠI REZULTATŲ PRINCIPU PAREMTAS BALTARUSIJOS KVALIFIKACIJŲ SĄRANGOS VYSTYMAS

Baltarusijos aukštojo mokslo aplinką sudaro aukštos kokybės institucijos, teikiančios pasaulinio lygio žinias ir turinčios didelį aukštojo mokslo dalyvių skaičių. Tačiau valstybėje taip pat pripažįstama, kad šiose institucijose vyraujantis individualumo ir autonomijos laipsnis neatitinka dabartinių aukštojo mokslo globalizacijos sąlygų. Akivaizdžiu pavyzdžiu yra tarptautiniai mainai. Tai ypač sudėtinga studentų atveju, nes programos paprastai yra organizuojamos atskirai ir trūksta tikslių duomenų, koku lygmeniu pateikiamas bet kuris kursas. Baltarusijos švietimo ministerijos tikslas yra siekti narystės Europos aukštojo mokslo erdvėje (EHEA). Šiuo tikslu Baltarusijos švietimo ministerija nustatė ir įgyvendina (Rytų partnerystės pilietinės visuomenės forumas, 2017 m.) planą, kuriuo siekiama didinti tarptautinį Baltarusijos aukštojo mokslo sistemos suderinamumą. Šiame straipsnyje nagrinėjama, kaip ES finansuojamas projektas IESED galėtų tiesiogiai prisidėti prie šio plano įgyvendinimo.

Esminiai žodžiai: kvalifikacijų sąranga, globalizacija, aukštasis mokslas, tarptautiniai mainai.

**AUKŠTŲJŲ MOKYKLŲ VAIDMUO VISUOMENĖJE:
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