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Broadening the scope of QA

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If there are several authors, please copy and fill in the fields for each author and indicate who is the corresponding author and who will be responsible for presenting the paper at the Forum.

If you are submitting a paper or workshop proposal, please do not register for the event online until the results of the selection process have been announced. Each selected paper and workshop at EQAF 2018 will benefit from one reduced fee, which will be applied through a special registration process.

During the Forum, the full text of all papers presented at the Forum as well as the associated Powerpoint presentations will be published on the Forum website. If you do not wish your paper to be published, please indicate so here. This has no consequences on the selection of the papers. Please however note that all Powerpoint presentations will be published, regardless of whether the full paper is published.

Proposal

Title: Use of sectoral qualifications frameworks in a development of study programs.

Abstract (150 words max):

The paper discusses the opportunities to use sectoral qualifications frameworks in a development of study programs in higher education. Sectoral qualifications frameworks are extensions of National Qualifications Framework, that are prepared in a cooperation with sectoral stakeholders in order to make them more suitable to the needs of a given sector. Such tool has several potential advantages from a point of view of quality assurance policies at the universities: use of language that will be understandable by a huge variety of stakeholders, in particular employers, better match with labour market needs, better comparability between universities and departments and better permeability between study programmes or institutions.

The examples of use from 4 Polish universities and various sectors are to be presented.

Has this paper previously been published/presented elsewhere? If yes, give details. NO

Text of paper (3000 words max):

Introduction

It is widely believed in higher education institutions that a proper design of study programmes is a condition sine qua non of a quality assurance in higher education. Since at least 2005 and a first draft of the Framework for Qualifications of the European Higher Education Area (henceforth: QFHE), there is also a consensus, that a part of the agenda in this area is to use several types of qualifications frameworks: European Qualifications Framework (EQF), QFHE or national qualifications framework in a given country. Standard 1.2 of Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) 2015 states explicitly: "The qualification resulting from a programme should be clearly specified and communicated, and refer to the correct level of the national qualifications framework for higher education and, consequently, to the Framework for Qualifications of the European Higher Education Area."

Levelling of non-formal and VET qualifications is usually held through matching of learning outcomes to the best fit level descriptors of qualifications frameworks. Research on the horizontal comparisons of levelled qualifications¹ shows however, that it is widely agreed among higher education to proceed in a reversed order: to build study programs and curricula that will be in line with expectations of a given level of a Framework. As a consequence qualifications framework very often serve as a starting point in formulating study programmes, in particular learning outcomes – therefore their significance for quality assurance is much broader than simple information about the level.

¹ The pilot project on the horizontal comparison of levelled qualifications. Draft of the final report for discussion at AG-41 (2017), Unpublished document



There are two obstacles for this standard in practice of higher education institutions. Firstly, the level descriptors of either EQF or NQF are usually formulated in a very generic way, so their direct use is sometimes very difficult for the academic staff. If the level descriptors are not easily understandable by a staff, their usefulness will be limited. It is relatively often, that HE institutions, in order to meet an obligation of a reference to qualifications framework, simply copy-paste some level characteristics – most often from area of Responsibility and autonomy in terms of EQF. It is obvious, that such practices have no impact on the academic performance and quality assurance. It is often difficult to tell where is the border between “can apply their knowledge and understanding in a manner that indicates a professional approach to their work” (QFHE First cycle) and “can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments” (QFHE Second cycle) or between “advanced knowledge of a field of work or study” (EQF Level 6) and “highly specialised knowledge, some of which is in the forefront of knowledge in the field of work or study” (EQF Level 7).

Secondly, two parts of this standard, though put in one sentence, are often treated separately: clear specification and communication appears to have nothing in common with a reference to the correct level of qualifications framework. In fact however, the proper use of level characteristics of a qualifications framework can singlehandedly assure the clarity of language used in a formulation of study programs and curricula. Strong focus on learning outcomes approach, use of some specific verbs (e.g. in lines with Dublin descriptors), easier reference to other courses at the same level all can lead to better communication between educational institutions and external stakeholders.

The tool that can help to face both those challenges is a sectoral qualifications framework. Sectoral qualifications frameworks (SQF) are a type of qualifications frameworks, that focuses only on competencies (qualifications, learning outcomes) that are specific only for a given sector of an economy. They are developed in a strict cooperation with sectoral stakeholders, in particular those representing labour market side, in order to make them more in-line with a needs and expectations of a sector. The following sections of this paper will briefly present the idea of a sectoral qualifications framework, the possibilities to use them in higher education and the experiences from various Polish universities that are currently working on an implementation of the SQFs in their quality assurance agenda.

Sectoral qualifications frameworks – idea and design

There are several approaches to prepare the sectoral qualifications frameworks and therefore their definitions. They differ not only among the sectors (since they need to be sector-specific), but also among countries or institutions. Two main approaches are: treating a “sectoral qualifications framework” as an extension or detailing of “general” framework, with direct reference to NQF or EQF, or more labour-market centered tool, based on tasks and skills directly at the workplace, sometimes called (more adequately) the competence frameworks. The latter are represented by a various international projects², mainly but not exclusively in German-speaking countries. Best known examples are CarEasyVET project, in car industry, BAQ in construction sector or Metalog in logistics sector. They usually focus on VET qualifications, in particular those on levels 3-5 of EQF, therefore there are of lesser concern in context of quality assurance in higher education.

The examples of the former approach are framework in Triple-E Project for a banking sector, held by European Banking & Financial Services Training Association, Sectoral Qualifications Framework for Border Guards (see Frontex 2013) and various examples of SQFs prepared in Poland. It is also worth to mention the Tuning projects, that had the most direct link to higher education, though never have been fully implemented³. This paper will use the definition from the Polish Law on Integrated Qualifications System. There are three reasons of such choice: 1. There are several examples of use of such SQFs in higher education institutions, 2. There are several sectors with similar methodology⁴, what supports cross-sectoral comparability, 3. The definition is generic enough to be adjustable for any other country, sector or a context.

² For a brief overview see: Politecnico di Torino (2012), Overview of Sectoral Qualifications Frameworks, NQF-SQF Project, www.project-nqf-sqf.eu

³ The results of the Tuning Projects are SQF for Social Sciences, SQF for Humanities and Arts and various initiatives less directly linked with SQFs, e.g. Reference for Points for the Design and Delivery of Degree Programmes in Chemistry or Physics.

⁴ For the detailed methodology of development the sectoral qualifications frameworks in Poland see Szymczak, Trochymiak, Żurawski (2015). The revised and updated version in English is foreseen to be published by the of 2018.



Abovementioned definition is: “Sectoral qualifications framework is a description of levels of qualifications functioning in a given sector or branch; Levels of sectoral qualifications frameworks refer to adequate levels of Polish Qualifications Framework”. First part of this definition signals, that it is “classical” qualifications framework (not a competence framework), based on learning outcomes. The third part shows, that Polish SQFs are extensions of Polish Qualifications Framework, as a consequence e.g. level 4 of SQF refers to level 4 of PQF (and therefore to level 4 of EQF). Finally, it is explicitly stated that SQF covers only the key sectoral learning outcomes, that are specific to the sector and understandable for their stakeholders.

In Poland as for mid-2018 there exist eight SQFs in sectors: banking, sports, IT, tourism, telecommunications, development services, construction and fashion industry, while trade, public health and car industry are currently under construction. Agriculture, chemical engineering, mining and power engineering are the sector where advanced plans are prepared. Table 1 shows few examples on how the level descriptors are made in various SQFs:

Table 1. Examples of level descriptors in Polish sectoral qualifications frameworks (level 6, knowledge).

Descriptor of Polish Qualifications Framework	
	Is able to innovatively complete tasks and resolve complex and non-routine problems under variable and not fully predictable conditions
IT	Is able to design, produce and implement IT system software using various components and distributed processing, and is especially able to use mathematical and IT knowledge to describe and simulate processes, develop models, write algorithms and perform other related activities.
Banking	Is able to analyse forecasts of important economic variables, including sectoral data, present them in a synthetic form and use them to build/restructure customers’ portfolios or to properly manage the bank.
Telecommunications	Is able to design telecommunications networks in different technologies in a manner consistent with the requirements of the Construction Act, Telecommunications Act, related and industry laws, and the principles of technical knowledge
Tourism	Is able to Prepare analytical, diagnostic and planning documents pertaining to the conducted business activity, taking into account analyses of the operations of competitors and changes in the tourism and accommodation market; Monitor changes occurring in the accommodation market and take them into account when planning long-term activities in the market.
Sports	Is able to carry out sports training processes in non-routine conditions (e.g. in various geographic and environmental conditions, during convalescence in a sports training process);
Construction	Is able to prepare the operational documentation of a construction consisting of the current multi-sectoral technical documentation, including the energy performance certificate, situational plan, repository in the registry of land and mortgages, the construction log, necessary operating instructions and multiyear operating programme of the facility
Source: Educational Research Institute (2016, 2017a, 2017b, 2017c, 2017d, 2018a, 2018b)	

The key methodological idea for the sectoral qualifications frameworks “from sector for the sector”. That’s why they are prepared by the sector experts’ team. For example, in the team that developed SQF for banking took part: 10 representatives of commercial banks (as the employers side), representatives of cooperative banks, Union of Polish Banks, Polish Financial Supervision Authority, Labour unions, universities (Department of Banking, Warsaw School of Economics), non-formal education institutions.



Such cooperation helped to develop the tool that will be both understandable for all the stakeholders in the sector, as well as will correctly reflect the current labour market needs.

Sectoral qualifications and higher education

Sectoral qualifications frameworks are usually designed with a labour market purposes so they focus on VET qualifications and competences (the important exceptions are some results of Tuning Project). However, there are several ways to make them very useful for higher education departments.

First and foremost, the process of a design the SQFs assumes the involvement of various stakeholders, both from education and labour market side. This is a good opportunity for a constructive discussion about the actual needs of a labour markets and future trends. Such way of processing is much more effective, in particular in comparison with survey methods, that usually reveal current situation rather than trends. Gover A., Loukkola T. (2018) as a result of EQUIP Project reported that there is a common problem of engaging employers and other world-of-work representatives in educational activities. SQF can make this process easier, because it is much more likely to engage stakeholders, if the cooperating actor is “a sector” rather than a single university. Since the SQFs are publicly available, any institution can benefit from this cooperation.

Sectoral qualifications frameworks may also contribute to a development of a clear language, that will be helpful for higher education staff and at the same time understandable for employers and other stakeholders. Discussions on what does it mean “non-routine problem” in a given sector help to useful terminology. Finally, use of some standard ways of defining learning outcomes supports the comparability between departments and institutions. If all the higher education institutions in a given sector use similar terminology, it is much easier to identify the differences in study programs. It also supports the permeability of the system and therefore the mobility of the students.

Beyond the scope of this paper are also other examples of use of sectoral qualifications frameworks, beyond the narrow area of study programs development. See for example Chłoń-Domińczak, Żurawski (2017), who discuss the use of SQFs in measuring skills mismatch and identifying skills gaps.

Case studies from Polish Universities

First Polish SQFs were prepared in 2015. Since then there will be various initiatives that aimed at implementation them for the needs of higher education institutions. This sections will show some of those examples in more detail.

1. Gdansk University of Physical Education and Sport was the first Polish university to directly use sectoral qualifications framework in their works on study programmes and learning outcomes. Since 2017 they started to reformulate learning outcomes of courses “Sports” and “Physical education”, both on undergraduate and graduate levels, with a use of sectoral qualifications framework for sports. All the learning outcomes were referred to the SQF and the levelling was officially announced on the university’s website for all the stakeholders. Currently, there are works on new coaching qualifications for various sports, also with a use of SQF for sports.

SQF for Sports descriptor	Learning outcome based on SQF for Sports
Can interpret and take into account test results (e.g. of physiological, biochemical, biomechanical, psychological medical exams) in his/her own occupational tasks relating to sports participation;	Can perform and assess basic physical measurements, in particular anthropometric, biomechanical, physiological and diagnostic. Can diagnose effort capacities of the organism and training loads.

2. Jagiellonian University, in particular the Faculty of Chemistry, was involved in a variety projects regarding the development of sectoral qualifications frameworks in several countries, mainly from the former Soviet Union, in particular this include the TEMPUS project. Those experiences, in particular regarding food, environment and chemistry sectors are now used in updates and revisions of existing study programs at the university (for details see e.g. Frankowicz, Lis



(2018)). Furthermore, Faculty of Chemistry is involved in the plans of a development the sectoral qualifications framework for chemistry engineering sector.

3. Sectoral qualifications framework for tourism sector was developed by a team of experts lead by the Department of Tourism of Warsaw School of Economics. A participation of the Department helped to adjust the project of SQF to the needs of higher education. Currently the Department is revising the tourism course at the university and the curricula of several subjects, to make them coherent with SQF standards. It is expected, that in a near future, the study program will be directly referenced to the SQF levels, similarly to the experiences of Gdansk University.

Furthermore, the experiences from the cooperation of a variety of sectoral stakeholders, helped to form the Sectoral Skills Council of a Tourism Sector. Department of Tourism is one of the coordinators of this body. The Council is carrying a "Sectoral human capital balance", survey of employers' opinions on labour market needs, based on SQF.

4. Warsaw University of Technology was involved in a variety of initiatives regarding skills and competencies of a construction sector, in particular the development of SQF for construction sector and Sector Skills Council of Construction sector. Sector Skills Council of Construction Sector based its agenda on a SQF – it accepted the terminology proposed in a framework, prepares the skills surveys based on a framework etc. Professors of WUT participate also in pioneer works on use of SQF for qualifications of level 8 (doctoral programmes) and defining learning outcomes for post-graduate courses.

Conclusions

Sectoral qualifications frameworks are still brand new solutions in a field of education, so the estimates of their impact on quality assurance in higher education. However, the examples presented in this paper, that can be treated as a pilot solutions show very promising results. Proper communication with various stakeholders seems to be one of the key challenges for quality assurance in 21st Century. Use of sectoral qualifications frameworks appears to be one of the most inspiring approaches to prepare a language understandable by all the actors in a given sector. Better match with labour market needs is most obvious but definitely not the only consequence.

References:

A Framework for Qualifications of the European Higher Education Area (2005), Bologna Working Group on Qualifications Frameworks

Chłoń-Domińczak A., Żurawski A. (2017), Measuring Skills Mismatches Revisited – Introducing Sectoral Approach, IBS Working Paper 03/2017

Educational Research Institute (2016), Sectoral Qualifications Framework for Sport

Educational Research Institute (2017a), Sectoral Qualifications Framework for Information Technology

Educational Research Institute (2017b), Sectoral Qualifications Framework for the Banking

Educational Research Institute (2017c), Sectoral Qualifications Framework for Telecommunications

Educational Research Institute (2017d), Sectoral Qualifications Framework for Tourism

Educational Research Institute (2018a), Sectoral Qualifications Framework for the Construction Industry

Educational Research Institute (2018b), Sectoral Qualifications Framework for Development Services

Frankowicz M., Lis. A. (2018), Wykorzystanie sektorowych ram kwalifikacji wśród instytucji szkolnictwa wyższego, Presentation on an International conference on sectoral approach to qualifications in Warsaw.

Frontex (2013), Sectoral Qualifications Framework for Border Guarding. Setting standards for training excellence, vol. I | II, Frontex,



Gibbs G. (2010), Dimensions of quality, Higher Education Academy

Gover A., Loukkola T. (2018), Enhancing quality: From policy to practice. EQUIP Project

Martin M. (2018), Internal Quality Assurance: Enhancing higher education quality and graduate employability, UNESCO Publishing

Politecnico di Torino (2012), Overview of Sectoral Qualifications Frameworks, NQF-SQF Project, www.project-nqf-sqf.eu

Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). (2015). Brussels, Belgium.

Szymczak A., Trochymiak M., Żurawski A. (2015), Sektorowe ramy kwalifikacji w Polsce. Analiza założeń i wytyczne do tworzenia, Warszawa, Instytut Badań Edukacyjnych

The pilot project on the horizontal comparison of levelled qualifications. Draft of the final report for discussion at AG-41 (2017), Unpublished document

Tuning Project (2010), Tuning Sectoral Framework for Social Sciences

Tuning Project (2012a), Tuning Sectoral Qualifications Frameworks for the Humanities and the Arts

Tuning Project (2012b), Sectoral Qualifications Frameworks for the Creative and Performing Disciplines and for the Humanities

Discussion questions:

Should sectoral approach to quality assurance in higher education focus on national or international context?

What sectors ought to be particularly interested in developing study programs with use of sectoral frameworks?

Please submit your proposal by sending this form, in Word format, by 24 July 2018 to QAForum@eua.eu. The file should be named using the last names of the authors, e.g. Smith_Jones.doc. Please do not send a hard copy or a PDF file.