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QUALITY ASSESSMENT OF EDUCATION BASED ON THE U-MAP METHODOLOGY

OCENA JAKOŚCI EDUKACJI W OPARCIU O METODOLOGIĘ U-MAP

Abstract

The aim of this work is a description of the methodology of creating U-maps that are used to compare indicators of the quality of higher education. The article describes a description of the methodology and its use to describe the quality indicators state university in Andijan (Uzbekistan).

Key words: U-map methodology, quality assessment, University in Andijan.

Streszczenie

Celem niniejszego artykułu jest ukazanie metodologii tworzenia u-map, które są używane do porównywania wskaźników jakości edukacji na uczelniach wyższych. Praca prezentuje opis metodologii i jej zastosowanie do charakterystyki wskaźników jakości na uniwersytecie w Andijan (Uzbekistan).

Słowa kluczowe: metodologia u-map, ocena jakości, uniwersytet w Andijan.

Introduction

Questions regarding the evaluation of the quality of higher education and the issue of ensuring and improving the quality of higher education worldwide resonate for a longer period. Their solution has become central to strategies of direction of education in the higher education area at European, national and ultimately institutional level[1]. In the international context, the dimension of quality in higher education depends on EU norms and standards (European Standards and Guidelines for Quality Assurance – ESG), which are systematically set so as to be applicable to all European higher education institutions and agencies for monitoring and evaluating the quality of higher education[2].

[1] A. Hašková, *Research of Quality Assurance Systems at Higher Education Institutions in Slovakia* [In:] *6th International Conference LUMEN 2015 Rethinking Social Action. Core Values*, Bologna (IT): Editografica, 2015, p. 639–644. ISBN 978-88-7587-725-5.

[2] A. Hašková et al., *Providing quality education in universities*, Nitra: UKF, 2013, p. 4. ISBN 978-3-16-148410-0.

Dissemination of the bologna process

The introduction of ESG into practice arose the question if universities can match the quality systems at individual higher rounds, respectively. The question of identifying the points that can modify ESG, amend it, or extend to non-EU countries if they wish so.

One of the more official response to these trends is the realization of international projects of the EU Erasmus + IQAT Enhancing capacities in implementation of institutional quality assurance systems and typology using Bologna Process principles – strengthening the capacity of the introduction of institutional quality assurance systems and typologies in applying the principles of the Bologna process (IQAT, www.project-iqat.eu/), being the main focus on the dissemination of experience of EU countries with the introduction of internal rating systems and quality assurance in tertiary education in universities of Kazakhstan and Uzbekistan. European Union countries are in the project represented by five universities:

- Czech University of Life Sciences in Prague (Czech Republic),
- Centre for Higher Education Studies (Prague, Czech Republic),
- University of Alicante (Spain),
- University of Latvia (Riga, Latvia),
- Constantine the Philosopher University in Nitra (Slovakia).

Partner countries Kazakhstan and Uzbekistan are in the project represented each by three universities:

- S. Seifullin Kazakh Agro Technical University (Astana, Kazakhstan),
- International Education Corporation (Almaty, Kazakhstan),
- Karaganda State Technical University (Karaganda, Kazakhstan),
- Tashkent Chemical-Technological Institute (Tashkent, Uzbekistan),
- Samarkand Agricultural Institute (Samarkand, Uzbekistan),
- Andijan State University (Andijan, Uzbekistan).

Methodology of U-maps

Starting point of the project IQAT was to create a strategy that would show where the implementation of a system of quality can start on university's institutions of partnership countries. This was necessary to find a tool to quickly and easily compare their higher education systems, which are involved in the project. For this work was used the methodology of U-Map.

U-Map as a tool for profiling universities can determine which quality indicators are on the universities the same (similar) and which are different. It allows you to compare up to 29 quality indicators (http://about.u-map.org/background/methodology/).

With respect to the objectives of the project IQAT were quality indicators reduced the number of 24 and divided into six dimensions so as to enable com-

parison of quality assurance systems and at the same time to create a possibility to propose a system of quality assurance at the institution.

U-Map methodology is transparent so it can be used for the purposes of institutional case studies. U-Map provides an overview of six different dimensions. Dimensions of U-Map are:

1) Teaching and learning – dark blue.
2) Student profile – green.
3) Involvement of Research – red.
4) Regional engagement – purple.
5) Involvement in the exchange of knowledge – light blue.
6) The international orientation – yellow.

Each dimension still includes a number of indicators. Graphical display of the results of mapping is the image of a flower or the solar disk with petals of different lengths, where one petal means more activities within given indicator. The length of one petal is also the quantitative expression of the level of implementation of the indicators. Each indicator can take on four levels: the most significant, important, less important, none (http://about.u-map.org/background/methodology/).

One color = one dimension

One ray/petal = one indicator

Dimension 1: Teaching and learning

Dimension includes five indicators: the number of bachelor's level graduates (in%), the number of master's level graduates (in%), the number of PhD graduates (in%), expenses for teaching, the number of study programs. All parts of the dimensions are indicated in dark blue.

Dimension 2: Student profile

Dimension includes four indicators: the number of distance learning students, the number of adult students, the number of part-time students, the number of students together. All parts of the dimensions are indicated in green.

Dimension 3: Involvement in Research

Dimension includes four indicators: the number of PhD graduates (relative to academics), expenses on research (of the total expenditure, in%), the annual number of peer-reviewed scientific publications in relation to the total number of academic staff, the number of non-peer-reviewed publications. All parts of the dimensions are indicated in red.

Dimension 4: Regional engagement

Dimension includes three indicators: the number of students from the region, the number of graduates working in the region, the income of the budget of the region. All of the dimensions are indicated in purple.

Dimension 5: Involvement in the exchange of knowledge

Dimension includes three indicators: the number of cultural events, the number of patents (national and international), the number of start-up companies. All of the dimensions are indicated in light blue.

Dimension 6: International orientation

Dimension includes five indicators: the number of foreign students, the number of students from exchange programs, the number of foreign academics, foreign incomes and the number of students sent to study abroad. All parts of the dimensions are indicated in yellow.

Sample of using the methodology of U-map

Results of the evaluation indicators of the quality of education at the State University Andijan through methodology U-map is shown in Figure 1. For example, image shows that the university is in education focused mainly on preparing fresh graduates, it does not have distance and external forms of education and that the number of students ranks it to bigger universities (in the country it is the eighth in order of the number of students). It is well involved in regional events, organizes many events for the region, many students also come from the same region, who is also a labor provider for their graduates. Involvement in research is average, indicators say that publishing in peer-reviewed publications is not a priority of the university. Also, international exchanges are at a lower level, the university benefits from the needs of the region and prospective students come from a region, where most of them remain for work.

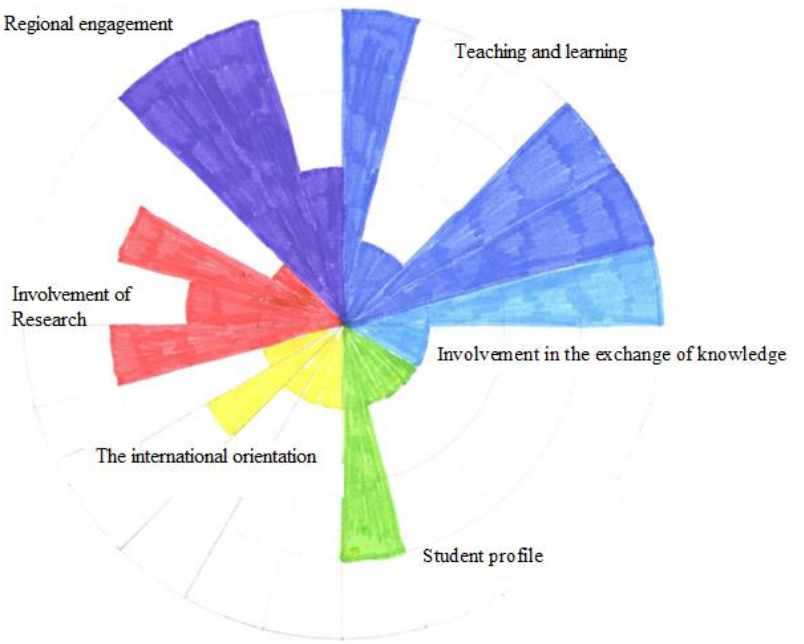

Figure 1. Quality Indicators of University in Andijan

It is preferable to use U-maps to compare universities in terms of quality as compared universities have drawn up U-Map. Comparing the "flowers" – maps of universities, we can easily see which dimensions are comparable and which are quite different.

Conclusion

Application of U-map has some limitations that need to be taken into account in their work. This is particularly the transparency and reliability of the data, which are included in the profile. This condition is essential. It is better to have an incomplete profile than use unreliable data. For this reason, the number of quality indicators for examining the University of Andijan was reduced to 24.

An important issue is also the definition and understanding of the different indicators. In the case of high schools that are not from the EU, we face a fundamental difference in the concept of higher education. Therefore, the developing the U-map must be consulted with the management of the university and highly accurate communicated with experts who are involved in the creation of map

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