The Role of the Bologna Process in Changing the Quality Culture and Mindsets of HIE Leaders

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Abstract This paper focuses on assessing the past 20 years of Bologna Process and the effects and outcomes it had on the quality culture and mindsets of higher institutions of educations (HIE) and their leaders and stakeholders.

Bologna Process has been an unprecedented project that aims at channeling the European highest standards of education across the continent. It created a unique scientific and research space that promotes and encourages mutual research and educational cooperation, student and professors exchange, collaborative projects, initiatives, and more. The European Commission is also an actor and full member of the Bologna Process because of its EU-centered interests.

Our results show that although huge work has been done in the last 20 years since the Bologna process started there are still some discrepancies and drawbacks the member State will have to overcome. We concluded that most of the problems identified are systematic and, in some cases, cannot be solved without severe and rigid structural reforms and changes in the national legislation.

Keywords: Bologna process, quality culture, leadership, mindsets, higher education, leaders

1 Introduction

The quality management of research, development and innovation activities (R&D) of the universities and higher education institutions (HEI) is an area that is almost completely neglected in studies on the quality of higher education (Pfeffer 2015). In fact, little is known about it, as the focus is traditionally on quality management and the evaluation of education (Goldberg and Cole 2002).

The European Standards and Guidelines for Quality Assurance in the European Higher Education Area (ENQA, 2015 European Association for Quality Assurance in Higher Education (ENQA), 2015, Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG) Brussels, ENQA) are quite broad and have a long history and relevance (Zhang et al. 2019).

An important aspect is making sure to request institutions or quality assurance agencies that they focus on quality management of research (Psomas and Antony 2017; Petrova et al.2015). For example, the Tuning Project provides a quality-enhancing methodology for creating study outlines, designing and reviewing curricula, including those for joint degrees, for the formulation of statements of knowledge and skills achieved and competences, and for measuring the workload of students (Kehm 2010). It specifies common grounds for educating, learning and assessing competences, further developed with the help of quality indicators. The universities evolve their own approaches and schemes for cultivating and enhancing an internal quality culture.
Interstate education is a powerful tool for bringing institutions together and advancing accepted quality improvement mechanisms (Lapiņa et al. 2015). An extensive mobility system must ensure adequate recognition of study periods and degrees, as well as the adequacy of student activities at a host institution. Optimization has assisted the progress of acknowledging by fully expanding the European Credit Transfer System (ECTS) accumulation objective logically using learning outcomes articulated in terms of skills and workload.

Although the Organisational Culture Profile (OCP) is used in a variety of businesses, it is not extensively employed by research organizations to assess culture. In fact, in the academic field, a typological approach may have been used more often because of the inherent difficulties in measurement. A typological path can be beneficial for depicting academic culture, since the various aspects and angles of culture can be placed in the context of its three pillars: teaching, science and service.

The OCP also has multi-dimensional aspects such as support, innovation, stability and social responsibility as the foundation, all of which are important in the context of higher education. Its contributions are invaluable in defining different features of pharmaceutical organizational culture. The purpose of Round 1 in the Delphi method is to establish the applicability of formerly analyzed constructs for construing organizational culture in academic pharmacy, and to plead for your thoughts for additional constructs and specific elements that could define them. Moreover, organizational culture can be interpreted in many ways, but for our purposes, we simply assign to them the attitudes and actions that add to the exclusive civil, emotional and intellectual environment of an organization. A Delphi method was employed to develop a list of 35 elements within six areas evaluating the organizational culture in academic pharmacy. The produced list contains elements that reflect previously validated actions, but reflect the unique characteristics of academic and professional learning programs, particularly taking into account the self-governing and synergetic atmosphere deep-rooted in higher education institutions, application of student evidence and the carefulness of some standardization under the aegis of external evaluation (Zhang and Zhou 2012). The elements developed by the procedure not only provide a tool for assessment, but also highlight the characteristics inherent in a sustainable culture that benefits administrators, faculty, staff, students, and other stakeholders (Vilcea 2014).

2. Assessment of 20 years of the Bologna Declaration

Bologna Process helps European countries to ensure the comparability of standards and the quality of degrees. The Bologna Process has created the European Higher Education Area, in particular under the Lisbon Recognition Convention and the Bologna Declaration. Corrections that are constantly introduced to address identified deficiencies do not provide sufficient results, so that in some areas it is considered to leave the Bologna model of education, especially in medicine, due to its specificity. European transparency instruments such as the European Transfer and Accumulation System (ECTS) and the Diploma Supplement play a crucial and very important role.

The Higher Education and Democratic Culture Initiative was launched to emphasize that higher education is as important to developing a democratic culture as other education sectors, and also because European higher education institutions are not sufficiently aware of their civic mission. However, the role of higher education in society is not only economic.

Some publications have dealt directly with the Bologna Process and its impact on quality assurance processes across Europe. Westerheijden (2001) argued that the Bologna Process was aimed at making European higher education more transparent and promoting the development of clearer quality assurance processes. Van Der Wende and Westerheijden (2001) showed why and how the link between internationalization and quality assurance has been made in recent years by examining developments suggesting convergence between the two. The authors emphasized the impact of international developments across Europe and elaborated on the impact of the Bologna Declaration on quality assurance.

Areas until 2010 with a single European degree structure that strengthens quality assurance and facilitates the recognition of qualifications and study periods. The process has undoubtedly contributed to shaping the higher education landscape in Europe and in the 48 countries that have signed the Bologna Declaration over time.

The aim was to create a transparent, integrated quality assurance system for both secondary and tertiary education. It is possible that the concept for the new agency has created more confusion and uncertainty among stakeholders due to the lack of time to prepare and not clarity. The quality assurance processes for higher education and the quality assurance processes for primary, lower secondary and upper secondary education were not clearly differentiated. Bologna Process supports openness, transparency, mutual recognition, quality assurance and clear adherence to credit-based performance and helps universities to prepare graduates for work in an progressively ambitious and globalized atmosphere (Kozachek 2015). The entry into the Master’s level should only take place after completion of a Bachelor’s degree. Students should not pass from a good bachelor’s degree directly to doctoral studies (even though the level of post-graduate programmes is now debatable (see Strielkowski 2018)). Students should receive a minimum number of credits at each level before moving on to the next, and they should have the right number of credits to complete.
An important and crucial part of Bologna Process is the Erasmus Programme. Apart from the three million mobility students who have studied or worked abroad due to Erasmus scholarships, the program has further impacted internationalization and higher education reform. It piloted the ECTS and initiated the access of Central and Eastern European countries and other emerging candidates to membership of the European Union (see Veiga et al. 2008).

Table 1. Basic principles of the Bologna process (1999-2019)

| EHEA principles                                                                 | 1999 | 2001 | 2003 | 2005 | 2007 | 2009 | 2010 | 2012 | 2015 | 2018 |
|---------------------------------------------------------------------------------|------|------|------|------|------|------|------|------|------|------|
| Respecting cultural, linguistic, HE etc. diversities; democratic values         | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |
| HE is a public good and a public responsibility                                  | -    | +    | +    | -    | +    | +    | +    | +    | +    | +    |
| Institutional autonomy (and academic freedom [since 2007]); academic values      | +    | -    | +    | +    | +    | +    | +    | +    | +    | +    |
| Responsiveness to the needs of society; accountability; HEIs and society         | +    | +    | +    | -    | +    | +    | +    | +    | +    | +    |
| HE, innovation, competitiveness, employability, LLL                              | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |
| Compatibility and comparability; common cornerstone qualifications               | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |
| Recognition of HE qualifications, periods of study and prior learning            | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |
| Educational co-operation; enhanced mobility of students and staff                | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |
| Co-operation in quality assurance; European QA register                          | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |
| Working in partnership; HE stakeholders                                          | -    | +    | +    | +    | +    | +    | +    | +    | +    | +    |
| Linking HE and research; doctoral programmes; research capacity                  | -    | -    | +    | +    | +    | +    | +    | +    | +    | +    |
| The social dimension; strengthening social cohesion, reducing inequalities       | -    | +    | +    | +    | +    | +    | +    | +    | +    | +    |
| European dimensions: joint programmes and degrees, etc.                          | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |
| The global dimension: attractiveness, competitiveness, co-operation             | +    | +    | +    | +    | +    | +    | +    | +    | +    | +    |
| HEIs continue to fulfil their full range of purposes                             | -    | -    | -    | +    | +    | +    | +    | +    | +    | +    |

Source: Adapted and expanded from Zgaga (2014)

Continuous changes to the Bologna Declaration have influenced the curricula of the higher education faculties, especially the IT and medical programs. The quality of teaching at universities in different European countries depends on many factors, including sufficient space for teaching, university faculty, technical supplies and aids to support the educational process (Martinez 2015).

It is worth addressing the issue of the evolution of the concept of “quality” itself if we wish to understand the scale of structural changes in the Bologna process, and the level of influence on quality assurance systems in the EHEA. What predominated the formation of a unique area and what were the main documents and the principles laid down in them, this is the topic for discussion.

The Bologna process, in its scale, may concede, perhaps, only to the creation of the European Union in 1992. In the field of higher education, this process, initiated in May 1998 by the signing by the 4 countries of the Sorbonne Agreement, currently has 48 participating countries. In addition to the scale of building the EHEA, we
can talk about the irreversibility and so far, the incompleteness of the process. The main documents of the Bologna process are as follows:

- Sorbonne Agreement (1doc998)
- The Bologna Declaration (1999)
- Prague Communiqué (2001)
- Berlin Communiqué (2003)
- Bucharest Declaration (2004)
- Bergen Communiqué (2005)
- London Communiqué (2007)
- Leuven Communiqué (2009)
- Budapest-Vienna Declaration (2010)
- Bucharest Communiqué (2012)
- Yerevan Communiqué (2015)
- Paris Communiqué (2018)

The fundamental principles and the degree to which these principles were achieved and developed in different documents by years are given in Table 1 above.

The Budapest-Vienna Declaration, signed in 2010, officially announced the creation of the European Higher Education Area, thereby summing up the results of the first 10 years. This declaration outlined the contours of the EHEA: today it is a recognition of the diversity of missions of educational organizations that exist in the knowledge society; commitment to the ideas of academic freedom, autonomy and responsibility of higher education organizations; student-centered learning, student mobility, transparency and comparability of systems, incompleteness of the initiated reforms. However, we are more interested in the issue of quality assurance institute.

In 2003, at a meeting of Ministers for Education of the Bologna process in Berlin, the issue of creating national quality assurance systems for higher education was first questioned. Ministers assigned the European Network of quality assurance (ENQA), in collaboration with the European University Association, the European Association of Higher Education Institutions, the European Student Union, to develop harmonized standards, procedures and methodologies for assessing quality, as well as external procedures for assessing quality assurance systems and accreditation bodies. The underlying principles in this process were clear definition of the responsibility of bodies and institutions involved in the process; quality assessment based on the adoption of the results of internal self-evaluation, including external assessment involving students and other stakeholders; international participation, and international cooperation.

By 2005 the ENQA had developed and introduced the first generation of European Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG). Although the document has the word “standard” in its title, it does not have a strict prescriptive character and does not imply strict execution. The standards determined that “... the responsibility for guaranteeing the quality of higher education is, first and foremost, vested in the educational institutions themselves, and thus creates the basis for the real responsibility of the academic environment within each state”. The authors of the document determined its purpose in assisting and supporting educational organizations in developing their own quality assurance systems. The document consisted of 3 parts: an internal quality guarantee for an educational organization, an external quality guarantee for higher education, and standards for accreditation agencies.

The following principles of the European Standards and Guidelines for Quality Assurance in the European Higher Education Area became fundamental for HEIs while establishing their quality culture and striving for enhancing the value of education:

- initial accountability for quality and its guarantee rests with education providers;
- educational organizations have the right to independently develop procedures by which accountability achieved;
- quality assurance is accomplished applicable to reporting and in order to advance the educational processes used in a HEI;
- quality is a multidimensional concept and can only be revealed through an extensively comparative analysis with international systems;
- any processes should not impede the maintenance of diversity and innovation within the educational system.

This was the first document that was reissued ten years later to the conference of Ministers for Education of the countries participating in the Bologna process, held in Yerevan in 2015, which introduced concepts such as...
quality assurance and quality culture. Having undergone some changes, the document, nevertheless, remains a fundamental tool for systems that build a quality culture within educational organizations.

At the meeting in Paris on May 24-25, 2018, progress in the formation of the European higher education area over the past two decades was noted. The document states that for further development of mobility and recognition in the European higher education area it is necessary to promote the automatic recognition of comparable qualifications for education awarded in one country of the European higher education area, in other countries in the interest of access to continue training and enter the labor market.

3. Changes in the quality culture in universities

A comparative analysis of two generations of standards (ESG) showed that the changes became a logical reflection of the implemented structural reforms: the adoption of a pan-European and National Qualifications Frameworks, a paradigm shift in the content of the educational program, the work of international recognition centers for qualifications, the need for scientific and innovative developments, an increased role for students, and an increased responsibility for educational services to society. In 2005, the beginning of work was laid, which was to become the foundation for building the policies of the states participating in the Bologna process in the field of improving the quality of education, its competitiveness and comparability. Back in 1998, the Sorbonne Agreement emphasized the importance of education in building innovative ecosystems “...Europe is not just a euro zone, but also a territory of knowledge”.

The first generation of ESG endowed educational organizations with great rights and freedom in determining a development strategy and choosing the principles of quality culture. Along with this, the document identified different levels of the quality assurance system. Thus, the 2009 European Commission report on progress in the field of quality assurance described the requirements for systems and proposed building policies at three levels: international, European and national. The international level implied an increase in the number of participants in national agencies in associations. At the European level, the creation of the European Register of Education Quality Assurance EQAR was envisaged. Work at the national level was meant to be towards the further dissemination of ESG, the creation of a quality assurance infrastructure, and the involvement of the academic community, students and business representatives in quality assurance procedures. Although there has long been the International Network for Quality Assurance Agencies in Higher Education (INQAAHE) at the international level since 1991, the practice of the European Registry was new. The creation of such a registry pursued the following objectives:

1. to contribute to the mobility of students and ensure trust in educational organizations;
2. to limit the merge of fictitious organizations for giving diplomas, pursuing exclusively profitmaking;
3. to expand the right of educational organizations to choose any accreditation agency from the list included in the register;
4. to create a tool for quality control of the activities of quality assurance agencies and build trust in them from the state and society.

Being a member of the Bologna process EU countries are much influenced by the European Standards and Guidelines, which to some extent contributed to the improvement of state accreditation procedures (Ivanicka and Tomlain 2015). However, the influence may not be crucial and some of the principles laid down in the fundamental documents of the Bologna process have not yet been implemented in the national quality assurance procedures (Kushnir 2019). The structural reforms of the Bologna process today have four domains:

- **Qualifications Framework** - National qualifications frameworks that have passed the audit procedure for compliance and compatibility with the EHEA European Qualifications Framework;
- **Quality assurance system**, built on the principle of improving the educational process and including the mandatory elements of internal, external quality assurance, meeting the requirements of ENQA/EQAR;
- **Recognition**, implying the recognition of foreign diplomas, degrees and periods of study (official training); recognition of informal and informal periods of study;
- **Transparency** - the essential is the use of transparency tools such as: high-quality reports on the educational program; a description of the programs in terms of learning outcomes; Diploma Supplement; use of ECTS; reports of external expert commissions.

National and European models of quality assurance have slightly changed since the introduction of the first generation of ESG, but fundamental rule remained unchanged: all forms and procedures of quality assurance
pursue the goal of improving the quality of education. Regardless of the variety of approaches, the principles of assessment should remain unaltered. Independent quality assurance agencies are required in order to make this model a reality. According to the ESG independence is understood as:

- **Organizational independence**: guarantee of independence of the agency from the state, educational organizations and other stakeholders;
- **Functional independence**: freedom and autonomy from third parties, such as the state, educational organizations and other stakeholders, in determining the procedures and methods, nomination and appointment of external experts;
- **Independence of official results**: despite the fact that students, representatives of the business and academic community are involved in quality assurance procedures, agencies are fully responsible for the final results of these procedures.

Today many EU countries are represented by state or independent agencies in the international arena of quality assurance. Having undergone the necessary self-evaluation procedures, the visit of an external expert panel, the description of the visit’s results and the publication of the report, the agencies may be granted full membership in ENQA. It would be logical in this situation to submit documents to the EQAR registry, but the story might always have an alternative ending. However, we should keep in mind that full ENGA membership does not imply full compliance with all ESG standards and recommendations, and the commission’s report always include recommendations for improvement and critical comments on the functioning of the national agencies. Among the main comments that should be eliminated by the next visit of the expert panel, there have been remarks about the lack of independence of accreditation agencies from governmental bodies in both organizational and functional aspects. It is assumed that essential structural changes in the legislative framework will fully demonstrate compliance with the ESG.

Having analyzed the ENGA reports on external reviews of the performance of national quality assurance agencies we may conclude the following:

- State accreditation does not take into account the efficiency of the processes of internal quality assurance systems.
- The requirements of state accreditation should set more ambitious goals, and bring quality indicators in order to encourage universities to develop a quality culture, and to ensure that state accreditation serves as a valuable external tool that contributes to enhancing the internal system.
- Not always international experts and students are members of the assessment procedure, which now has become a prerequisite in the new generation of the ESG.
- Some experts are not enough qualified to participate in the accreditation procedure. They still tend to be subjective rather than differentiate internal quality system problems from national system-wide problems.
- The results of expert opinions are not published. The university does not have the right to comment on the conclusions.
- In some cases, quality assurance agencies are an executive body, who are involved in the selection, certification of experts, approve the composition of expert panels for accreditation. They makes decisions on accreditation.
- Reports of external reviews sometimes are not published, they are given directly to the university. Students, employers and other stakeholders are not able to read the results of the review.
- Some systems show that they lack efficient follow up procedures except for re-accreditation every five-six years.

All problems mentioned above are system wide and cannot be resolved within the framework of the existing legislation. More details of the proposal for improving the regulatory framework will be discussed and elaborated in further research.

### 4. Conclusions

All in all, the Bologna Process constituted a milestone in changing the quality culture and mindsets of leaders from higher education institutions in Europe and beyond (Lacatus 2013). Looking back at its origins and assessing the 20 years of its existence and operation, one cannot but admire its achievements and impacts on education, in general, and on higher education, in particular.
Further steps to strengthening the Bologna Process are on their way. The Member States of the Bologna Declaration are committed to ensuring the further development of quality assurance mechanisms and national qualifications frameworks. The Berlin Communique, which increased the number of countries to 40 members, was adopted in 2003 and emphasized research, training and interdisciplinarity to maintain and enhance the attractiveness of higher education in Europe. For the next 15 years, the number of countries participating in Bologna Process has been growing. The project seems to be viable and it attracts new members and funding, as well as expanding in terms of overseas partnerships.

Higher education system of today is changing due to a number of prerequisites: world countries are joining the Bologna process, which entailed a change in the legislative and regulatory framework, states cut funding, and industry is optimistic as regards to the quality of the results of training of graduates of educational programs. The higher education system has to do a lot of work to bring it closer to the world of labor, which should be based on improving the quality of educational programs that reflect the real needs of the socio-economic environment of the territory. The degree of effectiveness of the implementation of this process in the future will determine the innovative country’s economy.

The basis of the innovation process is the human capital, associated with creation, implementation and further use of innovations. According to the annual Global Innovation Index (GII) report, which is jointly prepared and published by Cornell University, INSEAD Business School, and the World Intellectual Property Organization (WIPO), today there are a number of countries that have been leading in the global study. These countries are seen as initiators and leaders of innovation. The main factor determining the country’s innovative capabilities is human capital related to innovation. Other factors: technology and capital, which influence the formation of innovative processes, also correlate with the human factor. Therefore, a quality education system is crucial for creating the foundation of an innovative ecosystem.

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