

Bologna revisited – more relevant than 16 years ago

Session Post-Bologna Education – What Balance?

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Introduction

Back in 2002, on the 28th June, here, in this City of Coimbra, I delivered a conference where I said that Bologna represented a moment that could not be lost for the reforming of the Portuguese System of Higher Education (Feyo de Azevedo, 2002). I had in mind two strong ideas (i) the need for an internal reform in itself; (ii) the need for convergence with the neighbouring European countries. 16 years after this milestone that was the signature of the Bologna Declaration, indeed it is worthwhile to revisit the process, stating immediately that, yes, I still take this as a very important process for reforming our system, and yes, and somehow as expected, it fell behind what I would like to see it achieving, namely because there was not enough political power to carry out and take further away the reforms, namely in the academic issues that I shall discuss below. But the good news is that the train is moving...

The Process

Bologna should be discussed in three main dimensions: political, academic and economic. Considering the process of globalization, facing policies of mass education obviously relevant for the World, considering the significant change in motivation and concepts of life of young people, considering the opening of global job market opportunities, considering the threats (simultaneous opportunities) of education without boundaries, considering the new instruments for teaching and learning and finally considering the global economic competition with the far-east countries (which are not anymore far!), it seemed clear to me, from the very beginning, that the Bologna Process, or some similar movement, was the way for the future of Europe, for all reasons, namely political and academic. And, indeed, slowly, but steadily, I see the influence of this movement in other parts of the World.

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The 10 main objectives that were set in the consecutive summits of Ministers of Education, of Bologna (1999), Prague (2001) and Berlin (2003) have to be understood within the three dimensions stated, and they were: Action line 1 - Adoption of a system of easily readable and comparable degrees; Action Line 2 - Adoption of a system essentially based on two cycles; Action Line 3 - Establishment of a system of credits; Action Line 4 - Promotion of mobility; Action Line 5 - Promotion of European cooperation in quality assurance; Action Line 6 - Promotion of the European dimension in higher education; Action Line 7 - Lifelong learning; Action Line 8 – Involvement of Higher education institutions and students; Action Line 9 - Promotion of the attractiveness of the European Higher Education Area; Action Line 10 - Doctoral studies and the synergy between the European Higher Education Area (EHEA) and the European Research Area² (ERA).

With this background, globally, I tend to discuss Bologna in two main groups of concepts and objectives – (i) those related to the structure, which indeed, and wrongly, were for many the main or only concerns of the Bologna Follow-up Group; and (ii) those related to the substance of the Process, the academic issues, really latecomers in the Process, that eventually came in as the bureaucratic group understood that without the academics the Process would not go far.

About the structure

The structure, thinking of Higher Education, not of Research, aimed mainly at promoting cooperation and mobility, having in itself a significant political nature. Somehow, the setting of the structure represented the basis of the EHEA – the European Higher Education Area, formally announced in 2010, in the Budapest-Vienna meeting of Ministers. Essentially, the structure is constituted by: (i) a framework for qualifications; (ii) a degree system; (iii) a system to measure work (ECTS); (iv) a system for quality assurance. The documents related to these topics were essentially developed and approved back in 2005.

The idea behind this structure is that it was relevant and necessary to build Trust, considering that trust is the basis for cooperation and mobility.

The ECTS system is not yet fully understood and accepted. The ECTS User's Guide was subject of a revision very recently, in 2015.

Equally, the major issue of Quality Assurance has been a source of debate along these last 10 years. The Standards and Guidelines for Quality Assurance in the European Higher Education Area were also subject of a revision in 2015.

² The discussion about the on-going construction of the European Research Area is out of the scope of this talk.

Qualifications frameworks and the related national qualifications frameworks represent a major instrument to build and promote Trust. I shall comment developments concerning a concept dear to me - the concept of a three-layer qualifications frameworks.

About the substance

The academic substance is the heart of the matter, but indeed it took sometime before this issue became an issue in the works of the BFUG (Bologna Follow-up Group). We have to understand the reason- these are mainly academic issues. Here, I see progress, developing steadily, but slowly... and I think that we all know why.

Leaving the political motivations aside, the academic dimension of the Bologna Process somehow should be seen as an anticipation of this main issue, that is the changes in society that led to a young generation, 'the millennials', with an ever growing holistic thinking and with expectations that require adapting of structures, concepts and mindset of those responsible for education.

Let me put forward some main topics, that of course are controversial (to say the least...) for some Academics. :

- (i) Search for new contents, closer to more immediate Societal concerns;
- (ii) Develop new programme structures, linked to a concept of lifelong Learning
- (iii) Develop new methods, changing from
 - a. Teacher-Centred to Student-Centred methodologies, and
 - b. Teaching based on Teacher Inputs to Learning Centred in well defined objectives – Learning Outcomes;
- (iv) Change from Digital Repository Support Systems to Digital Collaborative and Cooperative Systems;
- (v) Adopt new tools for distance and cooperative learning
- (vi) Go for the The Third Wave – Pedagogical qualification of 'Faculty'

In my talk I shall address these and some complementary issues, commenting advances and weaknesses.

Many complementary issues are at stake and they have all to do with the Process that began in 1999 (I would say in 1998 in the Sorbonne). Just a few to provide some answer:

- What is the best environment for this generation of students?
- What will be the role of on-line courses?
- What about hybrid courses?

- How to develop or articulate our classical portfolio of programmes with the necessary offer of lifelong learning studies?

Conclusion

There are weaknesses to overcome, for sure many, such as: we are not yet measuring adequately the learning outcomes' of programmes; we are far from adopting cooperative methods for learning; there is not enough political support to the process.

Globally, in university education the fundamentals, born and developed in research environments, should always be the basis, but the needs of Society in this mass education global environment and lifelong learning must be strongly taken in consideration. The Faculty must understand the need for new pedagogies, resulting from the evolution of the digital technologies, necessarily addressing the concept of 'learning without boundaries and without walls', a very rapid change, hard to absorb by the 'Boomers' (that include professors...) and even by the 'Generation X'.

Today, as in the past, the issue is to train and widen the scope of thinking of young people. The difference from the past and the difference for the future is that 'millennials' will live longer, will work longer, will have to study longer, more and more will have to work away from the original home, indeed will have to think global, just to the dimension of Earth or even beyond...

I think that the Bologna Process has all these issues in mind and has itself gained a dynamics that promotes the required answers to these challenges of the future.

Some references related to the theme of the conference

- Augusti, G. and S. Feyo de Azevedo (2011), *Qualifications Frameworks and Field-Specific Approaches to Quality Assurance: Initiatives in Engineering and Technical Education*, Int. J. of Quality assurance in Engineering and Technology Education, **1** (1), 44-57, January 2011, available in <http://www.fe.up.pt/~sfeyo> (publications/opinion and dissemination papers)
- Bergan, S. (2007), *Qualifications – Introduction to a concept*, Council of Europe Higher Education series No. 6, Council of Europe Publishing, Strasbourg
- ECTS User's Guide 2015, The European Credit Transfer and Accumulation System, Revised version 2015, http://ec.europa.eu/education/library/publications/2015/ects-users-guide_en.pdf
- EQF-LLL (2008), *The European Qualifications Framework for Lifelong Learning (EQF)*, Recommendation of the European Parliament and of the Council, 23 April 2008, available in the site of the European Commission at http://ec.europa.eu/education/lifelong-learning-policy/doc44_en.htm
- ENAE (2015), *EUR-ACE® Framework Standards for the Accreditation of Engineering Programmes*, available in www.enaee.eu
- Feyo de Azevedo, S. (2002), *Notas para Reflexão sobre o Tema Bolonha - Oportunidade Imperdível para a reforma do sistema do ensino superior*, XIV Congresso da Ordem dos Engenheiros,

- Coimbra, 27-29 de Junho, available in <http://www.fe.up.pt/~sfeyo> (publications/opinion and dissemination papers)
- Feyo de Azevedo, S. (2003), *A Respeito da Reforma do Ensino Superior*, in Avaliação, Revisão e Consolidação da Legislação do Ensino Superior (Inquérito Público: Análise e Resposta, Ed. A. Amaral, p. 315-329, CIPES, Pub. Fundação das Universidades Portuguesas, 2003; available in <http://www.fe.up.pt/~sfeyo> (publications/opinion and dissemination papers)
- Feyo de Azevedo, S. (2004), *Os novos paradigmas de formação no espaço do ensino superior e as actividades profissionais*, In Seminário – Reflexos da Declaração de Bolonha, Ed. Fórum Regional do Centro das Profissões Liberais, Coimbra, 13-14 Nov. 2004, p. 27-40, Junho, available in <http://www.fe.up.pt/~sfeyo> (publications/opinion and dissemination papers)
- Feyo de Azevedo, S. (2007), *A Respeito da Reforma Legislativa em curso no Sistema do Ensino Superior – Gestão, Qualificações Profissionais e Garantias de Qualidade*, Ingenium, II Série nº 101, 24-26, Setembro/Outubro, available in <http://www.fe.up.pt/~sfeyo> (publications/opinion and dissemination papers)
- Feyo de Azevedo, S. (2007), *Technical Education – from London to Leuven/Louvain-La-Neuve and beyond*, Keynote speech at the Workshop on “Scientific & Technical Education and the Bologna Process” held on 14 November at the Facoltà di Ingegneria, Università La Sapienza, Roma, Italy, available in <http://www.enaee.eu> (documents)
- Feyo de Azevedo, S. (2009), *High Level Qualifications Frameworks and the EUR-ACE Frameworks Standards – do they fit together?* Invited Conference in the Workshop on Overarching and Sectoral Frameworks, ENAEE, Brussels, Fondation Universitaire, January 22, available in <http://www.enaee.eu> (documents)
- QF-EHEA (2005), A Framework for Qualifications of the European Higher Education Area, Bologna Working Group on Qualifications Frameworks, Ministry of Science, Technology and Innovation, Denmark, available in the site of the Bologna Follow-up Group at <http://www.ehea.info/Uploads/Documents/QF-EHEA-May2005.pdf>
- SGQA (2015), Standards and Guidelines for Quality Assurance in the European Higher Education Area, European Association for Quality Assurance in Higher Education, Revised ESG approved by the Ministerial Conference in Yerevan, on 14-15 May 2015. Available in <http://archive.ehea.info/about>
- WPE-EFCE (2010), EFCE Recommendations for Chemical Engineering Education in a Bologna three cycle degree system, available in http://www.efce.info/Bologna_Recommendation.html