The Bologna Process: A Case Study of Pedagogical Change

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Riassunto: È ormai tempo di considerare l’impatto del Bologna Process, dato che sono passati più di dieci anni dalla data in cui, nel 1999, fu firmata la dichiarazione di Bologna da 30 Ministeri dell’Educazione europei. La EHEA (European Higher Education Area) fu fondata nel Marzo 2010 dagli stati membri, che ora ammontano a 47. Dopo una sintetica presentazione del contesto, il focus del contributo si centra su un case study relativo ad una istituzione di ricerca, l’Università di Stoccolma in Svezia. Questo è un caso interessante per via dell’adozione in tempi ristretti di una progettazione curriculare basata sugli esiti (outcome-based curriculum design) e per la parallela introduzione del sistema di valutazione a sette livelli ECTS (European Credit Transfer System). In questo contesto le resistenze sono state inizialmente piuttosto forti, mentre le conseguenze pedagogiche sembravano lontane dal raggiungimento. Il corpo docente aveva bisogno di formazione per essere preparato a supportare questo tipo di cambiamento. Saranno descritti i corsi progettati per aiutare i docenti e le conseguenze delle riforme verranno discusse criticamente. Saranno inoltre indagate le somiglianze e le differenze tra l’impatto del Bologna process in Svezia e in Gran Bretagna. In conclusione, saranno presentati possibili sviluppi futuri per la formazione superiore nell’area europea.

Abstract: It is timely to consider the impact of the Bologna Process, as it is over ten years since the 1999 Bologna Declaration was signed by 30 European Ministers of Education. The European Higher Education Area (EHEA) was launched in March 2010 by the member countries, which now number 47. Following a brief outline of the background, the focus is on a case study of one research-intensive institution, Stockholm University in Sweden. This is an interesting case because of the quick adoption of outcomes-based curriculum design and the parallel introduction of the seven-step European Credit Transfer System (ECTS) grading scale. In this case, resistance was initially rather strong as the pedagogical consequences of these reforms were far-reaching. Academic staff needed training to prepare them to implement these changes. Courses designed to help them will be described and the consequences of these reforms will be critically examined. The similarities and differences between the impact of the Bologna process in Sweden and England are also mentioned. Finally, possible future developments in the European Area for Higher Education are presented.

Keywords: Bologna process, higher education, pedagogical change, curriculum design.
Introduction

The aim of this study is to consider the possible impact of the Bologna Process more than ten years after the Bologna Declaration was signed in 1999. After an overview of the background, the focus moves to a comparison between approaches to the Process in two northern European countries, England and Sweden. A detailed account of reforms at Stockholm University in Sweden is provided. A case study of one department’s adoption of an outcomes-based system with a seven-step criterion-referenced grading scale illustrates the potential for reform initiated to accommodate the requirements of the European Credit Transfer System (ECTS).

Background: The Bologna Process

Following the 1999 Bologna Declaration, the European Higher Education Area (EHEA) was set up through the Bologna Process. Very different systems of higher education have adopted «transparent systems based on three cycles: Degree/Bachelor - Master - Doctorate» (European Union, 1999) in the interests of convergence.

The six action lines of the Declaration were designed to promote the mobility of teachers, researchers and students, to ensure that teaching was of a high quality, and to embed a European dimension into higher education (HE). In summary, the action lines are:

1. The introduction of easily recognisable and comparable academic degrees and a shared diploma supplement to improve transparency;
2. A system based essentially on a first three-year cycle and a second cycle (Master’s level) built on the first;
3. The European Credit Transfer System (ECTS) so that credits can be accumulated and transferred;
4. The elimination of obstacles to freedom of movement to enhance mobility;
5. Cooperation on quality assurance;
6. Increase the European dimension of study in HE.

Despite these aims including the desire to develop quality through cooperation across the EHEA, individual countries have full autonomy regarding the content and organisation of HE. It is therefore interesting
to follow how the six actions have shaped HE since 1999, as the steps taken have essentially been voluntary. Institutions with a strong European identity and a willingness to change and develop are arguably more likely to take the actions listed above and adapt to the Bologna Process. It has been suggested that those with a more international identity, encompassing areas outside Europe, may have a weaker European identity, and that the agenda of «international attractiveness might undermine the overall Bologna agenda» (European Students’ Union, 2010a, 15).

For the purposes of this study, the focus will be on the first three actions, especially the ECTS. The reason for this choice is that the adoption of the ECTS is a concrete action which has an impact on the way institutions approach teaching, learning and assessment. The elements of the ECTS are in principle relatively easy to introduce locally. For many institutions, the ECTS has been the first step in the Bologna Process so that «the three-cycle system and the ECTS are among the prime examples of successes of the Bologna Process» (Ibidem, 5).

Figure 1. *The Bologna Process* (European Students’ Union, 2010a)
Overview: European Students’ Union on the Bologna Process

A study of the European Students’ Union (ESU) analysis of «ten years of European higher education reform» (Ibidem) is fruitful because the students are not the originators of the European, national or institutional strategies and are free to critique outcomes. The cover image of the document referred to here is reproduced in Fig. 1. The Bologna Process is personified as a huge patched-together monster, regarded with curiosity and fascination by a student, and with terror and horror by an academic. This iconography reflects approaches to novelty and change as they often manifest themselves in the European academy.

The ESU’s overall conclusion is that «the change within the European higher education arena has been drastic» (Ibidem, 3) despite some fundamental difficulties; for instance, diverse understandings of keywords have led to confusion. A major obstacle to mobility has been the «lack of overall financial support for covering the entire EHEA mobility scope» (Ibidem, 5). This is likely to become worse in the 2011 economic climate. It is therefore unlikely that the goal of 20% of students taking part in opportunities for student mobility by 2020 will be attained (Ibidem). As for the three-cycle structure, old degree systems often run parallel to new, so that implementation can be superficial (Ibidem, 8).

Pedagogical change within the Bologna Process has been instigated by the introduction of outcomes-based learning. However, as the European Students’ Union (ESU) study establishes, implementation is patchy at best (see Fig. 2). An important consequence of outcomes-based approaches is their emphasis on “what the student does” (Biggs-Tang, 2007) leading to student-centred learning (See also European Students’ Union, 2010b). Active student learning is generally effective (Morton, 2006; Prince, 2004). However, resistance to change and a shortage of teacher education for academic staff have often prevented the adoption of innovative teaching methods (European Students’ Union, 2010a, p.109). Fig. 2 nevertheless indicates that some institutions have implemented outcomes-based learning and the case study which follows illustrates how this can be successfully done.
A comparison of approaches: the United Kingdom (UK) and Sweden

The United Kingdom

The population of the UK is around 62 million and it has one of the largest economies in the European Union. The “knowledge economy”, «based upon the effective utilisation of intangible assets such as knowledge, skills and innovative potential» (ESRC, 2007) is vitally important. Around 50% of employees are engaged in this sector and therefore need a high level of education, not least for research and development, so the universities are central to the continuing prosperity of the nation.

Attitudes to the Bologna Process are influenced by UK perceptions of their role as «a European leader in higher education» (House of Commons, 2007, §84). However, it has been recognised that active participation in the Bologna Process is advisable because «[…] international students can now find very high-quality programmes, taught in English, at excellent universities, for little or no fee» (Ibidem, §88) elsewhere in Europe.

On the level of curricular reform, outcomes-based syllabi, benchmark statements, and easily-converted assessment systems usually based on percentages are all thoroughly embedded in UK higher education. For this reason, it is simpler to map the ECTS onto existing structures without reforming these aspects of UK HE.
Sweden

Tertiary education is also important to Sweden, where considerable funds are invested in education, research and development. In fact, Sweden is exactly the type of country where the programmes taught in English mentioned in the House of Commons report quoted above are to be found. There are no tuition fees for home and EU students and in 2008 there were as many as 24,000 Swedish students studying abroad out of a population of 348,000 students. The total population is around 9 million so the proportion of students is high. The country is prosperous and has not been adversely affected by the economic downturn.

On the more technical level of curricular reform, Sweden has had to introduce outcomes-based approaches, and has done this with considerable energy on a national level so that curricula have become easier to adapt to the Bologna Process. The same willingness to reform has been shown in the careful formulation of assessment criteria for the criterion-referenced assessment system. The adoption of the ECTS seven-step scale is becoming widespread across the HE sector so that comparability and student mobility can be enhanced. These issues will now be more closely elucidated through the examination of a Swedish case.

Case study

Data gathering and setting

The setting of the case study is Stockholm University in Sweden. The data originates from 2005-06 when I worked as an educational developer at the University. Follow up data was studied in 2010 using electronic documentary sources.

The Bologna Process, ECTS and pedagogical change at Stockholm University

Swedish higher education institutions (HEIs) enjoy a high degree of autonomy. Their adoption of Bologna reforms is therefore uneven. At Stockholm University, however, the head of the University, the Rektor, was a Bologna pioneer, initiating far-reaching top-down change in 2005 based on the decisions detailed in Table 1.

The timetable for the introduction of these three elements of the ECTS, the cycles, outcomes-based course design, and the seven-grade scale with written grading criteria, was demanding for staff. The roots of this reform
lie in the 2003 Berlin Communiqué which specified the aim «…to elabora-
torate a Framework of comparable and compatible qualifications for …
Higher Education systems, which should seek to describe qualifications in
terms of “workload”, “level”, “learning outcomes”, competencies and pro-
file» (European Union, 2003, 4).

Table 1. Stockholm University Rektor’s decision of 4 November 2005

<table>
<thead>
<tr>
<th>Year</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2006</td>
<td>In future, all courses and programmes will be identified as belonging to the first cycle (undergraduate level) or second cycle (Master’s level).</td>
</tr>
<tr>
<td>2007 and spring 2008</td>
<td>A course outline including intended learning outcomes must be written for each course.</td>
</tr>
<tr>
<td>From autumn 2008</td>
<td>A goal-related seven-grade marking scale with written grading criteria linked to the intended learning outcomes in the course outline will be introduced.</td>
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</tbody>
</table>

These changes were introduced at Stockholm University partly because internationalisation is a priority. 88% of students on Master’s programmes came from outside Sweden (not only from the EHEA) in 2007-08.

Academic staff are not always amenable to reform (Trowler-Bamber, 2005) and may traverse considerable “discomfort zones” (Fullan, 1991) before change is implemented. Fullan identifies general pressure to change, as evident in the Stockholm University Rektor’s decision, as only one factor which may eventually lead to adoption. Staff also need support in carrying out that change, they need to work with colleagues to implement change, and they may vacillate between resisting and accepting change. Often, they are obliged to change behaviours before they believe in the advantages of the innovations involved. They may eventually come to perceive the advantages of change, and in Fullan’s (1991) terms, to believe in it.

In this case, support was provided in the form of workshops, opportunities for consultancy and online resources. Collegiality led to small groups of academic staff working together to write learning outcomes, course outlines, and later assessment criteria. Initially, profoundly negative reactions were voiced, especially as regards the seven-grade scale. Staff behaviour initially changed because of coercion. Eventually some advantages in moving from the original three-grade scale (pass, fail and distinction) to seven grades were perceived. Fullan’s (1991) notion of change in belief following change in behaviour was often in evidence.

Universities are complex organisations. The cultures in departments
may differ considerably. We now “zoom in” on the process of change in the Department of Psychology at Stockholm University. This department was an early adopter, despite reluctance among some academic staff. Educational developers from the University’s Centre for Learning and Teaching were invited to help them to write intended learning outcomes (ILOs), and prepare to adapt to the outcomes-related seven-grade scale and written grading criteria. The first workshop took place on 20 January 2006, a short time after the Rektor’s decision.

What did this change involve for the individual university teacher? The first step was to formulate intended learning outcomes (ILOs) for their courses. ILOs are written descriptions of what the student is expected to be able to do to show their knowledge and understanding, skills and competencies, and in Sweden also their “värderingsförmåga och förhållningssätt”, judgement and approach. Approximately six to eight outcomes per course are considered about right, and the aim is that these should lead to the active demonstration of core knowledge and skills.

Teachers in the Department of Psychology were introduced to the various components of learning outcomes which were then illustrated using a table similar to Table 2. It is important to select examples from a Department’s own current courses. The left-hand side of the table exemplifies the content- and teacher-focused knowledge transmission model. The right-hand side of the table shows how course objectives can be reformulated to focus on active student learning. Student representatives at the first workshop reacted enthusiastically to this difference, commenting “at last we understand what we need to be able to do!”.

Table 2. From teacher-focused knowledge transmission to student-focused active learning

<table>
<thead>
<tr>
<th>COURSE OBJECTIVES 2006 and before</th>
<th>INTENDED LEARNING OUTCOMES 2007/Spring 2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>NEUROPSYCHOLOGICAL THEORY AND DIAGNOSTICS</td>
<td></td>
</tr>
<tr>
<td>The aim of the course is to provide:</td>
<td>After completing the course, students are expected to be able to:</td>
</tr>
<tr>
<td>Detailed insights into neuropsychological theory concerning adults, with illumination of current issues and methods.</td>
<td>Analyse neuropsychological theory concerning adults;</td>
</tr>
<tr>
<td>The course will provide knowledge of the anatomy and development of the nervous system and an introduction to neurological diagnosis in adults and children.</td>
<td>Describe current issues and methods;</td>
</tr>
<tr>
<td></td>
<td>Describe the anatomy and development of the nervous system;</td>
</tr>
<tr>
<td></td>
<td>Carry out preliminary neurological diagnoses in adults and children.</td>
</tr>
</tbody>
</table>

VALUTAZIONE E COMPETENZE
Four years later, in autumn 2010, the course documentation of the Department was studied to see whether the effect of the reform and workshops regarding the adoption of outcomes-based syllabi had been sustained in the long term. It was found that learning outcomes were thoroughly embedded, although they could perhaps have been broken down into more single outcomes in the example in Table 3. There is also a sense of certainty that the student will achieve the intended outcomes. Student success naturally depends on a range of factors which are often beyond the control of course organisers and teachers so a slightly tentative approach is recommended.

Learning outcomes such as those in Table 3 show that students are expected to carry out more complex tasks than simply learning theories and repeating them. Application and evaluation cannot take place without a profound understanding of the scientific theories which students study.

Table 3. Intended Learning Outcomes 2010, Psychology 1, Stockholm University, Sweden (Department of Psychology Stockholm University Sweden, 2010b)

<table>
<thead>
<tr>
<th>On completing this course a student will be able to:</th>
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<tbody>
<tr>
<td>• Apply a scientific attitude and critically evaluate scientific theories and research findings</td>
</tr>
<tr>
<td>• Discuss theory, methods, and results, together with their application in social psychology, biological psychology, developmental psychology, and cognition</td>
</tr>
<tr>
<td>• Integrate the different course components with each other to gain an understanding of psychology as a whole and how different psychological perspectives can complement each other.</td>
</tr>
</tbody>
</table>

There were, however, many arguments against the move to the seven-grade scale. It was feared that students would become grade-focused rather than learning-focused (Dahlgren-Fejes, 2005), that competition between students would lessen the efficacy of cooperative learning, and that the workload for staff would be heavy, both in adapting to the new scale and in using it subsequently. However, it is evident that more universities in Sweden have adopted the seven-grade scale and commentators confirm that it facilitates mobility (see for example Tunestad, 2010).

The process of supporting staff as they were adjusting to the new scale was simplified by a perception that three grades were often not enough. It was unsatisfactory that there was no differentiation between students who had just achieved a pass grade and those who were near a distinction. A basic conversion table was devised to help staff to conceptualise the new grades by comparing them with three-grade scale (see Table 4).
Table 4. From pass/fail and distinction to a seven-grade scale

<table>
<thead>
<tr>
<th>Grade Type</th>
<th>Grade</th>
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<tbody>
<tr>
<td>Distinction+</td>
<td>A</td>
</tr>
<tr>
<td>Distinction</td>
<td>B</td>
</tr>
<tr>
<td>Pass+</td>
<td>C</td>
</tr>
<tr>
<td>Pass</td>
<td>D</td>
</tr>
<tr>
<td>Pass-</td>
<td>E</td>
</tr>
<tr>
<td>Fail/redraft</td>
<td>Fx</td>
</tr>
<tr>
<td>Fail/resit</td>
<td>F</td>
</tr>
</tbody>
</table>

Where grading was regarded as impossible, for instance when psychology students were carrying out a personal psychoanalysis, pass/fail grades were used. These have been retained for certain modules at the Department of Psychology and in other disciplines where appropriate.

Table 5. Master’s Programme, Biological Psychology, autumn 2010 (Department of Psychology Stockholm University Sweden, 2010a) [Author’s translation]

Criteria for Grade B (very good)

- The student is able to use central theoretical and methodological knowledge of biological psychology independently and provide an account of differences and similarities between central terms and theories.
- The student can also weigh up the relevance and limitations of different research methods, and evaluate the reasoning and interpretation of empirical results in the literature.
- The student can search for relevant recent literature which complements the compulsory course literature and can integrate this information in written work.
- The student demonstrates highly developed analytical ability and can synthesise knowledge in ways which sometimes goes beyond the available literature.
- The student has very good oral and written communication skills.

As for grading criteria, none were used prior to this reform. The Department of Psychology now has criteria available to all students. These have been carefully written in some detail as exemplified in Table 5. The formulation of this type of descriptor of the performance required to achieve a particular grade is helpful to students as well as the staff who provide feedback to students on their work and grade it. The thoughtful and detailed formulation of this descriptor and those for the other grades (available via
the link in the reference for Table 5) suggest that profound conceptual change has taken place amongst the teachers in this department. They focus on active student learning and the outcomes of that learning, which are clearly defined as higher order learning. Information has to be carefully considered, processed and applied, as is appropriate at tertiary level.

**Case study conclusion**

This case shows how a combination of the top-down imposition of change, support to staff who are required to implement that change, collegial cooperation, and a growing perception of the advantages of innovation, can work together to achieve significant pedagogical development.

**The future of the Bologna Process**

Kehm’s (2010) overview of the first ten years of the process across the EHEA is informative. The impact of the process on the small scale of a Swedish case is naturally not prevalent in other cases in the EHEA countries. Kehm points out that in «France, Italy, Spain, Germany, and Austria, the implementation process became so bureaucratic and had such negative… effects on study structures that in the winter of 2008/09 students started to protest against the Bologna reforms and their implementation» (Kehm, 2010, 529). Different rates of implementation and additions to the Process are problematic and «tensions and contradictions in the governance and implementation of the reform agenda are pervading the European level, the national level and the institutional level» (*Ibidem*, 530).

The key challenges for the future are to maintain the political will and momentum to continue to develop and implement the process, to support the late joiners in their efforts to make up for lost time, and to ensure that teachers and students alike understand the proposed curricular reforms. If they do not, the reforms are not likely to be implemented, and progress towards the main goals of the process – compatibility, comparability, and competitiveness – will not be made. The case described here is an example of how such understanding among teachers and students can be achieved.
Conclusion

The Bologna Process can have a profound impact on teaching, learning and the assessment of student attainment. However, attempts to achieve comparability through transparency are complex and challenging. Underlying issues are often difficult and controversial among teachers and students alike. There are divergent approaches to the Process among the 47 member countries, ranging from early adopters in Scandinavia to those who have demonstrated against the process in southern Europe.

There are nevertheless many advantages in continuing to develop the Bologna Process. It is particularly significant for nations which have recently achieved the academic freedom countries in western Europe often take for granted.

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