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The Impact of the Bologna Process on the Design of Higher Education Programmes in Europe

Frank McMahon

Abstract: This paper outlines the growing influence the Bologna Process is having on higher education in an increasing number of European countries. Starting in 1999 with relatively modest, tentative proposals for reform in twenty-nine countries, the process now encompasses forty-five countries and has become gradually more ambitious in its scope and more insistent in seeking compliance with its objectives. The potential benefits of the process are outlined as well as the possible negative effects. The paper analyses the “promotion of the necessary European dimensions in higher education,” and in particular, it focuses on the role of student mobility programmes in the creation of a European Dimension. Statistics on student mobility between countries are provided and imbalances and deficiencies are considered. The views of some individual students and ESIB are used to suggest a way forward for the mobility scheme. The paper concludes with some questions about the future of the Bologna process.

Key Words: Bologna Process, Higher Education, University autonomy, Curriculum development, Student mobility; Europe

1. Introduction

The Bologna Process may be dated from the historic signing of a declaration in Bologna in June, 1999 by Ministers of Education from twenty-nine countries of their determination to establish a European Higher Education Area. However, even that simple statement is not entirely accurate: only twenty-eight of the signatories were Ministers (Ireland’s signatory was a civil servant), not all the signatories represented countries (Belgium provided both Flemish and Walloon representatives) and most importantly, the Bologna meeting had been preceded by a meeting of Ministers from France, Germany, Italy and the UK held at the Sorbonne in 1998. Notwithstanding this, the Bologna Declaration launched a major initiative by Ministers of Education to re-structure higher education in Europe through the creation of a European Higher Education Area (EHEA) by 2010. The declaration set objectives towards the achievement of an EHEA as follows:

1. adoption of a system of easily readable and comparable degrees, also through the implementation of the Diploma Supplement, to promote employability
2. Adoption of a system based on two main cycles, undergraduate and graduate; the main cycle lasting a minimum of three years should lead to a degree
3. Establishment of a system of credits - such as in the ECTS system - as a proper means of promoting the most widespread student mobility
4. Promotion of mobility of overcoming obstacles to the effective exercise of free movement for students, teachers, researchers and administrative staff
5. Promotion of European co-operation in quality assurance with a view to developing comparable criteria and methodologies
6. Promotion of the necessary European dimensions in higher education, particularly with regards to curricular development, inter-institutional co-operation, mobility schemes and integrated programmes of study, training and research.ⁱ

2. A tentative start

The objectives may be criticised for their vagueness and the lack of any precision in regard to their accomplishment. In a paper I gave to a conference in Prague in 2001, I concluded that the declaration differed significantly from the agreements that had advanced European unity within the EU.ⁱⁱ While the declaration specified that the first cycle degree should last a minimum of three years, no maximum was specified. The whole process was to be voluntary rather than binding on signatories. The declaration recognised the autonomy of universities and the diversity of higher education provision in Europe. I suggested these factors would tend to weaken the achievement of a common system for Europe. Here I mention my 2001 views, not to congratulate myself on my prescience, but rather to admit to having got it wrong. The Ministers recognised that their declaration was but one step in a process and they adroitly set events in motion in a manner that allowed them to re-visit periodically. They decided they would meet two years later to review progress.

3. Prague, 2001

When they met in Prague in May, 2001 Ministers were able to note that “the goals laid down by the Bologna Declaration have been widely accepted that some countries had already adopted the two main cycles structure and that several others are considering it with great interest.”ⁱⁱⁱ

The Ministers welcomed Croatia, Cyprus and Turkey into the process and emphasised three new points:

- a) The need for lifelong learning policies
- b) The role of students and student representative bodies
- c) The importance of enhancing the attractiveness of European higher education to students from Europe and other parts of the world

The Prague communiqué marked a shift in emphasis by the Ministers towards a more inclusive approach. It included the phrase “universities and other higher education institutions” where Bologna had mentioned universities alone; there is mention of “degrees and other awards” rather than just degrees; and finally the Ministers acknowledged the roles of the European University Association (EUA), the European Association of Institutions in Higher Education (EURASHE) as well as the European Union of Students (ESIB).

A significant contribution to the momentum of the Bologna Process was provided by the decision of the European Commission (EC) to throw its considerable weight behind the process. In particular, the EC ensured that there was an active follow-up group working on the initiatives between the bi-annual meetings of Ministers and that there was finance available, at least among EU member states, to meet the costs of increased mobility of students and teachers as envisaged in the Bologna Declaration.

4. Berlin, 2003

By the time the Ministers assembled in Berlin in 2003, eight more countries had applied for membership, including Russia, thus bringing total membership to forty countries. To give the process further momentum, the Ministers set intermediate priorities for the next two years in respect of:

- a) Quality Assurance: they agreed that a set of standards, procedures and guidelines should be developed by 2005
- b) Degree Structure: all countries to have started the implementation of the two cycle system by 2005
- c) Diploma Supplement: every student graduating as from 2005 to receive a Diploma Supplement automatically and free of charge

The Ministers gave recognition to the Doctoral level as the third cycle of Bologna Process.^{iv}

5. Bergen, 2005

By the time the Ministers met in Bergen, Norway in 2005 they were able to note a good deal of progress on the key issues they identified in Berlin. The standards and guidelines for quality assurance drawn up by the European Association for Quality Assurance in Higher Education (ENQA) were finalised and could be adopted by the Ministers. They felt able to set 2007 as the deadline for completion of the objectives in the fields of the degree system, quality assurance and the recognition of degrees and study periods. A new commitment to the adoption of national frameworks of qualifications by 2010 was agreed together with an overarching European Framework. These latter commitments are by no means trivial since at the time of their meeting only Denmark, Ireland and the UK had frameworks of qualifications in place.

The importance of research was emphasised and the need for structured doctoral programmes and transparent supervision and assessment was agreed. Finally, the number of countries involved in the process increased by a further five, bringing the number to forty-five.^v

6. Possible benefits of the Bologna Process

It now seems likely that the EHEA will indeed be created by 2010, with each of the forty-five member states operating broadly in accordance with the parameters laid down by the Ministers. This will include the provision of Bachelor, Masters and Doctoral degree cycles, a national framework of qualifications in each state and an over-arching European framework. All universities will use the same credit accumulation and transfer system (ECTS), thereby facilitating increased mobility of students within Europe. Already, the EU has provided greatly enhanced funding for student mobility and in

2005 Irish institutions of higher education (HEIs) were asked to double the number of incoming and outgoing students on Erasmus/Socrates programmes.

The new EHEA will also facilitate the mobility of workers, at least within the twenty-five member states of the EU, because of increased recognition of awards. Shortages of skilled manpower in one EU state can be met by the migration of skilled workers from other EU states.

Heads of Government in EU states committed themselves to the so-called Lisbon Strategy in March 2000 to making Europe the most competitive economy in the world. To function, the modern Knowledge Economy needs an increasing flow of highly skilled workers and one aspect of the Bologna Process has been the speeding-up of the flow of graduates from European universities. In countries where traditionally students spent five years on their first degree (for example Czech Republic, Finland, Germany and Italy), new Bachelor degree programmes, generally of three years duration, have been introduced. It was a stipulation of the Bologna Declaration that the Bachelor degree programmes “must have relevance to the labour market.” Thus, Europe now seeks to have a competitive advantage over other advanced economies by having a better alignment between the output of university graduates and the needs of the economy.

There is growing acceptance of the Bologna reforms among leaders of Europe’s universities. The European University Association has monitored attitudes in advance of each Ministerial conference and has published the results in a series of Trends reports. The most recent, Trends IV published in 2005, found widespread support for the reforms, much more so than two years earlier reported in the Trends III report.^{vi}

This new EHEA may well make Europe more attractive to non-European students who hitherto have flocked to Australia and the USA. Since such students pay the full economic tuition fee, their presence in Europe in increased numbers will boost the finances of European universities.

Other benefits from the Bologna Process will be that quality assurance will become ubiquitous (for example some Russian universities are now introducing QA procedures for the first time) and the international comparability of awards will be facilitated. This latter process will be helped by the introduction of the Diploma Supplement in a format that will be consistent throughout all countries using it.^{vii} It can be readily produced in any European language and employers in all states should come to understand it within a relatively short time.

7. Possible negative effects of the Bologna Process

While the Bologna Process represents a bold attempt by Ministers to create a system of higher education that is both clear and consistent, it is not without difficulties. The most dramatic change has occurred in those countries that previously had long (five years) first degree cycles leading to a Masters degree. These countries, including the Czech Republic, Finland, Germany and Italy have been required to introduce Bachelor degree programmes and these are generally of three years duration. This significant shortening of degree programmes must surely come at a cost in terms of the scope and/or the quality of the degree. When taken in conjunction with the requirement set by Ministers that the first degree must have relevance to the labour market, it must be expected that employers in many European countries are now (or will shortly) experience a radically different type of university graduate starting employment.

In Ireland, where there had traditionally been Bachelor degrees and thus there has not been much change arising directly from the Bologna Process, a new National Framework of Qualifications was launched in October, 2003.^{viii} The launch was preceded by detailed consultations with employer bodies and since the launch there have been strenuous efforts to ensure it is widely understood. But even after almost two years, many employers have very little knowledge of the new qualifications introduced or indeed the framework itself. Those countries that have recently introduced new Bachelor degrees (or are about to) and are now asked to introduce a new Qualifications Framework will have a particular difficulty in communicating the changes to all concerned.

The replacement of Masters degrees by Bachelor degrees in many countries may lead to a less informed graduate coming on to the labour market in those countries. Universities accustomed to providing education over a five-year duration will take some time to adjust to the new regime of three-year degrees. So, initially at least, graduates of three year programmes will not match the standards of their predecessors. The Trends IV report indicated that concern about the employability of first cycle graduates caused many academics to advise students to remain in higher education until the end of the second cycle.^{ix} Where students do enter the labour market after the first cycle, the lowering of standards may be passed on to other countries because of the implementation of the mutual recognition of qualifications through the Lisbon Convention.^x There is a danger that the combined effects of the introduction of the new Bachelor degrees and the Lisbon Convention will encourage a move towards the ‘lowest common denominator’ in the qualifications required to enter many professions.^{xi}

From the start of the Bologna Process the needs of industry seemed to be a priority. Hence, the requirement that the first cycle degree should “have relevance to the requirements of the European labour market” was clearly designed to accommodate the needs of industry. This action, taken in conjunction with other initiatives by the European Commission, will encourage an instrumental approach to higher education, that is an approach in which the needs of industry takes precedence over purely educational needs of the individual and the dissemination of knowledge. In this context, the standardisation of European degrees may well be at the expense of excellence.

One possibility that may emerge from the process is that the Masters degree may become the award that promotes the employability of graduates. For example, the prospectus for Padua University for 2005/06 describes the new structure of degree courses introduced by the “3+2” reform. It describes the purpose of Masters degrees as being “to build on a student’s knowledge and to convert it into specific professional skills.”^{xii} With the trend of 50% of all high school graduates going on to higher education, it may be necessary for graduates to gain a higher degree to distinguish them from the many graduates with Bachelor degrees. Such a development would aid Ministries of Education in those European countries that fully or substantially subsidise Bachelor degree-level study but who require Masters degree programmes to be self-financing. Thus, the burden of financing higher education would shift somewhat from the Ministry (i.e. taxpayer) to the student, without the overt introduction of unpopular tuition fees.

8. The European dimension

As the Bologna Process developed momentum, most of the subsequent attention focussed on the adoption of a system based on undergraduate and postgraduate cycles, since it required major restructuring of degree programmes in many signatory countries. Much less attention has been paid to the objective of promoting “the necessary European Dimensions in higher education” which it hopes will be achieved in respect of curricular development, inter-institutional co-operation, mobility schemes and integrated programmes of study, training and research.

The first question to be asked about the desire for a European Dimension is why is it necessary? One does not find in the USA a desire to promote an American Dimension by facilitating students from MIT to go to UCLA and students from Harvard to spend one semester in Chicago. Similarly, there is no urging of students from Shanghai to go to Beijing and students from Beijing to go to Harbin, all in the name of promoting a Chinese Dimension. Likewise, within European countries there are no schemes to encourage British, French or German students to transfer to other universities within their own countries. One might argue that the need for a European Dimension arises because Europe is not a single state, indeed not even a federal state but rather consists of many nation states. Thus, the promotion of European Dimensions could be seen as a step towards creating a more unified Europe.

Although this paper started with the Bologna Declaration as the origin of the quest for “European Dimensions,” two earlier events deserve consideration. The Maastricht Treaty of 1992 defined a process of European citizenship and, among other things, emphasised the development of quality education and encouraged mobility through the recognition of qualifications. At an even earlier date, the European Commission in 1987 founded the Erasmus programme to promote mobility of staff and students between European universities. Since 1987, more than a million people in the European Union have taken advantage of the programmes to study or train in a country other than their own through the Erasmus programme. The number of countries participating has increased from eleven in 1987 to thirty-one countries now.

For leaders of European universities, the promotion of European Dimensions could pose a problem. Many would argue that the responsibility of university leaders is to promote what is best for their students. This may possibly include a European Dimension but equally it could be an Asian, American or a global dimension. In practice, it does not seem to be such a problem. The implementation of the Bologna Process has been monitored by the European University Association and the results published in four reports on trends in this regard. The most recent report, in 2005 - Trends IV-, found widespread support for the Bologna reforms, much more so than was reported in the Trends III report in 2003.^{xiii}

9. Student mobility to facilitate a European dimension

Ministers of Education, at their meetings in relation to the Bologna Process, have identified student mobility as a key element in achieving a European Dimension in higher education. No doubt they were influenced by the successes of the mobility programmes which pre-dated the Bologna Declaration by some twelve years. Already, over one million students have participated in

Erasmus/Socrates mobility programmes in the first seventeen years of their operation. Table 1 below provides some data for the most recent year for which statistics have been published.

In 2003/04 the Erasmus scheme was extended to thirty-one countries, including the countries of Central/Eastern Europe that were accession or candidate countries for EU membership. A total of 135,586 students spent a period of study in another European country. Of those, more than 85% of the visits were hosted by universities of the then 15 member states of the EU.

Table 1: Erasmus Student Mobility, 2003/04

Country	Students Out	Students Hosted
France	20,981	20,275
Germany	20,688	16,874
Italy	16,829	12,743
Spain	20,034	24,076
Netherlands	4,388	6,733
UK	7,539	16,627
Ireland	1,705	3,587
Other (24 countries)	43,442	34,671
Total	135,586	135,586

(Source: European Commission website^{xiv})

Although Erasmus agreements are designed as exchange programmes, with a target of equal numbers in each direction, a feature of the pattern of visits is the imbalance between numbers sent out and numbers hosted in some countries. Both the UK and Ireland hosted more than twice the number they sent out, probably because those two countries offer programmes in English which can be availed of by nationals of every country. Unfortunately, neither the UK or Ireland is noted for its facility in foreign languages, so both are unlikely to reciprocate in exchange agreements with Finnish, Greek and Polish (to name but three) universities. There are other factors that contribute to the relatively low participation of UK students in mobility programmes with other European countries, as set out in the recent HEFCE Report.^{xv} These include the lack of any plans on mobility in two thirds of UK universities and the greater emphasis given to the recruitment of fee-paying overseas students. The Netherlands also suffers a large imbalance, probably because of its recent development of English language degree courses. Not surprisingly, the Central/Eastern European countries send out many more students than they receive.

The average duration of student visits has increased over the past ten years from 6.4 months to 6.8 months, reflecting the mixture of one semester and two semester visits.

Student mobility has been identified by Ministers of Education as a key tool to be used in achieving the Bologna objective of European Dimensions in higher education. In most countries the Erasmus mobility in 2003/04 corresponded to less than 1% of the respective student population - as an average it was 0.78% - whereas the Socrates objective was 10% of all students to have participated in Erasmus mobility during their degree programme. To achieve the 10% target, approximately 2% (based on five-year programmes) to 3% (based on three to four year programmes) of the student population would have to participate each year. Paradoxically, the new Bologna move towards shorter degree programmes will make the achievement of the 10% target more difficult.

The EU, which has become a key partner in the Bologna Process, has now set the target of doubling the number of students participating in Erasmus exchanges annually. While the EU is willing to increase the funding it provides to meet the new target, it will be challenging because funding has been considered inadequate, compelling students or their parents to subsidise the foreign stay. While this subsidisation is possible for middle class parents, it will become increasingly difficult as universities seek to encourage larger cohorts of students to participate in exchange programmes.

Finally, the further development of student mobility in Europe could be facilitated by the adoption of a more comprehensive policy on foreign language instruction, the development of a fully portable financial support/loan scheme and an EU-wide economic compensation scheme for uneven exchange of admissions.^{xvi}

10. Role of ECTS

The achievement of a European Dimension through curricular development, inter-institutional co-operation, mobility schemes and integrated programmes of study, training and research requires the support of an appropriate credit transfer scheme. The most widely-used system is the European Credit Transfer System (ECTS), based on 60 credit points per annum. Thus, a student from Germany who

opts to spend one semester in a Dutch university would expect to earn 30 ECTS credits which can count towards his/her degree in Germany. A Learning Agreement is required to be signed at the start of the visit and a transcript of the student's achievements provided at the end of the visit. When fully developed, this system will greatly facilitate student mobility (it is already a key component in doing so) but there are some anomalies. For example, the UK has not yet adopted the ECTS scheme while the number of hours of student effort required to earn one credit point varies from 20 hours or 25 hours in different countries. Despite these shortcomings, ECTS has helped to overcome some of the barriers that existed before its adoption, when universities had immense problems translating performance in one country into performance in the student's home institution.

11. Different traditions in continental Europe

There are some traditions familiar to UK and Irish academics which are virtually unknown in other European countries. For example, in the early 1990s I chaired an accreditation board at a higher education institution in Maastricht and was informed it was the first ever accreditation or validation committee to visit that particular institution. And external examiners, so long a feature of quality assurance systems in the UK and Ireland (indeed, long before the words quality assurance were first used in relation to academic courses), are only now being introduced to some Continental European countries. Finally, the notion of a distinction between honours degrees and ordinary degrees is a distinction that had no place in many European countries (or in the USA for that matter). The objective of creating a European Higher Education Area will require all these issues to be addressed.

12. Student accounts of mobility experiences

Student accounts of their experiences abroad, whether given formally in written reports or as informal accounts given to other students, undoubtedly influence the propensity of students to apply for exchange programmes in particular countries. A systematic survey of UK students who had studied abroad for part of their programmes found that

Mobile students generally felt very positive about their foreign experience: 95 per cent thought it had enhanced their personal development, and 90 per cent felt that it was relevant to the development of an international career. Strict academic benefits were stressed less often.^{xvii}

International Student Offices in many universities now post on their websites, as part of the marketing effort to attract students to participate in exchange programmes, accounts by students of their experiences abroad. Such accounts explain the divergences between a university's policy and the actual outcome in regard to exchange programme. For example, Sophie Lenz, a student of the University of Lenz has described the policy of her university to encourage exchanges with universities in South-East Europe and the Balkan states.^{xviii} But very few students went there, preferring instead to go to those countries with the "big languages" (Great Britain, France, Spain). A second reason for not going to South-East Europe was the perception that the countries there were beset by problems of low life-standards, criminality and poverty while the quality of education was poor. She herself overcame these perceptions and spent a short but very happy period at Pecs, Hungary. As a result of her happy experience, an Erasmus semester has since been developed for Graz students at Pecs.

ESIB, the National Unions of Students in Europe, has analysed the progress made in the implementation of the Bologna Process, when looked at through student eyes.^{xix} It is critical of the lack of consistency in European countries to the issue of the European Dimension, concluding that only on joint degrees is there a common ground of understanding. While ESIB advocates other initiatives (more foreign language elements and a European labour market perspective in curricula) it offers no opinion on the role of student mobility in its analysis of the Bologna Process. However, in a comment on the occasion of the issuing of the Bergen Communiqué in May, 2005, Vanja Ivošević, Chairperson of ESIB commented favourably on the lifting of obstacles to mobility which ESIB saw as a priority over the next two years. Her statement went on to advocate further action:

It's good that mobility is on the front in this process as well, but ESIB still feels that more needs to be done, for example by creating a European Mobility Fund.^{xx}

13. Joint degrees

One of the ways in which it was envisaged a European Dimension would be created was through universities collaborating in the development of joint degrees. It was the opinion of ESIB that this was the one area in which there was a common ground of understanding, although the students were critical of the extent to which the joint degrees that emerged were highly selective both in regard to their selection of students and the high fees they charged. There seems to have been more activity at postgraduate level than at undergraduate level. In particular, the well-funded scheme called Erasmus Mundus has generated a good deal of interest, possibly because of the funding of €42,000 per student for a two year programme, €21,000 per student for a one year programme.

Apart from the Erasmus Mundus scheme, there has not been much collaboration in the area of curriculum design in Europe. If this collaboration does not occur very soon, it is unlikely to occur for many years since European universities may be pre-occupied with implementing the changes required in the structure of degrees and the implementation of national frameworks of qualifications. If, however, there is momentum in the trend towards joint degrees, it may spark other standardisations such as agreement on a common calendar. Currently, there are large differences in the approaches taken to the construction of calendars for the academic year. Neither the lengths of semesters nor the start/finish dates are uniform across Europe, despite official encouragement towards increased collaboration.

Where joint degrees are being developed in different European countries, the question of the definition of a joint degree arises. The definitions that emerge can be flexible enough to cover situations where two degree parchments are awarded, where two or more universities contribute modules to a single degree or where two or more universities collaborate in the design of the degree programme. The European University Association has published an important report on the topic in which it welcomed the student mobility aspect of joint programmes.^{xxi} But it also drew attention to the obstacles arising primarily from the shortcomings in existing arrangements for co-operation between European higher education systems. It concluded that there is need for the legislative reform, which was pledged by Ministers of Education in the Berlin Communiqué in 2003.

14. The future of the Bologna Process

The progress made in the implementation of the reforms introduced by the Bologna Process has been considerable and it has been accomplished without any major resistance from the university sector. For that reason, it now seems likely that the Ministers will complete the process by their deadline of 2010. The phrase “complete the process” is a dangerous one since Ministers have shown an appetite for introducing new targets whenever they meet. In 2004, during Ireland’s presidency of the EU, I met the then Irish Minister for Education and expressed my surprise at how smoothly the process had gone. The Minister, who had just chaired a meeting of EU ministers for education, told me that the general mood among ministers was to “go further and faster.” Since then, the Bergen summit introduced the requirement for each country to prepare a national framework of qualifications and adopted the idea of an overarching European framework.

The eleven-year period of the Bologna Process from 1999 to 2010 requires an unprecedented level of co-operation between universities and other agencies to facilitate the implementation of the various initiatives. This is happening at a time of increasing competition globally between universities as they seek to maintain or increase their student numbers, especially fee-paying international students. The General Agreement on Trade in Services (GATS) is being used to open up international markets for universities.^{xxii} Thus, universities may be torn between, on the one hand, continuing co-operation towards Europeanisation and, on the other hand, competition to achieve success in the globalisation battle. Hahn felt that German higher education was for many years headed by the idea of co-operation-based Europeanisation; that efforts at all systems levels were being made to implement the Bologna Process, but that a new competitiveness had emerged. “The achievements of this [Bologna] process at European level can easily become fragile if, too harshly, it turns the co-operative win-win approaches of internationalisation into competitive, unbalanced and nationally oriented global policies ...”^{xxiii} Undoubtedly, one of the objectives of the ministers from the outset of the Bologna Process was to make Europe more competitive in the quest for international students. But the need for a long period of co-operation within Europe may dull the competitive spirit of European universities in the global battle.

A surprising feature of the Bologna Process as it unfolded has been the prompting of European universities to introduce degree programmes in the English language in non-English speaking countries. For example, many new programmes in the Netherlands, Scandinavia and Germany are now offered in English. There is no doubt that this development enhances the attractiveness of the programmes for Chinese and Indian students, who are much more likely to speak English than say Dutch, Danish or German. The development also aids European mobility since students of such English language programmes can move readily within European countries to other English language

programmes. But there must be some doubts about the quality of teaching by staff forced to teach in a language that is at best their second language.

This growing dominance of English language programmes may aid the impression that English is the language of higher education. This in turn may unwittingly facilitate the growth of US providers of international education who will insist on their rights under GATS.

Finally, universities are discovering that the implementation of the Bologna Process makes new demands on resources. For example, the introduction of English language degrees requires investment in new library resources while the issuing of the Diploma Supplement will strain administrative staffing. The question of who will pay for the Bologna reforms has not yet been adequately addressed.

^{i.} European Ministers of Education. 'The European Higher Education Area: Joint Declaration of the European Ministers of Education', Bologna, 1999. (Text available on <<http://www.bologna-bergen2005.no>>)

^{ii.} McMahon, Frank, 'The Bologna Declaration and its Effect on Professional Education in Europe', Anniversary Conference of the University of Economics, Prague, 2001.

^{iii.} European Ministers of Education, 'The Prague Communiqué', Prague, 2001. (Text available on <<http://www.bologna-bergen2005.no>>)

^{iv.} European Ministers of Education, 'The Berlin Communiqué', Berlin, 2003. Text available on <<http://www.bologna-bergen2005.no>>

^{v.} European Ministers of Education, 'The Bergen Communiqué', Bergen, 2005. (Text available on <<http://www.bologna-bergen2005.no>>)

^{vi.} *Trends IV* (2005) and *Trends III* (2003) reports prepared by Reichert and Tauch for the European University Association.

^{vii.} The Diploma Supplement is a detailed transcript of the performance of a graduate in each year of his/her programme, together with a description of the system of education in the country in which he/she studied. It is designed to assist employers or other higher education institutions to interpret the holder's qualifications.

^{viii.} Details of Ireland's National Framework of Qualifications are available at the website of the National Qualifications Authority of Ireland at <www.nqai.ie/overview.pdf>

^{ix.} *Trends IV* report (2005) by Reichert and Tauch.

^{x.} The Convention on the Recognition of Qualifications in the European Region developed by the Council of Europe and UNESCO and adopted April, 1997 in Lisbon.

^{xi.} The Bologna Declaration excluded some areas from its remit including medicine.

^{xii.} Studying in Padua 2005/06, universita degli studi di padova. A bi-lingual guide obviously geared to attract international students.

^{xiii.} Trends Reports prepared for the EUA by Sybille Reichert and Christine Tauch, 2003 and 2005.

^{xiv.} EU Commission website,

<http://europa.eu.int/comm/education/programmes/socrates/erasmus/stat_en.html>

^{xv.} HEFCE Report on International Student Mobility prepared by Sussex Centre for Migration Research, University of Sussex and Centre for Applied Population Research, University of Dundee, July 2004.

^{xvi.} Anne West, of London School of Economics, 'New Perspectives for Learning', PJB Associates, London, 2000.

^{xvii.} HEFCE Report op cit.

^{xviii.} Sophie Lenz, University of Graz, Erasmus student in Pecs, Hungary in 2003.

^{xix.} ESIB's Bologna Analysis 2005-Bologna Through Student Eyes.

^{xx.} Vanja Ivosevic, chairperson of ESIB, in a comment published on the ESIB website on the issuing of the Bergen Communiqué on 20 May, 2005.

^{xxi.} EUA report on Developing Joint Masters Programmes for Europe, Brussels, 2004.

^{xxii.} GATS is the abbreviation for the General Agreement on Trade in Services; it gives countries the right to sell their services, including education services, in other countries.

^{xxiii.} Karola Hahn, writing in 2003.