



# Bologna Promoters' Training Seminar on the Three-Cycle System

## Draft Brochure



Education and Culture

## **The Three Cycle System and Qualification Frameworks**

*The Bologna Process started in 1999 as an intergovernmental process when twenty nine European education Ministers signed a declaration with the aim of establishing of a European higher education area (EHEA) by 2010. Today, not only are a total of 45 countries involved, but the Bologna Process also affects the activities of all higher education institutions and academics across Europe. In order to facilitate this process, the European Commission has established a network of Bologna Promoters whose task it is to help institutions with the implementation of issues on the reform agenda, namely the three cycle system, recognition and quality assurance.*

*This brochure focuses on the three cycle system and on qualification frameworks. Whereas the three cycles are the basic elements of the Bologna Process and comprise programmes and associated qualifications at three levels, qualification frameworks are tools that are designed to make the relationship between these qualifications transparent.*

## **1. Clearer course and qualifications patterns in higher education**

A central aim of the Bologna Process has been to rethink the way successive stages of higher education are structured in European countries without sacrificing the diversity of different systems. The word 'cycle' is now used to denote each of the three main stages associated with the Process. Within this overall framework, higher education is divided into first, second and third cycles which lead in turn to the three consecutive qualifications of a Bachelor's degree (as the first cycle qualification is known in most European countries), a Master's degree, and a doctorate.

Countries which have committed to the Bologna Process have sought to implement this change in order to help create a clearer identity for higher education in Europe, as part of the construction of the European higher education area by 2010. The three stages or cycles are a simple alternative to the wide variety of national courses and qualifications that existed before 1999. By transforming provision in higher education into a more consistent pattern which is comparable across different countries, it is easier to take forward the arrangements for academic recognition and the mobility of students and teachers successfully developed under the Erasmus mobility scheme and the European Credit Transfer and Accumulation System (ECTS).

For all students, employability has now become a crucial issue, and the three cycle qualifications are better geared towards the labour market. In the long term, the simpler structure will enable greater numbers of people to improve their chances of employment as they become more mobile with more widely

recognised qualifications. The new structure will also provide a more coordinated approach to enhancing the quality of provision in universities and other higher education institutions. As a result, European higher education is set to become more internationally competitive and attractive.

The three-cycle structure is now also linked to the development of so-called Qualifications Frameworks. Countries involved in the Bologna Process have adopted an umbrella-type framework for qualifications in the EHEA with the aim of further enhancing transparency, academic recognition and mobility. It is intended that this 'overarching' EHEA framework should provide reference points for the compatible national or regional qualifications frameworks that these countries have also agreed to develop. Further, sectoral qualifications frameworks are being developed for certain professional fields. Meanwhile, the European Commission is proposing a European Qualifications Framework (EQF) for lifelong learning, including higher education, which may become an EU recommendation in 2007. All these developments and their implications are further discussed below.

## **2. From a two to three cycle system**

As 2010 gets closer, the plan to base higher education courses in Europe on a simpler three-cycle structure is steadily taking shape. Since the start of the Bologna Process, the countries involved have concentrated primarily on the first two cycles separating undergraduate and postgraduate study. Firstly undergraduate Bachelor-type courses or programmes should last at least three years (i.e. they are associated with a minimum of 180 ECTS credits) and should

primarily lead to a qualification recognised by employers in the labour market. However, the first-cycle qualification also has to serve as a basis for second-cycle Master programmes. Within the Bologna process, the Master degree has been defined in Helsinki (March 14/15 2003) as normally carrying 90 - 120 ECTS credits of the appropriate master profile, with the minimum requirement amounting to 60 ECTS credits. The need to have flexibility at the master level, as well as at the Bachelor level, was emphasised in this agreement.

At their 2003 Berlin meeting, higher education ministers in the Bologna countries firmly agreed to start implementing a two-cycle structure by 2005. By the time of their meeting in Bergen in May 2005, the vast majority of the 40 countries concerned at this time had either introduced the structure or taken definite preparatory steps in order to do so. Half of all students in these countries were enrolled in courses under this system, which had been adopted in most fields of study. Significant progress was also reported in applying the structure to programmes in subjects thought to be less easily adaptable to the new system, such as law, architecture and engineering.

Furthermore, the Ministers agreed at the Berlin meeting to include doctoral programmes and qualifications as the third cycle in the reformed structure. Ministers drew attention to the significance of doctorates in research and research training, and the contribution of interdisciplinary training in particular to better quality and more competitive higher education in line with the Lisbon strategy for 2010. Basic principles for doctoral programmes were agreed at a Bologna Seminar on the European Knowledge Society in Salzburg. They have become known as the Salzburg 'Ten Basic Principles' for doctorates and

comprise amongst other points a common understanding regarding focus, anchoring, diversity and duration of doctoral programmes. While doctoral training remains ‘the advancement of knowledge through original research’, doctoral programmes increasingly have to meet the needs of a wider labour market. The Salzburg Principles also contain practical advice regarding the contractual framework for the shared responsibilities between doctoral candidates, supervisors and institutions.

### **3. Length and workload of cycles**

Each of the Bologna study cycles is meant to last a given length of time but there is some room for flexibility. The agreed duration of the undergraduate Bachelor-type stage is a minimum of three years. While master degree programmes normally carry 90 - 120 ECTS credits, the minimum requirements should amount to 60 ECTS credits. Exceptions to this agreement occur most often in medicine, but sometimes in other subjects depending on specific features of the national context. For the doctorate there has been less focus so far on reaching a common agreement on length, with most doctorates currently lasting three or four years.

Greater consistency in the length of cycles means that they are more readily comparable for recognition purposes and thus more likely to encourage increased international academic mobility.

However, much more important than the nominal length of the cycles is the associated workload. The workload concept mirrors the shift from a teacher-

centred to a student-centred approach. In general, 60 ECTS credits are associated with a full-time year of study. Credits can be acquired through different forms of learning, e.g. lectures, seminars, independent study and project work. Credits can only be obtained after successful completion of the work required and an assessment of the learning outcomes achieved.

#### **4. The Development of Qualification Frameworks**

The three-cycle course structure in the Bologna Process has more recently become part of the broader issue of European Qualifications Frameworks. A Qualifications Framework is a written guide to qualifications in one or more education systems at one or more levels, and how they relate to each other. It describes, classifies and maps systematically on the basis of what learners with particular qualifications should know and be able to do – the ‘learning outcome’ – in terms of their knowledge, skills, abilities and/or competences. This information can be very useful for academics working on curriculum reform, as well as for employers, policy-makers and others who for different reasons need to know more about what qualifications represent. The information thus also constitutes a helpful way of thinking about the purposes of education in general.

Qualifications frameworks are being developed in Europe but also in other parts of the world. They differ widely and involve various technical concepts and terms. Their main unit of content is called a descriptor. Descriptors refer to levels and outcomes applicable to virtually all fields of study (generic descriptors), or to just one or two subjects or types of qualification, such as those with an applied vocational emphasis (specific or profile descriptors). They may also be used to

compare qualifications between as well as within countries, so they have to be internationally understood despite these technical aspects. A well-known set of generic descriptors are the Dublin Descriptors which serve as a basis for the level descriptors in the qualifications framework for the EHEA. Subject specific descriptors have been developed within the Tuning project in which up till now more than 135 higher education institutions in more than 27 countries have been involved.

## **5. The potential benefits of Qualification Frameworks**

Qualifications frameworks rely on a rather dry technical vocabulary that may blur their real practical meaning and purpose. The full significance of terms like 'learning outcomes', 'generic descriptors' and 'overarching qualifications frameworks' are often not immediately apparent even to those for whom they are intended. Yet their use cannot be totally avoided once they have been selected to express particular concepts.

A comparison with maps and atlases may help to demystify such terms. Learners are like travellers who need maps to find out where to go, investigate what is involved and determine the likely outcome. On one possible route they may cross mountains and enjoy magnificent scenery, but a duller main road will get them to their destination more quickly. The focus of maps depends on their geographical coverage. But the conventions used are compatible overall and consistent with an easy switch from general to more immediate operational concerns and vice versa. Thus tourists will consult an atlas when considering where to go abroad, discovering how to get there and what to expect.

Like maps, qualifications frameworks – whether national or international – are meant to bring different options and benefits for students and others into sharper relief. They too rely on a range of quite sophisticated technical conventions and descriptions and if these are compatible the end result is worth it. Similarly, they are intended to offer clear precise information, enabling learners to choose courses more flexibly, to secure recognition of their qualifications and possibly study abroad. By the same token, frameworks should provide a platform for quality assurance, which can only be consistent and meaningful when all parties agree on the purpose of courses and qualifications in the first place.

## **6. The Qualifications Framework for the EHEA**

At the May 2005 Bergen meeting, the Bologna Process led to the adoption of an ‘overarching’ or umbrella framework of qualifications in higher education for the entire EHEA. Its purpose is to reference and help compare the national higher education qualifications frameworks that the appropriate public authorities in the (at present) 45 EHEA countries are now expected to draw up.

The EHEA framework is thus meant to reinforce the effort to achieve greater clarity, simplify academic recognition and boost mobility, which underlies the three-cycle structure. This umbrella framework relies mainly on the same descriptive elements as will be used in national frameworks, namely generic descriptors and ECTS as a measure for workload.

## **7. National Qualifications Frameworks**

By focusing on just the single country to which they belong, national qualifications frameworks should provide a more detailed picture of the needs that individual higher education qualifications satisfy. The Bologna ministers have agreed to start work on these national frameworks by 2007 at the latest. They aim to do so with reference not only to 'learning outcomes' but also to concepts identified at their 2003 Berlin meeting, including 'workload', 'level', 'competences' and 'profile', which were all defined specifically for this purpose. The individual countries will retain full responsibility for their own qualifications and the quality assurance associated with them.

These national frameworks are expected to reflect the complexity of qualifications and include both generic and profile descriptors. They should enable learners to explore and select particular types of institutions or courses in line with their personal needs, while helping employers to know what to expect from a 'qualified learner'. They will also assist providers and educational policy-makers in coping with changes in the demand for certain types of knowledge and skills as they emerge or become obsolete. National frameworks are likely to affect the way institutions and public authorities work together, so all those with a vested interest in educational outcomes – the stakeholders – are encouraged to take part in their development. In offering a clearer picture of higher education qualifications, national frameworks are expected overall to encourage more flexible learning pathways in keeping with the goals of the 'overarching' EHEA framework.

## **8. The Dublin Descriptors within the Qualifications Framework for the EHEA**

Special importance has been attached to a set of generic descriptors of qualifications and learning outcomes, which are based on the concepts of knowledge and understanding, applying knowledge and understanding, making judgements, communications skills and learning skills. They are called the ‘Dublin descriptors’ after the follow-up meetings in Dublin at which they were developed and adopted by a group of experts called the Joint Quality Initiative.

These descriptors set out to identify the nature of the entire qualification obtained at the end of each Bologna cycle. Within the Qualifications Framework for the EHEA they are linked to the ECTS system of 60 credits in one year of study, 30 credits for one semester and 20 credits for a three-month term. On this basis, the total number of credits for a cycle depends on its duration, with 180 or 240 credits for a Bachelor’s degree, and most commonly 90-120 for a Bologna-type Master’s qualification. After Descriptors had originally been developed for the first two cycles, they were later completed by descriptors for the third cycle and shorter (ca. two-year) higher education within the first cycle. In the case of a particular discipline, the descriptors are meant to be used with due regard for its individual context and language conventions.

So that the ‘overarching’ EHEA framework provides a logically consistent means of referencing, comparing and recognising qualifications, it is recommended that the more detailed national frameworks should be compatible. It is intended that countries should self-certify this compatibility on the basis of certain criteria.

Among them are that qualifications should be included in national frameworks on the basis of transparent procedures and should clearly relate to the cycle qualification descriptors in the EHEA framework. They should also include clear links to the 1997 Lisbon Convention on the Recognition of Higher Education in Europe and the EU directives on the recognition of professional qualifications, and demonstrate consistency with other transparency mechanisms, including the Diploma Supplement. There is further widespread agreement that the details of self-certification should be published and that the whole process should be completed by 2010, the final EHEA target date.

#### **9. The EC proposal for a Qualifications Framework for Lifelong Learning**

In the meantime, in a development distinct from Bologna but which takes aspects of the Bologna Process into account, the European Commission is finalising a separate proposal for a European Qualifications Framework (EQF) for lifelong learning at all levels, including higher education. Its declared aim is to function as a 'translation device', simplifying communication between providers and learners in education and training, by enabling them to position and compare qualifications more easily. It too is based on learning outcomes and is meant to serve as an umbrella-type reference for national but also sectoral qualifications frameworks. If the proposal becomes a (non-binding) EU recommendation, it will apply solely to the present 25 EU countries and seven other countries contributing to education and training as part of the Lisbon strategy.

The idea was launched in July 2005 and submitted for consultation with all stakeholders in the countries concerned during the second half of that year. In

contrast to the EHEA framework with its three Bologna cycles, the proposed EQF refers to eight levels of qualification covering all forms of education, including those involving informal and non-formal learning. Levels 6 to 8 tend to reflect the content of the cycle qualification descriptors in the EHEA overarching framework, subject to a few differences. Level 5 of the EQF also corresponds to the short higher education descriptor recently added to the first Bologna cycle in the EHEA system.

A meeting to review the entire consultation process was held in Budapest in February 2006. While the proposed EQF has attracted broad support, the importance of further clarification and possible simplification is also apparent. As regards higher education, the European Commission is aware of concern that the EQF in its final form will benefit from being consistent with the Bologna Process mechanisms. This applies, for example, to its proposed credit transfer system for vocational education and training (ECVET), whose compatibility with the ECTS credit system - which is already well established in the legislation of many countries - seems essential. It is planned that progress should be made with a view to a possible EU recommendation on the EQF in 2007.

#### **10. Making the most of the new structures**

Now that the new degree structure is becoming widespread and agreement on frameworks is established, it is important to gain full benefit.

Given the political commitments taken, national qualifications frameworks have to be developed as soon as feasible. Once this happens, efforts to pursue curricular

reform in line with the restructured study cycles are likely to become increasingly consistent and sustained. This probably applies most of all to the ‘learning outcomes’ concept at the heart of the frameworks, which in the past has been not always understood and appropriately applied. For example, the development of new first-cycle Bachelor programmes has sometimes been viewed as simply a means of offering students the same content in less time. Yet ‘learning outcomes’ are especially crucial in redesigning curricula for these programmes, and the critical aspect is in applying a student-centred approach to rethinking curriculum, and taking account of the multiple purposes of higher education including employability. Governments should also take the lead in this respect by ensuring appropriate employment opportunities for graduates with Bachelor qualifications in the public sector.

Similar comments apply to the second (Master’s) cycle in which many different kinds of programmes are currently on offer, including long integrated programmes, short programmes, courses with an emphasis on professional qualifications, those that concentrate on research, and increasingly also Joint Master programmes. The qualifications framework and ‘learning outcomes’ approach may help to rationalise the diversity of provision at this level and help understanding that whatever the profile of a specific Master degree, it should ensure the employability of the graduate as well as open a path to progress to the next cycle.

Curriculum reform will remain one of the most important tasks of academics in the Bologna Process in the years to come. The evidence from the most detailed survey of the Bologna Process so far, *Trends IV*, suggests that individual

universities will benefit from devising a strategic plan for their institutional curricular development as a whole. This will also enable them to address issues such as the shift towards more student-centred learning, and the best way of handling the transition between Bachelor's and Master's programmes, and then between Master's and more intensive doctoral research. As *Trends IV* also highlighted, it will be important as part of this activity for institutions, with the support of ministries, rectors' conferences and student associations to share and discuss good practice. Students, for their part, will require more extensive guidance services to help them understand the opportunities presented by the three-cycle structure and to be able to benefit fully in the future.

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