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USING LEARNING OUTCOMES

A consideration of the nature, role, application and implications for European education of employing 'learning outcomes' at the local, national and international levels.

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1 CONTEXT AND ISSUES

1.1 INTRODUCTION

Learning outcomes are extensively referred to in various Bologna-related documents, many of the official seminar reports and, more recently, the Berlin Communiqué itself:

Degree structure: 'Ministers encourage the member states to elaborate a framework of comparable and compatible qualifications for their higher education systems, which should seek to describe qualifications in terms of workload, level, learning outcomes, competences and profile. They also undertake to elaborate an overarching framework of qualifications for the European Higher Education Area.

*Within such frameworks, degrees should have different defined outcomes. First and second cycle degrees should have different orientations and various profiles in order to accommodate a diversity of individual, academic and labour market needs. First cycle degrees should give access, in the sense of the Lisbon Recognition Convention, to second cycle programmes. Second cycle degrees should give access to doctoral studies.'*¹

Learning outcomes have achieved an exalted status bolstered by the ubiquitous number of references to them in conferences, official documents and communiqués. This is in stark contrast to the poor level of understanding associated with them and their relatively rare practical implementation across Europe. Detailed experience of learning outcomes is in fact limited to just a few countries at both the institutional and national levels. This gap presents a significant challenge to the Bologna process and even calls into doubt the full realisation of the European Higher Education Area by 2010. This makes the need for their better understanding a priority.

Learning outcomes represent one of the essential building blocks for transparent higher education systems and qualifications. They have a reputation as rather mundane and prosaic tools, yet it is this basic underpinning function that makes them so significant. It is important that there should be no confusions about their role, nature and significance, or the educational foundations of the Bologna process will be weakened. Learning outcomes have applications at three distinct levels: (i) the local level of the individual higher education institution (for course units/modules, programmes of study² and qualifications); (ii) the national level (for qualifications frameworks and quality assurance regimes); and (iii) internationally (for wider recognition and transparency purposes). Learning outcomes and 'outcomes-based approaches' have implications for curriculum design, teaching, learning and assessment, as well as quality assurance. They are likely to form an important part of twenty-first century approaches to higher education and the reconsideration of such vital questions as to what, who, how, where and when we teach and assess. The very nature and role of education is being questioned, now more than ever before, and learning outcomes are important tools in clarifying the results of learning for the student, citizen, employer and educator.

In terms of curriculum design and development, learning outcomes are at the forefront of educational change. They represent a change in emphasis from 'teaching' to 'learning' typified by what is known as the adoption of a student-centred approach in contrast to traditional teacher-centred viewpoint. Student-centred learning produces a focus on the teaching – learning – assessment relationship and the fundamental links between the design, delivery and measurement of learning.

Learning outcomes are not just an isolated tool at the level of curriculum design but also represent an approach that plays a significant role in a much wider context that includes: the integration of academic and vocational education and training (VET), the assessment of prior experiential learning (APEL)³, the development of lifelong learning qualifications frameworks, the development of credit transfer and accumulation systems.

¹ Berlin Communiqué 2003, page 4.

² This includes all the study leading to a particular qualification or award.

³ APEL is also known as Prior Learning Assessment and Recognition (PLAR).

The origin of learning outcomes approaches have a chequered history and can be loosely traced to IV Pavlov (1849-1936) and his conditioning of dogs! Following this, the American 'behavioural school' of psychological thought developed with the work of JB Watson (1858-1958) and BF Skinner (1904-1990). The psychologists Watson and Skinner developed the behaviourist approach that explained human behaviour in terms of responses to external stimuli. Notwithstanding Skinner's ideas on mass conditioning, programmed instruction and the excesses of some of their crude approaches, their work led to productive research on the improvement of US teaching, learning and training methods in the areas of business, industry and the armed forces. Behaviourism emphasised the clear identification and measurement of learning and the need to produce observable and measurable outcomes. The 'learning outcomes approach' was subsequently further developed by educational authorities in Australia, New Zealand, South Africa, United Kingdom and more recently by Denmark, Sweden, Ireland and other parts of Europe. From these beginnings the emphasis on learning outcomes has evolved to encompass all subject areas and has moved from the vocational education and training (VET) fields through to higher education.

This report seeks to explore the context and issues surrounding the role, nature and purposes of learning outcomes, including an evaluation of their positive and negative aspects and a consideration of alternative approaches to express, measure and evaluate learning (section 1). It provides a brief exploration of the current usage of learning outcomes across Europe and some consideration of global developments (section 2). It analyses the role of learning outcomes in the Bologna process and seeks to assess their importance and implications for each of the 'action lines' and some of the key Bologna initiatives (section 3). Finally, it identifies a number of issues for consideration, together with areas for further reflection and development (section 4).

1.2 WHAT ARE LEARNING OUTCOMES – their definition, nature and potential

There is currently no precise agreement about, or definition of, the term 'learning outcome' across Europe or the rest of the globe. However, this does not necessarily signify a problem as most who use the term have taken it from Northern European, Australian, New Zealand, South African and US practice and the meaning has not fundamentally changed. Learning outcomes have been commonly defined as follows:

*'A statement of what a learner is expected to know, understand and/or be able to demonstrate at the end of a period of learning.'*⁴

*'Learning outcomes (are) statements of what a learner is expected to know, understand and/or be able to demonstrate after a completion of a process of learning.'*⁵

*'Statements of what a learner can be expected to know, understand and/or do as a result of a learning experience.'*⁶

*'Student learning outcomes are properly defined in terms of knowledge, skills, and abilities that a student has attained at the end (or as a result) of his or her engagement in a particular set of higher education experiences.'*⁷

*'Learning outcomes are statements that specify what a learner will know or be able to do as a result of a learning activity. Outcomes are usually expressed as knowledge, skills, or attitudes.'*⁸

*'Learning outcomes (are) specific measurable achievements.'*⁹

⁴ The definition used by the SEEC, NICCAT, NUCCAT *Credit and Qualifications – Credit Guidelines for Qualifications in England Wales and Northern Ireland*, November 2001.

⁵ Source: Final Report of the Socrates Project (Phase 1), *Tuning Educational Structures*, glossary. This is also the definition used by ECTS in the new 2004 ECTS Users' Guide.

⁶ Source: Credit and Qualifications Framework for Wales, working document, June 2003, page 8.

⁷ Source: US, Council for Higher Education Accreditation (CHEA)

⁸ Source: American Association of Law Libraries: <http://www.aallnet.org>.

⁹ Source: University of Hertfordshire: http://www.herts.ac.uk/tli/locguide_main.html.

*A learning outcome is a statement of what competences a student is expected to possess as a result of the learning process.*¹⁰

*'Learning outcome statements are content standards for the provincial education system. Learning outcomes are statements of what students are expected to know and to do at an indicated grade, they comprise the prescribed curriculum.'*¹¹

These definitions of learning outcomes do not differ significantly from each other. A learning outcome is a written statement of what the successful student/learner is expected to be able to do at the end of the module/course unit, or qualification. The key aspect each of the definitions has in common is the desire for more precision and consideration as to what exactly a learner acquires in terms of knowledge and/or skills when they successfully complete some learning. Learning outcomes are concerned with the achievements of the learner rather than the intentions of the teacher (expressed in the aims of a module or course). They can take many forms and can be broad or narrow in nature. There is often some confusion between learning outcomes and aims and objectives and certainly many regard learning outcomes and objectives as the same thing and use the terms synonymously. Aims are concerned with teaching and the teacher's intentions whilst learning outcomes are concerned with learning.¹² It has been remarked that

*'There is no absolutely correct way of writing learning outcomes...'*¹³

The creation of learning outcomes is not a precise science and they require considerable thought to write – it is easy to get them wrong and create a learning strait jacket. Learning outcomes are commonly further divided into different categories of outcomes. The most common sub-divisions are between: subject specific outcomes that relate to the subject discipline and the knowledge and/or skills particular to it; and generic (sometimes called key transferable skills) outcomes that relate to any and all disciplines e.g. written, oral, problem-solving, information technology, and team working skills, etc. The identification of generic skills is seen as important in enhancing the employability of graduates whatever their discipline.

Learning outcome statements commonly begin with *'On completion of the learning (unit/module or qualification) the successful student will be able to assess the relative merits and implications of the adoption of learning outcomes.'* Such statements are typically characterised by the use of active verbs. Six categories of learning were identified by Bloom as: knowledge, comprehension, application, analysis, synthesis and evaluation.¹⁴ Examples of verbs used are as follows: for knowledge - duplicate, state, relate; for comprehension - classify, describe, recognise, review; for application - apply, demonstrate, solve; for analysis - calculate, analyse, appraise, criticise; for synthesis - assemble, construct, plan, formulate; for evaluation - appraise, argue, predict evaluate, etc.¹⁵

It is important to recognise the broad connection between learning outcomes, levels, level descriptors, credits, and teaching, learning and assessment. Learning outcomes have been described as a basic educational building block and as such they have a direct and powerful links with a number of other educational tools. They make possible much more than the simple identification of learning achievements. They have a direct relationship to levels and level indicators. When learning outcomes are written they are created in the context of the institutional/national/international reference points that aid the maintenance of standards and quality (see section 3.7). Therefore the development of the curricula in terms of learning outcomes does not happen in a vacuum. Appropriate reference points guide the module/unit and programme learning outcomes.

¹⁰ Source: Transnational European Evaluation Project (TEEP).

¹¹ Source: Government of British Columbia Ministry of education.

¹² One way to distinguish aims from learning outcomes is that aims indicate the general content, direction and intentions behind the module from the designer/teacher viewpoint. Learning outcomes and objectives are more difficult to distinguish as objectives can be written in terms of learning outcomes. This issue is discussed in depth in, Moon J, (2002) *The Module and Programmes Development Handbook*, Kogan Page, page 62.

¹³ Gosling D and Moon J, (2001) *How to Use Learning Outcomes and Assessment Criteria*, SEEC publications, page 5.

¹⁴ Bloom B (1956) *Taxonomy of Educational Objectives – The Cognitive Domain.*, Longman, New York.

¹⁵ There are many texts that explore how to write learning outcomes including Moon J, (2002) *The Module and Programme Development Handbook*, chapter 5, Kogan Page.

Credit-based systems are rapidly being introduced across Europe and some are intimately linked to learning outcomes. For example in the Scottish Credit and Qualification Framework (SCQF) two measures are used to place qualifications and learning programmes in their framework. These are the levels of the outcomes of learning and the volume of these outcomes described in terms of SCQF credit points. In this way SCQF credit points are used to quantify the outcomes of learning and give them a value or currency.¹⁶

In the ECTS systems credits are inevitably¹⁷ moving towards a definition in terms of *'notional learning time to achieve specified learning outcomes'*. Credits are a powerful way to quantify learning achievement in different contexts (VET, lifelong learning as well as higher education). However, ECTS credits are not currently linked to levels and consequently they suffer from being rather crude instruments as they cannot delineate progression or indicate anything about the nature of learning. It is only when credits are linked to level and learning outcomes (learning outcomes are used to define credits) do they reach their full potential (see sections 3.6 and 3.8).

Finally, learning outcomes cannot be divorced from teaching, learning and assessment. This is the most significant set of relationships for curriculum designers. Once the learning outcomes have been decided it is obviously good practice to decide suitable methods of assessing them and the production of relevant assessment criteria. The final stage in this process is to design the appropriate delivery mechanism – the teaching and learning methods to be used. This sequence for module/course development is not necessarily as rigid as described. The important point is that outcomes-learning-delivery-assessment enjoy a causal link and clear reflection on their relationship improves the coherence of course design.

The adoption of a learning outcomes approach represents more than simply expressing learning in terms of outcomes. It entails much more, due to their significant implications for all aspects of curriculum design, delivery, expression, assessment and standards.

1.3 THE RELATIONSHIP BETWEEN LEARNING OUTCOMES AND COMPETENCES

The relationship between learning outcomes and competences is a complex area – the subject of some debate and no little confusion. 'Competence' and 'competences' are used in association with learning outcomes in a number of ways – hence the problem. 'Competence' can broadly refer to aptitude, proficiency, capability, skills and understanding, etc. A competent person is someone with sufficient skills and knowledge and capabilities. Some take a narrow view and equate competence just with skills acquired by training. It should be recognised that there is no precise common understanding or use of the term.

In the Tuning project competences and skills are understood as including 'knowing and understanding' (theoretical knowledge of an academic field, the capacity to know and understand), 'knowing how to act' (practical and operational application of knowledge to certain situations), 'knowing how to be' (values as an integral element of the way of perceiving and living with others and in a social context). Competences represent a combination of attributes (with respect to knowledge and its application, skills, responsibilities and attitudes) and are used to describe the level or extent to which a person is capable of performing them. In this context, a competence or a set of competences means that a person can demonstrate a certain capacity or skill and perform a task in a way that allows evaluation of the level of achievement. Competences can be demonstrated and therefore assessed. Both the Tuning project and the shared qualification descriptors (Dublin descriptors) that were developed within the Joint Quality Initiative (JQI), include generic competences (skills and knowledge) and include attributes like the capacity to learn, the capacity for analysis and syntheses etc. In relation to the Tuning project a list of 30 generic competences was identified.

Learning outcomes are commonly expressed in terms of competences or skills and competence. The loose use of all these terms in an almost interchangeable way does lead to confusion and the development of a common terminological understanding should be encouraged.

¹⁶ See SCQF (2003) *Introduction to the Scottish Credit and Qualifications Framework*, Second edition, Pages 4-5.

¹⁷ Inevitably, as ECTS moves from a limited credit transfer, to a full credit accumulation and transfer, instrument that links VET and HE in a framework for lifelong learning within the over-arching European Qualifications framework.

1.4 POSITIVE AND NEGATIVE ASPECTS OF LEARNING OUTCOMES

The introduction of learning outcomes is, and has always been, subject to much disagreement and has raised much passion in educationalists. It is clear that they can have both positive and negative consequences and the problems associated with their introduction should not be underestimated. The following is a brief review of the main issues that are normally raised, associated with the advantages and disadvantages of their introduction.

Those who have reservations about the adoption of learning outcomes approaches have expressed two main concerns: (i) basic conceptual/philosophical objections and (ii) practical/technical objections.

In terms of philosophy, the objections follow the view that higher education learning cannot be constricted and/or reduced to a series of learning outcomes that inhibit and prescribe the learning process. Academic study is by definition open-ended and the detailed specification of outcomes is antithetical to the traditional university function. Proponents of this view often emphasise the distinction between higher education and vocational education and training, the latter being more suited to a learning outcomes approach due to the skills and competence-based nature of such courses. Academic study, it is suggested, is different in nature and cannot be limited to a skill/competence-based approach that creates a target-led culture focused on ticking boxes. Learning outcomes are viewed as an attack on the liberal conception of education, which diminishes the teacher to facilitator and stifles the diversity of education by reducing it to a crass instrumentalist approach.

The practical/technical objections to learning outcomes are associated with their formulation and implementation. The implementation of learning outcomes is a formidable task that involves a huge staff-development process as well as cost implications in terms of time and money. It is a massive undertaking to transform all curricula to be expressed in terms of outcomes and this often takes years to accomplish. In addition, there can be a high degree of staff resentment and disagreement concerning the detailed process of identifying, writing and implementing learning outcomes – and the consequential changes to teaching, learning and assessment. Furthermore, various technical problems arise concerning the nature and detail of the approach to outcomes adopted. It is argued that learning outcomes written as threshold statements can limit learning and stifle creativity as well as dumb-down teaching. Learning outcomes can be over-described and under-described (too specific or too general). Their development requires the existence of some sort of framework of qualifications descriptors, levels and level descriptors within a qualifications framework. Finally, it is sometimes the case that the move to learning outcomes, which is often linked to the introduction of credits and modular frameworks, leads to module/unit overload as too much is crammed into a restricted time period for learning.

The advantages of adopting learning outcomes exist at several levels in terms of benefits for the: (i) course/module designer; (ii) quality assurance and standards; (iii) learners; and (iv) national and international educational transparency.

In terms of course and module design the use of explicit learning outcome statements can help ensure consistency of delivery across modules or programmes. They are also said to aid curriculum design by clarifying areas of overlap between module/programme/qualifications. Learning outcomes help course designers to determine precisely the key purposes of a course, how components of the syllabus fit and how learning progression is incorporated. Highlighting the crucial relationship between teaching, learning and assessment (criteria and grading) improves course design and the student experience. Learning outcomes promote reflection on assessment, and the development of assessment criteria and more effective and varied assessment.

The benefits to quality assurance relate to how learning outcomes increase transparency and the comparability of standards between and within qualifications. Outcomes-based qualifications possess greater credibility and utility than traditional qualifications. They play a key role (nationally and potentially internationally) by acting as points of reference for establishing and assessing standards.

Learners benefit from a comprehensive set of statements of exactly what they will be able to achieve after successful study. They provide learners with clear information that can help them

with their choice of module/unit/programme/qualification to study and can lead to more effective learning. They also benefit employers, higher education institutions and civil society in general by clearly articulating the achievement and attributes associated with particular qualifications.

Internationally, learning outcomes contribute to the mobility of students by facilitating the recognition of their qualifications and improving the transparency of qualifications and thus simplifying credit transfer. They also provide a common format for different forms of delivery (e.g. distance, work-based, non-formal and experiential learning¹⁸) and have significant capacity to link vocational educational and training and higher education. This is important when there are now an increasing number of national and international initiatives to promote lifelong learning (see section 3.6). Learning outcomes can assist the creation of multiple progression routes through and between different the educational systems.

It must be stressed that the positive and negative aspects above are a summary representation of the general claims that are made about learning outcomes. In practice, many of the objections can be overcome, providing that learning outcomes are developed with care and sensitivity. Much depends on how they are constructed and whether (and how) they include knowledge, skills, abilities/attitudes and understanding. Badly constructed, narrow and limiting learning outcomes are not appropriate for higher education where creativity and imaginative leaps are highly valued.

1.5 ALTERNATIVES TO THE USE OF LEARNING OUTCOMES

The majority of European educational systems do not use learning outcomes in any systematic and comprehensive way to express the purposes, content, nature and level of their qualifications (the curricula). It is therefore useful to explore what alternative techniques and approaches systems employ for expressing their studies.

Those countries that do not use learning outcomes rely on traditional approaches for the explanation and expression of their qualifications and the units/modules that constitute them. The curricula are described in terms of what students will cover. The content is listed and the main theories, events, processes and relationships are mapped-out. This type of approach can be characterised as part of an 'input-focused' series of measures to express the general level and relationship between qualifications.¹⁹ This approach emphasises the length of a programme, its access requirements, the material covered, and the number of staff and level of resources available.

These variables are often used as the focus for quality assurance activities in input-driven systems. In addition, learning is categorised in terms of years of study to achieve a particular qualification. In this case it is generally understood that a first year of 'first cycle' study is less complex and demanding than a fourth year of study. So a reference to how many years a qualification might take, plus a specific year of study, provides some very general information about the level of study. This approach is often accompanied by an emphasis on student workload measured in terms of direct contact time with staff²⁰. However, total student workload expressed in hours is now, due to the Bologna process, assuming more weight in Europe.²¹ This tendency will become strengthened as the move from a curriculum model based on the volume of learning identified in terms of years of study shifts to one based on the notional time to achieve specific learning outcomes.²² However, the latter will not eradicate the former completely, as the length of a traditional programme is a sort of 'gold standard' we are all familiar with. However, the adoption of learning outcomes approaches will mean that less emphasis will be put on crude time measures and greater focus will be applied to flexible delivery modes that are becoming increasingly more popular. Part time learning, distance learning (including e-learning), work-based learning, burst-

¹⁸ The accreditation of prior experiential learning (APEL) is predicated upon a learning outcomes approach.

¹⁹ Similarly many national qualifications frameworks reflect this traditional approach in their methodology and tools used to explain their systems. The movement toward new-style qualification frameworks based on levels, level indicators, learning outcomes and subject reference points are intimately linked to the adoption of output approaches and learning outcomes.

²⁰ In Europe this approach is declining in favour of one that examines total student workload – that includes all learning activities inside and outside the university.

²¹ 1500-1600 hours per annum appears to be the average workload for a European student according to the Tuning project survey.

²² Notional learning time is defined as the number of hours a learner will spend, on average to achieve the specified learning outcomes at a particular level.

mode learning and intensive programmes increasingly do not conform to the time-pattern of traditional education.

The input-focused approach has implications for curriculum design. It is common for staff in HEIs to first decide the course content, working from a traditional syllabus, and then let this dictate how it will be taught and assessed. This teacher-centred approach stands in opposition to the output-focused learning outcomes approach. Indeed, there is evidence that these input-focused approaches are slowly giving way to more output-focused, student-centred approaches that use 'notional learning time to achieve given learning outcomes'. The problem is that although the logic of such an approach is slowly being acknowledged (Tuning, ECTS), most European HEIs currently do not systematically express their programmes in terms of learning outcomes.

The outcomes-based approach to course design has assumed more importance as the nature of the educational environment has changed in the last 10 years. The patterns of education are now different, there are more part-time students and lifelong learning is deemed essential to a vibrant economy. With the advent of credit systems, the need to widen access and ensure a 'Europe of knowledge' is created - challenging our traditional models and modes of education.

1.6 LEARNING OUTCOMES AND EDUCATIONAL REFORM – PEDAGOGY, ASSESSMENT AND QUALITY ASSURANCE

Learning outcomes focus attention on explicit and detailed statements of what students learn – the skills, understanding and abilities we seek to develop and then test. It is important to stress that learning outcomes form an integral part of an educational reform agenda that can be summarised in the phrase 'student-centred learning'. This approach in its extreme manifestation has been represented as a paradigm shift from traditional ways to measure and express learning characterised as 'input' approaches (that emphasises teaching hours and resource counting) to 'output'-focused techniques (using learning outcomes and competences). The emphasis moves from the content (what staff teach) to outcome (what a student will be able to do). However, the move towards student-centred learning is not new and many educators have instinctively adhered to such an approach. The extreme choice between input, and output-focused approaches to teaching and learning misrepresents the situation where a middle way is often possible and constructive.

The adoption of a learning outcomes approach focuses activity on the learner and away from the teacher. It promotes the idea of the teacher as a facilitator or manager of the learning process and recognises that much learning takes place outside the classroom without a teacher present.²³ It further involves the idea that students should be actively involved in the planning and management of their own learning and take more responsibility for this as the student progressively develops as an independent learner.²⁴ It is important to note that student-centred learning necessitates the use of learning outcomes as the only logical approach. This produces an automatic focus on how learners learn and the design of effective learning environments. There is a cascade effect that links the learning outcomes, the selection of appropriate teaching strategies and the development of suitable assessment techniques. This is done within the context of external reference points (qualification descriptors, level descriptors, benchmark statements). Modules are not developed in a vacuum but within a dynamic and interactive set of factors that directly link the internal, institutional world, with the external national qualifications framework and quality assurance system.

²³ For example, in the workplace, at home and in social situations where non-formal and informal learning is the norm.

²⁴ The development of modular credit-based frameworks invariably involves a high degree of choice (multiple study routes) and a progression and sequence in the modules studied. This sort of framework provides sufficient flexibility to facilitate the progressive assumption of more responsibility, by the student, for the choice and management of their studies – they develop as independent learners as the course progresses.

2 LEARNING OUTCOMES IN EUROPE (brief over-view of current usage)

2.1 INTRODUCTION

In order to provide some hard information for this study the European Commission ECTS/DS counsellors were contacted (100+ individuals) as well as the 40 members of the Bologna follow-up group (BFUG). Other sources were also consulted. All were asked to respond to provide national information on the state of development of the use of learning outcomes. Learning outcomes were defined as:

'... precise statements of what a learner is expected to know, understand and/or be able to demonstrate at the end of a period of learning – involving the exact identification of the skills and abilities that a student will have on the successful completion of a module/unit and/or complete qualification.'

Respondents were asked to reply indicating the situation in their country but to discount any institutional involvement in the Tuning project.

The following table indicates the information gained. This information should be viewed with some caution as it gives the situation according to those who replied – it does not represent the complete picture. The information has also been interpreted and edited. The results do not represent any official position and the listed contacts are not responsible for entries. Their details are included to indicate where further information might be obtained. Despite these caveats the report does give an indicative snapshot of the current state of use of learning outcomes across the European Higher Education Area.

2.2 COUNTRY ACTIVITY REPORTS

COUNTRY	DESCRIPTION OF ACTIVITY	CONTACT REFERENCE
AUSTRIA	There is activity concerning learning outcomes in the university and Fachhochschule sectors. One part of the curriculum of a university study programme is the competency profile under the Universities Act 2002 (http://www.weltklasse.ar/upload/attachment/947.pdf). In the Fachhochschule sector applications for study programme recognition must contain a survey of the educational demand and qualification requirements, under the Fachhochschule Study programme legislation Act 2003. Information on the Act can be obtained from http://www.bmbwk.gv.at/universitaeten/recht/gesetze/Gesetz-Fachhochschul-Stu4169.xml#03 .	Maria Keplinger., Austrian Ministry of Education and BFUG member. Maria.Keplinger@bmbwk.gv.at
BELGIUM (Flemish Community)	Since 2003 a learning outcomes perspective has been incorporated explicitly in higher education for the Flemish community and in particular the definition of bachelor and master degrees based on the JQI 'Dublin descriptors'. The new parliamentary decree 2003 provides a framework for all higher education programmes, which has to be adopted by 2004-2005. These descriptors for all higher education institutions also function as a tool for quality assurance and accreditation and are formulated in an output-oriented way (http://www.ond.vlaanderen.be/hogeronderwijs).	Marie-Anne Persoons, Flemish delegation BFUG. Marieanne.persoons@ond.vlaanderen.be Luc Francoise, ECTS/DS Counsellor, Vakgroep 'nieuwste Geschiedenis, Universiteit Gent, Blandijnberg 2., B-9000 Gent, Belgium. Luc.francois@ugent.be
BELGIUM (Walloon Community)	There is modest development in the area of learning outcomes. There is new decree concerning Bologna developments and individual institutions are developing their awareness of the new approaches.	Chantal Czoller, ECTS/DS Counsellor, Université Libre de Bruxelles, Av FD Roosevelt 28. B-1050 Bruxelles, Belgium. Czoller@admin.ulb.ac.be

CROATIA	<p>There are a number of activities taking place associated with learning outcomes at the University of Zagreb (55,000 students and 33 faculties). The main disciplines concerned are Information Technology, Engineering, Law, Medicine, Visual and Dramatic Arts, Psychology and Education. The Bologna reforms are implemented through a central body at the university, which is responsible for the implementation of ECTS and the 'transformation of study programmes'. In addition, the Tempus quality assurance project 'active learning and critical thinking across the curriculum in higher education', aims to facilitate the understanding of the learning process and elaborate learning outcomes.</p>	<p>Professor Vlasta Vizek-Vidović, Vice-rector International Relations, University of Zagreb, Trg marsala Tita 14. 1000 Zagreb, Croatia. vizek@unizg.hr</p>
CZECH REPUBLIC	<p>The national independent Accreditation Board for all study programmes for degrees (BSc, MSc, PhD), seeks in the documents for accreditation, 'learning objectives' to be specified besides the syllabi for all courses. Therefore syllabi are expressed in terms of learning objectives. The latter are defined as indicated in the formal 'request for information letter' that also puts an emphasis on the identification of the 'added value of the course'.</p>	<p>Prof. Ing. Jan M Honzik CSc Vice-Dean of Faculty of Information Technology, Brno University of Technology, Czech republic. (National ECTS/DS Coordinator) honzik@fit.vutbr.cz</p>
DENMARK	<p>The two Danish Ministries VTU (Universities) and UvM (Schools) had meetings in January and April respectively 2004 (and launched the new Danish Qualifications Framework), where senior personnel were informed about the intentions to embed the recommendation of the Berlin Communiqué including ECTS, learning outcomes and competences. A new Ministerial order, issued to universities May 2004 covering bachelor-master programmes, calls for them to be expressed in terms of ECTS competency profiles and goals with appropriate detailed specifications of programme content.</p>	<p>Mogens Berg, Ministry of Science Technology and Innovation, DK-1260 Copenhagen, Denmark. mob@vtu.dk</p> <p>Poul Bonde, Danish ECTS/DS Counsellor, Aarhus Universitet, Fredrik Nielsens Vej 5. DK-8000, Aarhus, Denmark pb@adm.au.dk</p>
ESTONIA	<p>The use of learning outcomes is not widespread though there are some initiatives in this direction. The most advanced field is teacher education where competencies are identified and regulated by Government decree. However, the government Act does not prescribe how the competencies are to be obtained as this is the responsibility of the university. A further initiative is that of the Estonian Rector's Conference which has appointed a special task force to work on quality issues. In this context the use of learning outcomes has been elaborated in order to measure/express the student's real learning.</p>	<p>BFUG representative: Heli.aru@hm.ee</p>
FINLAND	<p>The Finnish Ministry of Education has created a task force for developing a new framework of qualifications. The legislation for polytechnics and universities requires detailed specifications of the degree study qualifications that include the aims of the studies and calls for extensive practical based knowledge and skills. In the university sector a number of task forces have been established that have analysed the core elements -content and competences for each curricula/field. The contents of courses are now represented in terms of learning outcomes. In the non-university (Polytechnic) sector it has been customary for some time to represent vocational course content in terms of learning outcomes.</p>	<p>Matti Isokallio, ECTS/DS Counsellor, Director of Student Administration, Satakunta Polytech nic, Tiedepuisto 4, FIN-28600. Finland. Matti.isokallio@samk.fi</p>

FRANCE	<p>Systematic reference to the notion of ‘learning outcomes’ (in terms of knowledge, skills and competences), whether or not the course studied is professional or academic, is still not a widespread reality in France. The conception of professional vocational diplomas (<i>diplômes à vocation professionnelle marquée</i>) such as those acquired from <i>écoles de commerce</i> certainly incorporates the idea of knowledge, but also the conception of skills and abilities that a student should have acquired upon completion of their course. Where engineering degrees are concerned, there is a tendency to define programmes in terms of the technical and technological competencies and the theoretical knowledge considered indispensable for a future engineer. However, this is more a reflection of the evolution of the job market in France where not all qualified engineers are employed as production engineers. ‘Classic’ university degrees are based solely on the idea of disciplinary knowledge. In the sphere of professional education, the formulation of a national index of professional certification (<i>répertoire national de certifications professionnelles</i>) retained as a part of the 2002 law on social modernisation (incorporating APEL) is not based on the concept of learning outcomes. In fact, this ‘national index’, which aims to clarify the contents and objectives of <i>certificats</i>, <i>diplômes</i> or <i>titres</i> issued allows the classification of <i>diplômes</i> and <i>titres</i> by subject area and level, while <i>certificats de qualification</i> are classed separately by subject area, and the <i>fiches constitutives</i> of the national index, which are currently being developed, correspond to diploma supplements. Universities are slowly beginning to realise the importance of learning outcomes and abilities for a future graduate in possession of a <i>diplôme national de l’enseignement supérieur</i> (national qualification of higher education). Following the reform of the validation of recognition of prior learning, introduced in France in 2002, universities were invited by the <i>Direction de l’Enseignement Supérieur</i> of the Education Ministry to define the ‘reference of abilities’ for an awarded <i>diplôme</i>. The objective is to assist universities to evaluate, in the fairest possible way, the experience of a certain person who wishes to take a course ‘x’ run by a university, or who requests the award of a national higher education qualification recognising their experience.</p>	<p>Helene Lagier, Bureau des Affaires Communautaire, Ministry de l’éducation nationaux, de l’Enseignement supérieur et de la Recherche (MENESR). Paris, France. Helene.lagier@education.gouv.fr</p>
GERMANY	<p>In Germany, the Rectors’ Conference is now actively working on creating a national ‘credit and qualifications framework’. This will probably be modelled on the ‘Dublin Descriptors’. It expresses qualifications in terms of knowledge (<i>wissen</i>) and skills (<i>können</i>). It is in its very early stages of development but does adopt a learning outcomes methodology to express different qualifications. Various individual higher education institutions are independently adopting learning outcomes as a way to express their curricula.</p>	<p>Christian Tauch, Head of International Department Hochschulrektorenkonferenz (HRK), Ahrstrasse 39. D-53175 Bonn. Germany tauch@hrk.de</p> <p>Volker Gehmlich, ECTS/DS Counsellor, FH Osnabrück, Caprivistrabe 30A, Germany. gehlich@wi.fh-osnabrueck.de</p>
GREECE	<p>There is limited activity regarding learning outcomes in Greece. The discussion about the shift from teaching-oriented to learning-oriented approaches using learning outcomes has not begun in a systematic way. However, there are a number of isolated individual institutional/faculty initiatives in the university and non-university sectors.</p>	<p>Professor Dioyssis Kladdis, Bologna expert, University of Korinthos. Greece. kladis@uop.gr</p>

<p>HUNGARY</p>	<p>A new Hungarian qualifications framework is being designed by a group of experts under the guidance of the national Bologna Board and various cycles will be defined in the forthcoming (Autumn 2004) Higher Education Act. The new framework will provide points of reference and act as a tool for the academic community to describe the main features of a degree in the given study area. It will lay down the general criteria of competencies required for obtaining an award. The framework defines learning outcomes to be attached to each level, type and programme, clearly indicating the differences between each level. It will not prescribe the details of the content of the curriculum (as in the existing system). The intention is to replace the current content-based regulations. The new framework will serve as the basis of the new qualification requirements laid down by government decree. The national level work is intended to give impetus to institutional programme development based on learning outcomes. Institutions will be encouraged to identify and define learning outcomes to clarify for all stakeholders the knowledge, skills and abilities a student must gain. The new framework will also support and link to internal and external quality assurance dimensions.</p>	<p>Éva Gőnczi, Ministry of Education, Department of Higher Education, Development and Evaluation, Szalay utca 10-14, H-1055, Budapest, Hungary. Eva.gonczi@om.hu</p>
<p>IRELAND</p>	<p>There is widespread recognition and emerging use of the concept of ‘learning outcomes’ in Irish education and training which is inextricably linked to the development of Ireland’s National Framework of qualifications. Under the National Qualifications Authority of Ireland (NQAI), education and training stakeholders are seeking to recognise all learning within a framework of qualifications. A ten-level framework has been designed to encompass the widest possible spread of learning. Each level is defined by a set of learning outcomes that are expected of a learner who successfully completes an award. These learning outcomes are packages of knowledge, skill and competence that are described in a grid of level indicators. At each level of the Framework, there are one or more award-types. An award-type is a class of named award that shares common features and levels. Each award-type has its own descriptor that sets out the key features, profile and overall standards. These standards are also expressed as learning outcomes or packages of knowledge, skill and competence. Standards of awards will be expressed increasingly as learning outcomes and education and training providers are endeavouring to describe their programmes in terms of the standards to be achieved, i.e. as learning outcomes, rather than in terms of inputs and processes associated with the learning. A major development in this regard is the recent revalidation of all programmes (covering over 40 institutions and nearly 1000 programmes expressed in learning outcome format), leading to the awards of the Higher Education and Awards Council (HETAC) in accordance with the new Framework learning outcomes standards. This project was seen as successful as it drew on widespread consultation with stakeholders and produced worthwhile gains for all involved. Other higher education and training awards bodies/providers (universities and the Dublin Institute of Technology) are also engaging with this process by considering or actually starting to express learning in terms of learning outcomes.</p>	<p>Seán Ó Foghlú, Chief Executive National Qualifications Authority of Ireland (NQAI), Jervis House, Jervis Street, Dublin 1, Ireland. SOFoglu@nqai.ie</p> <p>Seamus Puirseil, Higher Education and Training Awards Council (HETAC), Ireland. spuirseil@hetac.ie</p> <p>Don McQuillan, Chief Executive, Irish Universities Quality Board, 11 Merron Square, Dublin 2, Ireland. dmcquillan@iuqb.ie</p>

ITALY	<p>The 1999 Ministerial Decree number 509 concerns the reform of the higher education system in Italy and it classifies various study programmes. For each study area the ‘educational goals’ are listed. The decree defines these goals as ‘the body of knowledge and abilities that characterise the cultural and professional profile which the degree course confers’. Furthermore, each university regulates its own degree course programmes and establishes specific educational goals for them. Italy defines all classes of degree course in terms of professional profiles and learning outcomes.</p>	<p>Ms Germann Verri, Ministry for Education, University Research, Italian BFUG member.</p> <p>Dr Katherine Issacs, ECTS/DS counsellor, Università di Pisa, Piazza Torricelli 3/A. I-56126 Pisa, Italy. isaccs@stm.unipi.it</p>
LATVIA	<p>In Latvia there is some evidence of the development of learning outcomes approaches. Two new examples are ‘Regulation on the standards for academic education’ and ‘Regulation on the standard of professional higher education’ both include an important role for the notion of learning outcomes.</p>	<p>Andrejs Rauhvargers, Latvian Rectors’ Conference, ECTS/DS Counsellor, Raina bvd 19., LV-1586 Riga, Latvia. Andrejs.Rauhvargers@aic.lv</p>
LITHUANIA	<p>Lithuania has a binary system of education. In the university sector the discussion concerning learning outcomes and competences has only just started and seminars have been organised to discuss the issues. In colleges (non-university institutions of higher education), the situation is more advanced. Working groups have been formed by the Ministry of Education to establish ‘professional qualification standards’. Each standard is to be agreed and then approved by ministerial decree. The ongoing process develops by identifying several clusters of expected outcomes in the standard. On graduation students will be expected to demonstrate the skills/competences they have gained from each cluster. The process is still under development.</p>	<p>Ms Raimonda Markeviciene, National ECTS/DS Counsellor, Head of International programmes and Relations, Vilnius University, Universiteto 3, 2734 Vilnius, Lithuania. Raiminda.markeviciene@cr.vu.lt</p>
MALTA	<p>At the University of Malta, the terminology ‘learning outcomes’ is not used. Modules are described in terms of content and sometimes in terms of aims and objectives.</p>	<p>Veronica Grech, ECTS/DS Counsellor, University of Malta, Msida, Malta. Veronica.grech@um.edu.mt</p>
NETHERLANDS	<p>Substantial activities associated with professional education (HBO) are taking place. The HBO-raad is creating a databank of domain competencies. The agreement of the various competencies is done in consultation with professional fields and organisations. The extensive process this involves is ongoing. Many institutes of higher education are in the process of expressing their final teaching objectives in terms of knowledge, skills and attitudes to be attained by the student at the end of their course. The term ‘competence-oriented’ rather than learning outcomes is used. In universities the situation is more mixed, with marked differences between institutions where some are much more advanced than others in identifying and implementing learning outcomes.</p>	<p>BFUG members M.e.leegwater@minocw.nl and knottnerus@hbo-raad.nl</p> <p>Dr Arne van der Gen, Leiden Institute of Chemistry, Einsteinweg 55, Leiden. NL-2300 Netherlands. a.gen@chem.leidenuniv.nl</p> <p>Peter van der Schee, ECTS/DS Counsellor, Fontys Hogeschool, Eindhoven, Netherlands p.vanderschee@fontys.nl</p> <p>Robert Wagenaar, ECTS/DS Counsellor, University of Groningen, Netherlands. r.wagenaar@let.rug.nl</p>

NORWAY	<p>In Norway, some study programmes have national curriculum regulations (teacher education, health and social studies, engineering) which give instructions as to how study programmes should be organised e.g. subjects that are mandatory, number of credits, description of contents, teaching method, evaluation, etc. The ‘quality reforms’ currently progressing in Norway involves the specification of the assessment of grades being assessed relative to specific skills and abilities. This work has been initiated by the Norwegian Council for Higher Education and will be carried out by the appropriate National Committee for each disciplinary area. The work is in its early stages and is focused on the development of detailed discipline-based criteria for the purposes of grading. Work on a national qualifications framework has begun as a follow-up to the Berlin Communiqué.</p>	<p>Professor George Francis, University of Bergen, Department of Chemistry, Allegaten 41. N-5007, Norway. nkjfr@kj.uib.no</p> <p>Ms Tone Flood Strom Advisor, Department of Higher Education, Ministry of Education and Research, Norway tfs@ufd.dep.no</p>
POLAND	<p>There is relatively little activity in Poland at present. There is some discussion of learning outcomes within the academic community and the ministry. The latest documents on standards for study programmes include descriptions of graduates in terms of their knowledge and also their skills.</p>	<p>Maria Misiewicz, ECTS National Counsellor, Director of the Teaching Department, Uniwersytet Wrocławski, PL Uniwersytecki 1. PL-50137, Wrocław, Poland. Mami@adm.uni.wroc.pl</p>
PORTUGAL	<p>There appear to be no specific national developments to introduce learning outcomes. However, many universities are trying to define competences for graduate programmes along with the appropriate methodologies associated with them. For example in 1999-2000 the University of Aveiro had undertaken a process to ‘rethink the curricula’. This involved the definition of general competences for graduates (cognitive and communication) and for subject area and degree programmes. This process is linked with reflections on appropriate teaching methodologies. In the History Department of the University of Coimbra, professors are required annually to define learning outcomes and identify generic competences drawn from a predetermined list. The course descriptions containing learning outcomes (<i>resultados</i>) are available on the web (http://www.uc.pt/historia/ch/ecad112.html).</p>	<p>Professor Estela Pereira, ECTS/DS Counsellor, Universidade de Aveiro, Departamento de Física, Campus Universitario de Santiago, P-3810 Aveiro, Portugal. esper@fis.ua.pt</p> <p>Professor Joaquim Ramos de Carvalho, ECTS/DE Counsellor, Universidad de Coimbra, IHTI Faculdade de Letras, Largo da Porta Férrea. 3004-530 Coimbra, Portugal. joaquim@dei.uc.pt</p>
RUSSIAN FEDERATION	<p>In the Russian Federation requirements for the knowledge and training of graduates are outlined, to indicate what they have to know and be able to do. These are to be found in the State standards developed for each programme. The State standards (in Russian) can be found at: http://www.edu.ru/db/portal/spe/archive.htm .</p>	<p>Gennady A Lukichev, Director, National Information Centre on Academic Recognition and Mobility (ENIC), Ministry of Education, Russia. glukichev@sci.pfu.edu.ru</p>
SLOVAK REPUBLIC	<p>Slovakia is currently using information sheets to describe course units. These require the specification of learning objectives and the methods used. This is part of a governmental decree that is binding for higher education institutions. There is a process underway to include detailed learning outcomes but this is still under development.</p>	<p>Dr Jaroslava Stašková, ECTS/DE Counsellor, Filozofická Fakulta, Prešovská Univerzita., SK-080 798 Prešov, Slovak Republic. jstasko@condomet.sk</p>

SLOVENIA	<p>There is a small amount of activity regarding learning outcomes which are translated as ‘aims (<i>cilji</i>) of study programmes and ‘the image of graduates’ (<i>lik diplomanta</i>) meaning what qualities a successful student acquires. In recent discussion papers the term ‘learning outcomes’ (<i>učni izidi</i> and <i>študijski rezultati</i>) is becoming more common. The Slovenian Parliament recently approved a higher education law amendment (May 2004) where two provisions have direct links to learning outcomes. Article 33 seeks more precise definitions of the starting point for the preparations of study programmes. Article 34 calls for the definition of programme aims in terms of generic and subject-specific competencies. It is likely that the national higher education framework will include and elaborate learning outcomes. Some individual HEIs are already exploring learning outcomes following the ‘Tuning’ experience.</p>	<p>Professor Pavel Zgaga, Bologna expert, Slovenia. Pavel.zgaga@guest.ames.si</p>
SPAIN	<p>In Spain, a new type of approach to higher education is emerging as a result of the Bologna reforms, which are being used as an opportunity for quality enhancement. Parallel to the issuing of the general framework for the Spanish higher education and the decrees relating to the implementation of the ECTS and the DS by the Ministry of Education, the Spanish Agency for Quality Assurance and Accreditation (ANECA) has launched a number of tenders for the development of new degree designs. These degree projects are for universities and aim at the ‘joint degree’ debate and proposals by groups of universities of specific degree programmes designed in accordance with the new coordinates of the European Higher Education Area. The new degree designs are asked to specify the learning outcomes and competences, consequently bringing the issue of the outcomes and competences to the forefront of the debate about the transformation of degrees. It is not clear yet what the long-term impact of these initiatives will be. There is however, a potential for a profound change from a predominantly content-teacher based education to a student-centred, competence-based system where the learning outcomes are at the core. Some universities (e.g. Deusto) already have detailed plans to innovate and transform themselves in the manner described above.</p>	<p>Dr Julia Gonzales, ECTS/DS Counsellor, Universidad de Deusto, E-48080, Bilbao, Spain. jmgonzal@rector.deusto.es</p>
SWEDEN	<p>Work begun in 2002, is progressing towards a stronger learning outcomes perspective, although learning outcomes have existed since 1993 in the Higher Education Act and Degree Ordinances that formulated objectives for specific degrees. The current ongoing review of the entire Swedish qualifications framework is conducted by the Ministry of Education and was triggered partly by the Bologna process. The work on the qualifications framework involves a learning outcomes approach, and the Ministry Review Report (<i>Högre utbildning i utveckling – Bolognaprocessen i svensk belysning, Ds 2004:2</i>) was presented in February 2004; reactions from all stakeholders are being sought until June 2004. The ‘degree review’ report examines degree structures, levels, grades and credit points (including ECTS). It seeks to promote mobility, increase the transparency and clarity of Swedish higher education, and improve lifelong learning. The project proposes the development of new generic qualification descriptors that indicate the level of knowledge, understanding and competence to be obtained before</p>	<p>Stefan Lofkvist, Swedish National Agency for Higher Education (Hogskoleverket), Box 7851. SE-10399. Sweden. Stefan.lofkvist@hsv.se</p> <p>Swedish Ministry of Education and Science Degree Review factsheet: http://www.education.ministry.se</p>

	<p>the award of <i>kandidatexamen</i>, <i>masterexamen</i> and <i>doktorsexamen</i>. These three degrees would be the outcomes of each of the proposed degree levels which means that at the same time the qualification descriptors would function as the level descriptors for the three cycles. Currently, general academic degrees are described in terms of workload, level and profile. In Sweden there is a distinction between ‘academic’ and ‘professional’ degrees and the latter employ additional descriptions in terms of learning outcomes and skills. Currently, under the mandatory Swedish credit point system student workload is expressed in points where one week of full-time study equals one credit point (one year = 40 credit points). The review group proposes that ECTS is adopted for all levels as well as the ECTS grading scale. It is not clear if credits will be expressed in terms of learning outcomes or how this might impact on the approach to grading. Any new legislation is not expected to come into effect until July 2007.</p>	
SWITZERLAND	<p>In Switzerland, there is no systematic use of learning outcomes. However, the Rectors’ Conference (CRUS) is trying to raise awareness about them especially in relation to the development project to create a ‘national qualifications framework’. The recent Rectors’ Conference Bologna recommendations (http://www.crus.ch/deutsch/Lehre/Bologna/) acknowledged the future development of defined European generic qualification descriptors. The Swiss have not committed themselves to work in this area but universities are encouraged to reform using learning outcomes and note the work associated with the ‘Dublin descriptors’. In addition, an informal group that includes quality assurance and Rectors Conference representatives is working on BA-MA descriptors. The link between the allocation of credits and learning outcomes is mentioned in the Federal level and university level Bologna-ECTS recommendations (http://www.unil.ch/bologne see documents de référence).</p>	<p>Susanne Obermayer, Conference of the Swiss Universities and ECTS/DS counsellor, Bologna and ECTS Coordinator, Sennweg 2, CH-3012 Bern, Switzerland. Susanne.obermayer@crus.ch</p> <p>Antoinette Charon Wauters, ECTS/DS Counsellor, Head of International Relations, Université de Lausanne, CH-1015, Lausanne, Switzerland. acw@rect.uni.ch</p>
THE FORMER YUGOSLAV REPUBLIC OF MACEDONIA	<p>Learning outcomes are not a feature in either of the two state universities in Macedonia (St Cyril and Methody in Skopje and St Kliment Ohridski in Bitola). However, the ‘<i>education and development strategy 2001-2010</i>’, designed by the Ministry of Education and Science, emphasises the development of the individual through the acquisition of general and professional knowledge. Education should provide critical, creative and innovative citizens with appropriate skills and competences in the context of lifelong learning. Educational reform in Macedonia includes the reconsideration of the role and mission of universities and the creation of education that relates to employment. Proposed legislation includes regulations on a qualifications framework and learning outcomes. In the South East European University learning outcomes are already being introduced.</p>	<p>Nadezda Uzelac, Head of the Macedonian Network for Higher Education Information (ENIC), Ministry of Education and Science, ul. Dimitrie Cuposki br. 9, MK-1000, Skopje/Macedonia. Nadezda.uzelac@mofk.gov.mk</p>
TURKEY	<p>There is some activity associated with learning outcomes in Turkey. The Turkish ECTS counsellors’ team is promoting the expression of learning outcomes in ECTS Information Packages and this is leading to much discussion on their nature, scope and role. The level of interest and activity varies between higher education institutions.</p>	<p>Professor Mehmet A Kisakürek, ECTS Counsellor, University of Ankara, Turkey. kkurek@education.ankara.edu.tr</p> <p>Dr Burak Arıkan, ECTS Counsellor, Sabanci University, Orhanlı, Tuzla, 34956, Istanbul, Turkey. barikan@sabanciuniv.edu.tr</p>

<p>UNITED KINGDOM</p>	<p>Learning outcomes have been used extensively throughout the United Kingdom (England, Scotland, Wales and Northern Ireland which enjoy different educational structures) since the early 1990s. In 1997 the National Committee of Inquiry into Higher Education (the Dearing Report) envisaged mass participation in higher education and the resultant need for clear information about courses and qualifications and ‘greater explicitness and clarity about standards and levels of achievement required for different awards’. The qualifications framework for England, Wales and Northern Ireland, and the separate one for Scotland link to external reference points (benchmark statements, levels, programme specifications, and qualification descriptors) that in turn link to learning outcomes. The SCQF employs 12 levels with associated level descriptors, which are themselves regarded as broad levels of outcome. The whole UK system represents a complex outcomes-based approach. Subject benchmark statements (available at http://www.qaa.ac.uk) set out expectations about standards of degrees and define what can be expected of a graduate in terms of the subject techniques, skills, intellectual demand and challenge. Programme specifications are written by institutions to clarify the knowledge, critical understanding, skills and other attributes a student will have on successful completion of a specific programme. Learning outcomes are employed in different ways at different levels (institutional, regional and national) within the education systems. Most HEIs express their qualifications / programmes of study and their individual modules in terms of learning outcomes. Thus curricula are outcomes-focused in order to improve the design, teaching, learning and effectiveness of the student experience. HEIs are autonomous and responsible for their own internal systems for maintaining standards and quality. Their systems are audited by the UK Quality Assurance Agency (QAA). They monitor the effectiveness of their programmes and whether they achieve their intended learning outcomes. Learning outcomes therefore have direct links to standards, national mechanisms for quality assurance and the enhancement of teaching, learning and assessment. In addition, most UK institutions are credit based where credits are expressed in terms of ‘notional time to achieve a specified learning outcome’. Further information on UK credit, credit frameworks and learning outcomes can be obtained from: http://www.scqf.org.uk/home.aspx, http://www.seec-office.org, and http://www.elwa.ac.uk.</p>	<p>Stephen Adam, ECTS/DS Counsellor, University of Westminster, 309 Regent Street, London W1B2UW. United Kingdom. adamss@wmin.ac.uk</p>
<p>GLOBAL DEVELOPMENTS</p>	<p>It is not possible to provide a detailed picture of the global position regarding the use of learning outcomes in this small project. However, it is clear that activity outside Europe has been taking place notably in Australia, New Zealand, South Africa and the USA. The Australian Qualifications Framework (AQF) provides a comprehensive, nationally consistent framework for all post-compulsory education and training, which was introduced in 1995. The AQF recognises that the schools sector, vocational education and training sector and higher education each have different industry and institutional linkages and connects them in a single coherent framework incorporating title and guidelines. The guidelines contain the main criteria for defining qualifications based on the general characteristics of education and training at each qualification level. These characteristics are expressed principally as learning outcomes (descriptors of learning outcomes or competencies to be achieved for a particular qualification). Since 1993, the New Zealand Qualifications Authority (NZQA)</p>	<p>Australian Qualifications Framework (AQF). http://www.aqf.edu.au</p> <p>New Zealand Qualifications Authority (NZQA) http://www.nzqa.govt.nz/framework/</p> <p>Council of Higher Education Accreditation (CHEA) http://www.chea.org</p>

	<p>has developed its credit-based National Qualifications Framework (NQF), which is designed to provide nationally recognised, consistent standards and qualifications together with recognition and credit (measured in terms of notional learning hours to achieve the stated outcomes) for all learning of knowledge and skills. It has 10 levels that do not equate to years of learning. The level descriptors are described in terms of three categories: process, learning demand and responsibility. The NQF is an outcomes-based system and the New Zealand Register of Quality Assured Qualifications (the Register) lists all approved programmes and includes outcome statements that describe the nature of what a holder should achieve and what the <i>'qualification represents in terms of the application of knowledge, understanding, skills and attitudes'</i>. The USA is the originator of the learning outcomes approaches and its educational systems present a complex decentralised picture. Not all institutions express their modules and units in terms of learning outcomes but they are very widely used. According to the Council of Higher Education Accreditation (CHEA), the public, federal government, higher education community and policy makers and students increasingly seek 'learning outcomes' information as an integral part of making judgements about the quality of accredited institutions and programmes. Learning outcomes are becoming increasingly important in the accreditation process and <i>'evidence of learning outcomes is becoming the principle gauge of higher education's effectiveness'</i>. In the USA, learning outcomes are commonly linked to module and programme assessment and standards – levels of attainment.</p>	
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2.3 CONCLUSIONS

Despite the methodological drawbacks and limited nature of the review it is possible to draw the following broad conclusions:

- 2.3.1 There is considerable activity across Europe (far more than anticipated), which can be viewed as a positive Europe-wide movement toward the adoption of learning outcomes. Of the 30 countries that volunteered information, 29 indicated some activity (97%). 'Activity' includes any sort of learning outcome initiative and therefore encompasses small-scale individual initiatives at the institutional level through to complex national policies that impact on all sectors of higher education activity. However, at least eight 'active' countries report minimal development.
- 2.3.2 Currently, the following countries have developed (or are at the advanced stages of implementing) integrated systems that employ learning outcomes approaches at all levels of educational activity: Belgium (Flemish Community), Denmark, Hungary, Ireland, Italy, Slovak Republic, Spain, Sweden and UK.
- 2.3.3 In many countries the learning outcomes activity was predominantly characterised by bottom-up, dispersed, institutional interest (approximately 34%).
- 2.3.4 In the majority of countries there was a clear top-down ministry-led impetus for change (52%), often accompanied by institutional level activity. This does raise the question of how bottom-up activity can be encouraged and what is the best pattern to adopt: top-down imposition, bottom-up growth or some mixture of the two? The imposition of top-down policies on reluctant institutions means that they do not own the process and may create an antithetical, mechanistic response from staff in HEIs.
- 2.3.5 Several countries spontaneously indicated that their efforts were linked to the Bologna agenda and specifically the Berlin reform agenda (21%).

- 2.3.6 In no cases were learning outcome initiatives overtly linked with the adoption of student-centred learning, although this aspect was not raised in the question posed.
- 2.3.7 Implementation appears to be taking place right across Europe without any strong geographical, political or educational pattern emerging. However, movement is further advanced in parts of North-Western Europe.
- 2.3.8 Several countries indicated that there was activity but it concentrated on the Fachhochschule/polytechnic sector e.g. Austria, Netherlands and Lithuania. In a number of countries where a binary divide exists between professional and academic education, there is evidence of different policies being followed in each sector - with a greater impact in the professional sector. In the VET area it is clear from recent OECD and CEDEFOP reports that explore the use of learning outcomes and other mechanisms, that there is much activity to create 'zones of mutual trust' and national qualifications systems to promote lifelong learning.²⁵
- 2.3.9 It appears that the understanding of learning outcomes is commonly shared as it is broadly defined in terms of the request for information. However, it is not safe to assume that the detailed practical application of learning outcomes is understood in the same way in every country. There are possibly confusions between learning outcomes, objectives and aims. A more detailed survey of the national implementation of learning outcomes might reveal profound differences in understanding and practice. Certainly a common language is required.
- 2.3.10 More detailed research is needed and some mechanism to share good practice and experience would benefit all countries. A range of interesting and potentially very useful knowledge exists and could be explored to create case studies to illustrate the problems and pitfalls of introducing learning outcomes within higher education systems. A large number of replies indicated real interest in the results of the brief survey and sought any further information that was available.

²⁵ Coles M and Oates T (2004) *European Reference Levels for Education and Training*, CEDEFOP study. Coles M and Behringer F (2003) *The Role of National Qualifications Systems in promoting Lifelong Learning*. OECD Educational working paper number 3.

3 LEARNING OUTCOMES AND THE BOLOGNA PROCESS (implications)

3.1 INTRODUCTION

The Bologna process represents a strong desire amongst participating countries for radical educational reform. It commits them to creating *‘the most competitive and dynamic knowledge-based economy in the world’*. It seeks to *‘enhance the attractiveness and competitiveness of higher education institutions in Europe’* by the creation of the European Higher Education Area by 2010. The most recent Ministerial meeting in Berlin sought:

*‘... to review progress achieved and to set priorities and new objectives for the coming years, with a view to speeding up the realisation of the European Higher Education Area.’*²⁶

*‘Ministers emphasise the importance of all elements of the Bologna Process for establishing the European Higher Education Area and stress the need to intensify the efforts at institutional, national and European level. However, to give the Process further momentum, they commit themselves to intermediate priorities for the next two years. They will strengthen their efforts to promote effective quality assurance systems, recognition systems of degrees and period of study.’*²⁷

The successful creation of the Higher Education Area is clearly dependent on the introduction of common practical and effective reforms that collectively improve the efficiency and effectiveness of higher education in Europe. The Berlin Communiqué directly identifies ‘learning outcomes’ as having a role in this process (as indicated in section 1.1 of this report). However, the role of learning outcomes in these matters is not immediately apparent, so there is a need to establish what this position might be in relation to the specific nine Bologna Action Lines as well as the new Berlin priorities.

3.2 CONTRIBUTION OF LEARNING OUTCOMES TO THE BOLOGNA ACTION LINES AND CURRENT BERLIN PRIORITIES

Taking each Bologna Action Line separately:

3.2.1 **Adoption of easily readable and comparable degrees** – involves higher education institutions

taking full advantage of ‘existing tools’ in order to facilitate the academic and professional recognition of their course units and degrees. These existing tools are normally identified as the Convention on the Recognition of Qualifications concerning Higher Education in the European Region, 1997 (commonly known as the Lisbon Convention), the Diploma Supplement and the ENIC-NARIC information network. However, the use of learning outcomes (unit/module or as course descriptors) has an obvious role to play in making qualifications more transparent for students, credential evaluators and employers. If qualifications are described in terms of learning outcomes the process of evaluation and recognition is simplified and a more informed and fairer judgement can be made. Furthermore, it would help the systematic recording of information about qualifications in Diploma Supplements.²⁸

3.2.2 **Adoption of a system essentially based on two (now three) main cycles** – emphasises the importance of cycles, levels and level descriptors for the correct location of qualifications in any framework. The whole post-Berlin shift in focus towards the introduction of new style national qualifications frameworks and the creation of an over-arching European Qualifications framework can be seen as part of an outcomes-focused approach. The adoption of external reference points and the need for precision and clarity strengthens the case for the use of learning outcomes directly related to levels and level/cycle indicators that will characterise the new system. Finally, not only are learning outcomes a valuable way to express qualifications but they play a similar role with regard to programme specifications.²⁹

²⁶ Berlin Communiqué, preamble, paragraph one.

²⁷ Berlin Communiqué, section on progress, paragraph 2.

²⁸ In particular, section 4.2 of the Diploma Supplement requires information about the programme requirements and the contents of qualifications.

²⁹ Programme specifications are the concise summary of the main features of a programme of study and the learning outcomes that a typical student might reasonably be expected to achieve and demonstrate.

- 3.2.3 **Establishment of a system of credits** – implies the development of the European Credit Transfer System (ECTS) from a simple credit transfer tool into a more sophisticated and powerful credit accumulation and transfer system. The generalisation of ECTS has proceeded as different states have adopted it as the basis of their domestic credit systems. However, this process has been slowed by the lack of levels in ECTS and the imprecise nature of ECTS credits, which in practice at the institutional level are not defined in terms of learning outcomes. There are current moves to remedy these deficiencies (see section 3.6). Credits expressed in terms of learning outcomes are a powerful way to recognise and quantify learning achievement from different contexts; they also provide an effective structure for relating qualifications. The addition of the learning outcomes dimension has the potential to improve dramatically the effectiveness of ECTS as a true pan-European system.
- 3.2.4 **Promotion of mobility** – is an obvious area in which more curriculum transparency would make student exchanges and the full recognition of their studies simpler and easier. The removal of obstacles to the free movement of students and teachers can only be helped if courses are expressed in a common way that makes their content - skills and competences gained - explicit. This makes the process of making judgements about them more precise and effective. In this way both horizontal (within a study programme) and vertical (from one programme to another- first to second cycle) mobility can be improved.
- 3.2.5 **Promotion of cooperation in quality assurance** – is an obvious part of creating the European Higher Education Area. Quality assurance plays a vital role increasing mutual trust and confidence between educational systems. The use of learning outcomes and approaches associated with them (external reference points) can play an important part in encouraging common approaches and techniques that directly relate to the establishment of universal standards and assurance techniques. Universal approaches to reference points based on output approaches (learning outcomes) make cross-border judgements as to the level, nature and equivalence of qualifications easier and more accurate.
- 3.2.6 **Promotion of the European dimension in higher education** – centres upon the development of modules, courses and curricula at all levels with a ‘European’ content and orientation. In addition, the development of more integrated study programmes and joint degrees is to be encouraged (see section 3.4). These initiatives can be aided when the curriculum is expressed in a common and more precise manner by expressing module/course content in terms of learning outcomes. The fit and relationship between units of study is made more transparent and the construction of dual and joint programmes of study is simplified. Similarly the mobility of study units is facilitated where open and distance learning is concerned.
- 3.2.7 **Lifelong learning** – is a complex and little developed area. It is recognised that there is a need to improve educational opportunities for all citizens throughout their lives. The steps to align national policies as an integrated part of higher education activities involve the promotion of ‘*flexible learning paths*’ and the use of ECTS. Many countries are accepting the need for more flexible and integrated systems of qualifications as a consequence of the objective of creating a lifelong learning society in which citizens learn throughout their lives. The tool to accomplish the necessary linkages between VET and HE, as well as all learning from cradle to grave, is logically the adoption of credit based qualifications frameworks. The medium of credits based on learning outcomes has the potential to integrate in a single progressive structure: school, secondary, vocational training and higher education. The use of credits linked to levels expressed in terms of outcomes is proving to be a viable way to create such all-encompassing qualifications frameworks in Ireland, Scotland and Wales. These frameworks help people of all ages to access appropriate education and training. The expression of learning in terms of learning outcomes is perhaps the only way to accomplish such integrated systems for lifelong learning, capable of including the recognition of non-formal and informal learning (via APL and APEL).
- 3.2.8 **Higher education and students** – the employability agenda is strengthened by the adoption of learning outcomes that highlight the generic skills and competencies valued by employers. Similarly, students have much to gain from more explicit course descriptions. The empowerment of students has to include their active participation in educational life and their development as active learners in more student-centred learning systems. Effective student participation can be enhanced when modules and courses are clearly expressed in terms of learning outcomes which

allow the learner to see the skills and abilities they should acquire. This also helps them make more informed choices within and between different programmes of learning.

- 3.2.9 **Promote attractiveness of the European Higher Education Area** – is an obvious goal and implies an effective, efficient, high-quality educational zone that will attract non-European students and help retain home students. The emphasis put by ministers on ‘attractiveness and competitiveness’ can be indirectly enhanced by the adoption of learning outcomes approaches and the associated development of student-centred, transparent curricula.

The Berlin Communiqué emphasises the need for particular progress in the areas of (i) quality assurance, (ii) two-cycle system and (iii) the recognition of degrees and periods of study. There is obviously a concern by ministers that the goal of creating the European Higher Education Area by 2010 may not be on course and that the stocktaking exercise for the Bergen summit in 2005 is designed to explore the state of play in these three vital areas. If progress is found to be deficient the implication is that ministers will adopt suitable remedial action or ‘corrective measures’ to keep the Bologna process on course.

It is arguable that in all three of these priority areas learning outcomes play a significant and even a fundamental role. Without progress at the level of learning outcomes the 2005 stocktaking will be disappointing. The specific reasons for this are explored above in sections 3.2.1-3.2.9. The overall aims of the Bologna process - to improve the efficiency and effectiveness of European higher education and create a ‘Europe of knowledge’ - require the adoption of output-related, student-focused approaches to education, in place of the traditional input-focused techniques to express, measure and quantify learning. There is evidence that traditional models and methods of expressing qualifications and qualifications structures are giving way to systems based on explicit reference points using learning outcomes and competencies, levels and level indicators, subject reference points (benchmark statements) and qualification descriptors. The motivation for this is that these devices and approaches provide more precision and accuracy as well as facilitate transparency and comparison.

In terms of quality assurance ministers have called for ENQA and others to :

‘...develop an agreed set of standards, procedures and guidelines on quality assurance...’³⁰

The adoption of common methodological approaches to express qualifications, levels, and qualifications frameworks must underpin any further development of quality assurance in Europe. It is difficult to see how some of this can be achieved without a common Europe-wide adoption of qualification descriptors and level indicators expressed in terms of learning outcomes.

3.3 TUNING EDUCATIONAL STRUCTURES PROJECT AND LEARNING OUTCOMES

The ‘*Tuning Educational Structures in Europe*’ project is a large university-based initiative jointly organised by the universities of Groningen (Netherlands) and Deusto (Bilbao, Spain).³¹ It started in December 2000 and addresses several of the Bologna action lines, notably the ‘*adoption of a system of easily readable and comparable degrees* (line 1)’, the ‘*adoption of a system based on two cycles* (line 2)’ and the ‘*establishment of a system of credits* (line 3)’

Phase one of the project (2000-2002) was aimed at identifying points of reference for generic and subject specific competences for first and second cycles in the following subject areas: Business Administration, Chemistry, Education Sciences, Earth Science (Geology), History, Mathematics and Physics. In phase two of the project (2003-2004) European Studies and Nursing were added and the work of phase one was further refined. A projected phase three (2005) will seek to: continue the investigations with the involvement and agreement of more stakeholders; focus on the dissemination of the work; and develop the ‘Tuning approach’ in terms of recognition, ECTS accumulation, quality, third cycle descriptors, etc. The findings of Tuning phase two were recently presented at the Tuning closing conference in Brussels on 21st May 2004.³²

³⁰ Berlin Communiqué, section on quality assurance, final paragraph.

³¹ Full details of the Tuning project can be obtained from: <http://www.relint.deusto.es/TuningProject/index.htm> and <http://www.let.rug.nl/TuningProject/index.htm> .

³² The documentation for Tuning phase two will be finalised and published at the end of 2004.

Currently, Tuning involves over 130 higher education institutions from the enlarged EU. The name *Tuning* was chosen for the project to reflect the idea that universities do not look for harmonisation of their degree programmes or any sort of unified, prescriptive or definitive European curricula but simply for points of reference, convergence and common understanding.

The Tuning initiative is proving very influential in promoting the idea of learning outcomes and competences in HEIs throughout Europe. This bottom-up spontaneous initiative has the advantage of encouraging academics (in consultation with students and employers) to explore subject-specific and generic outcomes.³³

The Tuning project describes learning outcomes in terms of competences and regards them as points of reference for curriculum design and evaluation, not as straightjackets. They allow flexibility and autonomy in the construction of curricula. At the same time, they provide a common language for describing the curricula. In the framework of Tuning 'a methodology' has been developed to understand and improve curricula. Tuning has *inter alia* focused on 'developing professional profiles and comparable and compatible learning outcomes':

- In consultation with graduates, employers and academics it has evaluated the importance of 30 generic competences and their existence in HEI first cycle qualifications.
- It has developed subject-specific competences (knowledge, understanding and skills) for each of the subject areas that focus on what each area has in common. In effect, it has mapped subject areas and developed common reference points and subject specific competences for each of the pilot disciplines (this has produced something akin to the UK benchmark statements).
- It has begun to explore the relationship between learning outcomes and teaching, learning and assessment.

The Tuning project is recognised as important in that it has raised Europe-wide consciousness about the role and significance of learning outcomes and competences. However, this experience is limited to those institutions currently involved in the project and to those subject disciplines covered. In addition, many HEIs involved in Tuning have not introduced learning outcomes in their institutions nor necessarily within their discipline fields. Despite this, Tuning has accomplished much. It has shown that it is possible to obtain agreement from subject experts drawn from across Europe about the common competences in first cycle programmes. Furthermore, it has raised awareness about the links between teaching, learning and assessment and the articulation of learning outcomes. Finally, it has emphasised the role of generic competences and their significance in the curriculum. These achievements are important in moving European higher education institutions towards outcomes-focused curricula and all that they imply.

3.4 THE ROLE OF LEARNING OUTCOMES IN JOINT/DUAL AWARDS

There is a growing interest in the development of joint degrees as indicated by the Bologna follow-up seminar '*Joint Degrees – Further Development*' held in Stockholm 6-7 May 2004.³⁴ The seminar examined various aspects of joint degrees, integrated curricula and the promotion of the European dimension in higher education, together with associated recognition problems. There appears to be no discussion of the potential role learning outcomes might play in the development and expression of joint degrees apart from the reference by David Coyne (European Commission DG Education and Culture) that linked '*ERASMUS support for the development and delivery of Joint Degrees in combination with the support for tuning exercises in the various thematic networks...*'

The 'tuning approach' clearly involves the articulation of learning outcomes and competences of a subject specific and generic nature. The detailed identification of learning outcomes at module and programme level has the potential to aid the process of curriculum design and expression. Learning outcomes would make it easier to identify similarities and differences and to match parts of different programmes of learning. Therefore the adoption of outcome approaches has a potentially important role to play in the curriculum development of joint degrees. They can aid the

³³ Details of the Tuning findings and approach to competences can be obtained at: <http://www.relint.deusto.es/TUNINGProject/line1.asp>.

³⁴ The final version of the report by the rapporteur Dr Pavel Zgaga of the Stockholm seminar can be obtained at <http://www.bologna-bergen2005.no>.

expression of learning, provide precise guidance on the skills, understanding and abilities developed in the student, and aid the detailed comparison and articulation of different programmes of learning. Perhaps their key contribution lies in the transparency that they can bring to the process of joint programme development and the conjunction of different courses.

In a similar way the development of the ERASMUS cooperation and mobility programme might benefit from the wholesale adoption of learning outcomes to improve the transparency of integrated Masters Courses. Where partnerships are envisaged with 'third countries' the process would also be simplified, particularly where partner countries are already familiar with, and use, learning outcomes.

3.5 LEARNING OUTCOMES AND RECOGNITION TOOLS

The area of recognition plays a pivotal part in the creation of the European Higher Education Area, particularly by seeking to develop and improve methods for the recognition of qualifications based on their level, quality and profile. In the 2003 Vaduz statement the ENIC-NARIC networks stated they would seek to:

*'Develop recognition procedures aiming at the recognition of learning outcomes rather than the formal paths that have led to these outcomes. In this, they will in particular build on the results of the Joint Quality Initiative and Tuning projects supported by the European Commission as well as on the work carried out on the recognition of prior learning and non-traditional qualifications. Recognition based on learning outcomes is important also with regard to facilitating lifelong learning.'*³⁵

There is a clear acknowledgment by those involved in recognition that learning outcomes have a role in recognition by making learning more transparent and therefore easier to evaluate. Furthermore, the *Bologna seminar on Recognition Issues in the Bologna Process* held in Lisbon April 2002, stated that:

*'Learning outcomes are important for recognition, since the basis for recognition procedures is in the process of shifting from quantitative criteria such as the length and type of course studied, to the outcomes reached and competencies obtained during these studies. The principle question asked of the student or the graduate will therefore no longer be "what did you do to obtain your degree?" but rather "what can you do now you have obtained your degree?". This approach is of more relevance to the labour market and is certainly more flexible when taking into account issues of lifelong learning, non-traditional learning, and other forms of non-formal educational experiences.'*³⁶

Various tools for the purpose of documenting learning outcomes already exist (EUROPASS, ECTS) and the whole area of recognition, including student mobility, can benefit from the widespread adoption of an outcomes approach that facilitates accurate judgements about qualifications, part-qualifications and periods of learning. Learning outcomes can contribute to the simplification of the recognition process so citizens can move between different higher education systems and get full academic and professional recognition of their qualifications.

3.6 LEARNING OUTCOMES APPROACHES AND THE DEVELOPMENT OF ECTS

The European Credit Transfer System (ECTS) has recently developed rapidly as a credit accumulation and transfer scheme at national level. It has moved from being a credit transfer system for recognising periods of study at foreign institutions to become a putative credit accumulation and transfer system that encompasses all learning and is not solely focused on overseas mobility. Its evolution has been accelerated by the Bologna process and the drive to find effective tools to help converge the structures of European higher education. ECTS now clearly defines ECTS credits as:

³⁵ Vaduz statement on the European Higher Education Area issued by the ENIC-NARIC networks 18-20 May 2003, Section 8e: <http://www.enic-naric.net>.

³⁶ Council of Europe, *Seminar on Recognition Issues in the Bologna Process*, Lisbon. April 2002: <http://www.coe.int>.

*'The currency to measure student workload in terms of notional learning time required to achieve specified learning outcomes.'*³⁷

This definition is extended to view learning outcomes *'as sets of competences, expressing what the student will know, understand or be able to do after completion of a process of learning'*. This new approach of using credits to quantify the outcomes of learning will have profound effects when implemented across Europe. It will involve those using the ECTS framework in casting all their modules in terms of learning outcomes and notional learning time. It is also likely that ECTS will adopt levels and level indicators in the near future. This enhancement together with the other modifications is likely to impact on national higher education systems that already use ECTS as the basis of their own domestic credit accumulation framework. These reforms will need to fit with the creation of new national qualifications frameworks and the overarching European (credit?) qualifications framework.

ECTS is also evolving into a system able to encompass lifelong learning that will include Continuing Professional Development (CPD) as well as formal, non-formal and informal learning based on learning outcomes linked to techniques for the Accreditation of Prior Experiential learning (APEL). The European Commission Director General for Education recently announced plans to develop a credit based integrated system for lifelong learning, centred on ECTS, that links vocational education and training and higher education.³⁸ In his speech he noted that *'This means at higher education level a shift in perspective from providers to learning outcomes and competences is essential.'* The Commission is clearly linking the Copenhagen process for vocational education and training with the Bologna process for higher education.

3.7 LEARNING OUTCOMES AND QUALITY ASSURANCE DEVELOPMENTS

The ministerial meeting in Berlin identified quality assurance at *'the heart of the setting up of a European Higher Education Area'* were committed *'to supporting further development of quality assurance at institutional, national and European level.'* They also sought by 2005: *'evaluation of programmes or institutions, including internal assessment, external review...'*

3.7.1 European Network for Quality Assurance in Higher Education (ENQA)

The European Network for Quality Assurance (ENQA) plus other bodies was tasked to report on this matter. There is evidence that in terms of quality assurance ENQA is moving from an input to an output focus prompted by the clarity and transparency it produces. The ENQA Steering Committee regards benchmarking as one of the increasingly relevant evaluation methods.³⁹ Traditional approaches are proving less useful in the global world inhabited by new providers and forms of (transnational and borderless) education. External reference points, based on learning outcomes, in conjunction with national qualifications frameworks can provide a robust basis on which effective standards can be maintained and applied to new providers.

3.7.2 Transnational European Evaluation Project 2002-2003 (TEEP)

The Bologna Declaration was the major motivation for setting up the Transnational European Evaluation Project (TEEP), 2002-2003. This project was coordinated through the European Network of Quality Assurance in Higher Education (ENQA) with the participation of three national/regional quality assurance agencies and the SOCRATES Thematic Networks of the three disciplines, History, Physics and Veterinary Science. It relates directly to any discussion of learning outcomes as it seeks to develop a European methodology for the use of common criteria and quality assurance at European level. In so doing it employs the notions of learning outcomes and competences. The project encompassed five institutions in each of three disciplines and sought to cover as wide a range of national and European contexts as possible. The project included both academic and professional disciplines through its selection of History, Physics and Veterinary Sciences. The project drew directly on the findings developed by the Tuning project that defined competences. The main objectives of TEEP were to:

- Develop further a method for trans-national external evaluation, building on experiences, such as the Tuning project and the BA-MA descriptors developed through the Joint Quality

³⁷ *ECTS Users' Guide – European Credit Transfer and Accumulation System for Lifelong Learning*, European Commission May 2004.

³⁸ Concluding comments made by N. Van Der Pas at the Irish Presidency Conference on *Themes and Approaches Across HE and VET*, March 2004.

³⁹ ENQA, (2003) *Benchmarking in the Improvement of Higher Education*, ENQA Workshop Report 2, Preface.

Initiative, using common criteria on the basis of an evaluation process in three different discipline fields.

- Identify possible obstacles, which derive from trans-national evaluation and indicate strategies that might be used to overcome them.
- Contribute to more visibility, transparency and compatibility in European higher education.

TEEP reported some difficulties understanding and interpreting the Tuning criteria with regard to articulating competences and learning outcomes. There were also problems because some programmes had not developed and implemented aspects of quality assurance covered by the TEEP criteria. It was found that staff found it easier to relate to subject-specific competences than (the too numerous) generic ones. The TEEP methodological report noted the potential and importance of compatible approaches to quality assurance within a transnational framework.⁴⁰ The lesson to be learnt from this experience is perhaps the need for more common understanding of learning outcomes and competences to be related to national, as well as internationally accepted, threshold standards.

3.8 LEARNING OUTCOMES AND THE OVER-ARCHING EUROPEAN QUALIFICATIONS FRAMEWORK

There is an obvious and fundamental line between the development of new style national qualifications frameworks, the overarching European qualifications framework (EQF) and learning outcomes. The Berlin Communiqué's call for these was based on the realisation that a unifying structure and approach was required to establish compatibility between different national systems of higher education. The Berlin Communiqué encouraged national qualifications frameworks to '*seek to describe qualifications in terms of workload, level, learning outcomes, competences and profile.*' This outcomes-focused approach has profound implications.

In parallel with higher education developments there is much activity by the European Commission to introduce credit transfer schemes for VET known as ECVET. Furthermore, the borderlines between VET and higher education are becoming increasingly blurred as more common tools and approaches are adopted. The creation of an overarching EQF for higher education is designed to facilitate the connections between national qualifications frameworks and thereby establish real transparency, leading to the creation of what has been described as a 'zone of mutual trust'. It is likely that, in time there will emerge, a true pan-European lifelong learning system that encompasses all sectors, levels and types of learning. This will require the adoption of common methodological tools and approaches to describe learning. One element of any such system would need to be the use of learning outcomes.

Several outcomes-based national qualifications frameworks exist (Ireland, Scottish Credit and Qualifications Framework, New Zealand Qualifications Framework, Australian Qualifications Framework, South African National Qualifications Framework, etc.) that use level descriptors based on generic learning outcomes. There are differences between how each system classifies its levels and describes learning. This raises the problem as to how different systems with different level descriptors, and ways to regard learning can be reconciled. The JQI Dublin Descriptors are an attempt to do this and certainly the multitude of new European bachelor degrees would benefit from being cast in terms of learning outcomes to ensure they are true 'stand alone' qualifications. The most transparent way to regard qualifications is to define them as units of recognised outcome of learning. In this way learning outcomes permeate the whole educational structure from the institutional level through to the national and international spheres of activity.

3.9 DIFFERENT LEVELS OF APPLICATION OF LEARNING OUTCOMES:

3.9.1 Institutional/local level – curriculum implications, teaching, learning and assessment

At the institutional level learning outcomes can be used to express learning at the level of the unit or module. In so doing they clarify for the learner what is expected of him or her as well as the skills/competences, understanding and abilities that they will acquire on successful completion of their study. For the teacher, learning outcomes can clarify what exactly the module will deliver and unite this with the appropriate mode of delivery and assessment. The dynamic process marrying outcome and learning with assessment is not simple but it can lead to better programmes of

⁴⁰ Transnational European Evaluation Project – Methodological Reflections, ENQA Occasional Paper 6, pages 9, 12-13.

learning. The qualification itself can also be described in broader learning outcomes that link to external reference points leading to better design.

3.9.2 National level – qualifications frameworks and quality assurance

At the national level learning outcomes play a wider role that permeates the ways the national qualifications framework is described and the tools used to describe it. Quality assurance is improved, as explicit guides to standards can emerge based on level descriptors, qualification descriptors and subject benchmark statements.

3.9.3 International level – transparency, recognition and comparability

At the international level learning outcomes play a different role than at the local and national levels. They will be by definition much broader and less precise than national descriptors when used in any European Qualifications framework (as Bologna cycle descriptors). However, providing common approaches are used by different states within their own national systems, learning outcomes open up the possibility of real transparency, mobility and fair recognition on a scale impossible in the past.

4 ISSUES FOR CONSIDERATION

4.1 INTRODUCTION

Learning outcomes can be seen potentially to have an important impact on the educational world and more particularly the tools used to describe it, and the nature of the architecture of the new European Higher Education Area. Their widespread adoption raises a number of questions.

4.2 AREAS FOR FURTHER CONSIDERATION AND DEVELOPMENT:

4.2.1 General questions:

- What is the appropriate role of learning outcomes in the European Higher Education Area – do they have a positive contribution?
- Can learning outcomes contribute to all three Bologna cycles?
- What are the implications of learning outcomes for governments, ministries and national authorities - how do they relate to quality assurance frameworks and qualifications frameworks?
- What contribution do learning outcomes make to the development of ECTS, lifelong learning and the linking of VET and HE – and what are the national and international implications of this? Can national parallel frameworks for vocational and academic education be linked by the common use of learning outcomes?
- How might learning outcomes contribute to the development of quality assurance at the European level? How can national and internationally accepted threshold standards (and descriptions of learning) be developed?
- What are the implications of learning outcomes for higher education institutions (at module and programme level)?
- How can good practice and experience associated with the development and implementation of learning outcomes be shared, and is a top-down or bottom-up or a mixed approach more effective?

4.2.2 Technical questions:

- Do we need to develop common definitions and understandings about learning outcomes and their expression, and if so, how?
- Is it useful to distinguish between subject specific and generic learning outcomes?
- What are the implications of learning outcomes for the normative versus criterion reference assessment debate – if credits or any learning is expressed in terms of learning outcomes does this dictate the adoption of a criterion-led approach to assessment?
- Does the widespread adoption of learning outcomes necessitate any updating of existing recognition tools e.g. recognition conventions, good practice guidelines, EUROPASS, ECTS, etc?
- Should we seek some practical agreement about the role of learning outcomes in terms of cycle descriptors, levels, level indicators, qualification descriptors and subject benchmark statements?
- Should learning outcomes at module level be written as threshold statements?
- Are credits vacuous without learning outcomes?
- What are the local, national and international implications of adopting an outcomes-based definition of ECTS credits?
- How does workload relate to learning outcomes and how can workload most effectively be expressed?

4.3 CONCLUDING COMMENT

The traditional input-related curriculum has proved to be too focused on the teacher instead of the learner. Consequently there is what has been described as a paradigm shift underway, moving the emphasis from teaching to learning and to embrace student-centred learning. This change has been associated with a need for more precision in curriculum design, and an acknowledgement that more effective and varied learning styles can benefit the learner. This has strengthened the need to express, through the medium of learning outcomes, the knowledge, understanding, competences and other attributes within courses and their components. This pedagogical trend has also coincided with the multi-faceted Bologna agenda that emphasises the need for dramatic reform to modernise European education in terms of its structures and processes.

In particular, learning outcomes have the potential to contribute to every aspect of the Bologna agenda (every action line) as they play an underpinning role (a common currency) in the clear expression of the teaching-learning-assessment relationship, as well as the transparent expression of qualifications, qualification frameworks, quality, and their associated tools - cycle descriptors, levels, level indicators, qualification descriptors, subject benchmarks statements, etc.

Modules can be regarded and expressed as collections of learning outcomes, as can level descriptors, subject benchmark statements and individual qualification descriptors. Qualification frameworks built upon these foundations are more transparent and can be more easily accommodated into the proposed European overarching qualifications framework. Learning outcomes can also provide a common currency between vocational education and training and higher education, thereby helping to promote lifelong learning.

Learning outcomes are not the universal panacea for all educational problems facing higher education and they certainly come with some distinct problems that should not be underestimated. However, it is arguable that it might not be possible to have a meaningful European Higher Education Area without the widespread adoption of learning outcome approaches.



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