Learning Outcomes – the International Language for Describing Programmes in Higher Education Institutions

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1. What are Learning Outcomes?
2. What is the Bologna Process all about?
3. Why are learning outcomes at the heart of the Bologna Process?
4. How is the Bologna Process relevant to us as teachers and curriculum developers?
What are learning outcomes?

- Learning Outcomes are specific statements of what students should know and be able to do as a result of learning (Morss and Murray, 2005)
- Learning outcomes are statements of what is expected that a student will be able to DO as a result of a learning activity....(Jenkins and Unwin).
- A learning outcome is “a statement of what a learner knows, understands and is able to do on completion of a learning process” (European Qualifications Framework)
- Learning outcomes are explicit statements of what we want our students to know, understand or to be able to do as a result of completing our courses. (Univ. New South Wales, Australia)
- “Learning outcomes are statements that specify what learners will know or be able to do as a result of a learning activity. Outcomes are usually expressed as knowledge, skills or attitudes”. (American Association of Law Libraries).
- Learning outcomes are an explicit description of what a learner should know, understand and be able to do as a result of learning. (Learning and Teaching Institute, Sheffield Hallam University)
Working Definition

Learning outcomes are statements of what a student should know, understand and be able to demonstrate after completion of a process of learning.

- The learning activity could be, for example, a lecture, a module (short course) or an entire programme.
- Learning outcomes must not simply be a “wish list” of what a student is capable of doing on completion of the learning activity.
- Learning outcomes must be simply and clearly described.
- Learning outcomes must be capable of being validly assessed.
Aims and Objectives

The **Aim** of a programme or module is a broad general statement of teaching intention, i.e. it indicates what the teacher intends to cover in a programme or module or learning activity.

Example of aim: To give students an introduction to organic chemistry.

In some countries “Aim” is called a “goal”.

The **objective** of a module or lecture is a specific statement of teaching intention, i.e. it indicates one of the specific areas that the teacher intends to cover.

“My aim is to lose weight. My objective is to lose one kg per week”. My aim is to travel to Australia. My first objective is to get as far as Hong Kong”.

Objectives tend to be specific and measurable.
Aims and Objectives

Examples of objectives:
1. To give students an appreciation of the unique nature of carbon and its ability to bond to other carbon atoms.
2. To give students an understanding of the concept of hybridisation.
3. To ensure that students know some characteristic properties of alkanes and alcohols.
4. To make students familiar with a range of families of organic compounds: alkanes, alcohols, carboxylic acids and esters.

Aims are general and long term and refer to a series of lectures or unit of work (module).

Objectives are more specific and short term.
The language of aims and objectives

- To give students an understanding of ..... 
- To give students an appreciation of ..... 
- To make students familiar with ..... 
- To ensure that students know ..... 
- To enable students to experience ..... 
- To encourage students to ..... 
- To provide students with the opportunity to ..... 
  etc.
Examples of Aims

- To give students an introduction to current theories and practice in the area of science education.
- To give students an understanding of what constitutes good science teaching.
- To give students an appreciation of the contribution that science education can make to the overall education of young people.
- To help students develop the knowledge and professional skills to teach science in the secondary school.
- To give students a critical understanding of current debates and issues relating to science education.
- To provide students with the opportunity to develop their critical thinking skills to enable them to engage in highly effective science teaching in schools.
- To assist students to develop as reflective practitioners with an understanding of research methods in education and how these can inform practice in the classroom.
From the definition of Learning Outcome we see:

- **Emphasis on the student.**
- **Emphasis on the student’s ability to do something.**

Focus on teaching – aims and objectives and use of terms such as *know, understand, be familiar with.*

- **Outcomes:** Focus on what we want the student to be able to do - use of terms such as define, list, name, recall, analyse, calculate, design, etc.

- **Aims:** Give broad purpose or general intention of the module.
- **Objectives:** Information about what the teaching of the module hopes to achieve.
- **Learning outcomes** are not designed to replace the traditional way of describing teaching and learning but to supplement it.
Why are Learning Outcomes at the heart of the Bologna Process?
Focus on Learning Outcomes – Bologna

- Bologna Agreement signed in Bologna, Italy in 1999 by 29 countries. A total of 48 countries have now signed up to this agreement.
- The overall aim of the Bologna Agreement is to improve the efficiency and effectiveness of higher education in Europe in terms of academic standards of degrees and quality assurance standards.
- One of the main features of this process is the need to improve the traditional ways of describing qualifications and qualification structures.

Bologna, Italy (1999)
What countries have signed the Bologna Agreement?

**European Union** - all 28 countries
- Austria
- Belgium
- Bulgaria
- Cyprus
- Croatia
- Czech Republic
- Denmark
- Estonia
- Finland
- France
- Germany
- Greece
- Hungary
- Ireland
- Italy
- Latvia
- Lithuania
- Luxembourg
- Malta
- Netherlands
- Poland
- Portugal
- Romania
- Slovakia
- Slovenia
- Spain
- Sweden
- United Kingdom

**Non-European Union**
- Albania
- Andorra
- Armenia
- Azerbaijan
- Belarus
- Bosnia and Herzegovina
- Georgia
- Holy See
- Iceland
- Kazakhstan
- Liechtenstein
- Montenegro
- Moldova
- Norway
- Macedonia
- Russia
- Serbia
- Switzerland
- Turkey
- Ukraine

Total = 48
What is the Bologna Process all about?

- Setting up of European Higher Education Area (EHEA) to ensure the increased international competitiveness of the European system of higher education.
- The Bologna Process is not based on a European Union initiative. The agreement is between both EU and non-EU countries.
- Setting up of system to make it easier to understand the description of qualifications and qualification structures.
- Every student graduating will receive a Diploma Supplement describing the qualification that the student has received. The purpose of the Diploma Supplement is to improve transparency and facilitate recognition. A standard format will be used to help compare qualifications and make them easier to understand. The Diploma Supplement will also describe the content of the qualification and the structure of the higher education system in which it was issued.
The 10 Action Lines of Bologna Process

1. Adoption of a system of **easily readable and comparable degrees**
2. Adoption of a system based on three cycles
3. Establishment of a system of credits
4. Promotion of mobility
5. Promotion of European co-operation in **quality assurance**
6. Promotion of the European dimension in Higher education
7. Focus on Lifelong Learning
8. Inclusion of Higher Education Institutions and students
9. Promotion of the attractiveness of the European Higher Education Area
10. Doctoral Studies and the links between the European Higher education Area and the European Research Area
Learning Outcome in Bologna Process

‘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.’

Berlin Communique 2003

‘We adopt the overarching framework for qualifications in the EHEA, comprising three cycles (including, within national contexts, the possibility of intermediate qualifications), generic descriptors for each cycle based on learning outcomes and competences, and credit ranges in the first and second cycles.’

Bergen Communique 2005
‘We underline the importance of curricula reform leading to qualifications better suited both to the needs of the labour market and to further study. Efforts should concentrate in future on removing barriers to access and progression between cycles and on proper implementation of ECTS based on learning outcomes and student workload.’

‘Qualifications frameworks are important instruments in achieving comparability and transparency within the EHEA and facilitating the movement of learners within, as well as between, higher education systems. They should also help HEIs to develop modules and study programmes based on learning outcomes and credits, and improve the recognition of qualifications as well as all forms of prior learning.’

‘We urge institutions to further develop partnerships and cooperation with employers in the ongoing process of curriculum innovation based on learning outcomes.’

‘With a view to the development of more student-centred, outcome-based learning, the next [Stocktaking] exercise should also address in an integrated way national qualifications frameworks, learning outcomes and credits, lifelong learning, and the recognition of prior learning.’

London Communiqué 2007
“The Bologna reforms have changed the face of higher education across Europe, thanks to the involvement and dedication of higher education institutions, staff and students. Higher education structures in Europe are now more compatible and comparable. Quality assurance systems contribute to building trust, higher education qualifications are more recognisable across borders and participation in higher education has widened. Students today benefit from a wider variety of educational opportunities and are increasingly mobile. The vision of an integrated EHEA is within reach”.

Bucharest Communique (2012)
To consolidate the EHEA, meaningful implementation of learning outcomes is needed. The development, understanding and practical use of learning outcomes is crucial to the success of ECTS, the Diploma Supplement, recognition, qualifications frameworks and quality assurance – all of which are interdependent. We call on institutions to further link study credits with both learning outcomes and student workload, and to include the attainment of learning outcomes in assessment procedures. We will work to ensure that the ECTS Users’ Guide fully reflects the state of on-going work on learning outcomes and recognition of prior learning.
“However, as the report on the implementation of the Bologna Process shows, we must make further efforts to consolidate and build on progress. We will strive for more coherence between our policies, especially in completing the transition to the three cycle system, the use of ECTS credits, the issuing of Diploma Supplements, the enhancement of quality assurance and the implementation of qualifications frameworks, including the definition and evaluation of learning outcomes”.

Bucharest Communique (2012)
ASSESSMENT OF HIGHER EDUCATION LEARNING OUTCOMES

AHELO

FEASIBILITY STUDY REPORT

VOLUME 1
DESIGN AND IMPLEMENTATION

Karine Tremblay
Diane Lalancette
Deborah Roseveare

(2012)
Growing focus on student learning outcomes - Another trend sees a shift away from inputs towards outcome-based notions of higher education throughput. This shift has been most evident with the Bologna Declaration which aimed at establishing a European Higher Education Area and to write all higher education programmes in terms of learning outcomes by 2010. This trend is becoming global with many countries aligning their systems to be Bologna-compatible.

Note global trend - internationalisation

Emphasis on student centred learning and research on teaching-learning processes - The turn of the Century has also seen a shift in undergraduate education, from an "instruction paradigm" towards a "learning paradigm" in which the emphasis is no longer on the means but on the end. A corollary of this emphasis is to better understand the teaching-learning interplay. In this context, outcomes’ assessments are important for the evaluation of instructional effectiveness.

Note emphasis on Teaching, Learning and Assessment.
Bologna Process:

- As a step towards achieving greater clarity in the description of qualifications, by 2010 all modules and programmes in third level institutions throughout the European Union had to be written in terms of learning outcomes.

- “Learning outcomes represent one of the essential building blocks for transparency within higher education systems and qualifications”
  - Bologna Working Group, p.18 (December 2004)

- Major contribution of exemplar material from staff taking “Postgraduate Certificate / Diploma in Teaching and Learning at Higher Education”.

- Staff training in UCC – lunchtime session and setting up of “Postgraduate Certificate / Diploma in Teaching and Learning at Higher Education”.

- To date, translated into 13 languages.

Order from [WWW.NAIRTL.IE](http://WWW.NAIRTL.IE)
Pisanje in uporaba učnih izidov
Praktični vodnik

dr. Declan Kennedy

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NDP
HEA
UCC
Latest Translation: Arabic
Electronic copy of this book is available for free download.

If you insert "CORA Writing and Using Learning Outcomes A Practical Guide" into google search engine you will be able to download a free PDF of the book on Learning Outcomes by Dr Declan Kennedy. Alternatively, the book may be downloaded directly at https://cora.ucc.ie/handle/10468/1613
Implementing Bologna in your institution

Using learning outcomes and competences

Planning and implementing key Bologna features

Writing and Using Learning Outcomes: a Practical Guide

Declan Kennedy, Áine Hyland, Norma Ryan

Abstract

Given that one of the main features of the Bologna process is the need to improve the traditional ways of describing qualifications and qualification structures, all modules and programmes in third level institutions throughout the European Higher Education Area should be (re)written in terms of learning outcomes. Learning outcomes are used to express what learners are expected to achieve and how they are expected to demonstrate that achievement. This article presents a summary of developments in curriculum design in higher education in recent decades and, drawing on recent practical experience, suggests a user-friendly methodology for writing modules, courses and programmes in terms of learning outcomes.
European Credit Transfer and Accumulation System (ECTS)

- The European Credit Transfer System (ECTS) was initially set up in 1989 as a pilot scheme within the framework of the Erasmus programme.
- Its aim at that time was to facilitate the recognition of study periods undertaken abroad by mobile students through the transfer of credits.
- A credits system is a systematic way of describing an educational programme by allocating a certain value (credits) to each module of the programme to describe the student workload required to complete the module.
- A module is a self-contained fraction of a student's programme workload for the year with a unique examination and a clear set of learning outcomes and appropriate assessment criteria.
- Mobility to Accumulation. Bologna Process has developed the ECTS system from simply being a system for recognising study at foreign institutions into a Credit Transfer and Accumulation System. This takes ALL learning into account – not just study in other countries.
- Hence, ECTS now stands for “European Credit Transfer and Accumulation System”.
ECTS, Learning Outcomes and Modularisation

“ECTS is a tool that helps to design, describe, and deliver programmes and award higher education qualifications. The use of ECTS, in conjunction with outcomes-based qualifications frameworks, makes programmes and qualifications more transparent and facilitates the recognition of qualifications. ….ECTS is one of the cornerstones of the Bologna Process.”

ECTS Users’ Guide p.7 (2009)
“ECTS is a learner-centred system for credit accumulation and transfer based on the transparency of learning outcomes and learning processes. It aims to facilitate planning, delivery, evaluation, recognition and validation of qualifications and units of learning as well as student mobility”.

ECTS credits are based on the workload students need in order to achieve expected learning outcomes

ECTS Users’ Guide p.7 (2009)
“Workload indicates the time students typically need to complete all learning activities (such as lectures, seminars, projects, practical work, self-study and examinations) required to achieve the expected learning outcomes.”

“60 ECTS credits are attached to the workload of a full-time year of formal learning (academic year) and the associated learning outcomes.”

1 ECTS credit = 25 – 30 hours of work.

ECTS and LEARNING OUTCOMES

“ECTS is a learner-centred system because it helps institutions to shift the emphasis in programme design and delivery from traditional teacher-centred approaches to approaches that accommodate for learners’ needs and expectations.”

“In traditional teacher-centred approaches, subject requirements, knowledge and the teaching process itself were considered the main elements of educational programmes. Learner-centred learning puts learning at the heart of curriculum design and delivery…..”

The Bologna Process

The Bologna Process is the process that began with the Bologna Declaration in 1999 to establish a European Higher Education Area (EHEA).

“The Bologna Process has brought about a quiet and irreversible revolution in the higher educational systems of Europe. To date 46 countries have chosen formally to be associated with it and it implement its protocols which are at one radical and innovative as well as spacious and enabling” – FIN Report (University Sector Framework Implementation Network, 2009)
"The aspirations and ideals of the Bologna Process are, of necessity, stated in general and high level terms but it is recognised that their achievement demands a grounding in practical reality and in enabling organisational and administrative structures and practices. The original protocols of the Bologna Process recognised the need for strong administrative instruments to give tangible meaning and shape to the ideals – the Diploma Supplement and ECTS were mentioned – and as the process developed the need for firm Qualification Frameworks, explicit Learning Outcomes and transparent Assessment procedures became apparent”  

(FIN Framework Implementation Report, 2009)
To consolidate the EHEA, meaningful implementation of learning outcomes is needed. The development, understanding and practical use of learning outcomes is crucial to the success of ECTS, the Diploma Supplement, recognition, qualifications frameworks and quality assurance – all of which are interdependent. We call on institutions to further link study credits with both learning outcomes and student workload, and to include the attainment of learning outcomes in assessment procedures. We will work to ensure that the ECTS Users’ Guide fully reflects the state of on-going work on learning outcomes and recognition of prior learning.
Conference of European Ministers Responsible for Higher Education in Bergen, Norway (2005) adopted the overarching framework for qualifications in EHEA.

This framework shows:
- **Three cycles** (including within national contexts, the possibility of intermediate qualifications)
- **Generic descriptors** for each cycle based on learning outcomes and competences.
- **ECTS credit ranges** in the first and second cycles (i.e. Bachelors and Masters levels).

Ministers committed themselves to drawing up National Frameworks for Qualifications compatible with Framework of Qualifications for European Higher Education area by 2010.

Bergen, Norway (2005)
Dublin Descriptors

- The Bologna Framework is a European higher education overarching framework with three cycles (Bachelor, Masters and Doctoral) and associated generic descriptors that help us to write learning outcomes.

- The Descriptors for each cycle were drawn up at a meeting of Education Ministers in Dublin.

- These generic cycle descriptors are used in The Framework of Qualifications for EHEA (Bologna Framework) and are commonly called the “Dublin Descriptors” adopted in 2005.

- Each country must develop its own National Framework of Qualifications which map on to the Bologna Framework, i.e. the Bologna framework is a type of translation or benchmark device.
### First Cycle: Bachelor’s Cycle

**[180 – 240 ECTS credits]**

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>ECTS Credits</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>First cycle qualification</strong></td>
<td></td>
</tr>
<tr>
<td>Qualifications that signify completion of the first cycle are awarded to students who:</td>
<td>Typically include 180-240 ECTS credits</td>
</tr>
<tr>
<td>• have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education, and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;</td>
<td></td>
</tr>
<tr>
<td>• can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;</td>
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</tr>
<tr>
<td>• have the ability to gather and interpret relevant data (usually within their field of study) to inform judgments that include reflection on relevant social, scientific or ethical issues;</td>
<td></td>
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<tr>
<td>• can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;</td>
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<tr>
<td>• have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.</td>
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</tr>
</tbody>
</table>

Minimum of 3 years = 180 credits

4 years = 240 credits.
## Second Cycle: Master’s cycle

[60 – 120 ECTS credits]

<table>
<thead>
<tr>
<th>Second cycle qualification</th>
<th>Qualifications that signify completion of the second cycle are awarded to students who:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• have demonstrated knowledge and understanding that is founded upon and extends and/or enhances that typically associated with the first cycle, and that provides a basis or opportunity for originality in developing and/or applying ideas, often within a research context;</td>
</tr>
<tr>
<td></td>
<td>• can apply their knowledge and understanding, and problem solving abilities in new or unfamiliar environments within broader (or multidisciplinary) contexts related to their field of study;</td>
</tr>
<tr>
<td></td>
<td>• have the ability to integrate knowledge and handle complexity, and formulate judgments with incomplete or limited information, but that include reflecting on social and ethical responsibilities linked to the application of their knowledge and judgments;</td>
</tr>
<tr>
<td></td>
<td>• can communicate their conclusions, and the knowledge and rationale underpinning these, to specialist and non-specialist audiences clearly and unambiguously;</td>
</tr>
<tr>
<td></td>
<td>• have the learning skills to allow them to continue to study in a manner that may be largely self-directed or autonomous.</td>
</tr>
</tbody>
</table>

Typically include 90-120 ECTS credits, with a minimum of 60 credits at the level of the 2nd cycle.

1 year or 2 years
Third Cycle: Doctoral cycle

[Number of ECTS credits not specified]

<table>
<thead>
<tr>
<th>Third cycle qualification</th>
<th>Qualifications that signify completion of the third cycle are awarded to students who:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• have demonstrated a systematic understanding of a field of study and mastery of the skills and methods of research associated with that field;</td>
</tr>
<tr>
<td></td>
<td>• have demonstrated the ability to conceive, design, implement and adapt a substantial process of research with scholarly integrity;</td>
</tr>
<tr>
<td></td>
<td>• have made a contribution through original research that extends the frontier of knowledge by developing a substantial body of work, some of which merits national or international refereed publication;</td>
</tr>
<tr>
<td></td>
<td>• are capable of critical analysis, evaluation and synthesis of new and complex ideas;</td>
</tr>
<tr>
<td></td>
<td>• can communicate with their peers, the larger scholarly community and with society in general about their areas of expertise;</td>
</tr>
<tr>
<td></td>
<td>• can be expected to be able to promote, within academic and professional contexts, technological, social or cultural advancement in a knowledge based society.</td>
</tr>
<tr>
<td></td>
<td>Not specified</td>
</tr>
</tbody>
</table>

Time involved in various cycles

- Bachelor’s degree = 3 or 4 years
- Master’s degree = 1 or 2 years
- Doctoral degree = 3 years

Each of the three Bologna cycles is described in terms of generic descriptors as outlined in the “Dublin descriptors” (2005).

Note: The three cycles are closer to models in the UK and Ireland than in many countries of continental Europe where the model is based on the Magister or Diploma.
Moving from the Bologna Process (third level) to the European Qualifications Framework for Lifelong Learning (Primary, Secondary and Third Level)
European Qualifications Framework for Lifelong Learning (EQF)

- Adopted by EU in 2008.
- A common European reference framework that links together the qualification systems of EU countries.
- A “Translation Device” to make qualifications easier to understand.
- Has 8 levels with a set of descriptors for each level. These descriptors describe the learning corresponding to each level under the heading of knowledge, skills and competence.
## THE EUROPEAN QUALIFICATIONS FRAMEWORK FOR LIFELONG LEARNING

**Descriptors Defining Levels in the European Qualifications Framework (EQF)**

Each of the 8 levels is defined by a set of descriptors indicating the learning outcomes relevant to qualifications at that level in any system of qualifications.

<table>
<thead>
<tr>
<th>Level</th>
<th>Knowledge</th>
<th>Skills</th>
<th>Competence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Level 6</strong></td>
<td>advanced knowledge of a field of work or study, involving a critical understanding of theories and principles</td>
<td>advanced skills, demonstrating mastery and innovation, required to solve complex and unpredictable problems in a specialised field of work or study</td>
<td>manage complex technical or professional activities or projects, taking responsibility for decision-making in unpredictable work or study contexts, take responsibility for managing professional development of individuals and groups</td>
</tr>
<tr>
<td><strong>Level 7</strong></td>
<td>highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research, critical awareness of knowledge issues in a field and at the interface between different fields</td>
<td>specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields</td>
<td>manage and transform work or study contexts that are complex, unpredictable and require new strategic approaches, take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams</td>
</tr>
<tr>
<td><strong>Level 8</strong></td>
<td>knowledge at the most advanced frontier of a field of work or study and at the interface between fields</td>
<td>the most advanced and specialised skills and techniques, including synthesis and evaluation, required to solve critical problems in research and/or innovation and to extend and redefine existing knowledge or professional practice</td>
<td>demonstrate substantial authority, innovation, autonomy, scholarly and professional integrity and sustained commitment to the development of new ideas or processes at the forefront of work or study contexts including research</td>
</tr>
</tbody>
</table>
Recommendation that Member States:

“Use an approach based on learning outcomes when defining and describing qualifications, and promote the validation of non-formal and informal learning… paying particular attention to those citizens most likely to be subject to unemployment or insecure forms of employment, for whom such an approach could help increase participation in lifelong learning and access to the labour market”

(EU Commission, 2008)
Some Further Points about EQF

- The 8 levels span the full scale of qualifications.
- Work started in 2004 in response to requests from member states.
- The EQF is compatible with the EHEA framework and cycle descriptors of Bologna Process.
- Whilst the Bologna descriptors were developed specifically for higher education, the EQF is a lifelong learning framework.
- The EQF emphasises the results of learning rather than focusing on inputs such as length of study.
- The EQF defines a learning outcome as “a statement of what a learner knows, understands and is able to do on completion of a learning process”.
- Each of the 8 reference levels are described in terms of generic descriptors.
The EQF supports providers of education and training by increasing transparency of qualifications awarded outside the national systems, e.g. by sectors and multinational companies. International sectoral organisations can relate their qualifications systems to a common European reference point. Thus, the relationship between international sectoral qualifications and national qualification systems is clarified.

The EU recommends enhanced cooperation in vocational education and training within the EQF.

The EQF describes levels of qualifications. It does not award qualifications. Awarding of qualifications is still left to national qualification bodies.

Main users of EQF will be bodies in charge of national and/or sectoral qualification systems and frameworks.

Generic descriptors of Bologna cycles and EQF are not specific enough to be used as programme learning outcomes.
<table>
<thead>
<tr>
<th>Degree Type</th>
<th>Cycle</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Honours Bachelor Degree</td>
<td>First cycle</td>
<td>Level 6</td>
</tr>
<tr>
<td>Masters Degree</td>
<td>Second cycle</td>
<td>Level 7</td>
</tr>
<tr>
<td>Doctorate</td>
<td>Third cycle</td>
<td>Level 8</td>
</tr>
</tbody>
</table>
Relationship between Dublin Descriptors of Bologna Process and reference levels of European Qualifications Framework

<table>
<thead>
<tr>
<th>Qualifications that signify completion of the first cycle are awarded to students who:</th>
<th>EQF-level 6</th>
</tr>
</thead>
<tbody>
<tr>
<td>have demonstrated knowledge and understanding in a field of study that builds upon their general secondary education and is typically at a level that, whilst supported by advanced textbooks, includes some aspects that will be informed by knowledge of the forefront of their field of study;</td>
<td>Use detailed theoretical and practical knowledge of a field. Some knowledge is at the forefront of the field and will involve a critical understanding of theories and principles. Demonstrate mastery of methods and tools in a complex and specialised field and demonstrate innovation in terms of methods used. Devise and sustain arguments to solve problems.</td>
</tr>
<tr>
<td>can apply their knowledge and understanding in a manner that indicates a professional approach to their work or vocation, and have competences typically demonstrated through devising and sustaining arguments and solving problems within their field of study;</td>
<td>Demonstrate administrative design, resource and team management responsibilities in work and study contexts that are unpredictable and require that complex problems are solved where there are many interacting factors. Show creativity in developing projects and show initiative in management processes that includes the training of others to develop team performance. Consistently evaluate own learning and identify learning needs.</td>
</tr>
<tr>
<td>have the ability to gather and interpret relevant data (usually within their field of study) to inform judgements that include reflection on relevant social, scientific or ethical issues;</td>
<td>Communicate, ideas, problems and solutions to both specialist and non-specialist audiences using a range of techniques involving qualitative and quantitative information. Express a comprehensive internalised personal world view manifesting solidarity with others.</td>
</tr>
<tr>
<td>can communicate information, ideas, problems and solutions to both specialist and non-specialist audiences;</td>
<td>Gather and interpret relevant data in a field to solve problems. Demonstrate experience of operational interaction within a complex environment. Make judgements based on social and ethical issues that arise in work or study.</td>
</tr>
<tr>
<td>have developed those learning skills that are necessary for them to continue to undertake further study with a high degree of autonomy.</td>
<td></td>
</tr>
</tbody>
</table>
Progress of Bologna Process

- Bologna 1999 – 29 Countries, 6 action lines
- Prague 2001 – 33 Countries, 9 action lines
- Berlin 2003 – 40 Countries, 10 action lines
- Bergen 2005 – 45 Countries
- London 2007 – 46 Countries

Now 48 countries (Kazakhstan and Belarus)

Influence of Bologna Process is now worldwide with other countries aligning their systems to Bologna.

Emphasis on implementing and making progress in the Bologna Process.
The 10 Action Lines of Bologna Process

1. Adoption of a system of **easily readable and comparable degrees**
2. Adoption of a system based on three cycles
3. Establishment of a system of credits
4. Promotion of mobility
5. Promotion of European co-operation in **quality assurance**
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9. Promotion of the attractiveness of the European Higher Education Area
10. Doctoral Studies and the links between the European Higher education Area and the European Research Area
“The three Bologna cycles are based on generic descriptors of learning outcomes, so it is clear that describing higher education programmes in terms of learning outcomes is a precondition for achieving many of the goals of the Bologna Process by 2010. Learning outcomes are critically important in the development of national qualifications frameworks, systems for credit transfer and accumulation, the diploma supplement, recognition of prior learning and quality assurance.”

“If the Bologna Process is to be successful in meeting the needs and expectations of learners, all countries need to use learning outcomes as a basis for their national qualifications frameworks, systems for credit transfer and accumulations, the diploma supplement, recognition of prior learning and quality assurance. This is a precondition for achieving many of the goals of the Bologna Process by 2010.”

6. The Bologna Process is leading to greater compatibility and comparability of the systems of higher education and is making it easier for learners to be mobile and for institutions to attract students and scholars from other continents. Higher education is being modernized with the adoption of a three-cycle structure including, within national contexts, the possibility of intermediate qualifications linked to the first cycle and with the adoption of the European Standards and Guidelines for quality assurance. We have also seen the creation of a European register for quality assurance agencies and the establishment of national qualifications frameworks linked to the overarching European Higher Education Area framework, based on learning outcomes and workload. Moreover, the Bologna Process has promoted the Diploma Supplement and the European Credit Transfer and Accumulation System to further increase transparency and recognition.
National Framework of Qualifications

Putting the Bologna Process into practice.

A national framework of qualifications “is an instrument for the classification of qualifications according to a set of criteria for specified levels of learning achieved, which aims to integrate and coordinate national qualifications subsystems and improve the transparency, access, progression and quality of qualifications in relation to the labour market and civil society”.

(EQF 2008)
For many countries, one of the most challenging parts of the Bologna reform process is to make their National Framework of Qualifications compatible with the Framework for Qualifications of the European Higher Education Area.

- Showing that National Qualifications Framework is compatible with Framework of Qualifications of EHEA and EQF
- Introducing Learning Outcomes and writing modules and programmes in terms of Learning Outcomes.
- Showing evidence that the Learning Outcomes have been achieved.
- Workload in terms of ECTS credits and credit accumulation rather than teaching time.
- Showing how the National Framework of Qualifications facilitates Lifelong Learning.
- Lifelong Learning the only way to avoid obsolescence and is the key for ensuring progress.
What is meant by credit transfer?

This means that students can be given credit for their prior certified learning, i.e. learning which the student has undertaken and has been assessed as part of a qualification, e.g. a module.

Credit transfer enables a student to transfer credit gained in one programme of study to another programme of study.
What is meant by recognition of prior learning (RPL)

- This is a system where a student is given credit for learning gained through experience which took place before the student enrols on a formal programme leading to a qualification.

- It involves the student (a) reflecting on life and work experiences and non-formal learning experiences, (b) identifying learning outcomes achieved, (c) providing evidence of the learning.
Implications of Bologna Process and European Qualifications Framework for Teaching and Learning

- Central role of Learning Outcomes in education at all levels of the educational system.
- Training of teachers about concept of Learning Outcomes and to teach within a Learning Outcomes Framework.
- Co-ordination of Teacher-Centred approach and Student-Centred approach to Teaching and Learning.
- Linking of Learning Outcomes to Teaching and Learning activities and to Assessment.
Progress being made in Bologna Process

“The potential and widespread significance of learning outcomes is only just beginning to be realised. Their introduction is designed to facilitate the fundamental reform of existing qualifications and the creation of new ones fit for the 21st century. It is arguable that the main end product of the Bologna reforms is better qualifications based on learning outcomes and not just new educational structures.”

CEDEFOP, 2009 p. 82
At the end of this talk you should be able to:

1. *Describe* what is meant by the term *learning outcome*.
2. Distinguish between Learning Outcomes and Aims and Objectives.
3. Discuss the Bologna Process in terms of some of its overall aims.
5. Evaluate why the Bologna Process has been embraced so successfully by such a large number of countries.