ECTS- the European Credit System

Estela Pereira
Universidade de Aveiro

Overview of the presentation

- History
- Key aspects
- ECTS credits for transfer
- ECTS credits for accumulation
- ECTS and the Bologna Process
- Current challenges

Historical developments

- Initiated as a pilot project under Erasmus in 1988- 5 disciplines; 15 Universities each.
- Key aspects:
  - Universities agree on an exchange program
  - They recognise as home credits credits obtained in the partner Institution
  - Credits are a “currency” to compare programs
  - Transparency documents are developed:

    Information Package, Learning agreement, Transcript of records.

The wider use

- In 1995 the use of ECTS was extended to all disciplines, all interested Universities
- In 1999 a feasibility study indicated that ECTS may be used for accumulation and also for Life Long Learning
- The Bologna Declaration(1999) refers to ECTS as a model for credits in Europe.
- In 2003 in Graz the European Institution accept ECTS as the European credit System
- The Berlin Communique sets 2005 as the deadline for signatory countries (40) to implement ECTS

ECTS key aspects

- It is a **student workload** based system
- The workload of a regular academic year is **60 credits**
- For the workload teaching hours, home work, placements, exam preparation, etc are considered.
- The credits are distributed by the different course units according to the required workload.

ECTS and mobility:basic Instruments

- Partner Institutions make themselves Known to each other: Information Package
- A student studies at a host University a previous agreed program : Learning Agreement
- The host Institution gives the student results: Transcript of records
- The home Institution replace home courses by the host courses, totalling the same number of credits: Academic Recognition

Credit allocation: workload versus contact hours

- **ECTS**
  - **No** relationship between teaching hours and credits
  - Total number fixed
  - More flexibility in methodologies
- **Contact hours**
  - Vary with teaching methodologies
  - Vary with subject areas
  - Comparison between courses difficult

Advantages of ECTS

- May be used for different teaching methodologies
- Credit allocation implies a reflection on the degree program
  - Reasonable student workload
  - Adjustment of the credits of the courses
  - Adjusting course contents
- Allows for an easier comparison of study programs

Credit allocation

- Same learning outcomes
- Same workload
- ⇓
- **Same credits** ⇐

- Different methodologies
-
- ⇓
- Different contact hours

Credit allocation: the challenges

- Many Institutions in Europe are used to consider teaching hours only.
- Usually each professor devises his/her course without quantifying the total workload it requires from the student
- A joint reflection on the degree objectives , structure and methodologies is required.

How to allocate credits

- Define the objectives and learning outcomes of the study program
- Top down: divide the available credits by the study areas and then by the courses
- Define course objectives and contents according to the available credits
- Check afterwards with students if credits are indeed proportional to workload
- Make adjustments if necessary

ECTS implementation: *an example from the University of Aveiro*

2.semester, 1.year

- **Physics, Chemistry…**
- Calculus II
- Mechanics
- Fortran programming
- Chemistry II

- *Workload calculation was wrong somewhere.*
  Adjustments needed

- **Biochemistry…**
- Calculus II
- Mechanics
- Fortran programming
- Chemistry II
- Introduction to food Chemistry

Another example: *3.year 1.semester*

Electronic Eng. and Electronics teacher training

- Engineering
- Electronics I 7.5
- Theoretical electrotechnics 7.5
- Computer architecture 7.5
- Systems Theory 7.5

- Extra work for students in General Electronics to ensure 30 credits

- Teacher Training
- General electronics 9
- Theoretical Eletrotechnics7.5
- Computer architecture 7.5
- Education and School Sociology 6

Modularization

- ECTS is an instrument of mobility
- Flexibility of degree programs is essential
- To interchange modules they must have same credits
- Use a fixed number of credits for the course units
  - 3, 6, 9, 12
  - 5,10, 15
- **Adjust course contents to credits available**

Workload for one ECTS

- Overview of the Academic year:
  - Typical value: 40 weeks, 40 hours per week.
  - Some variation is found in Europe
    - professors are not used in general to consider the extra work outside classes, let aside quantify it.

- One credit corresponds to **25 to 30 hours** of student workload

Information package/Course catalogue

- Information on the Institution
  - Faculties, study programs, research
- General regulations
- Study programs structure
- Course descriptions
- Information for home and host students
- Paper or web information
  - user friendly access

Learning Agreement

- Contract between the home and host Institutions and the student
- States which courses the student must follow at the host Institution
- **Guaranty of recognition** of successfully completed course

Transcript of records

- States the results of the student
  - Courses followed
  - Number of credits
  - Local grades
  - ECTS grades
- Gives information about the grades obtained

ECTS grading scale

- It is a relative scale
- Applies statistically
- Does not replace the local grades
- Assumes a normal distribution of marks
- The scale
  - A: the best 10%
  - B: the next 25%
  - C: the medium 30%
  - D: the 25% bellow
  - E: the 10% last to pass
  - FX: fail but close to pass
  - F: fail

Academic recognition

- Home courses are replaced by the **previously agreed** courses at the host institution
- The identification of such courses must be documented prior to departure to the host Institution
- Thus recognition becomes automatic upon student return

ECTS as an accumulation system

- Credits are used for host and home students
- Credits are accumulated until the degree is complete
- A home student gets the degree when he gets all the required credits for the program

Comparison between accumulation and transfer

- Accumulation
  - In a study program approved by the Institution
  - Final degree awarded on completion
  - Credits obtained elsewhere may be or may not be recognised *(depending on their relevance)*
- Transfer
  - In a study program agreed upon Institutions that trust each other
  - Credits are recognised by the home Institution
  - Recognition is automatic

The Bologna Process: Berlin communique

- A degree structure comparable in Europe to facilitate recognition and mobility
- Higher Education quality assurance (2005)
- Two cycles followed by a 3.cycle (doctoral studies)(2005)
  - 1.cycle 3-4 years (180-240ECTS)
  - 2.cycle 1-2 years (60-120 ECTS)
    - *most countries adopt a 1.cycle of 3 years*
- Adoption of ECTS as the credit system (2005)
- Adoption of the Diploma Supplement (2005)
- Link between teaching and research
- Life long learning

ECTS and the Bologna Process

- Berlin set the deadline of 2005 for ECTS implementation
- ECTS becomes an instrument of transparency for the creation of the European Higher Education Area
- The responsibility of adequate credit allocation lies with the Institutions
- Quality assessment of credit allocation must be part of the quality policy

Questions for debate

- Advantages of a student workload based credit system
- The measurement of student workload
- How to link the credits to the learning outcomes
- What information to provide: analysis of the ECTS key features
- Recognition of credits:
  - Within a mobility program
  - For credits the student has accumulated elsewhere

The challenges ahead

- The overarching qualifications framework
- The link between student workload and the learning outcomes
- Setting level indicators
- Use ECTS for life long learning

Information on ECTS

- http://europa.eu.int/comm/education/programmes/socrates/ects_en.html
- http://odur.let.rug.nl/TuningProject
- http://www.relint.deusto.es/TuningProject/index.htm