Credit and Credit Reference Systems: A world view

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1. Why having (a) credit system(s)

- **Improve the comparability and compatibility of study programmes**

- **Make study programmes more transparent**

- **Allow for more flexibility and diversity of pathways**

- **Make it easier to construct well-balanced programmes**

- **Promote the feasibility of programmes**

- **Enhance the quality of programmes**

- **Facilitate and promote student mobility**

- **Facilitate and improve the recognition of periods of studies taken elsewhere successfully**

- **Facilitate different types of learning (informal, non-formal, formal, part-time, etc.)**

A credit system is a key element for the accumulation of knowledge and skills expressed and measured in terms of (workload / time-based) credits
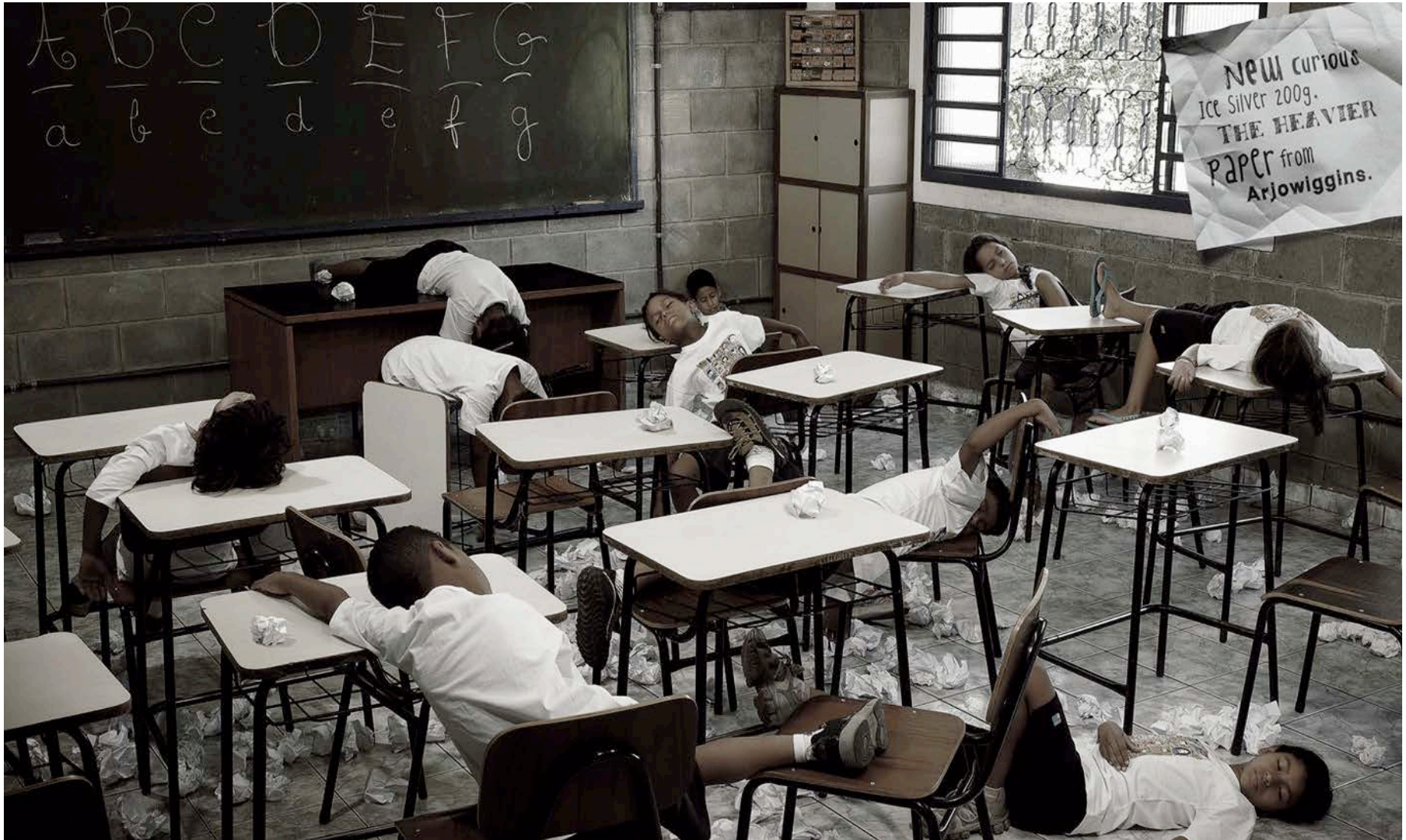
2. Different credit systems in the world

Contact/Credit hours model versus Student-workload Model

Student workload based model:

- Allows for more flexibility / individual pathways
- Modularization and tailor made study programs
- Differentiation in size of modules / units
- Inclusion of work placement
- Strategy for planning degree profiles

Different credit systems in the World:

1. Carnegie Credit hour
2. UCTS: UMAP Credit Transfer Scheme*
3. AACs: Asian Academic Credits
4. ECTS: European Credit Transfer and Accumulation System
5. CLAR : Latin American Reference Credit System
6. CATS: Credit for Accumulation and Transfer Scheme (in UK)
7. ACTS : ASEAN Credit Transfer System (under ASEAN University Network)**

*UMAP: University Mobility in Asia and Pacific
**ASEM: Asia-Europe Meeting

3. Carnegie credit hour

Oldest credit system in the world.

Has been set-up as an administrative system. Confirmed by Carnegie Foundation in a report published in Feb. 2015 that credit hour is a administrative unit not a Learning Unit

Carnegie supports the idea to design and implement pilots to develop a learning unit for the US (possibly along the lines of ECTS and Tuning.

4. Overview of situation in East-Asia

CREDIT SYSTEMS IN SOUTH-EAST ASIA (overview based on Taiji Hotta, etc., *Study on the ACTS (ASEAN Credit Transfer System) and Credit Transfer Systems in Asian Nations.* Hiroshima, 2010

Country	Type of system (contact/credit hours or workload based)	Number of hours per credit (bachelor)	Number of credits per full academic year	Workload hours per year
Brunei	Workload based	35-42	31 Master: 20	1100-1250
Cambodia	Credit hours	Lectures: 15 Seminars: 30 Fieldwork: 45	26 - 30 Master: 19-22	
China	Each university decides and prescribes own system	--	--	--
Indonesia	Credit hours	Lectures: 46 h. per sem. including preparation Practical training: 60 h. Placements: 85 h.	36 Master: 18	1650
Japan	Contact hours based	45 (15-30 contact h.; 30-45 practical training); (Master 30 + thesis)	31	1400
Korea	Credit hours	Contact hours: 15 min. per semester	35	
Laos	Credit hours	Not fixed	30 Master: 24	
Malaysia	Workload (and LO) based	40	40	1600
Myanmar	Credit hours	Class hours: 16 Practical training: 32		
Philippines	Credit hours	Lectures: 17 'Practical training' : 51		
Singapore	Each university decides and prescribes own system	NUS: 1 Modular Credit is 32.5 hours NUT: 1 Academic Unit: 1 hour of lecture/tutorial or 3 h. of practical training	40 NUS 36 NTU	NUS: 1300
Thailand	Credit hours	Lectures: 15 (minimum) Practical training: 30 (min) Individual learning: 45	30 MA: 24-36	
Vietnam	Credit hours	Lectures: 15 minimum	30 (MA no credits)	

Common Tendencies in Asia (Part 1)

1 — 1 credit = 13-17 hours of teaching, The number of teaching hours is more commonly used for counting credits than the amount of student workload.

2 — 4 year bachelor's programs
Except Malaysia and Laos. Medicine and engineering require 5-6 years

3 — 120 to 150 credits for a (4 years) bachelor's degree.

4 — Estimated student workload is 40-50 hours/credit
(Based on # of hours/credit in internship, lab work and field work)

China (40-45), Japan (45), Cambodia (45), Indonesia (46), Malaysia (40), the Philippines (51), NTU in Singapore (39), Thailand (45)

Common Tendencies in Asia (Part 2)

5 Two semester system and 13-16 weeks of instruction per semester. **(excluding reading and Exam weeks)** However, the majority are between 14-16 weeks

6 More use of absolute grading than relative grading
However, grading policies vary from institution to institution and even from department to department

7 Two general patterns of academic calendar
However, the academic calendar greatly varies from institution to institution and from nation to nation (See next chart)

① Brunei Darussalam, China, Japan, South Korea, Indonesia. Laos, Singapore and Vietnam (Malaysia from 2011),
② Cambodia, Myanmar, the Philippines, and Thailand

Trends in East Asia:

❑ 4 year bachelor and 2 year master programmes

❑ 15 hours of lectures and 45 hours of self study per credit

❑ 120 -170 credits for completion of BA

❑ Master: mosaic of systems, with little communalities

Conclusion:

Obvious need for ASEAN credit system

5. ECTS: A student workload based system

ECTS KEY FEATURES

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 is widely used in formal higher education and can be applied to other lifelong learning activities.

The (new) workload / learning outcomes based ECTS was developed in the framework of the Tuning Project

ECTS credits

ECTS credits are based on the workload students need in order to achieve expected learning outcomes. <u>Learning outcomes</u> describe what a learner is expected to know, understand and be able to do after successful completion of a process of learning. They relate to level descriptors in national and European **qualifications frameworks**.

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. In most cases, student workload ranges from 1,500 to 1,800 hours for an academic year, whereby one credit corresponds to 25 to 30 hours of work.

Use of ECTS credits 1

<u>**Credits are allocated to entire qualifications or study programmes as well as to their educational components**</u> **(such as modules, course units, dissertation work, work placements and laboratory work). The number of credits ascribed to each component is based on its weight in terms of the workload students need in order to achieve the learning outcomes in a formal context.**

<u>**Credits are awarded to individual students (full-time or part-time)**</u> **after completion of the learning activities required by a formal programme of study or by a single educational component and the successful assessment of the achieved learning outcomes.**

Use of ECTS credits 2

Credits may be accumulated with a view to obtaining qualifications, as decided by the degree-awarding institution. If students have achieved learning outcomes in other learning contexts or timeframes (formal, non-formal or informal), the associated credits may be awarded after successful assessment, validation or recognition of these learning outcomes.

Credits awarded in one programme may be transferred into another programme, offered by the same or another institution. This transfer can only take place if the degree-awarding institution recognises the credits and the associated learning outcomes. Partner institutions should agree in advance on the **recognition of periods** of study abroad.

ECTS credits express the volume of learning

Learning outcomes express the content of learning

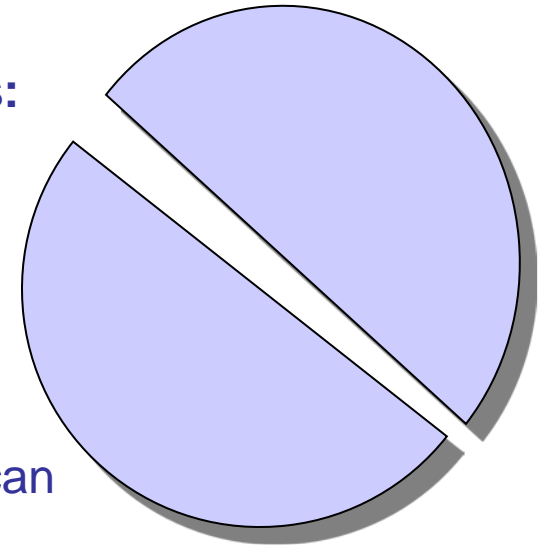**Basing degree programmes on learning outcomes: opportunities and difficulties**

Workload / time based credits and learning outcomes:

two sides of the same coin!

Opportunities

- Learning outcomes allow for better comparison and recognition of periods of successful learning
- Time required to achieve expected learning outcomes can be expressed in ECTS credits
- Learning outcomes allow for different approaches to reach the same results

Difficulties

- Formulating learning outcomes requires expertise and experience
- Learning outcomes should express reality
- Learning outcomes should always be measurable

Tuning distinguishes different types of interrelated elements that influence productivity, that is the time to obtain the required level of competence:

- Diversity of traditions

- Curriculum design and context

- Coherence of curriculum

- Teaching and learning methods

- Methods of assessment and performance

- Organization of teaching and learning

- Ability and diligence of the student

- Personal and material means available

Notional learning time and the typical student

Definition: *the notional learning time is the time an average student will need to meet the expected learning outcomes. These learning outcomes can be formulated at threshold (minimum) level or at desired level*

These concepts are used to design a degree programme or a course unit or module: a realistic estimation for calculating time

However ….. the average student does not exit in reality

Warning!

The notional learning time is not the actual time that any particular learner needs to spend. The actual time will differ from student to student

ECTS credits are also a tool for planning !

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ECTS a source of inspiration for many regions in the world:

❑ Latin America in the framework of the Tuning America Latina project 2011 involving 18 countries / governments / rectors conferences (example Chili)

  ❑ Project builds on Tuning I (2005 – 2007): agreement on usefulness of workload based system for planning and mobility

  ❑ Working group has been set up

  ❑ Made an inventory / state of the art in the different countries

  ❑ Identification and confirmation of need and adequacy

  ❑ First meeting in Bogota (May 2011); next meeting Guatemala (Nov. 2011)

❑ Russia as part of the Bologna Process

❑ South-East Asia: ASEAN Credit Transfer System

Thank you for your attention !