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Session GS026: Finding a Common Language:
Transatlantic Credit System Comparisons

The European Credit Transfer and Accumulation System (ECTS) and the Carnegie Credit Hour System of the United States: Fundamental Differences and Why They Matter.
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John H. Yopp
University of Kentucky

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WHY ARE CONCERNS OF U.S. INSTITUTIONS OF HIGHER
EDUCATION REGARDING CREDIT TRANSFER SYSTEMS
IN THE U.S. AND EUROPE SO IMPORTANT?

- ✧ It has been recognized for decades by U.S. higher education institutions and associations that the credit hour measure is not linked to "the academic worth of course content" nor student learning outcomes.^{1,2}
- ✧ Regional and Professional Accrediting Associations require U.S. institutions of higher education (IHE's) to demonstrate that they are measuring student learning outcomes to which credit hours earned are not effectively linked.³

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- ✧ The reauthorization of the Higher Education Act (2007)- a congressional policy mandate- contains requirements for IHE's to publically and clearly disclose their systems of credit measures and transfer.⁴
- ✧ The nature and forms of student learning and their institutions and extra-institutional settings have drastically changed since the Carnegie student credit hour measurement of learning was established over a century ago. For example: distance learning, credit transfer and accumulation from several IHE's for one degree (student mobility).² There are demands by students, government, and the public for changes that reflect these types of learning.⁵

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- ✧ In the context of transatlantic student exchange “credential evaluation, credit transfer, and grade translation are among the most widely debated and sensitive issues in international education, and numerous approaches, solutions models and formulas have been proposed over the years in the U.S. and Europe” (Haug, 1997)⁶
- ✧ The ECTS has gained a positive reputation in many areas of the world. Increasingly it is being used to create comparable transfer systems. U.S. universities must understand its features for comparability and transfer of credits to maintain their goal for internationalization.⁷

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THE PRINCIPLES OF ACCREDITATION: FOUNDATIONS FOR QUALITY ENHANCEMENT

Southern Association of Colleges and Schools Commission on Colleges

- ✧ Core Requirements: The institution has developed an acceptable Quality Enhancement Plan (QEP) that (1) includes a broad-based institutional process identifying key issues emerging from institutional assessment, (2) focuses on *learning outcomes* and/or the environment supporting *student learning* and accomplishing the mission of the institution, (3) demonstrates institutional capability for the initiation, implementation, and completion of the QEP, (4) includes broad-based involvement of institutional constituencies in the development and proposed implementation of the QEP, and (5) identifies goals and a plan to assess their achievement. (Quality Enhancement Plan)
- ✧ Comprehensive Standards: The institution identifies expected outcomes, assesses the extent to which it achieves these outcomes, and provides evidence of improvement based on analysis of the results in each of the following areas:
 - 3.3.1.1 Educational programs, to include *student learning outcomes*
 - 3.3.1.2 Administrative support services
 - 3.3.1.3 Educational support services
 - 3.3.1.4 Research within its educational mission, if appropriate
 - 3.3.1.5 Community/public service within its educational mission, if appropriate

However, the most relevant example of the reform movements in the U.S. regarding the baccalaureate programs in the LEAP initiative.

2008: <http://www.sacscoc.org/principles.asp>

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TRANSFER, AS USED IN THIS PRESENTATION IS THAT OF THE JOINT STATEMENT OF AACRAO, ACE, AND CHEA ON THE TRANSFER OF CREDIT⁵:

- ✧ “the movement of students from one college, university or other education provider to another and to the process by which credits representing educational experiences, courses, degrees, or credentials that are awarded by an education provider are accepted or not accepted by a receiving institution.”

This definition is essentially the same as used in the Bologna Process and the key features of its principal instrument, the ECTS.

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ORIGIN AND ROLE OF THE ECTS IN ESTABLISHING THE EUROPEAN HIGHER EDUCATION AREA (EHEA)^{7,8}

- ✦ Originated in 1989 as a pilot system to facilitate student mobility in the Erasmus program (http://ec.europa.eu/education/lifelong-learning-programme/doc80_en.htm). A credit transfer system was needed to recognize study abroad within Europe by mobile students.⁷
- ✦ 90% of all higher education institutions in Europe responding to the major Trends 2010 survey reported using it for credit transfer and 88% reported using it as a credit accumulation system towards earning a qualification (degree, certificate, etc.)⁸
- ✦ The 46 signatory countries in the Bologna Process have recognized ECTS as one of "the cornerstones of the European Higher Education Area"⁴ and a principal tool to reform and make compatible the diverse, national higher education systems of Europe.
- ✦ Together with the alignment of learning outcomes in national qualifications systems, it is an essential tool for transnational mobility in the European Qualifications Framework.

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THE KEY FEATURES OF THE ECTS^{7,9}

Credits, Workload, and Learning Outcomes

- ✦ The **ECTS** is a *student-centered system of credit transfer and accumulation* based on **STUDENT WORKLOAD** required to achieve the objectives of a program of study. These objectives are ideally specified in terms of *student learning outcomes*. These outcomes are *sets of competencies* that express what the student will know, understand, or be able to do after completion of the process of learning.
- ✦ **STUDENT WORKLOAD** is calculated from the time required to accomplish all of the learning activities (lectures, seminars, independent study, portfolios, examinations, etc.) related to the program objectives.
- ✦ **ECTS** is based on the principle that *60 credits measure the workload* of an average full-time student over the course of an academic year. European higher education programs generally require a **WORKLOAD** of 1500-1800 hours per academic year meaning that one credit equates to about 25 to 30 working hours.⁸

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- ✦ ECTS credits are awarded only after the successful completion of the work required and following an *appropriate assessment* of the learning outcomes acquired.

- ✦ *There is no way to link contact hours and ECTS credits.* For example, a lecture hour may require two hours of independent study and a one-hour seminar course may require a two-day workload for a preparation each week.

- ✦ Credits are allocated to all educational components of an academic program such as courses, placements, dissertation research, modules, etc., and correspond to the quantity of work each component requires to achieve its specific objectives or learning outcomes in relation to the total hours work necessary to successfully complete a full year of study.

- ✦ Credits can be allocated for all types of programs, regardless of length. This includes credit for stand-alone courses for students not in full-time programs or pursuing a degree. ECTS is not limited to courses, it also is used to award credit for work placements, described in terms of learning outcomes and work time to achieve them.

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RELATING ECTS TO LEARNING OUTCOMES AND STUDENT WORKLOAD: TUNING EDUCATIONAL STRUCTURES IN EUROPE^{7, 10}

I. Determining ECTS Credit

The European Credit Transfer & Accumulation System is based on a number of characteristics:

- ✦ An academic year of a full-time student has an absolute value of 60 credits.
- ✦ 60 credits stand for an average workload of around 1500-1800 hours, which corresponds to around 25-30 student work per credit.
- ✦ A program of study as a whole, in relation to its academic and professional profile, is taken as the starting point for allocating credits to courses.
- ✦ Programs of study are broken down into modules or course units, which should correspond to particular learning outcomes (knowledge, skills and understanding) and competences.
- ✦ A number of credits is allocated to each unit. Each of the units has its own learning outcomes.

II. THE TUNING APPROACH

- ✦ The Tuning Approach has shown “that approaches to teaching, learning outcomes and assessment have an impact on credit allocation (ECTS) and, consequently on student workload.”¹⁰

- ✦ “There is not a “one-to-one” relationship between workload and the time required to achieve the desired learning outcomes.” In achieving the desired learning outcomes a large number of interrelated factors play a role. Approaches to teaching learning rates and processes, and assessment also have to be taken into account, as well as the diversity of traditions, curriculum design and context, coherence of the curriculum, organising of teaching ability and diligence of the student, and financial support by public or private funds.”
- ✦ The Tuning Project has the following definition of learning outcomes (set of competencies): Statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of learning.
- ✦ “Student workload is calculated from the time required to accomplish all of the learning outcomes (lectures, seminars, independent study, portfolios, examinations, etc.) related to the program objectives.”¹⁰

THE TUNING APPROACH IS BASED ON THE CORRELATION OF A NUMBER OF DECISIVE ELEMENTS:

- ✦ "The course profile which indicates the place of the module in the overall programme of studies, as well as the competencies to be developed in the module.
- ✦ The target group, the level of the module and any existing entrance requirements.
- ✦ The learning outcomes formulated for the module.
- ✦ The educational activities which best suit the learning outcomes to be achieved.
- ✦ The types of assessment that are considered most appropriate to the learning outcomes.
- ✦ The notional work time (in hours), based on student workload, required to perform the educational activities which are necessary to achieve the learning outcomes".¹⁰

- ✦ Tuning offers two forms that can be helpful in making decisions on and adjustment of the student workload. The first form is for the teacher to plan the educational module and estimate the student working hours involved. The second is for the student to indicate the actual amount of time spent on the module, thus providing an opportunity to check whether the estimated workload corresponds to reality. Students are given the form completed by the teacher where only the estimated workload is not shown. By using these forms both teacher and students become aware of the learning outcomes, their relationship to the competences being developed and the notional student time involved for each of the tasks.¹⁰
- ✦ "The Tuning Project affects 16 million students in 46 countries with more than 4,000 institutions of higher education."

Examples of Learning Outcomes in the ECTS:

Subject specific for a course in History:

"At the end of the course/module the learner is expected to demonstrate his/her ability to comment and annotate texts and documents correctly according to the critical canons of the discipline."^{7,9}

Generic Competence:

"At the end of the course, the learner is expected to be able to demonstrate the use of information-retrieval skills in relation to primary and secondary information sources, including information retrieval through on-line computer searches."^{7,9}

THE ECTS GRADING SCALE^{7,9}

- ✦ The grading scale has been developed in the framework of the ECTS to *facilitate the understanding and comparison of grades* given in different national systems.
- ✦ The ECTS grading scale is based on the rank of a student in a given assessment, that is how she/he performed relative to other students. The system operates as follows:
 - ✦ The students are initially divided into broad pass and fail groups. The performance of these two groups is assessed separately.
 - ✦ Those in the pass group are divided into five subgroups and each is assigned a grade from A through E in descending order of performance. The best 10% are awarded an A; the next 25% a B grade; the following 30% a C grade; the following 25% a D grade; and final 10% an E grade.
 - ✦ Those in the fail group are divided into two subgroups: FX-Fail but some more work is required before credit is awarded; and F-Fail but considerably more work is required.

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COMPARISON OF THE EUROPEAN CREDIT TRANSFER AND ACCUMULATION SYSTEM (ECTS) WITH GUIDES FOR THE CREDIT TRANSFER POLICIES EMPLOYED BY INSTITUTIONS OF HIGHER EDUCATION IN THE UNITED STATES

Principal Sources of Information:

Joint statement on the transfer and award of credit of the American Association of Collegiate Registrars and Admissions Officers (AACRAO), American Council on Education (ACE), and Council for Higher Education Accreditation (CHEA)⁵ <http://www.chea.org/>, and ECTS User's Guide of the Directorate- General for Education and Culture⁷

(http://ec.europa.eu/education/lifelong-learning-programme/doc78_en.htm).

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Role of Institutions in Credit Recognition

U.S.

- ✦ "Each institution is responsible for determining its own policies and practices periodically to assure that they accomplish the institutions' objectives and that they function in a manner that is fair and equitable to students."⁵

ECTS

- ✦ "The degree-awarding institutions decide what to accept or not to accept. The awarding institution decides on what credit to accept for a specific programme."⁷ A key characteristic of the Bologna Process is institutional autonomy.⁷
- ✦ "ECTS does not guarantee automatic academic recognition. The degree awarding institution decides on what credits to accept for a specific programme. The ECTS Transcript of Record and Diploma Supplement facilitate recognition decisions."^{7,8}

- ✖ This characteristic is identical in the U.S. and ECTS.⁹

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The Acceptability and Applicability Gap

U.S.

- ✖ "Each institution applies its own credit evaluation policies in determining acceptability and applicability of courses. Acceptability and applicability are generally separately determined."⁵
- ✖ "Institutions also have a responsibility to advise the student that the work reflected on the transcript may or may not be accepted by a receiving institution as being the same (or any) credits as those awarded by the provider institution or that the credits awarded will be accepted to the academic credential the student is pursuing."⁶ "Institutions should make every reasonable effort to reduce the gap between credits accepted and credits applied toward an educational credential."

ECTS

- ✖ The Qualifications Frameworks at the national and European levels, with the ECTS greatly reduce (in principle) the gap between acceptability and applicability.⁹

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- ✖ **Comparison:**
The ECTS, and its Key Documents and Qualifications Frameworks more effectively avoid the gap between acceptability and applicability.⁹

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Responsibilities of the Sending and Receiving Institutions to the Student in Transfer	
U.S.	ECTS
<ul style="list-style-type: none">✖ "It is the receiving institution's responsibility to provide reasonable and definitive policies and procedures for determining a student's knowledge in required subject areas." Sending institutions have a responsibility to furnish transcripts and other documents necessary for a receiving institution to judge the quality and quantity of the student's work.⁶✖ "Institutions and accreditations need to assure that transfer decisions are not made solely on the source of accreditation of a sending institutions. Students should have reasonable explanations about how work offered for credit is or is not of sufficient quality when compared to the necessary institutions and how work is or is not comparable with curricula and standards to meet degree requirements of the receiving institutions."⁵✖ "Information on comparability and applicability must be obtained from catalogue and other materials and from direct contact between knowledgeable and experienced faculty and staff	<ul style="list-style-type: none">✖ The aim of ECTS is to provide accessible information to current and potential (transfer) students in each country. The European University "Tuning Educational Structures in Europe" Project, The Diploma Supplement, and the Qualifications Frameworks in concert with the ECTS-required Information Package/Course Catalogue provides information to prospective students on the requirements of both institutions. These are in the local language and English on the website and in hard copy.⁷

✖ There are similarities in responsibilities of institutions and admissions staff.⁹

Learning Outcomes as a Basis for Award of Credit	
U.S.	ECTS
<ul style="list-style-type: none">✖ The Principles of Accreditation³ of the Southern Association of Colleges and Schools Commission on Colleges (SACSC) has as one of five core requirements: "The institution has developed an acceptable Quality Enhancement Plan that: (2) focuses on learning outcomes and/or the environment supporting student learning and accomplishing the mission of the institution" and Comprehensive Standards of which the first is: "Educational programs to include student learning outcomes."✖ In its articulation and transfer policies, the institution should judge courses, programs, and other learning experiences on their learning outcomes, and the existence of valid evaluation measures including third-party expert review, and not on modes of delivery.⁴✖ "Transfer and award of credit policies should encompass educational accomplishment attained in extra-institutional settings. The American Council on Education's Center for Adult Learning and Educational Credentials operate and fosters program to determine credit equivalences for various modes of extra-institutional learning. Institutions may find these services of necessary assistance in this task."⁵	<ul style="list-style-type: none">✖ "Learning outcomes specify the requirements for award of credit. They are formulated by academic staff. Learning outcomes are sets of competencies, expressing what the student will know, understand, or be able to do after a process of learning.⁶ This applies to extra-institutional learning.✖ "Every type of learning can be expressed in learning outcomes and every type of credit requires a (realistic/average) workload which can be expressed in ECTS credits."⁷

- ✧ U.S. colleges and universities generally (78%)¹² have a common set of learning outcomes for undergraduate students and are engaged in curricular mapping. However, these are not used to define the degree nor related to the award of credit.⁹

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Fundamental Differences in the Award of Credit

U.S.

- ✧ The U.S. Student Credit Hour is based upon "time-and-location for recording learning."^{2,11} Example definition: "An hour (or nearly) of institution given over a specific period in a semester system (14-16 weeks). It is applied toward the total number of hours needed for completing the requirements of a traditional, credit-based degree, diploma, certificate, or other award."¹¹
- ✧ The Credit Hour System is closely tied to determination of relative faculty workloads, the cost of institution per student hour, and ultimately, the rate of educational efficiency for individual professors, fields, departments, and universities.² It is used "as an administrative, reporting, budgeting, monitoring, and reporting (accreditation, federal and state agencies, etc.) device."²

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ECTS

- ✧ "ECTS is a learning-centered system for credit accumulation and teacher based upon transparency of student learning outcomes and the learning processes. ECTS credits are based on the workload students need in order to achieve expected learning outcomes."⁷ There is no way to link contact hours to credits. Faculty workload in European universities cannot be linked to student credits in the ECTS because they are not related only to faculty institutional time but student workload."⁷

✧ Comparison:

Even though there is strong movement in the U.S. (as seen in the statements in the Regional Accreditation Associations) to link student learning outcomes to program content standards and objectives, these are not in turn being linked in a systematic way to student workload as in the ECTS. The U.S. approach lacks a holistic nature."⁹

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SUMMARY AND LESSONS LEARNED⁹

- ✦ Student mobility between institutions of higher education, nationally and globally, has taken on new meaning and generated new challenges in the globalized world. Student learning and transfer of credit involves multiple institutions and new modes of delivery vastly changed by the IT revolution.
- ✦ There is dissatisfaction among educators and admissions professionals with the U.S. student credit hour system created over a century ago, especially with its lack of linkage to student learning outcomes and workload.
- ✦ The common element to European (Bologna) reform and U.S. education reform is measuring student achievement through learning outcomes. The U.S. would benefit by more directly linking these to credit earned as in the ECTS.

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