

**International Seminar Leiria, Portugal**  
**CREDIT ACCUMULATION AND TRANSFER SYSTEMS**  
**24 –25<sup>th</sup> November 2000**

**CONFERENCE REPORT**

**PURPOSE OF THE SEMINAR**

The Leiria International Seminar was one of the international seminars agreed in Helsinki, during the Finnish Presidency of the European Union, and included in the first two years of the programme of the Bologna Declaration 1999 leading to Prague in 2001. The task of this international seminar was to discuss workable alternatives and build consensus about Credit Accumulation and Transfer Systems.

The purpose of this seminar was to discuss credit accumulation and transfer systems in the context of the Bologna process and lifelong learning. The experience gained by the European Credit Transfer System (ECTS) provided the framework for much of the national and international development of credit accumulation and transfer and the internationalisation of higher education. In addition, the '*ECTS Extension Feasibility Project Report*' of February 2000, commissioned by the European Commission (DG EAC), provided the context and background information for many of the seminar discussions.<sup>1</sup>

The International seminar covered a two-day period. It was attended by approximately 100 participants drawn from across Europe. The seminar ran with a mixture of plenary and workshop sessions described below.

**OPENING SESSION**

**Introductory Speech by his Excellency, the Minister of Education of Portugal, Augusto Santos Silva.**

The Minister opened the international seminar by stressing the high expectations and importance of the work the seminar participants were about to undertake. The extension and perfection of ECTS is a significant development that relies on the input of technical experts and much international cooperation.

In particular, the Minister stressed the need for more student and teacher mobility to aid European integration. Flexible and well-structured European education systems are required. Higher education has to become less of an 'island' in that it must link with secondary education, vocational education/training and lifelong learning. Finally, there needs to be more harmonisation between different national educational policies. This would require more points of contact and bridges between different systems. ECTS is a prime tool to help create the common European educational area without compromising national education systems.

**FIRST PLENARY SESSION**

**Keynote Presentation:**                    **The Issue of Credit Accumulation and Transfer Systems and the Main Goals of the Bologna Declaration.**

**Speaker:**                                    **Pedro Lourtie (Universidade Técnica de Lisboa, chair of the Education Committee of the EU during the Portuguese Presidency).**

This presentation began by discussing the six objectives of the Bologna Declaration that are instrumental in establishing the European area of higher education and promoting European higher education worldwide. In particular, it looked at building consensus to establish a European system of credit accumulation.

European education needs to improve its international competitiveness and the employability of its citizens. This would also lead to more competition between European systems which would improve and sharpen our individual educational provisions. The worldwide acceptance of European degrees and diplomas requires better information about their content, competencies, and academic and professional objectives. Also, the quality of the awards must be established along with the relevance of the programmes. These factors are crucial if we are to attract overseas students.

The mobility of students, teachers, researchers and administrative staff is a recurrent topic in the internationalisation of higher education. Many Community programmes support mobility and the Bologna Declaration calls for more action to remove the obstacles to it. Mobility should be seen in terms of recognition of previous study, and the ease of movement and opportunities for staff and student mobility. These all require appropriate systems of support and encouragement, including open and flexible procedures and friendly services.

---

<sup>1</sup> Further information relating to the extension of ECTS can be found on the European Commission (DE EAC) Website: <http://europa.eu.int/comm/education/socrates/ectsext.html>. In particular, see the ECTS extension 'Questions and Answers' document.

The Bologna Declaration called for the 'adoption of a system of easily readable and comparable degrees.' Pedro Lourtie identified difficulties with the workability of this proposition. He suggested a more fruitful way forward would be to build upwards from elementary units – credits. A system based on the ECTS 'credit' currency would allow for accumulation and facilitate the comparison of degrees. This would require building a consensus around such a system and putting in place the necessary prerequisites for its implementation. In addition, the Bologna Declaration refers to credits 'acquired in non-higher education contexts, including lifelong learning' this is an additional challenge for the European higher education area.

Pedro Lourtie emphasised that the aims of the seminar were to work towards the creation of a European credit system. He concluded by suggesting that common levels of reference, by areas of knowledge, could be expressed in terms of credits. Such an approach could help avoid any possible divergence in the simple two-cycle, loose, Bologna model.

**Second Presentation: Credit Accumulation and Transfer Systems: A Global Vision.**  
**Speaker: Volker Gehmlich, Fachhochschule Osnabrück.**

Volker Gehmlich presented a personal vision of a global credit accumulation and transfer system that could encompass adult education, vocational and professional training, higher education and lifelong learning. He noted that the 'ECTS Extension Feasibility Study' clearly highlighted a demand for the transformation of ECTS towards an accumulation system - a pan-European Credit System.

Several lessons had been learnt from ECTS, in particular its success lies in that it is student-oriented, provides institutional commitment, and creates openness and trust. It still faces problems when credits are misused or allocated incorrectly, and where learning agreements are missing and information packages unclear.

In the future degrees and qualifications will need to be more flexible and the teacher will act more as a facilitator. ECTS as a credit accumulation and transfer system can improve flexibility, choice, student and teacher mobility and promote student-centred learning. To do so, it will have to overcome problems and weaknesses associated with modular programmes.

ECTS guarantees academic recognition, develops the international dimension and improves competitiveness and efficiency. It also needs to be built into the total quality management process. ECTS as a transfer system assures that credits gained at host institutions are academically recognised by the home university. A credit accumulation system goes beyond a credit transfer system in that a student's entire study programme is expressed in credits. Volker Gehmlich indicated that ECTS must develop towards an accumulation system to fulfil its role of facilitating lifelong learning in Europe.

He presented a vision of a multi-mode flexible credit-based system for recording lifelong learning. Such a system would have learning accounts, and multiple entry and exit points. It would be capable of linking all levels of training and education. Modules and units would have defined levels and approved syllabi and module combinations. There would be many problems to be overcome such as defining the relationship between credits obtained in vocational training and academic credits. In Continuing Education the relationship between competencies and credits would have to be established as would the age and validity of credits.

This vision of the future would require top-down and bottom-up action to make it a reality. A local, regional, national and international consensus would have to be built. Europe requires a credit-based lifelong learning framework and ECTS can supply the basic tools for it.

**Third Presentation: From Credit Transfer to Credit Accumulation Ensuring Coherent Curricula (Levels, Grades, Knowledge Areas, etc.) and Quality (including the Question of Ageing of Qualifications).**  
**Speaker: Julia González Ferreras, University of Deusto.**

Julia González Ferreras presented a vision of the educational future that explored what has been achieved to date and then went on to outline a project designed to make a European system for credit accumulation a reality.

This presentation began by establishing what we have achieved so far after 12 years of experience and co-operation using ECTS principles and tools. To this has been added the new political will for change demonstrated by the Sorbonne and Bologna Declarations.

We are now at a dawn of a European credit accumulation system with many European countries adopting national credit systems based on ECTS or compatible with it. ECTS is now moving from a peripheral activity to a core activity for institutions. In addition, this process needs the development of coherent curricula which will require much reflection, analysis and dialogue particularly relating learning outcomes, skills and knowledge, and competencies to ECTS credit points. Coherent curricula also help ensure the quality of educational programmes. Common approaches to grades and the ageing of qualifications are also required.

Julia González Ferreras then outlined a new proposed project designed to examine and test all the problems and difficulties associated with developing ECTS. The project 'Tuning Educational Structure in Europe', covers the five disciplines of Mathematics, Geology, Business, Educational Services and History. It aims to exchange experiences in

these disciplines identifying their commonly understood profiles and competencies. It is a credit-based project that will examine how to measure student workload linked to learning outcomes, knowledge, skills and competencies. The project also seeks to bring about a high level of convergence in higher education in the five main subject areas by defining commonly accepted professional profiles, levels, curricula and learning outcomes for each area. (*N.B. The European Commission has since accepted this project.*)

## WORKSHOPS

There were four workshop sessions that explored different aspects of the development of a European credit system. Each workshop examined a series of pre-determined questions and began with a short presentation on the subject. The second plenary session saw the presentation of the results of the workshops by the workshop rapporteur\*. These were followed by short question and answer sessions.

**Workshop 1:** **Credit Accumulation Systems Based on Workload and on Competencies.**  
**Facilitators:** **Reinhard Schmidt (University of Florence) and Estela Pereira\* (Universidade de Aveiro).**

This workshop began with a presentation by Reinhard Schmidt on the regional project 'Integrare' that attempts to elaborate a prototype model to allow for the transference of credits among different educational sectors, including higher education, post-secondary and vocational education, in the Tuscany Region. In this project they are seeking to define a common, restricted "units of competence" in terms of workload, levels and contents using a computer based 'balance of competences' model.

In the discussion that followed it was clear that although a certain amount of consensus can be accepted for the annual workload of a regular student, much work has to be done to get clear definitions of competencies and the level and time to acquire them in different subject areas. It was agreed that a project such as '*Tuning Educational Structures in Europe*' is the type of activity needed to pursue this objective.

The following points were raised in discussion:

- A definition of outcomes exists for every higher education degree, in every country, although more work has to be done to give these more precision and depth.
- Links with lifelong learning and APEL were noted.
- The difficulty in establishing calculations and rules for workload acceptable to all subject areas and European countries. However, the experience of mobility programmes show that we can co-operate between different systems if their aims are comparable, based on transparency, trust and confidence.
- A credit accumulation based degree structure is entirely compatible with ECTS principles. Several countries are already using ECTS as the credit accumulation system for their degrees. No negative aspects were noted.
- A degree programme is, in itself, a learning agreement between institution and student.
- ECTS has the advantage of being learner-centred, in opposition to systems based just on contact hours, which are strongly dependent on traditional teaching methodologies. Under ECTS, annual student progress is easily comparable between different institutions. ECTS allows for the easy evaluation of student workload.
- ECTS is not in itself a quality assurance mechanism but it is an excellent tool to help understand and compare degree structures. ECTS credits give each Institution more freedom and more responsibility in allocating credits than contact-hour based systems. The way it achieves this allocation is also an indicator of quality.
- Each Institution defines its own study programs and it is its responsibility to define criteria to recognise credits obtained elsewhere.
- No standardisation can or should be imposed in Europe.
- Links between workload and competencies requires further discussion based on subject area.

**Workshop 2:** **Accreditation of Prior Learning (APL) and Accreditation of Prior Experiential Learning (APEL).**  
**Facilitators:** **Michel Feutre (Université de Science et Technologies de Lille) and John Konrad\* (Leeds Metropolitan University).**

This workshop began with a presentation by John Konrad to introduce this relatively new area. He examined what learning and experiential learning can be credited towards a qualification. The methodologies for its accreditation were explained along with good practice in their use. It was noted that both workload and competency-based credit systems could use the same methodologies but that there was always a limit on the amount of APL/APEL credits granted. These approaches require qualifications to have clear learning outcomes, levels and progression built into them. The learning outcomes act as the basis for the assessment of APEL and any subsequent award of credits. Different methods exist for this accreditation process including the use of Accreditation Boards, portfolio presentation, to just taking examinations. The use of APL and APEL techniques can open up access to higher education, facilitate the development of lifelong learning, and acknowledge that valid learning can take place outside academic institutions. All this improves mobility.

The following points were raised in discussion:

- Learning takes place in unusual settings.
- APL/APEL requires universities to develop new tools and expertise.
- Lifelong learning is a 'public good' that raises the question of who should pay for it.
- APEL concerns careful professional judgements made by committed teachers.
- In the legal profession its use has been long established.
- In France there are radical plans to allow APL/APEL recognition to constitute the almost complete award of a qualification.
- Professional bodies should be involved with APL/APEL processes.
- APL/APEL must link closely with quality assurance approaches.
- APEL is a socially just approach that recognises learning wherever it has taken place.
- APL/APEL is a developmental and progressive tool of great significance to lifelong learning.

**Workshop 3: Distance Learning and Lifelong Learning.**  
**Facilitators: Alfredo Soeiro\* (Universidade de Porto) and Volker Gehmlich (Fachhochschule Osnabrück).**

The workshop began with a presentation on the general topics of distance learning and lifelong learning. It was clarified that lifelong learning is a concept whilst distance learning is a mode of delivery. They were both seen as involving a shift of paradigm. It was agreed that distance learning has much support and is an important delivery mechanism for lifelong learning. Whilst, the distance learning approach should be viewed as an accepted teaching and learning technique. Credits gained by distance learning should be linked to clear learning outcomes.

Lifelong learning was regarded as an important innovation that raises a number of complex questions for all involved in the education and training sectors. Alfredo Soeiro explained the European university thematic network project in Continuing Education. The problems of different national definitions and understanding of 'Continuing Education' was explored with a presentation of alternative national approaches. EUCEN defines continuing education as '*any form of education, vocational or general resumed after an interval following the continuous initial education*'.

The workshop participants examined six pre-determined questions and concluded that:

1. Distance learning has no special implications when used in the context of credit accumulation frameworks. Distance learning is just a mode of delivery. The key point is to express the learning in outcomes and student workload.
2. The ageing of qualifications is significant in the context of credit accumulation systems as it is in any other system. In some professions the credits and qualifications are time-limited in the sense that outdated qualifications/credits are not necessarily recognised for professional practice or access/exemption purposes. It was agreed that the professional and academic worlds need to consider this matter further.
3. A European credit accumulation system must be developed and applied to lifelong learning. The inclusion of non-degree stand-alone courses will pose problems, which would need to be overcome. Any credit-based lifelong learning system will involve the use of all ECTS tools plus a strict quality assurance mechanism.
4. Credit-based, modular 'Open and Distance Learning (ODL)' programmes would certainly facilitate the development of qualifications tailored to job functions. This helps in the assembly of courses from the best sources that would certainly contribute to personal development.
5. In-company training should be recognised providing it is rigorous and appropriate to the recognition being sought. APL/APEL systems facilitate this process.
6. Credit systems are compatible with the labour market and the requirements for professional accreditation. However, enterprises are primarily interested in jobs being effectively done. Therefore, industry needs to be more involved in the design and accreditation of credit-based courses to encourage the integration between academic and professional recognition.

**Workshop 4: Articulation between Credits and the Diploma Supplement and Europass.**  
**Facilitators: Inge Knudsen\* (Director, Confederation of EU Rectors' Conferences) and Maria Emília Galvão (Deputy Director of International Relations at Ministério da Educação, Portugal).**

The workshop began with a presentation of the 'Diploma Supplement' and 'Europass' by the respective facilitators. The Diploma Supplement is a device to provide information on the nature, level, content, context and status of individual qualifications – in order facilitate their fair recognition. Europass is a system for recording work-based periods of study abroad. The presentation was followed by a short exchange of views on credit systems and their underlying concepts.

Four questions were posed to the workshop members and each was answered in the following way:

1. It was agreed that the information contained in the Diploma Supplement, as it stands, is adequate to the demands imposed by credit accumulations systems. It requires neither extra descriptors nor alterations.
2. It was agreed that Europass facilitates the translation of learning experiences into a credit accumulation system by simply registering and recording the experiences/training gained abroad.
3. It was agreed that the Diploma Supplement and Europass complement each other in the context of a credit accumulation situation. They each provide essential information.
4. The main role the Diploma Supplement and Europass play in a credit-based system for recording lifelong learning is by creating transparency. It is through this that recognition becomes easier.

The workshop participants agreed that it was important to underline that both the Diploma Supplement and Europass were tools – instruments that are nothing in themselves if there is no institutional wish to create transparency, support mobility and promote employability. They cannot solve national problems but they can support policies to create the readability and comparability of degrees.

The use of these tools is determined by national and/or local higher education policy decisions. It was also noted that:

- Many countries that use Europass and the Diploma Supplement also introduce credit accumulation and transfer systems and take other measures as part of their commitment to the Bologna process.
- The Diploma Supplement can be used beyond the borders of the EU, as it is a joint European Commission/Council of Europe/UNESCO initiative. It is popular amongst employers and graduates.
- Europass can be added to the Diploma Supplement to give employers proof that periods abroad are periods of genuine working experience. Europass helps in the process of documenting/proving APEL claims.
- In terms of employment, European citizens want mobility and this requires the recognition of their qualifications wherever they are gained. This becomes more important with lifelong learning and the fact that future generations will change employment and require professional updating at increasing speeds. In this context the Diploma Supplement and Europass become ever more significant.

## SECOND PLENARY SESSION

**The presentation of the results of the four workshops was followed by the plenary debate and finally, the conclusions drawn by the general rapporteur.**

**Debate:** From Credit Accumulation Systems to Common European Levels of Reference: The Ways Ahead.  
**Facilitator:** Pedro Lourtie (Universidade Técnica de Lisboa, chair of the Education Committee of the EU during the Portuguese Presidency).

The final plenary debate was organised as a session to raise questions, gain responses and suggest potential solutions that could be transmitted to the forthcoming meeting of education ministers in Prague. Pedro Lourtie posed the following questions:

1. Can we define common levels and subject content, and relate them to credits – is this the way forward?
2. How can we define programmes of study not just in terms of content but in terms of learning objectives, skills and competencies?
3. What is the place and role of APL/APEL and lifelong learning – what do we recommend?
4. What role do quality assurance and quality evaluation play in relation to credit accumulation and the Bologna concerns?
5. How should a European credit system develop?

The debate ranged across these questions. The participants positively endorsed the questions but saw their detailed answer in appropriate research projects. The various workshops gave some general indications of the way forward. It was agreed that formal and non-formal education needs to be linked by such devices APL/APEL. There was agreement that ECTS as an accumulation framework should be implemented across Europe as it would increase both the transparency and flexibility of national education systems. This would require international co-operation between academics, professional bodies, citizens and the social partners. In addition, strong national staff-development programmes are needed to implement any European credit accumulation system.

There was a strong endorsement of the proposed project, '*Tuning Educational Structure in Europe*' previously outlined by Julia González Ferreras. This project would serve to refine and test all the problems and difficulties associated with developing ECTS as an accumulation system. It was stressed that the project should also seek to identify general (non subject-specific) skills that all European graduates should acquire. Finally it was stressed that education must not only be for the purposes of gaining employment but also for transmitting cultural benefit to citizens.

**Final Presentation** Conclusions of the two-day International Seminar.  
**Speaker:** General Rapporteur - Stephen Adam, University of Westminster.

The general rapporteur summed up the overall achievements of the international seminar by highlighting the following aspects:

- The revolutionary forces currently impacting on European education represent huge difficulties and challenges for all involved in educational and training. These forces include globalisation and advances in information technology that are leading to rapid adjustments in national education systems. Learning is becoming more student-centred and flexible as credit-based systems are developed. These changes fundamentally challenge our notions as to how,

what, whom and where we teach, as well as how we assess. Those who fail to confront and adapt to these questions face a difficult future.

- The 'ECTS Extension Feasibility Project Report' of February 2000 clearly concluded that the ECTS was an excellent tool to aid transparency and convergence as envisaged by the Bologna Declaration. The study outlined the key advantages as well as the problems facing any extension of ECTS to a credit accumulation system within a lifelong learning perspective. These issues provided the agenda for the seminar workshop groups.
- The workshops achieved a number of things including:
  - Workshop 1: Examined problems associated with the quantification of credits. Understandably, it did not resolve these difficult problems but did highlight the need for credit definitions in terms of 'total student workload' as well as in terms of competencies.
  - Workshop 2: Considered APL and APEL. It found that learning can take place anywhere but the real challenge is to devise rigorous systems to accredit and measure such learning. The credit-based measurement of APEL is particularly important for models of lifelong learning.
  - Workshop 3: Explored distance and lifelong learning issues. These both benefit from credit-based approaches to provide the flexibility that such modes and concepts require. Educational and training programmes expressed in learning outcome and competencies were also seen to have advantages over traditional (input-based) content descriptions.
  - Workshop 4: Examined the use of the Diploma Supplement and Europass within a credit accumulation framework. Both were found to be valuable and workable devices to enhance transparency and recognition.
- The presentation by Pedro Lourtie on Credit Accumulation and Transfer and the goals of the Bologna Declaration reminded the seminar participants of the importance of their work in helping solve some of the problems of competition, employment, mobility, and convergence faced by European education.

In conclusion, the outcome of the two-day international seminar was clear:

1. In Europe we are faced by enormous common educational challenges.
2. Higher education can no longer exist as an island isolated from secondary, vocational and adult education. It must integrate more with these sectors by building appropriate bridges that help create a workable system for lifelong learning. All national education systems need to reflect on their own structures and practices in the light of these imperatives.
3. There was a consensus that credits and credit accumulation are the best devices to help create the converged yet flexible education systems required by European education.
4. The proposed project '*Tuning Educational Structure in Europe*' was endorsed.
5. Building a European education area will not be easy but we have excellent devices, such as ECTS, to help in its creation.

*Stephen Adam*  
*General Rapporteur, December 2000.*