

Full Report

Credit Accumulation and Transfer, and the Bologna Process: an Overview

Higher Education Policy Institute

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Contents

	Page
Background	3
Concepts	4
Modules	4
Credits	5
Purposes	11
Lifelong learning	11
Widening participation	12
Reduced failure	14
Free movement of people	14
Credit accumulation and transfer in practice	15
North America	15
The United Kingdom	22
Europe	26
Issues with Credit Accumulation and transfer	30
Lessons	35
Bibliography	39
Annex A: Tuning Project Working Paper	43

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Background

This report describes and evaluates credit accumulation and transfer (CAT) systems, and considers a number of the policy implications that arise. It provides an overview, at a high level, and does not seek to add to the distinguished and expert academic literature on the subject. While the topic is relevant to any discussion of widening participation and lifelong learning, it is of particular importance and of current interest because the Bologna process, which aims to achieve a degree of harmonisation of European higher education systems, is pressing the adoption of a Europe-wide CAT scheme as an integral part of that process. One of the main aims of this report is to consider the implications of that aspect of the Bologna process for this country.

The report concludes that CAT systems can help further lifelong learning, improve and widen participation and reduce non-completion. And they could help achieve the EU's goal of increasing the mobility of students between European universities. However, a key aspiration that some have for CATS – to provide a guarantee that students can automatically transfer between participating institutions – is a mirage even where CATS are currently well established.

The report also concludes that the most effective way that CATS can help achieve these various goals is in the context of specific agreements between individual or groups of like-minded institutions to articulate their courses and to recognise the learning experiences each may provide to a student of the other. That is in contrast to the direction that mainstream CATS developments are taking, which are focusing on increasingly bureaucratic structures – particularly the quest to define meaningful and commonly acceptable 'outcomes' for each course and module - which risk undermining the whole enterprise. Finally, the

UK has nothing to fear from the way ECTS are going: in particular there seems no reason why the English model of a three-year Bachelors degree, followed by a one-year Masters, should not continue.

Concepts

There are a number of interlinking concepts which are in some cases logically and practically distinct from that of credit accumulation and transfer, but which arise in any discussion of CAT systems, and which it is important to understand.

Modules

Modularization is described by Smith and Bradley thus: "Modularization is the idea that the curriculum can, and even should, be broken down into more discrete units of accessible study" (Smith and Bradley 1996). A degree programme may be modular in a formal sense (as in a "modular degree", which allows students to build up a degree by successfully pursuing a sufficient number of freestanding modules) or it may not, but even if it is not, it will inevitably be broken down into more or less discrete units. The amount of freedom that the student has to combine diverse modules to achieve a degree is an important issue that is much debated, but even where, for example in a single honours degree, a student is required to select from a number of limited choices, the degree is nevertheless broken down into modules, whether explicitly or not. For example, a degree in philosophy may cover ancient philosophy, moral philosophy, logical positivism, and so on.

The professor of philosophy, reported by Coleman, "who alleged that modularity would be impossible in that subject area since it negatively fragments what should be a positive learning experience" (Coleman, 2003) was missing the point. A philosophy degree is already divided into parts. It is true that the parts may be interlinking and inter-reliant, but a philosophy degree is nevertheless not taught as a single undifferentiated sequence. Viewing a degree course as

modular helps to make it transparent and helpfully requires those designing the course to exercise rigour and transparency in its design. Conceptually, even a degree course such as the Cambridge Tripos consists of modules, and if no further breakdown is available, it is possible to regard the whole of the first year as a single module.

Modularization ought not therefore to be a controversial notion. Where controversy does arise is around the length and intensity of modules. There are those who argue that modules should be devised to be as small as possible, enabling others to take the view that modularization is part of the dumbing down that they perceive in higher education and that therefore it is something that is not for them. In so doing, of course, they ignore the fact that even the most rigorously holistic course is modular to some extent.

In actual fact modularity represents a continuum - there are some programmes that have very highly structured progression through modules all of same length and value while other programmes are based on parts that merge into one another and are more developmental in nature. In the former case the progression will be more likely to have assessments that count all the way through for each module while at the other extreme assessment might be by examination of the whole at the end of three years. Assessment - the frequency of assessment and what is assessed - is a key feature of the development of modular systems, and represents one of the areas of difference between this country and some of our EU partners, many of which retain just one final 'grand slam' exam at the end of a degree programme, which examines everything taught for that degree.

Credits

Whereas modules are a curricular device - to divide the curriculum into logical and distinct components - credits are quite simply a means of attaching relative values to the different components of a course. They are a currency of learning.

In the words of the Scottish Credit and Qualifications Framework, they account for the volume of learning achieved "by estimating the amount of time required by the average learner, at a particular level, to achieve the outcomes" (SCQF, 2003). In these terms, they are, then, a measure of the time typically required to complete a module successfully.

Where credit systems exist, a degree is awarded after the student has successfully completed all the curricular requirements, one of which is normally the accumulation of a minimum number of credits. In a three-year degree, one third of that number is available after a typical one year of study, and modules are designed, each with a certain number of credits attached, to enable a student who successfully completes these modules to achieve that number of credits in the year.

Whether or not a formal credit system is in operation, if one part of a course takes up more of a term than another, and has more importance attached to it in the examination, then effectively it has more credit assigned to it. A formal credit system which assigns credits to course components systematises this process and makes it transparent. However, systems of credit accumulation have ambitions that go far further. They are intended to ensure that students can have flexibility of both time and place as they work towards their degrees. If a student is recognised for learning that he or she has achieved when they have completed a module by being awarded a number of credits for that, then it can readily be seen that they could take a break from their studies and come back subsequently to achieve more credits for further modules. This is what credit accumulation is about.

Credit transfer takes this one step further and allows a student to move between courses, or to another university, with the credits they have obtained, and achieve further credits there. Toyne (1979) describes credit transfer as "an essential process whereby qualifications, part qualifications and learning experience are given appropriate recognition (or credit) to enable students to

progress in their studies without unnecessarily having to repeat material or levels of study, to transfer from one course to another, and to gain further educational experience and qualifications without undue loss of time". Although this definition applies no less to credit accumulation than to transfer, it captures the essential fact that such arrangements enable students to have recognized the time they have already spent on their studies, even if at a different institution.

It needs to be borne in mind that a substantial amount of transfer takes place already in the United Kingdom. In 2002-03 over 11,000 of the 300,000 plus students who entered higher education institutions did so having been at a different institution either the previous year or following a year out (Higher Education Funding Council for England, 2003). However, it is believed that the great majority of these students entered their new institutions in year one of their course, without receiving any credit for their previous studies. Although data about this do not exist, it is widely believed – and very probably true – that movement may take place between universities with a similar pedigree (e.g. between new universities or pre-1992 universities), but is much less common between institutions with different pedigrees. Also in 2002-03, up to about 5000 students with a Higher National Diploma/Higher National Certificate moved on to a first degree course in England, and most will have done so with credit for their previous studies (i.e. they will not have had to take the first – or in some cases even the second – year of the degree course)¹.

It is clear that a substantial amount of transfer takes place even without formal CAT systems, though it is also clear that transferring students would benefit from the existence of a CAT framework (which would allow their previous higher education experience more easily to be taken into account).

¹ In Scotland, the HND – Degree route is even better established, with 6,500 of the 30,000 entrants to degree courses in 2001-02 holding HND/HNC qualifications. However, there is some controversy over this, and a recent research report by Professor John Field of Stirling University has demonstrated that few such students attend high status institutions and most pursue low status subjects with poor career prospects (Field, 2004).

Even within a university although flexibility is possible without credit systems, a common and formal credit system will ease such developments. For credits to be transferable between universities, it is a great help if universities agree and use a common denomination of accounting. A number of different denominations, or credit accumulation and transfer systems, are in place - some, for example, attaching 360 credits to a degree and others 180, with universities then attaching appropriate value to the modules that go towards the degree.

However, even where common systems of credit are agreed and in force, these only give an account of the volume of learning that has been achieved. Alone they say nothing about the content, its relevance to other courses that a student may wish to pursue, nor, crucially, about the standard that the student has achieved. By itself, the existence of a common credit system will do nothing much to increase the likelihood of the transfer of students between institutions. For this reason, attention has been given to the development of other associated instruments to enable this.

i. The first of these is a framework of levels and level descriptors, which describe the level of the credits that have been achieved - for example credits at honours degree level. This is necessary because the logic that leads to the adoption of credit systems for first degree provision applies equally at lower and higher levels too. If a student can obtain credits for pursuing a diploma, certificate or further education level course then means are needed to distinguish these from any honours degree level credits they may also have obtained. Many universities have recognised this, and distinguish between the levels at which different modules are pitched. And they also specify the percentage of credit at each level that is required for each qualification.

ii. The second concerns learning outcomes, and centres round the attempt to pre-specify what a student learns and achieves in each

module. This is in fact an extremely complex endeavour, and whereas learning outcomes can fairly easily be stated in mechanistic terms (which may be useful in subjects which are essentially transmitting a corpus of knowledge for professional practice) their description in a more sophisticated way that can be used by universities to assess a student's suitability for entry is far more problematic².

iii. Associated with learning outcomes is the third associated concept: that of a commonly recognised transcript, which enables the student to describe in detail what they have achieved - for example the content of the courses that they studied and the marks achieved. This is what the Bologna arrangements call the 'Diploma Supplement', or the more detailed version of this the 'Transcript of Record'.

iv. The fourth is a trusted and comparable quality assurance system, intended to give confidence to universities that the credits achieved at other universities are of an appropriate standard.

These are significant complications, but without them those working on this question have concluded that it is unlikely that the full potential of credit transfer systems can be achieved in this country and in Europe.

A further issue concerns the question of specific and general credit. Where there is close and explicit articulation between modules and courses in different institutions, or in other cases where a course taken by a student in one institution matches closely the requirements of another, then a student who undertakes a module in one institution can expect the credit obtained to count credit for credit as equivalent to the parallel course at the other institution. However, where there

² An example of a learning outcome is provided by SEEC in English Literature: "At the end of the module the learner is expected to be able to demonstrate detailed understanding of the influences of the historical and social context within which the chosen text is set, both from the study of the text itself and from the study of other contemporary literature." (SEEC 2001). This of course leaves open the rigour of the judgement about what constitutes 'detailed understanding', which may well differ from university to university.

is no articulation, or where a student wants to switch programmes or for other reasons, the new institution may conclude that the credit obtained may not substitute for any credits specifically required for the programme in question. However, in many cases the rules of the institution will allow a degree to be awarded on completion of a certain number of 'specific credits' (credits explicitly required for a particular programme) plus a certain number of general credits (that is to say credits for courses taken which may not be specifically required for that particular programme). In such cases, the credits which were not admissible as specific credits may be admissible as general credits.

Finally, while it may be easy enough to assign credits to chunks of learning, it can be far more contentious and complicated to agree (even within a single university) how credits combine or can accumulate into the award of a qualification. This is a major issue within universities, but it is particularly so when it comes to agreeing transfers between them. To enable credits to lead to a qualification there generally need to be 'rules' to ensure the coherence of the curriculum (in terms of the breadth and depth of topics covered), related rules to ensure that learning is progressive, rules concerning the number of general as opposed to specific credits that are required, rules about the required overall achievement of the student (e.g. whether they need to pass all modules, or if some failures would be accepted), and potentially rules about the shelf-life of credits³.

Purposes

Many diverse benefits are claimed for credit accumulation and transfer systems, and one of the problems that arises is that different approaches may be appropriate to achieve different objectives.

³ An example of the early adoption of a credit system internally in a university, and the rules that governed the issues describe here, is provided by the Oxford Brookes University modular degree course, described in Watson et al (1989)

Lifelong learning

If students can accumulate credit for the learning that they undertake wherever they undertake it, then this may encourage people, having begun the educational process, to undertake learning throughout their lives and perhaps to gain qualifications for such learning. The Dearing Report, in 1997, said

“If the higher education sector is to be truly committed to the concept of lifelong learning, students will need to be able to take advantage of a national system of credit accumulation and transfer. Transfer will not be possible without some level of national currency of the credit acquired by the student. “ (Dearing 1997, 10.62).

This would mean that the geographical constraints that might inhibit people from undertaking more conventional forms of higher education are less of a constraint. This itself may encourage more people to engage in education. It would also mean that people could study part-time, and regulate the intensity of their study according to their work and other commitments. The Scottish Credit and Qualifications Framework (SCQF) states the benefit of a CAT system as follows:

“We believe in a culture of lifelong learning where the education system, provision of learning and the benefits of new technology are focused on making it easier for people to participate in learning at any stage of their lives. We recognise that for many people, real or perceived barriers do still exist and we are committed to tackling these on several fronts” (SCQF 2003).

A related proposition is that learning credits should be available for learning wherever or however it is achieved, including learning obtained within the workplace or even on the job - workplace or work-based learning. This adds a further level of complication to what is already a fairly complex set of notions. It

is, nevertheless, a logical extension of the possibilities that the development of CAT systems allow. If a qualification can be achieved by building up an appropriate number of credits, then a separate debate can be had about the processes that credit can be attached to – whether in the formal learning environment or elsewhere. The SCQF, for example, believes that “any short programme, module, unit, or work-based learning has the potential to be credit rated” (SCQF 2003).

Widening participation

In part because of the experience in North America (of which more below) credit accumulation and transfer systems are seen as potentially helpful to widening participation, both in the sense of encouraging people who might not otherwise have gone to university to do so, but also to the extent that they may help students who would otherwise have left university without having achieved any qualification.

In some parts of North America it is common for students to begin a degree programme at a local college, to complete up to two years of the programme there, and then to transfer to a university to complete their degree - in British Columbia and in the USA as a whole over one third of graduates take this path, and in California more than half do so. In those countries the college/university route was established explicitly to make it easier for students from poorer backgrounds to enter higher education - easier both in an economic sense (because to study at a local college can be significantly cheaper for the student) and geographically (because colleges tend to be far more geographically dispersed than are the much smaller number of universities).

As is described below, the infrastructure that enables these arrangements has been put in place explicitly for this purpose. Such an infrastructure does not exist in this country, and so the development of credit systems by themselves would not foster this sort of development here. This has not stopped some,

nonetheless, from arguing that credit system should be developed in this country which would "guarantee" students progression and transfer between institutions. As is shown below, such "guarantees" are not actually a feature even of those systems where progression from colleges to university is explicitly a design feature.

Moreover, some of the chief features that cause credit transfer to be so essential for widening participation in other countries are not features in this country. We do not have a vast territory that means that some people are hundreds – or even thousands – of miles from their nearest university. There are few parts of England where people do not have a university within reasonable reach⁴. Nor is it the case that studying at a local college in England is significantly cheaper than studying at a local university – the fees are the same (though it needs to be noted that because of the greater geographic distribution of colleges the prospects of studying at a local college – and so living at home - are greater than at a local university). Nevertheless, there are suggestions that some people – particularly those who have been away from learning for a while or those who are academically insecure for other reasons – may prefer what may be the more supportive environment of a further education college to undertake their initial higher education courses, and it would undoubtedly contribute to widening participation if credit transfer arrangements were in place that enabled them to do so.

Reduced failure

If students build up credit for each module that they have completed, then it might well make it easier for them to transfer to a different university if they found that that was right for them; and even if they decided to leave higher education entirely, it might ease their return at a later date to complete a degree course. There are even those who have argued that "credit should be a qualification in its

⁴ Though as a matter of fact in British Columbia, the largest proportion of students enrolling in university level college courses are registered in local community colleges in the Greater Vancouver area where there are two large universities and other degree granting institutions.

own right" (Reynolds, 2001), though it is hard to see what benefit this would have, since the main value of qualifications is the value that is attached to them by the world at large, and it is difficult to believe that such an "award" would carry much value in the wider world. As already discussed, there is already in this country a certain amount of movement between institutions and reengagement in the higher education process. Nonetheless, it certainly seems true that a credit accumulation and transfer system would help to ease and systematise that process, and it might well, therefore, have the effect of reducing the amount of non-completion.

Free movement of people

The European Union's engagement with credit accumulation and transfer is largely motivated by its wish to achieve free movement of people around Europe. Adoption by all European universities of the European Credit Transfer System (ECTS) will be a step, but only a step, towards achieving this. At the outset, ECTS was introduced to enable a student who spent some time in a university in a different European state to account for the time they had spent overseas towards their degree in their home institution. In the words of the EU Directorate General for Education and Culture, "it's aim at that time was to facilitate the recognition of study undertaken abroad by mobile students through the transfer of credits" (original emphasis) (Directorate General Education and Culture, 2004). The reality, of course, has been very much more complex, and as will be discussed below, credit systems alone fall far short of enabling the sort of free movement that is sought by the EU. Once again, though, CATS help to systematise a process that already takes place (students are already able to – and do - move around Europe to a limited extent), and while it would be overstating matters to say that it is a necessary condition for such free movement, it will be a helpful condition.

Credit accumulation and transfer in practice

North America

California

Credit systems were first developed in North America, and remain further advanced and in more extensive use there than elsewhere. Their history goes back nearly 150 years, when first Harvard, and then rapidly after that other universities, introduced explicitly modular systems, and "the notion of quantifying modules [via credits] and accumulating credit was an inevitable outcome of the Harvard system" (Smith and Bradley, 1996, quoting Theodossin, 1986). "The spread of secondary education led to higher education growth, and public opinion called for a wider variety of college courses ... leading to the proliferation of courses, and an increased need for cogitative measures of the educational process ... student mobility also increased; transferable, quantitative units of educational accomplishment became critically important" (Heffernan, 1973).

The increasing demand for higher education also manifested itself in demand for affordable higher education, and that led, in California and elsewhere, to the development of lower-level colleges which were local, focused on teaching and much cheaper than four-year universities, to provide the first part of a degree programme, with students able to transfer to four-year universities to complete their degrees after completion of the junior, or community, college.

In the middle of the 20th century this was formalised in California with the adoption of the California Master Plan, which created a three tier system of higher education, with the lower-level colleges having the explicit function of preparing students for transfer to complete their last two years of a degree at either the University of California (UC) or a California State University (CSU). This system is still in operation today, and while it may no longer be the most innovative example of a planned multi-tier higher education system in the USA, it

remains an outstanding example in practice, where more than half of all graduates from four-year institutions begin their academic careers in a Community College. It is for that reason – to use California as an example of a well-established credit system, to consider how it works, and what lessons that might have for the UK - that the California system is described in detail here.

In California, a commitment amounting to a guarantee is given to many students undertaking a course at a two-year college that if they complete the requirements of the four-year university they will be able to secure a place to complete their degree. These requirements concern both the content of the curriculum - for a particular programme they will stipulate what courses at the lower-level the student should have completed. They also concern the standards that the student should have achieved - they will typically state the average grades the student should have achieved in their courses at the lower-level college. These requirements will be pitched at such a level as to ensure that transfer students are at a similar level of attainment as those who enter direct from school.

There are a number of things about the arrangements in California that are worth noting.

- i. First, the curriculum requirement means that there has to be some considerable degree of commonality in the courses between the different universities and colleges. If there is not, then that makes it near impossible for colleges to offer preparation for other than specific courses in specific universities – a course at a college will only be able to prepare a student for transfer to a course at one university and to no others – or at least a student will need to negotiate with other universities how much credit they can be given for a course that does not formally articulate with one of theirs.

ii. Second, such transfer as occurs takes place almost exclusively between colleges and universities. There is relatively little transfer from one university to another (less than 7% of transfer students in University of California universities were from other UC or CSU universities, as were fewer than 8% of those at California State University institutions) (California Postsecondary Education Commission, 2000). This is a lower level of non-college transfer than in the USA as a whole – and indeed not much different from England - and may represent the fact that the College-University transfer route in California is so well developed.

iii. Third, the great majority of transfers are very local (between colleges and universities in the same area) and occur between a small number of institutions. In the three years to 1999-2000, of the 2247 conduits available between community colleges and California State University institutions (a conduit is a route from a given college to a given university) 105 of these (just 4.7 per cent of the total) accounted for two thirds of the total number of transfers. And of the 856 conduits available between community colleges and the University of California system, 15 conduits (1.8 per cent of the total) accounted for 26 per cent of the transfers, and a further 108 (12.6 per cent) accounted for a further 43 per cent. An internal report on the subject to the California Postsecondary Education Commission says that there are a relatively “small number of major conduits” (California Postsecondary Education Commission, 2002). Most colleges and universities do not enter into mutual articulation agreements, although students may – and do -- transfer between them.

iv. Fourth, the conditions that the University of California imposes each year concerning the standards that transferring students must achieve in order to be accepted is a considerable qualification of the “guarantee” that students have that if they pursue a course at a

community college they will be able to transfer to university. The rigour of the requirement can be – and it is – varied according to the financial exigencies affecting the universities. In the last year or two, for example, when budgets have been extremely tight, the requirement has been raised considerably and students who in earlier years might have expected to go from community college to the University of California have been unable to do so. The priority of the University of California is to admit students direct from school, and in recent years the percentage of students represented by transferring students, both to the California State Universities and to the University of California, has reduced.

- v. Fifth, and related to the above, in 1998-99 the University of California system accepted only 70 per cent of transfer students who applied, and only 50 per cent of applicants actually enrolled.

In the words of Smith and Bradley "In the US transfer is not the straightforward concept that many believe. Transfer from community college to university is not an automatic process, and accessibility comes from the development of strong transfer and articulation arrangements between community colleges and state universities". It is clear that the transfer system is not a general and widely used one but one which is intensive, specific and negotiated bilaterally. Notwithstanding this, and despite the evidence that the incidence of credit transfer has reduced in recent years (as it tends to do when State budgets become tight), credit transfer remains a most important feature of the higher education landscape in the United States. In the USA as a whole, it is estimated that close on one third of students who entered higher education in the mid-1990s gained credits from more than one institution, and that the majority of these were students who began their academic careers in community colleges⁵ (Berkner et al, 2002).

⁵ About 15 per cent of students who began at 4-year institutions attended more than one such university. This compares with the roughly 4-5 per cent in this country referred to above.

British Columbia

British Columbia has taken the Californian model and developed it into what is possibly the most extensive credit accumulation and transfer arrangement in the world. Based explicitly on the Californian model, two-year colleges were established in British Columbia in the 1960s specifically to allow students from remote locations (British Columbia covers a vast and sparsely populated territory) to enter higher education. As in California, the model was that they could do the first two years of a degree programme in a local college and then transfer for the final two years to a four-year university. In order to enable transfer to take place, universities and colleges enter into articulation agreements. These agreements ensure that students entering a college know what courses they need to follow to be acceptable to a specific university as the first two years of a specific degree programme, and they enable the university to know that any student transferring from a specific two-year college having completed those courses will be able to complete the final two years of the degree programme in question.

These arrangements have two consequences. First, there is a very close alignment of the curricula of the colleges and universities concerned: the colleges try to align their curriculum to that of all or most of the receiving institutions. The second is that, because there is a one to one, and course to course, relationship, some 50,000 articulation agreements exist in British Columbia. This seems a huge number, and indeed it has taken an enormous effort, and some years, to get to this point. However, the system now more or less runs itself, and only half of a full-time member of staff is assigned to coordinating the administrative bureaucracy of requesting and establishing articulation agreements.

This process is largely automated and web-based, and if a college designs a course which it wishes to articulate with one or more university courses, it posts

the details on the web site that has been developed for this purpose, including information about the courses and the universities with which it wishes its course to articulate. If the university concerned accepts the course for transfer credit, then that course is added to the list of articulation agreements. One interesting aspect of this process is that there appears to be a presumption that articulation will take place unless there are good reasons not. This is, of course, in part because community college staff are familiar with the curricula and requirements of the universities and take these into account as they develop their courses. But in part also this is a reflection of the ethos that has developed over 40 or so years in British Columbia⁶.

The arrangements in British Columbia appear to have worked extremely well and to have had the desired effect of opening higher education to students who might not otherwise have been able to attend. Between 30% and 40% of students completing a degree at a four-year institution began their degree courses in local colleges, and transferring students have many characteristics that identify them as people who might otherwise not have entered higher education - the majority of them study part-time (whereas only 20 per cent of those who enter direct from school do so), their average age is significantly older than direct entrants, they carry more student debt, and so on (British Columbia Council on Admissions and Transfer, 2001).

One remarkable thing about the experience in British Columbia is that, despite the fact that transferring students tend to have performed less well in high school, the grades they achieve at university are only a little lower than those of direct entrants (British Columbia Council on Admissions and Transfer, 2001). Moreover research conducted by the British Columbia Council on Admission and Transfer suggests that five years after leaving university in their

⁶ The Director of the British Columbia Council on Admission and Transfer in private communication has commented that this ethos has developed as a result of a very extensive system of research and evaluation over many years that has conclusively demonstrated that transfer students perform extremely well in their university studies following transfer. Trust has been established over time but certainly was not there during the first 10 years or so when the colleges were first established.

experience of life generally, in the jobs they have, in the salaries they command, and in their experience of unemployment, among other things, they are virtually indistinguishable from those who went to the same universities direct from school (British Columbia Council on Admissions and Transfer, 2003a). This is remarkable, and it suggests that the credit accumulation and transfer system in British Columbia plays an important part in creating a more equal society.

It appears that the college transfer arrangements are a significant contributor to widening participation in British Columbia. Nevertheless, in looking at the British Columbia system to draw lessons for the UK, a number of points need to be borne in mind.

- i. First, as in California, these articulation agreements are not general, but are course to course and college to university. That is why as many as 50,000 separate articulation agreements are required⁷. Credit transfer arrangements are not general. They are specific.
- ii. Second, again as in California, credit transfer seems to be stalling to some extent. The proportion of four-year students represented by students who transferred from college has reduced from around 40 per cent to around 30 per cent in the past decade (British Columbia Council on Admissions and Transfer, internal document). It is not uncommon now to find college students unable to secure the transfer place that they had been led to believe would be theirs - in 2002 more than 25 per cent of eligible students in British Columbia who wanted to continue their studies did not secure a place at a four-year institution (British Columbia Council on Admissions and Transfer, 2003b). This fact enables an important distinction to be

⁷ There are also hundreds of program transfer and block transfer agreements. In this kind of agreement the assessment is more holistic e.g. a two year diploma program is assessed as a whole, and the question is asked whether the curriculum is such that it prepares the student to carry on to higher levels, even if it is substantially dissimilar to the curriculum of the receiving institution.

drawn. The credit system ensures that if a student is admitted to university then they will be given credit for the work they have done. But it does not guarantee that the student will be admitted. That is a separate issue.

iii. Third, again as in California, transfer of credits takes place very largely between college students and universities, and there is relatively little transfer between universities⁸. Again, this suggests that credit transfer is a rather specific phenomenon.

The United Kingdom

Interest in credit accumulation and transfer is not new in the United Kingdom. The Robbins report (paragraphs 37-38) said that there should be “opportunities for the transfer of a student from one institution to another” (Robbins, 1963). It also commended flexibility and choice within an institution. While not explicitly recommending the adoption of CAT systems, that report would have recognised CATS as providing a mechanism for promoting that vision.

The Open University (OU), which admitted its first students in 1971 has a credit system of sorts, and offers an ordinary degree on completion of six credits and an honours degree on completion of eight. Moreover, the OU will recognise study completed elsewhere as contributing to or replacing one or more of the credits required to obtain a degree. This recognition is not automatic, but requires negotiation between the student and the OU. In the mid-1970s the Council for National Academic Awards (CNAA) and the Open University announced a joint credit transfer system which would allow students to apply for credit for work already completed. This was intended to provide the basis for students to transfer between Open University and CNAA courses, and thus to provide the basis for a nationwide credit accumulation and transfer scheme. This

⁸ In September 2003 of the 12,729 new undergraduate students who entered universities, just 676 did so from another BC University – only a slightly higher proportion than in the UK. On the other hand, looking only at the number of transfer students, this 676 represents 14.6 per cent of the total of 4631 transfers.

development was criticized at the time by one commentator on the grounds that “it is possible for a student with a collection of unrelated OU credits to transfer to a CNAA modular course having no particular relationship to that collection of credits” (Pratt, 1977). Echoes of this criticism are still heard today.

The CNAA and the OU also discussed at the time creating a national transfer agency to collate and make available information about transfer and acceptability between courses on a national basis. The ambition appears to have been to create an agency similar to that which exists in British Columbia to broker articulation agreements. This agency never came into being.

More recently, there have been established a number of consortia, most notably the Southern England Consortium for Credit Accumulation and Transfer (SEEC) and the Northern Universities Consortium for Credit Accumulation and Transfer (NUCCAT) in England, the Scottish Credit Accumulation and Transfer Scheme (SCOTCAT), which has been incorporated into the Scottish Credit and Qualification Framework (SCQF), and in Wales the Credit and Qualifications Framework for Wales (CQFW). The ambition of all of these is to establish common frameworks and approaches between consortium members, and ultimately to achieve increased amounts of credit transfer. Fundamentally, the approach of all these groups is similar, but they differ in such details (important to the cognoscenti, but essentially second order issues) as the number of credits in a year or in a degree course and the qualifications ladder within which credits are awarded.

The Scottish Credit and Qualifications Framework has been particularly active in developing the concepts and implementing them. The SCQF has recognised (as indeed have the other consortia in the UK) that simply accounting for the time spent completing a module does not provide sufficient information to enable a student to be accepted onto another course in that university, let alone another university, and therefore that information is required about the levels at which the work was done and the standards achieved. That of course has been so in the

past, and although a certain amount of transfer has always taken place between students and universities, universities have had to take decisions without systematic information. Simultaneously with the development of credits, therefore, SCQF has developed a framework of 12 qualification levels (ranging from doctoral to sub-higher education levels). A student who wishes to transfer to another university may therefore tell that university not just about the number of credits that they have acquired (that will tell that university about the volume of work that has been done), but can also satisfy the university that the level of the modules was appropriate. What is still lacking, of course, is any way of satisfying a university about the standards of the exporting university or the ability of the student concerned.

Other consortia have taken a similar approach. The SEEC, for example, has developed a framework of qualification levels and level descriptors; and has been heavily engaged in establishing and disseminating good practice with regard to such matters as the assessment of credit and the evaluation of prior and experiential learning for the purposes of credit. Credit consortia attempt to encourage common approaches – for example they attempt to ensure both that all members work within a common framework of levels, and also that they agree about the proportion of general and specific credits that needs to be gained at each level for the award of a particular qualification.

For whatever reason, and despite committed and innovative work on the part of a large number of members of credit consortia, credit accumulation and transfer has not taken hold in this country. In part, the infrastructure that exists in North America – a network of colleges whose function it is to provide the first part of degree courses, and universities that expect to admit significant proportions of their students from such colleges to the upper years of a degree courses - does not exist here. In part, it may be because the three year degree does not lend itself as easily to a model of an intermediate award (like the Foundation Degree) plus top up as does a two plus two arrangement. In part though, it is because every development in credit accumulation and transfer appears to reveal further

complications that need to be addressed, and the more complicated the process becomes the less widely accessible it is likely to be. This issue was highlighted in the response to what in many ways remains a seminal document on credit accumulation and transfer, "Choosing to Change" (Robertson, 1994).

"Choosing to Change", published in 1994, comprehensively addressed many of the issues surrounding credit accumulation and transfer, and was a powerful advocate for the development of such systems. Of the eight key recommendations, only three have been adopted, and none of those related to credit accumulation and transfer. Virtually none of the remaining 20 or so recommendations have been implemented. In part this was because the Higher Education Quality Council, the body that commissioned the report and to which many of the recommendations were addressed, was wound up shortly after the report was completed. In part though, undoubtedly, this was also because of the uncompromising - and almost theological - approach adopted by the report, an approach which recurs in much of the discussion among proponents of CATS. "Choosing to Change", for example, describes the "development of credit systems ..as.. involving a revolution", and dismisses the suggestion that "credit systems" might have a use as "as accounting tools", which is currently their main and most valuable function, but which it describes as "the prosaic view". Instead, it regards CATS as an "instrument for the modernization of the curriculum". It is little wonder that mainstream university opinion concluded that CATS were not relevant.

That is a shame. Lifelong learning and widening participation are important policy goals, and it is apparent that CAT systems have their part to play in furthering these. The fact that as much has not been made of them as might have been is in part due to the horses being frightened by the unrealistic and unreasonable claims that have been made.

Europe

In pursuit of the ambition to achieve greater mobility of students in Europe, the Bologna process envisages the adoption of the European Credit Transfer System (ECTS) by all European universities. The ECTS was originally introduced to enable students who had attended an institution in another EU state to have their period of study recognised at their home institution. In the words of the Directorate General for Education and Culture “ECTS makes study programmes easy to read and compare. It can be used for all types of programmes, whatever their mode of delivery, and for lifelong learning purposes. It serves both mobile and non-mobile students; it can be used for accumulation within an institution and for transfer between institutions. ECTS helps learners moving between countries, within a country, town or region, as well as between different types of institutions; it also covers itself-study and work experience.” (EU Directorate General for Education and Culture, 2004).

At present the ECTS system simply reports on how much the student has studied. It provides a common and readily understood currency for this, and relies on negotiation between students and universities that have exchange agreements to interpret and exploit this information to the point where a university can be sufficiently satisfied to give the student credit for their achievements at the university concerned.

A certain amount of transfer between European countries already takes place, mainly through the medium of the Socrates/ERASMUS programmes, which are designed to allow students to undertake some courses at universities in other member countries. In 2001-02 over 8000 UK undergraduate students went abroad for some of their first degree courses through the medium of the Socrates/ERASMUS programme (and more than double that number came here from other EU countries). Systematic data are not held on whether the credits obtained while abroad were recognised towards their degrees in their home

universities, but it is clear from anecdotal evidence that in many cases the time abroad simply lengthened the time to a degree and did not count.

At one level ECTS is a relatively modest development, which simply requires universities to attach credits to courses in a consistent way and one which is compatible with other universities. However, those responsible have concluded that to achieve its ambitions for widespread movement of students an effective Europe-wide CAT system will need not just to measure how long a student has studied, but the level at which they have studied, and what they have studied, and will also need to provide comfort to other institutions about the quality and standards of the institution at which they have studied.

There are therefore moves not just to develop the credit accumulation and transfer system, but to establish a framework of levels and descriptors for these (along the lines described above in Scotland), descriptions of learning outcomes, a common European quality assurance system and a common Diploma Supplement and Transcript of Record, which will describe in detail what the student has studied and what they have achieved.

The ECTS is entirely input focused at present, in common with other CAT systems, and is a measure of the time spent studying, taking no account of outcomes or outputs. This is difficult for the UK, where a Bachelors degree is typically of three years duration and a Masters is one year. A purely workload or time-based approach would raise questions whether our degrees are comparable with those being introduced elsewhere in the EU where five years will normally be required to complete a Masters degree (although this is not actually a requirement of the Bologna agreement). The UK has therefore argued that credit should be awarded not against the amount of time served, but in recognition of outcomes achieved. This is increasingly accepted within the EU, where efforts are now in progress to try to combine an element of outcomes as well as time in the ECTS.

However, not only does this greatly complicate the quest for a Europe-wide and usable credit system; it also sits uncomfortably alongside the credit systems already in existence in the United Kingdom, which typically describe credits as a recognition of time spent. The SCQF, for example, describe credits as an estimate of "the amount of time required by the 'average learner' to complete a module" (SCQF, 2003), and the credit unit used in Wales is described as the learning outcomes achievable in ten notional learning hours.

Given that credits, almost universally, are a measure of time, these developments have two implications. First they require a description of outcomes for every degree course and module; and second, they imply that students in this country can achieve those outcomes in a shorter space of elapsed time than students elsewhere. Or, in the language of credits, that our students can fit more notional minutes in an actual hour than students in other countries.

Both these implications are problematic. Measuring outcomes in a meaningful way is something that has eluded those who have made the attempt in the past in all but the most vocational subjects (in vocational subjects the common requirements that are often set by outside bodies such as engineering institutions or the medical colleges makes this is less difficult). It is increasingly recognised that without common curricula meaningful outcomes will not be described, and if that is the case then the development and description of useful learning outcomes is unlikely to occur⁹.

The second implication – that students in this country might achieve the same endpoint after four years that it takes students in other countries five years to achieve - while difficult presentationally, is entirely plausible. One of the UK's leading authorities on the ECTS has said that "there are real problems associated with different student workloads and the 'notional time' taken to gain

⁹ For examples of the sort of outcomes which are likely to emerge in the ECTS environment, see the forms attached to the Tuning Project Working Paper at Annex A.

credit across Europe. There are considerable variations in what ‘one year of study’ actually means in different countries” (Adam, 2001). How much a student can achieve in a period of time can be affected by the intensity of instruction, the number of contact hours, the number of assignments, the length of the academic year and so on (in actual fact most Masters courses in this country take 12 calendar months – much longer than the average academic year); as well as by things like pedagogic approaches and innovations in the teaching process. Given the attention that has been paid to learning and teaching in this country in recent years, it is not impossible that students are achieving more than they once did. However, to demonstrate this will be difficult, though this is what will be required if English universities are to award more credits for each year of study than their counterparts in the rest of Europe.

One complication is that the UK does not in fact claim that students in English universities can achieve the knowledge and competencies required for a Bachelors degree in a shorter period of time. The UK has accepted that Bachelors degrees in other countries can be awarded after three years of study – the same as in England. The logic would perhaps point to the UK arguing that 3-years Bachelors degrees in other European countries equate to an English ordinary degree (citing the Scottish precedent) which would incidentally also justify a requirement in those countries for two more years of study for a Masters. Accordingly, although there is currently concern about our ability to maintain the 3+1 model for Bachelors/Masters degrees, there is nothing in the Bologna agreement that prevents this, and we should be able to maintain our position in this regard.

There is one further basis for the argument that English students can achieve the same endpoint in a shorter period of time than students in other EU countries. If it were the case that students here entered their degree courses at a higher point than those in other countries, then they would have less far to travel to reach the same endpoint, and could plausibly do so in a shorter time. That is precisely the basis on which English universities award an honours

degree after three years whereas Scottish universities take four – there is no suggestion that the honours degree in Scotland has a higher standard, rather it is a recognition that students from Scottish schools have a broader education but do not, therefore, come to university with the depth of subject knowledge of their English counterparts (in part also because they tend to leave school younger). To the extent that it may be true that in the past students with A-levels have achieved greater depth of knowledge across a smaller spectrum than their counterparts from other European countries, then that might also justify shorter higher education courses.

Other aspects of the Bologna process, besides the ECTS, are positively helpful. The Diploma Supplement and Transcript of Record have already been referred to as valuable devices to allow students systematically to convey to institutions, employers and the wider world what they have achieved. Similarly, the Information Package and the Learning Agreement, negotiated between students and institutions, will be helpful to ensure that students have adequate information on the courses that they will undertake.

Issues with credit accumulation and transfer systems

Some issues are raised with regard to CAT systems that really ought not to be issues at all. As has been explained above, modularisation is a fact of life in almost all courses, whether explicitly or not. It is difficult to conceive a modern course that is not divided into components. Indeed, it is essential that those who develop and provide courses are able to stand back and look systematically at how their courses are organised, the discrete elements that go to make up a course, the learning that each seeks to provide, and so on. In as far as there is an issue with modularization it is not really about modularization at all. It is about the extent to which degrees might be built up by unrelated courses of study, how small those elements that go to make up a degree might be, the rules for combining them in order to achieve a qualification and what is examined and how. “Choosing to Change” (Robertson, 1994) argued that modules should be

as small and as short as possible, and against that are those who argue for the holistic nature of degree courses and are concerned about the development of “cafeteria style” degrees. In fact, this is a quite separate issue, and is neither about the principle of modularity nor about CAT systems.

Attaching credits to modules, again, is simply a question of systematically evaluating the relative effort required for the different components, and therefore the weight that should be attached to them. Students are already able to leave university and return subsequently, with recognition of work they had done previously. They can and do transfer between universities, with the receiving university taking more or less account of work done at the original institution. And it is not uncommon within a university for students to switch courses and have account taken of the work they have done previously. But such arrangements, in as far as they existed in the past, were entirely ad hoc, lacked transparency and were unsystematic. The advantage offered by credit accumulation and transfer systems is that they systematise and make transparent what may already take place but in a more or less random way.

Even if a university were to say that the whole of its first year was indivisible and therefore should be regarded as a single module, it is still possible to attach credits to that "module", which would attract the number of credits appropriate to one third of a three-year degree course (or in the case of a four-year degree course then one quarter of the credits). Watson and Taylor addressed precisely this issue when they said "For those institutions most firmly committed to full-time, linear study ... it should pragmatically only be necessary to identify a satisfactory assessment at the end of the year's equivalent of full-time study in order to articulate with a national qualifications framework. All institutions will, however, have to be more explicit about objectives, outcomes and standards, and to enable the academic community of teachers and students as well as their external sponsors to understand what credit and its accumulation into awards really means" (Watson and Taylor, 1997).

As credit accumulation and transfer systems have been developed in Europe, so has developed the feeling that for the European ambition for these to be achieved an overarching framework is required. This framework consists of a panoply of course levels, and common level descriptors . And beyond these has developed a requirement for common quality assurance systems and student

“Diploma Supplements” and “Transcripts of Record” (portfolios where the student can describe in detail what they have studied and the skills and knowledge they have obtained).

van der Wende points out that in some cases in the EU there are up to 100 different HE qualifications in a single country (van der Wende, 2000), which has led Haug to remark that “A potential European framework of qualifications cannot be less complicated than the most complicated of the national systems included in it” (Haug 1999). It should be noted however that in some respects the discussion has moved on, and it has been accepted that the European Quality Framework will be overarching and limited to describing a broad generic structure. Indeed, it is now presumed that national qualification frameworks will align with the European one, suggesting that it will not be over-detailed or overloaded. On the other hand, given that the point of the quality framework is to give universities confidence that they can accept each other’s credits without further scrutiny, it is not apparent that such a light regime will achieve that end, welcome though the reduced bureaucracy will be.

It is little wonder then that common frameworks and level descriptors are thought to be needed if a comprehensive system is to be introduced and all students are to be able to have their qualifications recognised, wherever they have obtained them. Logical this may be, but it has raised the stakes, increased the bureaucracy, and reduced the likelihood of success. To predicate a successful CAT system on the simultaneous development and maintenance of more and more complex features is high risk. It needs to be borne in mind that three different – not entirely compatible - sets of level descriptors exist in the UK alone, with no sign that these conflicts are about to be resolved, even in a single country.

It is interesting that in neither California nor British Columbia are these further aspects of credit accumulation and transfer systems even under consideration. That is in part because with smaller, more homogeneous, systems, more is left to

trust, and by and large universities have confidence that what is provided in the colleges, and in other institutions, is appropriate and of a quality equivalent to what they provide¹⁰. In part also it is because the credit accumulation and transfer systems in both California and British Columbia are more modest in their aspirations than those under development in the United Kingdom and in other parts of Europe.

In North America, by and large, systems have been developed to enable students to begin courses at a college and complete them at a university. They have not, for example, been designed to allow transfer between universities (although they may - see paragraphs 34 ii, 35 and 41 iii above - that is not how they have been designed). Agreements are very specific, university to university, college to college and course to course. The ambition in Europe, on the other hand, is to create generic, all embracing, systems. Consequently, because of the generality of the ambition, levels, level descriptors, Diploma Supplements, Transcripts of Record and even common or compatible quality assurance arrangements need to be developed, running the risk that the whole edifice will topple over because of its complication.

And it needs to be borne in mind that even if credit accumulation and transfer systems and all the ancillary features are successfully developed and widely adopted, this still does not in any sense provide a "guarantee" of progression or transfer. It will always - as it is at present in British Columbia and California - be up to universities in any individual case to decide whether or not to accept a student for entry. A common European credit framework will tell the receiving university how long a student has studied, and a common framework of levels and level descriptors will satisfy the university about the level of those credits. But the notion of "guaranteed" transfer remains a distant prospect. It seems inconceivable that universities will be required to admit students who have

¹⁰ That trust has also been built over time through the active participation of college and university academic staff in their respective articulation committees (of which there are about 70). These committees meet once a year (or sometimes more frequently). The trust that has developed is now based on evidence that demonstrates the efficacy of the transfer arrangements.

undertaken some previous study, without the university reserving the right to assess the capability of the student and perhaps the study that they have undertaken.

One further consequence of the North American approach that is worth noting is that it is a process that is labour-intensive at the system level, but which reduces the burden on institutions to establish the appropriateness and equivalence of the credits that a student brings with them. Once a student has been accepted then in most cases no further work is required to assess the credits that they have achieved. Where articulation agreements exist – as in California and British Columbia - then although universities will continue to insist on assessing the student and their acceptability to the university, they will not be obliged to assess the particular previous work done by that student. In the absence of such articulation agreements in the UK and in Europe, universities will wish to assess not only the student and their suitability for admission generally, but they will also need to assess the credits that they come armed with, even in circumstances where common credit accumulation and transfer arrangements are in place, and despite all the ancillary developments that are in progress¹¹.

One development in England that shows signs of moving us in the North American direction of specific articulation agreements is the recent proposal for Lifelong Learning Networks. It is too early to say how these will develop, but their initial description suggests a set of bilateral agreements between colleges and universities in an area, which makes them close in conception to the articulation agreements between colleges and universities in North America. But for them to have an effect similar to that of North America would require colleges and local universities to come to specific agreements on a course by course basis about the curriculum that was offered in the college and which courses in the university that would provide access to. If universities were to give an

¹¹ This is of course also so in British Columbia and elsewhere in North America as regards students who have earned credit which is suitable for transfer but has not been articulated in advance.

unqualified guarantee that anyone who had pursued a certain path at the college would be able to complete their degree at the university, without any further assessment of the suitability of student, then that would be remarkable. It is easy to see how in a time – and in those institutions - where the supply of places exceeds demand universities might give such guarantees. It is less easy to be confident that such guarantees would be honoured if demand outstrips supply.

Lessons

The first lesson that can be drawn from this brief review of credit accumulation and transfer systems is that we should be modest in our aspirations and claims for CAT systems. So long as too much is not claimed for them and overambitious developments are not sought, they can be useful, and their utility applies to all manner of higher education provision. The requirement systematically to break down the components of a university course, to describe the learning that each is intended to provide and the weight to be given to one component in comparison to others is simply a requirement to be rigorous and transparent, and should cause no difficulty to any institution. Similarly, to overlay a course with a credit framework ought to cause no difficulty. Even if a university insists, for example, that a single year is indivisible and cannot be broken down, then even that need cause no problems, since the number of credits appropriate to a full year of study can simply be attached to the learning achieved in a year.

This will offend CATS purists who see the development of CAT systems as a mechanism for revolutionizing the curriculum. But it would be a modest requirement, with no objectionable consequences for the universities concerned, and it would put us in good standing with our European partners. There is no reason why all universities in the UK should not apply European Credit Transfer points to their courses, and if this has the incidental benefit of obliging universities systematically to review courses that have not been systematically reviewed previously, then so much the better

Associated with this, however, is a second lesson, that credit accumulation and transfer systems are likely to be successful if they are simple, and by and large the less complicated they are, the more likely it is that they will be successful. It is not surprising that in this country and in Europe more widely CAT systems have not taken hold in the way that they have in the United States, given the complexity of the ancillary developments that are deemed to be required. It is true that, given the ambition to achieve all embracing and comprehensive generic arrangements, there is a certain logic to the need to develop credit levels and level descriptors and so on, but these complications make it all the more likely that credit accumulation and transfer will not play the major role sought for them in the development of higher education in Europe. Even if the systems are fully developed - and level descriptors do exist in this country - universities are likely to feel the need to make detailed and ad hominem decisions about the admission of individual students, and the more ambitious hopes for CAT systems are unlikely to be fulfilled.

The British Columbia and California systems have not felt the need to develop level descriptors and a credit framework - there universities trust the community colleges to make provision at an appropriate level. Nor do they apparently feel the need for quality assurance systems to satisfy them that the colleges are competent to make the provision - once again there is a degree of trust. In Europe - understandably because the system is so much larger, but also because more is demanded of the CAT system - trust is insufficient for this and elaborate systems are being developed. This was recognised explicitly by the EU's Director-General for Education and Culture, who, addressing a conference in Dublin early in 2004, said "The necessary mutual trust, which must underpin a qualifications framework, can only stem from quality assurance instruments which are compatible and credible"(van der Pas, 2004).

The North American experience demonstrates that credit accumulation and transfer can be a powerful device in widening participation and enabling people who may have lacked the credentials to go to university to do so, and others,

who perhaps because of geographical reasons may not have done so, to do so too. However, that experience also seems to show that some of the other benefits claimed for credit accumulation and transfer systems are less likely to be available - most particularly the movement of students between universities and the accumulation of credits for lifelong learning.

Applying this lesson in the UK context is problematic, since the North American infrastructure which permits the first two years of a degree course to be provided in a college and the last year or two in a university is not in place here. This is the single feature of the North American arrangements that does most to promote widened participation, and it would take a massive upheaval for those conditions to be established in this country - possibly with a redefinition of some universities as colleges and the building up of some colleges and the downsizing of some universities¹². However, even if we are not able to have such a revolution here, there are aspects of CATS which we would do well to adopt, and it would only take imagination and will to do so.

The way forward is much more likely to lie in agreements (which will necessarily have to be detailed and at course and curriculum level), based on common credit systems, between compatible, like-minded and often neighbouring institutions, than in general and generic systems that are unlikely to be effective in practice. The Lifelong Learning Networks show signs of having learned the lessons of CAT systems in North America, and by focusing on one to one relations and articulation agreements that will provide a reasonable prospect of progression – they cannot give a guarantee – they are more likely to prove successful than other more ambitious and far reaching attempts to introduce credit-based systems. Similarly, the way Foundation Degrees are developing, based on agreements between colleges and their local universities both about the curriculum, and about the division of academic input between them, looks encouraging in this respect.

¹² Because many more places would be required in colleges than exist at present, and many fewer university places.

As far as the relevance of this review to the Bologna process is concerned, adoption of a common European credit accumulation and transfer system will help universities to assess how much work a student has done; and the Diploma Supplement and Transcript of Record will help students to give an account of what they have achieved, and universities to assess this. That much is helpful and indeed is probably necessary, and there is no reason for any university not to award European credits for all of its courses, even if it insists on doing so at a very high level. In fact, it would be failing in its obligation to its students if it failed to furnish the credentials necessary to help them achieve mobility.

The further developments of common levels and level descriptors, and a common European quality assurance process may be logical, given the policy aim of achieving mobility of students, but they are only necessary because of the absence of trust. This absence of trust may be well founded, but it is an absence of trust nevertheless - and these complications may yet undermine the early and widespread use of the European Credit Transfer System for student transfer, even if an increasing number of universities attach ECTS points to their courses.

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TUNING EDUCATIONAL STRUCTURES IN EUROPE – PHASE II

STUDENT WORKLOAD, TEACHING METHODS AND LEARNING OUTCOMES: THE *TUNING* APPROACH ©

The need

While many countries in Europe are preparing the implementation of a two cycle system in accordance with the Bologna process, it becomes increasingly clear that there is a need to provide some simple reference points with regard to student workload. The issue of workload is related to the introduction of the ECTS credit system, both as a transfer and an accumulation system. ECTS is one of the tools for promoting comparability and compatibility in European Higher Education. The need for having clear agreed reference points also arises from the demand for transparency and fairness to students¹³.

ECTS principles

The European Credit Transfer and Accumulation System, abbreviated as ECTS, is a student-centred system based on the student workload required to achieve the objectives of a programme, objectives preferably specified in terms of the learning outcomes and competences to be required. ECTS is based on a number of principles¹⁴:

- 60 credits measure the workload of a full-time student during one academic year. The student workload of a full-time study programme in Europe amounts in most cases to around 1500-1800 hours per year and in those cases one credit stands for around 25 to 30 working hours.¹⁵
- Credits in ECTS can only be obtained after successful completion of the work required and appropriate assessment of the learning outcomes achieved. Learning outcomes are sets of competences, expressing what the student will know, understand or be able to do after completion of a process of learning, long or short.
- Student workload in ECTS consists of the time required to complete all planned learning activities such as attending lectures, seminars, independent and private study, placements, preparation of projects, examinations, and so forth.
- Credits are allocated to all educational components of a study programme (such as modules, courses, placements, dissertation work, etc.) and reflect the quantity of work each component requires to achieve its specific objectives or learning outcomes in relation to the total quantity of work necessary to complete a full year of study successfully.

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¹³ The term student is used in this paper for any type of learner.

¹⁴ A detailed description of the ECTS features can be found in the ECTS Users' Guide, which is available on the Europa Internet server of the European Commission:
<http://europa.eu.int/comm/education/socrates/ects.html>.

¹⁵ In second cycle full time programmes of studies we can distinguish two types: normal course programme which have an official load of 60 credits and so-called *intensive programmes* of a full calendar year (e.g. 12 months programmes, instead of a 9 to 10 months programmes) can have a maximum load of 75 credits (which equals 46 to 50 weeks).

The project *Tuning Educational Structures in Europe*,¹⁶ which focuses on learning outcomes and general academic (generic) competences and subject related competences has shown us that approaches to teaching, learning and assessment have an impact on the workload required to achieve the desired learning outcomes and, consequently, on credit allocation.¹⁷ Workload, teaching methods and learning outcomes are clearly related to each other. However, there are other relevant elements. In achieving the desired learning outcomes a large number of interrelated factors play a role. The diversity of traditions has to be taken into account, as well as curriculum design and context,, coherence of the curriculum, teaching organisation, ability and diligence of the student. In other words, the time required to achieve the same learning outcomes may vary according to the context¹⁸

An approach for determining student workload in Higher Education programmes

When deciding on the student workload the following elements are of relevance:

- The student has a fixed amount of time depending on the programme he/she is taking.
- The overall responsibility for the design of a programme of studies and the number of credits allocated to courses lies with the responsible legal body, e.g. faculty executive board, etc.
- The final responsibility for deciding on the teaching, learning and assessment activities for a particular amount of student time is delegated by faculty and university authorities to the teacher or the responsible team of staff.
- It is crucial that the teacher be aware of the specific learning outcomes to be achieved and the competences to be obtained.
- The teacher should reflect on which educational activities are more relevant to reach the learning outcomes of the module / course unit.
- The teacher should have a notion of the average student work time required for each of the activities selected for the module / course unit.
- The student has a crucial role in the monitoring process to determine whether the estimated student workload is realistic, although monitoring is also a responsibility of the teaching staff.

¹⁶ More information about the Tuning project can be found on the Europa Internet server: <http://europa.eu.int/comm/education/Tuning.html>; or on the servers of the coordinating institutions:

University of Deusto, Bilbao, Spain (www.relint.deusto.es/TuningProject/index.htm) or

University of Groningen, The Netherlands (www.let.rug.nl/TuningProject/index.htm).

¹⁷ The definition of learning outcomes agreed upon in the Tuning project is the following: *Statements of what a learner is expected to know, understand and/or be able to demonstrate after completion of learning. They can refer to a single course unit or module or else to a period of studies, for example, a first or a second cycle programme. Learning outcomes specify the minimum requirements for award of credit.* Learning outcomes are formulated by academic staff.

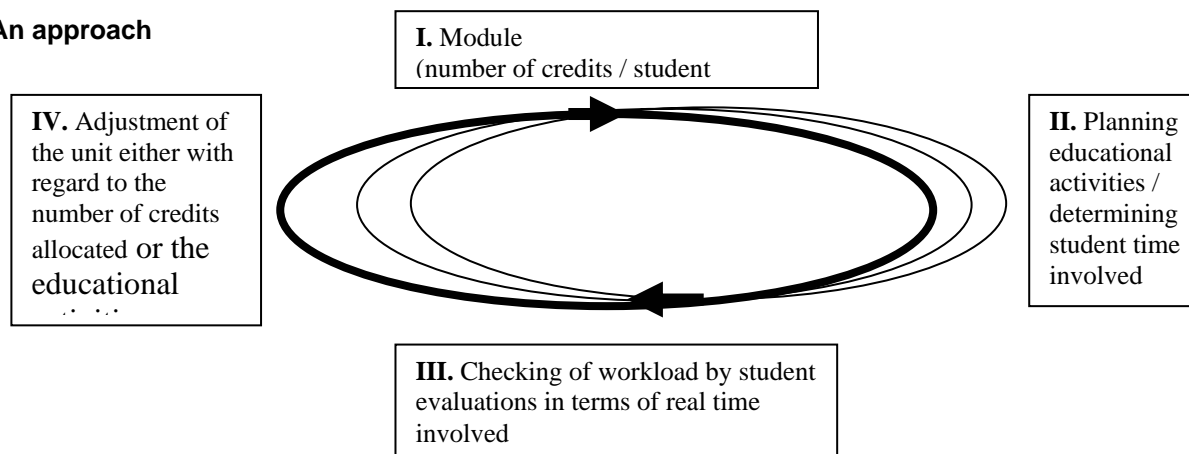
The Tuning Project focuses on subject specific competences and generic competences. These competences represent a dynamic combination of attributes, abilities and attitudes. Fostering these competences are the object of educational programmes. Competences, which are obtained by the student, will be formed in various course units and assessed at different stages.

How are competences and learning outcomes related?

- Learning outcomes according to Tuning methodology should be formulated in terms of competences.
- Learning outcomes define what the learner knows and is able to do at the end of the learning experience.
- Competences may be developed to a greater degree than the level required by the learning outcome.

¹⁸ 'Educational Structures, Learning Outcomes, Workload and the Calculation of ECTS Credits', in Julia Gonzalez and Robert Wagenaar, ed., *Tuning Educational Structures in Europe. Final report - Phase One* (Bilbao and Groningen 2003).

An approach



Four steps

To realize the overall objective, namely the development of an approach which leads to a truly valid consideration of a student's workload, implementation of the following four steps is recommended.

I. Introducing modules/course units

A choice must be made between the use of a modularized or a non-modularized system. In a non-modularized system each course unit can have a different number of credits although the total credits for each academic year will still be 60. In a modularized system the course units/modules have a fixed number of credits, 5 credits for example, or a multiple of this number. The use of a modularized system in an institution facilitates the use of the same modules by students enrolled in different programmes.

II. Estimating student workload

The workload of a module/course unit is based on the total amount of learning activities a student is expected to complete in order to achieve the foreseen learning outcomes. It is measured in time (in work hours); for example, a module of 5 credits allows for around 125-150 hours of work of a typical student.

Educational activities can be defined by considering the following aspects:

- *types of courses:* lecture, seminar, research seminar, exercise course, practical, laboratory work, guided personal study, tutorial, independent studies, internship, placement or 'stage', fieldwork, project work, etc.
- *types of learning activities:* attending lectures, performing specific assignments, practising technical or laboratory skills, writing papers, independent and private study, reading books and papers, learning how to give constructive criticism of the work of others, chairing meetings, etc.
- *types of assessment:* oral examination, written examination, oral presentation, test, paper, portfolio, thesis, report about an internship, report on fieldwork, continuous assessment, etc.

Teachers estimate the time required to complete the activities foreseen for each course unit / module. The workload expressed in time should match the number of credits available for the course unit. Teachers must develop suitable strategies to use the time available to best advantage.

III. Checking the estimated workload through student evaluations

There are different methods to check whether the estimated student workload is correct. The most common method is the use of questionnaires to be completed by students, either during the learning process or after the completion of the course.

IV. Adjustment of workload and/or educational activities

The outcome of the monitoring process or an updating of the course content might lead to an adjustment of the workload and/or the type of educational activities of the course unit/module. In a

modularized model it will be necessary to adjust the amount of learning material and/or the types of teaching, learning and assessment activities, because the number of credits (e.g., in our example, 5 or a multiple of 5) is fixed. In a non-modular model also the number of credits can be changed, but this will, of course, have an effect on other units, because the total number of credits of the programme of study is fixed (e.g. 30 per semester, 60 per year etc.). An adjustment of workload and/or activities is required anyway when the monitoring process reveals that the estimated student workload does not correspond to the actual workload.

Explanatory note regarding the use of the Tuning model in practice

The Tuning approach is based on the correlation of a number of decisive elements:

- the degree profile which indicates the place of the module in the overall programme of studies, as well as the competences 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 average work time (in hours), based on student workload, required to perform the educational activities which are necessary to achieve the learning outcomes.

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 average student time involved for each of the tasks.

Samples of the two forms are attached to this paper together with an example of how they could be used in practice.

The example focuses on generic competences which, in the Tuning consultation process with graduates, employers and academics, were ranked lower in the learning process. Furthermore, a combination of educational activities has been chosen, which covers different approaches to teaching, learning and assessment. This is only to illustrate how these approaches can be used. **A typical course unit might be expected to be much more straightforward and therefore easier to plan.** Finally, it has to be stressed that the example does not intend to give an indication about the number of lectures per credit, the most appropriate educational activities, or possible titles for lectures, etc. The hypothetical example is **only intended to serve as a tool** for discussion and a practical way to show how competences, learning outcomes, educational activities, levels, credits and student workload are related.

*Tuning Management Committee
August 2004 (final version)*

**PLANNING FORM FOR AN EDUCATIONAL
MODULE ©
(to be completed by the teacher)**

Programme of Studies:
Name of the module / course unit:
Type of course (e.g. major, minor, elective):
Level of the module / course unit (e.g. BA, MA, PhD):
Prerequisites:

Number of ECTS credits:
.....

Competences to be developed:

1.
2.
3.
4.
5.
6.

Learning outcomes	Educational activities	Estimated student work time in hours	Assessment



**FORM FOR CHECKING WORKLOAD OF AN
EDUCATIONAL MODULE ©
(to be completed by the student)**

Programme of Studies:

.....

Name of the module / course unit:

.....

Type of course (e.g. major, minor, elective):

.....

Level of the module / course unit (e.g. BA, MA, PhD):

.....

Prerequisites:

.....

Number of ECTS credits:

.....

Competences to be developed:

1.
2.
3.
4.
5.
6.

Learning outcomes	Educational activities	Estimated student work time in hours	Assessment

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TUNING PLANNING FORM FOR AN EDUCATIONAL MODULE ©

(to be completed by the teacher)

Name of the module / course unit: Intercultural Communication in Multicultural Societies
 Type of course: Elective course unit
 Level of the module / course unit: Bachelor
 Number of ECTS credits: 5 ECTS (average student working time: 125 hours)

Competences to be developed:

1. Appreciation of diversity and multiculturalism (related to modules X, Y, Z)
2. Capacity to work in multicultural contexts (related to modules A, Z, J)
3. Teamwork (related to modules)
4. Oral and written communication (related to modules)
5. Capacity for applying knowledge in practice (related to modules)
6. Understanding of cultures and customs of other countries
7. Capacity to understand structures of cultural systems (related to modules)
8. Capacity to have an independent judgement on current related issues

Learning outcomes	Educational activities	Estimated student work time in hours	Assessment
<p>Familiarity with diverse approaches to culture and understanding of their implications.</p> <p>Understanding and capacity to use in an adequate academic context key concepts such as cultural identity, multiculturalism, integration, assimilation, segregation, context and meaning, etc.</p> <p>Development by the student of his or her own mental frameworks in relation to:</p> <p>a) the various layers of culture</p> <p>b) the key issues in the current debate concerning different degrees of tolerance of cultural symbols</p>	Background questionnaire	½ hour	Class Participation * (40%)
	Lecture 1: <i>Approaches to culture</i>	1 hour	
	Group work on definitions of culture	1 hour	
	Class discussion	1 hour	
	Reading assignment	5 hours	
	Class seminar on reading assignment	½ hour	
	Lecture 2: <i>Perception and Culture</i>	1 hour	
	Reading assignment on the lecture	3 hours	
	Class seminar on reading assignment	½ hour	
	Lecture 3: <i>Cultural identities, group, individual and society</i>	1 hour	
	Reading assignment on the lecture	5 hours	Oral presentations (all groups) (12%)
	Class seminar on reading assignment	½ hour	
	Lecture 4: <i>Symbols, heroes and values</i>	1 hour	
	Writing and presentation of Team work 1: <i>Cultural symbols in the current debate in newspapers</i> (search for relevant articles on the web, setting up of individual dossiers, reading and analysis)	15 hours	
		3 hours	

Understanding and being able to identify the different dimensions of cultural differences in approaches to: space, time, equity, hierarchy, high-low context, etc	Group work on 8 short case studies followed by class debate		One written case study to be analysed (10%)
	Presentation of the theoretical perspective on the cultural dimension	1 and ½ x 8 = 12 hours	
	Background reading of selected texts	12 hours	
		1 hour	
Understanding processes of a) acculturation b) transition from ethnocentrism to ethnorelativism and capacity to articulate own /somebody else's processes	Lecture 5: <i>Presentation of Benet's model</i> , followed by critical perspective by the group.	1 hour	Write a two-page report based on personal experience (8%)
	Lecture 6: <i>Process of acculturation</i> , followed by identification of significant steps by the group	1 hour	
	Reading assignment	4hours	
	Personal reflection of themes presented in the lectures	1 hour	
		3 hours	
Understanding obstacles and roads to intercultural communication. Development of comprehensive listening and capacity to answer in the appropriate cultural key Development of an attitude of respect and appreciation of diversity	Panel of presenters from different cultures and debate. Reflection exercise	3 hours	* Self-evaluation (with guides) (8%)
	Lecture 7: <i>Intercultural Communication. Key issues</i>	1 hour	
	Reading assignment	3 hours	
	Personal reflection of themes presented in the lectures	1 hour	
	Film: "No Man's Land".	2 hours	
	Class Discussion about the film	1 hour	
	Lecture 8: <i>The role of perception in intercultural communication</i>	1 hour	
	Reading assignment	2 hours	
	Which are the main three points of the assigned reading? Debate in class	2 hours	
	Visit to NGO or other type of organisation that works with people from other cultures	3 hours	

Understanding the current challenge of migration and the possible solutions for the future	Lecture 9: <i>Value of Diversity. Migration: variety at our door</i>	1 hour	Oral presentations (all groups) (12%)
	Reading assignment	5 hours	
	Class seminar on reading assignment	1 hour	
	Lecture 10: <i>Managing Diversity</i>	1 hour	
	Lecture 11: <i>Images and reality of Multiculturalism</i>	1 hour	
Understanding of the debate about models of society and policies for different cultures and migrant groups	Writing and presentation of Team work 2: <i>Towards Cultural Cohesion. Solutions, laws and policies in Multicultural State</i> (search for relevant information, reading and analysis)	15 hours	
		3 hours	
Awareness of different approaches and issues in research in intercultural communication	Lecture 12: <i>Main research approaches</i>	1 hour	Learning Report (10%)
	Group work on Different Research issues	1 hour	
	Preparation of Learning Report	3 hours	
		1 hour	

125 hours

100%

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* Class participation, which includes attendance, preparation of reading assignment and class discussion. This relates to the whole course.

TUNING FORM FOR CHECKING WORKLOAD OF AN EDUCATIONAL MODULE ©

(to be completed by the student)

Name of the module / course unit: Intercultural Communication in Multicultural Societies
 Type of course: Elective course unit
 Level of the module / course unit: Bachelor
 Number of ECTS credits: 5 ECTS (average student working time: 125 hours)

Competences to be developed:

- | | |
|--|--|
| 1. Appreciation of diversity and multiculturalism (related to modules X, Y, Z) | 5. Capacity for applying knowledge in practice (related to modules) |
| 2. Capacity to work in multicultural contexts (related to modules A, Z, J) | 6. Understanding of cultures and customs of other countries |
| 3. Teamwork (related to modules) | 7. Capacity to understand structures of cultural systems (related to modules) |
| 4. Oral and written communication (related to modules) | 8. Capacity to have an independent judgement on current related issues |

Learning outcomes	Educational activities	Estimated student work time in hours	Assessment
Familiarity with diverse approaches to culture and understanding of their implications. Understanding and capacity to use in an adequate academic context key concepts such as cultural identity, multiculturalism, integration, assimilation, segregation, context and meaning, etc. Development by the student of his or her own mental frameworks in relation to: c) the various layers of culture d) the key issues in the current debate concerning different degrees of tolerance of cultural symbols	Background questionnaire		Class Participation * (40%)
	Lecture 1: <i>Approaches to culture</i>		
	Group work on definitions of culture		
	Class discussion		
	Reading assignment		
	Class seminar on reading assignment		
	Lecture 2: <i>Perception and Culture</i>		Oral presentations (all groups)
	Reading assignment on the lecture		
	Class seminar on reading assignment		
	Lecture 3: <i>Cultural identities, group, individual and society</i>		
	Reading assignment on the lecture		
	Class seminar on reading assignment		
	Lecture 4: <i>Symbols, heroes and values</i>		

	Writing and presentation of Team work 1: <i>Cultural symbols in the current debate in newspapers</i> (search for relevant articles on the web, setting up of individual dossiers, reading and analysis)		(12%)
Understanding and being able to identify the different dimensions of cultural differences in approaches to: space, time, equity, hierarchy, high-low context, etc	Group work on 8 short case studies followed by class debate		One written case study to be analysed (10%)
	Presentation of the theoretical perspective on the cultural dimension		
	Background reading of selected texts		
Understanding processes of c) acculturation d) transition from ethnocentrism to ethnorelativism and capacity to articulate own /somebody else's processes	Lecture 5: <i>Presentation of Bennet's model</i> , followed by critical perspective by the group.		Write a two-page report based on personal experience (8%)
	Lecture 6: <i>Process of acculturation</i> , followed by identification of significant steps by the group		
	Reading assignment		
	Personal reflection of themes presented in the lectures		
Understanding obstacles and roads to intercultural communication. Development of comprehensive listening and capacity to answer in the appropriate cultural key Development of an attitude of respect and appreciation of diversity	Panel of presenters from different cultures and debate. Reflection exercise		* Self-evaluation (with guides) (8%)
	Lecture 7: <i>Intercultural Communication. Key issues</i>		
	Reading assignment		
	Personal reflection of themes presented in the lectures		
	Film: "No Man's Land".		
	Class Discussion about the film		
	Lecture 8: <i>The role of perception in intercultural communication</i>		
	Reading assignment		

	Which are the main three points of the assigned reading? Debate in class		
	Visit to NGO or other type of organisation that works with people from other cultures		
Understanding the current challenge of migration and the possible solutions for the future Understanding of the debate about models of society and policies for different cultures and migrant groups	Lecture 9: <i>Value of Diversity. Migration: variety at our door</i>		Oral presentations (all groups) (12%)
	Reading assignment		
	Class seminar on reading assignment		
	Lecture 10: <i>Managing Diversity</i>		
	Lecture 11: <i>Images and reality of Multiculturalism</i>		
	Writing and presentation of Team work 2: <i>Towards Cultural Cohesion. Solutions, laws and policies in Multicultural State</i> (search for relevant information, reading and analysis)		
Awareness of different approaches and issues in research in intercultural communication	Lecture 12: <i>Main research approaches</i>		Learning Report (10%)
	Group work on Different Research issues		
	Preparation of Learning Report		

..... hours

100%

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* Class participation, which includes attendance, preparation of reading assignment and class discussion. This relates to the whole course.