2. Flexibility and Academic Credits within Higher Education trends

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"Our team gave a colloquial expression to describe the core... we will call it the "Heartwood". May be because it goes inside, because is dense, because sounds voluminous; because it has a little of sweetness and bitter, because is in the centre as the almond, but we can not catch it. Graphic words have their way to get the most hidden places"

Abstract - Globalisation in Higher Education and the new market framework within the University System have introduced the concept of flexibility. One of the main tools in the development of this process has been the Academic Credit System (Credit Framework), which is a way of restructuring the curriculum towards Flexibility of Provision. Many countries around the world have introduced this model following the American Credit System. This paper will conceptually explore the links between the main trends in higher education and this new concept.

Resumen - Flexibilidad y créditos académicos dentro de tendencias de educación superior

La globalización en la Educación Superior y el nuevo marco de mercado dentro del sistema universitario ha introducido el concepto de flexibilidad. Uno de los instrumentos principales en el desarrollo de este proceso ha sido el Sistema de Crédito Académico (el Marco de Crédito), que es un modo de reestructurar el currículum hacia la Flexibilidad de Suministros. Muchos países en el mundo entero han introducido este modelo, después del Sistema de Crédito americano. Este trabajo explorará conceptualmente los eslabones entre las tendencias principales en la enseñanza superior y este nuevo concepto.

Palabras clave: flexibilidad, créditos académicos, transformando instituciones de educación superior

Key words: Flexibility, academic credits, transforming Higher Education Institutions

1. An introduction based on Curriculum-Mode 1 and Curriculum-Mode 2

Globalisation in Higher Education and the new market framework within the University System have introduced new concepts to the educational arena. Among others, flexibility is a revolutionary framework which is transforming Higher Education Institutions. One of the main tools in the development of this process has been the Academic Credit System, which is a way of restructuring the curriculum towards Flexibility of Provision. Many countries around the world have introduced this model following the United States credit system. This paper will conceptually explore the links between the main trends in higher education and how they are related to this new concept of a Credit Framework. The paper will also explain how the credit system has a relationship with consumerism and the renewal of labour market expectations and how both are related to flexibility in Higher Education. Finally, given the very specific concept on which this paper focuses, it will not overestimate its importance and will systematically question it throughout the paper.

As indicated by Ensor (2004) in the case of South Africa, one of the key texts to understand the credit system within the University environment has been the seminal paper written by Gibbons et al. (1994), summarized in Appendix 1 "...the Gibbons conception can be understood as a systemic conception of knowledge which gives privilege to an open and flexible system of knowledge, as opposed to the traditional, differentiated and stratified structure of the disciplinary knowledge. The new structures of knowledge...have affected profoundly the limits and functions of Higher Education Institutions". Following from this, and according to recent authors on higher education, it is particularly important to highlight the emergence of the Curriculum- Mode 2, "which is more relevant to work...eroding traditional disciplinary boundaries and ensuring greater portability and transferability trough the development of modular programmes". Curriculum Mode 2 also implies deep transformations in terms of changes in the curriculum structure, curriculum content, curriculum pedagogy, curriculum aims as well as the management of it, which are described in Appendix 1. Ensor (2004) goes further, claiming that the impact of Curriculum- Mode 2 is shaping a globalised and uniform model of Universities, for which credit accumulation and transfer, teaching
based on applied and problem solving and interdisciplinarity in teaching, represent the main goals.

The apparent consequences of this change, including flexibility and academic credits, have generated a key debate about the intended and unintended impacts in teaching, learning, equity, quality assessment, institutional management and many other variables related to Higher Education Institutional tasks. Authors like Mason et al. (2001) suggest that academic credits, among other changes in higher education, have transformed the university into an institution focused on utilitarian aims, rather than a universal pursuit of knowledge, leading to the "commodification" of educational attainment. Others, such as Naidoo and Jamieson (2005), warn about the commodification of higher education, and its possible consequences in low quality learning. This paper will argue on a less definitive claim, even allowing contending positions to live together. As an example, Trowler (1998) presents the tension between the "de-differentiation disciplines", from which arises the decline of the distinctive discipline and the de-professionalization of academic work, as opposed to the preservation of the dominance of disciplines by national examinations, national and international quality systems, research and teaching assessment exercises, among others.

In order to study this topic, the paper will conceptually analyse trends in Higher Education such as academic capitalism, "New Managerialism", consumerism, globalisation, Post-Fordism in Higher Education, internationalisation, entrepreneurial universities, marketisation, among others, particularly how all of them are related to the credit system and flexible curriculum regimes. The importance of the topic comes from irrefutable facts. Day after day the discourse about credits and its impact on mobility, diversity, competitiveness, quality and employability is becoming a main issue in Higher Education Institutions, especially during the last six years as a result of the "Bologna" process in Europe, which has been exported to many countries in Asia, Latin America and Africa, and which follows the USA higher education tradition. "Bologna has become a new European Higher Education brand, today easily recognized in governmental policies, academic activities, international organizations, networks and media".

Finally, this paper intends to give a clear picture about the main forces explaining the introduction of the credit system, regardless of the country or the institution in which it is implemented, and will highlight new areas for research. Both things are useful instruments when dealing with national or international comparative analysis about the credit system and its particular impact on the higher education system.

2. A methodological note and "hybridisation" as the starting point (a theoretical framework)

Despite Credits and Flexibility being old concepts, especially within North American Literature, the particular topic developed in this paper and the way it will be treated are rather new. Many articles and scientific literature deal with both terms and have worked on them from a historical perspective. Karseht (2005), Trowler (1998), Watson (1989), Allen & Layer (1995), Agelasto (1996), Heffernan (1973), Zgaga (2003), De

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4 An excellent description of this problem is given by Trowler (1998) when he references Jarry and Parker (1994) subtitle in their paper about academic credits and flexible curriculum, "any color you like as long as it is multi-coloured". This subtitle suggests a move away from single honors, towards the deconstruction of academic tribes and territories.


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6 In this case it is useful to recall the Latin American Tuning process and the Six by Four (6x4) project (Developed by CENEVAL - Mexico). Both projects have developed certain agreement within an important group of Universities in Latin America, about a Credit System. This system has close links to the ECTS (European Credit and Transfer System), which is also compatible with the American Credit System.


8 This paper argues that the origins of the credit framework could be found in the USA literature on "learning assessment", and explains how it has emerged in the UK since 1980. In both cases the paper argues that the system is related to access, flexibility, choice and efficiency.

9 This paper gives the University of Harvard system of electives the role of pioneer for its spread across the USA and latterly to Europe.

10 This paper gives a clear picture about the history if credits, particularly in the United Kingdom.

11 This paper gives a Chinese-American perspective for the Credit System.

12 This paper references the development of the credit system associated with two other changes. On one side the break from the classical curriculum and the introduction of the elective system, and on the other side, a move towards...
Jong & Van Hout (2002), Restrepo B. (2002) and Díaz & Gómez (2003), are good examples of this historical analysis when dealing with flexibility and credit based systems.

In addition, this paper has found that the recent literature on the topic either becomes quite technical (empirically and practically based in a rather instrumental conception)\textsuperscript{13} or policy oriented. In the first case, giving a particular method to implement it, just like a recipe; and in the second case, defending the concept without any critical or analytical judgement\textsuperscript{14}. This article tries to avoid these two over-simplifications of the topic, therefore it will analyse it in a deep and complex manner. Moreover, it will avoid the recognised simplifications of higher education research, particularly the one expressed by Naidoo (2003) and Naidoo & Jamieson (2005), for whom this kind of research tends to view Universities as closed systems without any relationship with macro forces in the environment. The research proposed in this case will try to give a certain kind of interaction between institutional settings and macro forces in the University framework. In order to do that, the paper has worked in six stages which utilize the Critical Review of the Literature as the main method. It will not develop any empirical work, since it is not needed for the theoretical outcomes expected from the paper. Figure 1 gives a synthetic picture of this research, considering the Critical Review of the Literature as the desired method, which mainly follows the recommendations of Wallace and Poulson (2003). It is clear that the research did not develop a linear approach; on the contrary, it went back many times in order to improve the hypothesis, the analysis, the claims and the conclusions.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure1.png}
\caption{STAGES OF THE RESEARCH}
\end{figure}

Once began, and particularly when checking key articles about the different positions on the topic, the reading brought to memory a particular economics reading which tries to characterise the way in which the Macroeconomics schools of thought work historically. Snowdon, Vane and Wynarczyk (1994) discuss T.S. Kuhn's thesis in the development of science as opposed to his thesis in the development of art. In this last case, contrary to the first one, two completely different views could live without the destruction of each other.\textsuperscript{15} In consequence, in macroeconomics you can find simultaneously incompatible traditions or schools, and even an amalgamation of them. As previously mentioned this reading is plausible because the literature about credits and flexibility states that they are neither the only consequence of a particular trend in higher education, nor a historical linear transformation of certain variables.

\begin{itemize}
\item \textsuperscript{13} Examples of this can be found in Duke (1995), Watson (1989) and Allen and Layer (1995). All of them include methodological phases or stages to implement the credit system or flexible regimes, avoiding the discussion about the model.
\item \textsuperscript{14} Examples of this can be found in Zgaga (2003), Tait (2003), Hawes and Donoso (2003) and Restrepo B. (2002). All of them justify the concept based on international or inter-institutional agreements, without any critical judgement and analysis.
\item \textsuperscript{15} As Snowdon et al. (1994) say "complete victory is rare, which allows the possibility of a comeback or revival of the old".
\end{itemize}
in higher education. This paper prefers a more complex view in which different and even contending trends in higher education or incompatible (conflictive) views can exist together, and usually this is the case when explaining the credit systems and flexible curriculum regimes.

Credits and flexibility are usually explained in the literature as an example or a consequence of a particular trend of higher education and these trends are described in the literature of higher education. Deem (2001) for example, identifies some recent changes (trends) in Higher Education like globalisation, internationalisation, "New Managerialism" and entrepreneurialism. The first one is defined as "the global spread of business and services as well as key economic, social and cultural practices to a world market, often through multi-national companies and the internet". Deem (2001) says it has an important impact in institutions; particularly related to organisational changes and new forms of educational provision, the majority of which are related to standardised products and transnational agendas. For the case of South Africa, Ensor (2004) suggests that globalisation is changing the higher education system around the world in a very uniform way, particularly through the credit accumulation and transfer system and introducing interdisciplinarity in teaching. Internationalisation, the second trend, corresponds to the "sharing of ideas, knowledge and ways of doing things in similar ways across different countries". In other words, how to integrate the international dimension in terms of students, curriculum, research, professors, etc. This trend for many authors is related to topics such as the adoption of systems of easily readable and comparable degrees, the adoption of flexible frames of reference for qualifications, the introduction of credit systems, the promotion of mobility, the enhancing of the academic environment, competitive pro-change attitude. The consequences as Davies (1987) claims are related to a very "market oriented" attitude in which it is not strange to see students as consumers and competition as the environment to live in. The fourth trend given by Deem (2001) is "New Managerialism", which is how "contemporary business practices and private sector ideas or values have permeated publicly funded institutions and work practices" and which will be developed later on in this paper.

The literature on higher education also identifies other similar or related trends like marketisation and academic capitalism in the University environment. The first one associated to the demand to obtain larger proportions of the budget from the private sector rather than the public sector, the development of more managerial concerns within the institutional management setting, the preoccupation over how to compete, the demand for efficiency in educational delivery, among other market or quasi-market changes. This trend, as Mason et al. (2001) suggest, is closely entrenched with new educational practices like academic credits. "...the use of a credit system... currently being adopted in a number of countries...is related to the transition from state run centralized economic systems to market based economies...obviously, the credit system is not the sole link between our educational institutions and the market economy, nor would adopting or replacing it necessarily strengthen or sever this connection...".

Finally Academic Capitalism, defined as "a situation in which the academic staff of publicly funded universities operates in an increasingly competitive environment, deploying their academic capital, which may comprise teaching, research, consultancy skills or other applications of forms of academic knowledge", is shifting the University environment towards seeing the student as a potential consumer in which education is an economic transaction. Again ending in the "consumerist" view of

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17 Slaughter and Leslie (1997) talks how globalisation is putting a particular pressure on policy makers, and is transforming the decision making process in the higher education business.
18 Other authors like Marginson (2000) have explored the same concept in certain areas of the world. Particularly he has worked in the case of Australia.
19 Deem (2001) pp.7
20 Deem (2001) pp.7
provider-receptor (teacher-student) in which education is a commodity to be provided or delivered, and where flexible regimes become a consequence. "This is the logic which says that educational institutions and individual educators should be flexible, that they should respond to the needs of the learners..."25

Having in mind the real facts about credits and flexibility in many countries, this paper supports a more complex view in which credits and flexibility appear even in the middle of conflictive views or contending trends (Hybridisation26 environment). Middleton (2000) gives a clear explanation of this kind of convergence approach, which can be extrapolated on to explain how credit systems have appeared in many higher education systems around the world. "While there is general agreement on the increasing immediacy of economic influences on higher education, opinion is sharply divided on whether it is being reconstituted as an instrument of state economic policy, as a private economic activity meditated through an educational market, or as some combination of the two... The view taken by this article is that there is compelling evidence both of marketisation and of political centralisation in higher education, but that the relationship between these two forces is under-theorised..."27 Ensor (2004) extends this concept to the case of credits, providing the example of South Africa in which two discourses have shaped the educational policy, the credit accumulation and transfer system (curriculum mode 2) and the disciplinary discourse (curriculum mode 1). Examples of this can be found in Brehony & Deem (2005) who express how despite claims about more flexible organisations in the public sector, British University settings suggest bureaucratic elements have not vanished28. The main argument (hybridisation) of this paper is that credits and flexible regimes appear in the middle of different higher education trends, mixing, for example, centralised and market policies either with entrepreneurial practices or competitive frameworks. But "hybridisation" can also be related to the consequences. It is not strange to find rigidity-flexibility dilemmas in the implementation of credit or flexible systems29. Cloonan (2004) confirms this for the UK Higher Education system saying that "flexibility does not automatically lead to all the range of providers... Many HE practices remain absolutely inflexible with flexibility more apparent in "peripheral" areas..."30

Assuming "hybridisation" as explained before, this paper brings a school of thought in which it is possible to have contending claims living together and explaining transformations in Higher Education. This led this paper to introduce "New Managerialism" as a theoretical approach which can help to understand the issue of credits and flexibility. "New Managerialism" for Brehony & Deem (2005) consists of a set of values, ideas and practices including marketisation, performance management, league tables, devolved budgets and targets, aimed at reforming the management of public service organisations31. Those practices and ideas are related with changes in Higher Education Institutions, such as new organisational forms (flattened and team based management structures), use of new technology, new management practices (e.g. use of cost centres), fostering of competition, efficiency, effectiveness, performance evaluation and market-oriented values and new culture and narratives. These practices are not easily standardized in just one concept, view or trend, supporting the "hybridisation" approach; "The notion of hybridisation of a range of organisational forms, practices and cultures may actually represent a more useful account of what is happening to higher education, than attempts to document convergence across different countries".32 As a consequence, the implementation of changes associated with "New Managerialism" in Higher Education does not need to eliminate traditional practices. On the contrary, modern and traditional regimes or practices can cope in a hybridisation process even with contradictions. "It is evident that there is a perception that the move to devolved management of public services and their marketisation has also been accompanied paradoxically by both greater state regulation and fragmentation of service delivery"33. In particular, Trowler (1998) identifies the introduction of the credit framework as the application of these "New Managerial" practices, because it gives the potential to reduce the waste of resources in curriculum delivery. Given the massification fact in higher education, and the scarcity of resources, credits seem to be a nice tool to improve introduction of the Bologna process. This is the case when introducing credits for accumulation and transfer.29

Deem (2001). Given this fact, it is not easy to conclude in a comparative and multi-national study which tries to get conclusions with data from different Universities around the world.

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efficiency in delivering the curriculum. Deem’s papers\(^{34}\) give some evidence on practices which related to “New Managerialism” have close links with the implementation of credit and flexible systems such as: new regulation for staff work, new organisational forms, marketisation practices within the curriculum\(^{35}\), new ways of academic control and regulation, competition among faculties within one institution, changes in resource allocation, new funding schemes, decentralisation, flexibility and widespread use of information technology, etc. “Flexibility in higher education is marked by...changes to the curriculum and teaching methods, notably modularisation (where students choose from a menu of optional units rather than following core units) and semesterisation...But to what extent can these be attributed to post-Fordism development and to what extent are New Managerial ideologies targeted a more convincing explanation?...New Managerialism seems to offer a more persuasive explanation...\(^{36}\)

In summary, using “New Managerialism” as a theoretical approach in which “hybridisation” (contending views and ideas living together or being amalgamated) exists; this paper will understand credit systems and flexible curriculum regimes. However, a previous step is needed to go further.

3. A key relationship: “New Managerialism”, consumerism and the labour market

Within the concept of “New Managerialism” appears another trend for Higher Education, which can help this paper to understand academic credits and flexible regimes in the curriculum. It is known in the literature as consumerism, which is a concept commonly accepted to be derived from neo-liberal market principles in higher education. But, it is also clear that consumerism is associated with New Managerialist principles. The key question is how “New Managerialism” is related to consumerism?. To answer that, we must consider at least two channels described in the literature. The first one\(^ {37}\) emphasises on how consumerism is a step from the Keynesian welfare state towards a quasi-market framework in which there is a new regulatory framework related to New Managerialism. “Researchers\(^ {38}\)...have indicated how the development of quasi-markets linked to managerialist frameworks in higher education; have altered the relationships within and among institutions as well as the nature of rewards and sanctions in academic life. In particular, consumerism operates within a regulatory policy framework which is based on the notion that competition between HEIs\(^ {39}\) for limited resources will produce a more effective, efficient and equitable higher education\(^ {40}\). This new kind of regulation is the answer to new ways of competition among higher education institutions, which in many cases have led to consumerist attitudes.

Following Naidoo & Jamieson (2005), the second channel states that the relationship between New Managerialism and consumerism comes through the development of symmetric information policies in Higher Education, such as performance indicators and league tables. Those measures, implemented according to “New Managerialism” principles, have provided choice and information and have strengthened the importance of consumers. From a policy-maker view, Hawes & Donoso (2003) explain how choice and information in the European context (Bologna Declaration), give transparency for academics, clients, students, research community and employers. Given the existence of those kinds of policies, it is very simple to end up with consumerist behaviours in higher education.

This paper suggests at least two more channels. The first one considers that “New Managerialism” implies a new role for academics which is leading to consumerist attitudes in teaching. A reason for this comes from students who are allowed to build their own courses in the university using flexible systems such as academic credits. Following consumerist theories, the main argument to implement “New Managerialism” is an undesirable imbalance of power between those who provide services (teachers) and those for whom they are provided (students)\(^ {41}\). The result is a new role for both academic staff and students. Trowler (1998) gives an...
extreme and critical example for the teachers; "In this scenario academic staff will become purveyors of commodities within a knowledge supermarket, which may or may not be selected by the student as curriculum. Students, on the other hand, now have more choice building their preferred curriculum route, which again in an extreme view can "disempower academic staff because they will not longer be able to shape student identities by designing a sequence of learning activities for them." The result has been a new provider-receiver relationship proposed by the "New Managerialism" principles, which implies a new quasi-consumerist attitude in teachers and students. Teachers, trying to offer and design "attractive" subjects to capture the students' attention and students requiring from academics more attractive alternatives of subjects. To ameliorate this, there is evidence of countervailing forces (again sustaining the hybridisation model proposed in this paper) which are preserving the dominance of disciplines, like national examinations, assessment exercises in teaching and research, quality assessment models, among others. At the end, there is a move away from the traditional distinctive disciplines towards less specialised disciplines and professional identities. 

The second new channel, proposed by this paper, is related to how New Managerialism principles imply new organisational forms, which can be associated with changes in curriculum management and which have close links with consumerism. These organisational forms ask for flexible provision and individualistic curricula in terms of new choices about time, place and pace of tuition, new means and models of study and new ways of collaboration in learning. These transformations are also close to consumerism, since the curricula have acquired greater breadth and flexibility and provide opportunity for individual choice; "Flexible learning places the learner at the centre. Resources are adapted to suit the needs of the learner rather than vice-versa." This channel is also related to how "New Managerialism" is using consumerist methods responding to massification which is another trend in higher education. Williams (2002) explains: "Flexible delivery is, by definition, a client-oriented approach because it is a commitment, on the part of the education provider, to tailor courses to meet the various individual needs of its students. Furthermore, it is a tacit recognition of the massification of higher education." This paper will focus on this channel and based on it will develop the details of flexibility in higher education.

In any case, given the fact that a relationship does exist between consumerism and "New Managerialism", what does this imply? Following Karseth (2005) referencing Biesta (2004), it implies an "outward orientation where student as a potential consumer is placed in the centre" and it also implies a "new language of learning". As a result "one of the main problems with the new language is that it allows for a redescription of the process of education in terms of economic transaction, that is, a transaction on which (i) the learner is the potential consumer, the one who has certain needs... (ii) the teacher or the educational institution becomes the provider, that is, the one who is there to meet the needs of the learner, and where (iii) education itself becomes a commodity to be provided or delivered by the teacher or educational institution and to be consumed by the learner." The commodification discourse in Higher Education, as treated by various authors, has been related to other changes such as modularisation and semestralisation of the curriculum, institutionalisation of complaints procedures, the use of student satisfaction surveys and certain budget allocation processes, among others. Apart from ending on a new language of learning, there is some concern about consequences of commodification in educational attainment (Mason et al. (2001)), such as the instrumental attitude to learning (Naidoo (2003)) and superficiality; institutional chaos in managing the curriculum (Mason et al. (2001)); inequality (Naidoo and Jamieson (2005)); deprofessionalisation of academic staff (Trowler (1998), Gleeson & Shain (1999), Naidoo &

42 Allen & Layer (1995) prefer a less extreme example in which the academic staff assumes a new role in supporting the student to choose the subjects (a new way of tutoring). The claim is that in this way it is possible to counterbalance inflexible (one route) curriculum with a "demand" model in which the student can build the curriculum with certain help of the academic staff, designing a proper route.

43 Rustin (1994) gives a similar explanation saying that "The idea that students should be more free to move physically and organize their time more flexibly...undermines the power of academic controllers... one of the attractions of flexibility...is precisely that it does undercut or circumvent the power of the subject departments and their hierarchies. It in effect, attacks their monopoly ". Bocock (1999) describes this saying that "lecturers often describe themselves as being on the losing side".

44 Trowler (1998) pp. 46, 47.
Jamieson (2005) and Allen & Layer (1995)); and pedagogical changes which are lowering the level of quality.

Given these undesired effects, it must be mentioned that the commodification trend in Higher Education seems to be closely related to those expectations and requirements of the labour market. In other words, it is related to new needs in the workforce and the new scenario of knowledge (Mode 1-Mode 2 debate) which apparently makes it unavoidable. "The so called knowledge explosion is placing pressure on the 'knowledge transfer' conception of teaching. The emergence of constructivism, together with employer demand for generic skill development, is forcing educators to rethink their positions on what is taught and how is taught... technological and industrial change fuel an increasing demand for higher education which requires new approaches to provision. 'The new economy' demands continuous organisational and individual learning in order to respond adequately to change... the ability to learn will be critical..." Jenkins & Walker (1994) summarise this as how the labour market demands learner autonomy, team work and team leadership, initiative in decision making, employability and adaptability. All of these new requirements demand flexible employees who, in terms of this new flexible labour market, are needed to remain competitive in a continuous changing environment. As a consequence, Higher Education "has to serve the flexible economy and in order to do so it must itself become more flexible... flexibility in the contemporary workplace is forcing a mirroring flexibility in the provision of education... this suggests that pursuing the analogy of core and periphery from labour market theory can shed light on the nature of flexibility in Higher Education". A conclusion given by Cloonan (2004) derived from the last paragraph, is that practices of flexibility in Higher Education have been adopted more due to pragmatic rather than pedagogical reasons.

In summary, it is clear that academic credits and flexible curriculum regimes must be explained within the context of consumerism and its undesired effect in the commodification of higher education. In a way, this paper begins to answer a question raised by Naidoo and Jamieson (2005) about how commodification is changing the form and structure of the curriculum. This paper suggests that flexibility and academic credits are one of the key means by which consumerism (and its consequence on commodification of higher education) is transforming not only the form and structure of the curriculum in higher education, but also the way teaching is performed and delivered.

Initially it is also evident that academic credits represent a consumer based concept when promoting access, choice, flexibility and efficiency. Appendix 2 shows the main principles of the new credit culture that are transforming higher education and including consumerist attitudes within the system, which allows students to construct a "bespoke programme of study, based on modules, to suit their needs and interests". Therefore, it is not strange to find in the academic credits literature explicit references to consumerism. For example Duke (1995) says that the credit accumulation and transfer system (CAT) "implies a new paradigm of education in which the design and provision of the curriculum is shifting from the institution to the student. Instead of one institution defining what the student should follow when taking a degree, according to CAT, it is the student who in a more individualistic and market-driven way decides what he needs". Similar references can be found in the literature from the United States about academic credits and how the curriculum is becoming a market place where students are shoppers and professors are suppliers of learning.

4. The "heartwood": precisining flexibility and academic credits within the context of new trends in higher education

Up to now this paper has been using flexibility and academic credits as synonyms; however, this is not exactly correct. This section will try to explain the main differences between the two concepts, and will explain

49 Ling et al. (2001) pp. 9 and 10
51 Sennett (1999) illustrates this saying that "flexible capitalism has blocked the straight roadework of career, diverting employees suddenly from one kind of work into another". Hence, flexible capitalism requires a new kind of employee who has the ability to move from one job to another one without any difficulty. Cloonan (2004) on the other hand calls for flexibility in order to be competitive.
52 Sennett (1999) gives a full explanation for this topic within the new labour market. Naidoo and Jamieson (2005) and Gómez & Celis (2004) contend a paradigmatic view according to which, this new scenario of the labour market is demanding highly skilled labour force. On the contrary it seems to be demanding less skilled but more flexible and general educated employees. Mason et al. (2001) explain how that is working in the curricula "The idea of a core curriculum, focused exclusively on classical subject matter was challenged by the introduction of various academic "majors" that allow students to select a course of study... the idea of electives was also developed as a means of providing further choice and specialisation. The core curriculum was eventually transformed into the general education component of the university curriculum".

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how they can be correlated within the context of the main trends in higher education.

Flexibility of Provision in Higher Education

Flexibility in Higher Education is one of those words which can be extremely vague, even though it seems to be a very popular concept in recent times in the Higher Education literature. Cloonan (2004), for example talks about how “the idea of flexibility has assumed the status of a mantra which is mouthed by progressives and conservatives alike and it seems that the very vagueness of the term contributes to its popularity”. He also expresses how particularly problematic it is when used in a non-neutral way, justifying certain change without adding any other argument. In order to solve this and find a proper definition, it is necessary to differentiate flexible delivery from flexible provision in higher education. Flexible delivery implies that higher education focuses on a one-way form of knowledge delivery in which there is a passive role for students and an active one for teachers. Flexible Provision, being closer to what it is called Curriculum-Mode 2, embraces teachers and students in an interactive way of learning, which therefore makes it the main topic to be treated in this paper when discussing flexibility.

Following Ling et al. (2001), Rustin (1994), Green & Lamb (1999), Brehony & Deem (2005), Williams (2002), Bondeson (1977), flexible provision in higher education implies that the constraints of time, place, contents, learning styles, forms of assessment, access (entry and exit points in the program) and ways of collaboration about learning, which have limited the university experience of learning, should be removed. The concept also presumes that there is a guided choice for the learner. It is worth mentioning that on this concept there is not a clear consensus. Rustin (1994) limits the concept to removing constraints of time and space, Green & Lamb (1999) extend the idea to constraints in terms of access, but without precisely the differences between flexibility of delivery and provision, and other authors only describe one of the constraints identified in this paper. Flexibility, defined the way this paper suggests, has delicate implications in terms of creating a more open way of education, in which accessibility, learning, teaching, higher education management, curriculum design, among other topics, change dramatically. Without any doubt it is more than a “buzz” word, which is clearly being introduced in the current higher education system and as previously mentioned, giving application to new trends of higher education. The impact of flexibility in higher education is “an illustration of processes of globalisation within educational policy...flexibility in the contemporary workplace is forcing a mirroring flexibility in the provision of education”.

This last idea of how inevitable flexibility provision is becoming within the new labour market framework, can be verified in a work by Sennett (1999), when he describes the demands of “flexible capitalism”. This last concept is very useful to understand changes in higher education management and outcomes related to flexible provision of learning in higher education. “Flexible Capitalism” in Sennet’s word is a system which consists of three elements, discontinuous reinvention of institutions, flexible specialization of production and concentration without centralisation of power. The first one implies fragmentation due to the implementation of loose networks rather than pyramidal structures, ending with changes such as standardisation, downsizing and reengineering. The second one tries to get more varied products which must arrive quickly to the market and the last one implies the combination between apparent decentralisation but with a very restrictive system of information which concentrates power.

Reflecting on the “hybridisation” model proposed in this paper, it must be said that the almost inevitable change to flexibility of provision in higher education, usually exists in a rather uncomfortable status, in which rigidity and flexibility live together, even within the context of a particular institution: “many higher education practices remain resolutely inflexible with flexibility more apparent in peripheral areas.”

This paper also identifies the main ways to approach “flexible provision” as well as the main outcomes of this new concept. One of the conclusions will be that the outcomes can be considered to be the “key link” between

58 Brehony & Deem (2005) give a particular example in higher education when implementing modularisation and semesterisation. They think these changes increase “the power of senior administrators and the influence of bureaucracy at the expense of lecturing stuff and discipline concern”.
59 Using this concept it is easy to find how the implementation of “flexible provision in higher education” has close links with these changes. In particular, when they pretend to have an individualised product, eliminating any kind of constraint in the university experience. However this implies new ways of management and centralised information systems able to control the new system. Schellekens et al. (2003) have a complete exemplification of how flexibility of provision in higher education is transforming the operational characteristics of Universities leading to a new way of management.
academic credits and flexible provision. The ways of approaching "flexibility of provision" can be found in the literature when talking about how flexibility occurs in areas such as curricula, pedagogical practices, academic structures and institutional management. Curriculum Flexibility can be defined as "the possibility of responding creatively and quickly to intellectual itineraries of students and professors...fomenting and promoting opportunities of student mobility and inter-institutional and program transfers." Following Díaz (2002), Curriculum Flexibility can be associated with academic reorganisation, program redesign, changes to traditional models of learning and teaching, redefinition of time and length of the programs and a closer relationship between education and the labour market, among others. Pedagogical Flexibility refers to the openness to student-centred strategies of learning rather than teacher-centred, the promotion of diverse learning environments which permit new ways of interaction and approaches to knowledge, the emphasis on student individualisation of the learning experience and changes looking for horizontal and personalised relationships between students and professors rather than vertical relationships. Flexibility in Academic Structures refers to changes in the organisation and relationships between disciplines, units, departments and areas within Universities. Extending the concept, organisation can be related to relationships between professors and students. Finally Flexibility on Institutional Management relates to the introduction of new organisational structures which can transform power relationships and ways of communication. At the same time it includes changes to main managerial practices in higher education institutions related to funding, resource management, marketing, research, budgeting, control, auditing, performance evaluation, teaching and students' role and participation in the university, among others.

Tools for flexibility

Appendix 3 gives a summary of the main tools to implement flexibility of provision in higher education, keeping in mind the key constraints being removed in the university experience of learning. It has to be said that this list does not pretend to be complete, but it tries to highlight the more important tools and how they are related to the concept previously given in this paper. Some of them have particular relevance in the implementation of an Academic Credit Framework for accumulation and transfer and will be explained in certain detail (Appendix 3 highlights them in bold letters). Modularisation and/or Cycle Education can be defined as the system in which "educational awards are broken up into component parts of a more or less standard size. These parts may then be assessed separately and independently, so that students can study individual modules/cycles in a variety of different sequences." It breaks the traditional sequential structure of the disciplines, programs or chain of programs, moving towards alternative ways of building the educational experience. In terms of a particular program or subject, this system also pretends to integrate competencies and to promote different inter-disciplinary perspectives.

Díaz (2002) precisioning the concept introduces two kinds of curriculum flexibility. The first one referred to changes in the organisation and contents of the curriculum (how to move from disciplinary designs to interdisciplinarity), and the second one related to how to satisfy individual, labour market and society needs with the curriculum. This concept is also understood in the literature as "flexible learning". Bridgland & Blanchard (2001) define it in a similar way including areas of change such as: student centred teaching and learning, flexible approach to the development and delivery of programs, changes in time, places and ways of learning, recognition of the diversity of student population and understanding of many contexts of teaching and learning. Finally Rickards (2000) defines it as "an educational approach using a variety of student centred teaching and learning methods, resources and flexible administrative practices that responds to the needs of a diverse student population, enabling them to achieve vocational and professional qualifications and the goals of a university education".


Van Eijl (1986) gives some examples of different kinds of systems within the Dutch Higher Education System that are comparable with modularised models. They are: Block course systems, Baukasten systems, Blockstudien and concentrated study.


Europe has given an example of the "cycle Education" concept when defining the undergraduate cycle and the masters and Phd cycles and how they all have relationships and complementarities. In this case the program is not the one which is divided. It is the traditional chain Bachelor - Masters- Phd the one which is changing.
around specific problems\textsuperscript{68} avoiding an excessive number of evaluations and assessments.

The modularised/cycle system looks for disaggregating long and extended higher education programs and courses, permitting interdisciplinary connections, promoting standard provision and allowing inter-institutional relationships, increasing the possibility of student choice, allowing for different kinds of connections between programs of different levels\textsuperscript{69}, promoting learner autonomy and flexible course designs, improving economy and efficiency of delivery and permitting easier developments of new programs. Leading to all of these objectives, modularised systems have transformed the educational environment and have had close links with Academic Credit Frameworks. Although modularity and credits clearly have their differences, they also have several points in common. "They both suggest that learning can be built up from separate blocks that can be uniquely valued. As such, both are tools with the capacity for delivering learning in a more flexible way. They are similar in offering students the potential for some power and flexibility over how, when and even where they learn...In one equally important sense, however, they are different. Credits can go beyond the individual education; beyond educational institutions; and even beyond formal educational provision.\textsuperscript{70} Therefore, modularity is related more to the institutional curriculum and management structure, while credits are related more with learning assessment and measurement. In any case, as many authors suggest, modularisation can be a key prerequisite for the credit system for accumulation and transfer.\textsuperscript{71}

As previously mentioned, Modularisation can be extended to include what is called "cycle education". This model argues in favour of defining long and continuous cycles interconnected and built on small links which can help the student to have different entries and exits within the educational experience.

\textit{Semesterisation}, another tool for flexible provision of education, can be defined as a change in the way the courses are delivered in a particular program. It provides a new definition of the academic time and allows the curricula to be divided in modules or even to be valued in credits. Thinking about the learning experience, it looks for effectiveness by reducing the length and amount of the subjects to be studied. The implications, as Rustin (1994) states, are greater concentration of students' attention and more effective use of teachers and students' time. In addition, it can help to have more choice for students than year-long programs. Contending these views, Allen & Layer (1995) give the opposite position: warning against superficiality of the educational experience due to short periods of time and administrative troubles in managing the system.

The \textit{Use of New Technologies (Information and Communication Technologies ICT)} can also be described as one of the main tools for flexible provision of education. Some authors see them as the consequence of this change; however this paper prefers the opposite view. This idea refers to virtual, distance and on line education in which ICT is used to complement or even eliminate the "face to face" concept in the educational experience, not only in the teaching arena, but also in research and even the institutional resource availability. The objective is to vary times, location of teaching and research, admission and management procedures. Some other examples related to this objective are redefined libraries (with on-line books and on line scientific papers, apart from new ICT pedagogical resources), learning materials in real time and on-line access and strengthened electronic mail and communication systems, among others.

The redesign of the curricula and the didactic diversification correspond to very important tools when talking about flexible provision. The first one corresponds to changes in the structure, organisation and practices within a particular academic program, the second one refers to the possibility of moving from traditional teaching methods towards learning-centred methods. It includes building tutorials, collaborative learning and case studies, among others.

Finally, one of the main tools for flexible provision, which is the main topic of this paper, is the "System for Credit Accumulation and Transfer", which for the purposes of this research, and in looking for a more general view on it, will be called "The Credit Framework".

\textbf{System for Credit Accumulation and Transfer: The Credit Framework}

The System of Credits has become an important mechanism to guarantee and attain flexibility of provision in Higher Education. Although there is not an intrinsic relationship between credits and flexibility, this last concept presumes open structures and forms, one of which is the academic credit system. "The system of credits has important effects in particular aspects
of learning such as the selection, rhythm, sequence, and an individual interest...from this point of view flexibility presumes credits.

For this paper, the System of Credits is not just a value or a number to be established for a particular subject. This paper will talk about "The Credit Framework" which includes all the aspects which need to be transformed in the curriculum when giving credit value to assess learning. Therefore, it has close links with modularisation, semesterisation, curriculum redesign, didactical changes and use of ICT tools among others. This framework is built on the particular idea of time measurement of academic tasks and does not follow the traditional view from which learning is simply based on teaching hours. On the contrary, credits incorporate the concept of all the academic tasks including teaching and independent hours required by the student within his/her learning process. In conclusion, the Credit Framework presumes a comprehensive concept of learning in which student theoretical activities are mixed with practical and independent activities.

Assuming a dynamic view of credits, historically "The Credit Framework" has had different purposes. The system has provided learners a method to formally recognize their successful learning (Recognition). In addition, it has helped to make "academic learning portable", giving the learner a possibility to have mobility within the educational system and accumulation of that learning (Accumulation and Transfer). Recently, purposes of the credit system include a new concept which is related to quality matters. This now means that credits also help to define academic standards and to qualify learning; "credit has been incorporated into the development of some qualification frameworks and deliberately excluded from others. Since credit is a formal recognition of learning achievements based on key underlying principles, it follows that credit has a potentially valuable role in qualification frameworks.

Given these purposes, the utilization of "The Credit Framework" must be mentioned. Following Reyes (2003), academic credits must be understood in the framework of a flexible policy in higher education which enables Higher Education Institutions to develop new forms of curriculum design, structuring and organisation. They also help Higher Education Institutions to implement alternative academic, pedagogical and managerial methods, based on flexibility, relevance, and collaborative learning. Finally, Academic Credits facilitate inter-institutional dialogue and mobility within and outside the University system. Restrepo J.M. & Locano (2005a) summarize the uses of academic credits in terms of curriculum flexibility, development of self-learning attitudes, inter-institutional and international mobility and transfer of students and teachers, curriculum updating, improved access to the higher education system, increased inter-institutional transparency and increased institutional efficiency.

**Flexibility of Provision and the Credit Framework**

This paper claims that the relationship between the Credit Framework and flexibility of provision is derived from the expected outcomes of both systems. Since the "Credit Framework" is a combination of various tools to implement Flexibility, and keeping in mind that flexibility of provision presumes the Credit Framework, it is clear that both should attain common outcomes. It can be said that the credit framework is a necessary (but not sufficient) tool for flexibility.

This paper initially identified at least seven expected main outcomes (outcomes expected from flexibility and the implementation of a Credit Framework), which can be defined, such as: curriculum updating (when fomenting the supply of new academic activities updated with new pedagogical tools), improved access (when facilitating different routes, entries and exits in the higher education system and helping to increase the coverage of the system. Also when recognising the diversity of the student population), inter-institutional and international mobility (when facilitating national and international recognition of formal and non formal learning), flexible ways of learning (when promoting student-centred learning and recognising the existence of different rhythms of learning), employability (when answering to the labour market needs in terms of knowledge and competencies), internationalisation (when promoting more inter-institutional programs of exchange, transfer and recognition) and finally giving special attention to individual needs (when fomenting the autonomy of the student to choose an academic route according to his/her particular needs). According to Figure 2, the left side is a list of possible

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72 Díaz (2002) pp. 96,97
73 It is more than the concept given by Heffernan (1973) years ago, for whom the credit is "a unit for expressing quantitatively the time required for satisfactory mastery of a course of one class hour per week term...or a measure expressing the extent of content in a course, as well as quantitative requirements for a degree". It is also more than a "form of (academic) currency"
74 Bridges & Tory (2001) pp. 257,258
75 Examples of this new role can be found in the Diploma Supplement implemented in Europe within the ECTS (European credit and transfer system) model and the "Complemento al Titulado" CAT (Diploma complement) in Latin America within the SICA-AL "Sistema de Créditos Académicos de América Latina" (Academic Credit System for Latin America) model.
tools for flexible provision, one of which is "The Credit Framework." For this tool there are at least three main purposes identified: accumulation, recognition and qualification (academic standards). The right side represents four ways of approaching flexible provision, which are materialized using the previous tools. At the end, using the credit framework as a tool for flexible provision it is possible to attain certain outcomes, which are the link between flexibility of provision and the Credit Framework. It is not claimed that these outcomes are inevitably attained, but that they are possible outcomes which are supposed to be attained using the Credit Framework, according to the literature.

**Figure 2. Relationship between Flexible Provision and The Credit Framework**

- **Tools for Flexible Provision**
  - Modularization
  - Semesterisation
  - Distance Education
  - Use of ICT tools
  - New learning methods
  - Tying and mentoring programs
  - New assessment procedures
  - New entry requirements
  - Notarized and international

- **Purposes Of the Credit Framework**
  - Accumulation
  - Recognition (compatibility, comparability and transparency)
  - Academic Standards (qualification)

- **Ways of approaching Flexible Provision**
  - Curriculum flexibility
  - Pedagogical Flexibility
  - Flexibility in Academic Structures
  - Flexibility in institutional management

- **Outcomes of the Next Level**
  - Improved access (equity)
  - Mobility
  - Flexibility
  - Employability
  - Internecesitization
  - Choice

- **Flexibility of Provision**

5. Conclusions

There is not doubt that Higher Education Institutions are undergoing incredible and unexpected changes. These transformations are the result of strong trends such as globalisation, internationalisation, marketisation, academic capitalism, new managerialism and entrepreneurialism, and have had institutional impacts in the academic and institutional management of institutions. Contrary to traditional views, this paper has claimed that many of these transformations occur in the middle of tensions between conflictive views and contending trends, in what is called a "hybridisation model". Given this fact, this paper presented a school of thought in which it is possible to have contending claims living together and explaining transformations in Higher Education systems. This led us to introduce "New Managerialism" as a theoretical approach.

Keeping in mind that the purpose of this paper was to explain how flexibility and academic credits represent vivid examples of those changes in the higher education arena, it can be concluded that even though the concepts do not represent the same thing, the expected outcomes of both are clearly related. Considering that the "Credit Framework" is one of the various tools to implement Flexibility and keeping in mind that flexibility of provision presumes the Credit Framework, it is clear that both should attain common outcomes. It can be said that "the credit framework" is a necessary (but not sufficient) condition for real flexibility. In addition, they both have close links with consumerism and the renewal of labour market expectations. The paper also pointed out that flexibility and credits were words which can be extremely vague, therefore the paper offered a definition for both, explained the ways to approach flexibility and the tools to implement it. Finally, the paper anticipated the outcomes to be derived from flexible regimes and the implementation of credit systems.

It is important to note that this paper did not overestimate the importance of flexibility or credits. On the contrary, it gave a preliminary picture of their defects and virtues. Apparent consequences indicate some fears about how flexibility can transform the University into an institution focused on utilitarian objectives, rather than a universal pursuit of knowledge, leading to the "commodification" of educational attainment. This paper argued on a less definitive or pessimistic conclusion, and preferred a rather pragmatic approach. It suggested that New Managerialism in Higher Education implies a new role for academics and new organisational forms, which are increasing individual choice and are leading towards consumerist attitudes in teaching and learning. In conclusion, all of these changes are related to new needs in the labour market and the new scenario of knowledge (Mode 1 - Mode 2 debate) which apparently makes them unavoidable.

The paper insists on the importance of the topic, considering the importance that it has been given during the last six years as a result of the “Bologna” process in Europe, which has been exported to many countries in Asia, Latin America and Africa, and which follows the American higher education tradition. These changes are also the result of how the university environment is shaping a Curriculum-Mode 2 in which a

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It has to be said that "The Credit Framework" usually involves many of the other tools presented in Figure 2.
A globalised model of Universities appears, characterised by credit accumulation and transfer systems, learning orientation, teaching based on applied matters and interdisciplinarity in teaching and research.

Finally, this paper has introduced new topics of research, which can be treated according to the theoretical approach proposed with this paper. It would be of particular interest to study how management systems are changing within institutional contexts due to flexibility and the implementation of credit systems, and if that change was expected to happen. At the same time it could be interesting to study if different institutional cultures affect the expected change on institutional management. In other words, if the institutional culture affects the pace and expected outcomes of the implementation of flexible regimes by using academic credits and building the "hybrid" environment.

The results from this paper, its method and the critical analysis of the international literature, are also of interest to deal theoretically with national or international comparative analysis about the credit systems and its particular impact on the Higher Education systems. It also breaks from the traditional literature on the topic which is either technical-instrumental or policy oriented, in which there is no analysis or judgements. It does not assume flexibility as a messianic concept, but a real occurrence which in many cases has brought advantages and disadvantages to the system and which is strongly influenced and moved by labour market expectations. Finally, the model worked in this paper has answered permanent demands about the need of studies which consider certain kinds of interactions between institutional settings and macro forces within the University framework.

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**APPENDIX 1**

**Attributes for the Modes of Knowledge 1 and 2**

<table>
<thead>
<tr>
<th>ATTRIBUTES</th>
<th>MODE 1</th>
<th>MODE 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem solving and problem definition</td>
<td>Scientific community interests</td>
<td>Application context</td>
</tr>
<tr>
<td></td>
<td>Lack of a practical objective</td>
<td>Knowledge is socially distributed</td>
</tr>
<tr>
<td>Structure of knowledge</td>
<td>Disciplinary</td>
<td>Transdisciplinary: solution is far beyond any discipline</td>
</tr>
<tr>
<td>Abilities and experiences</td>
<td>Homogeneous</td>
<td>Heterogeneous: New places to create knowledge</td>
</tr>
<tr>
<td>Organization</td>
<td>Hierarchical</td>
<td>Not Hierarchical</td>
</tr>
<tr>
<td></td>
<td></td>
<td>“Ad Hoc” organizations</td>
</tr>
<tr>
<td>Quality assessment</td>
<td>Peer review</td>
<td>Knowledge is socially responsible and reflexive (solution is not only scientific or technical)</td>
</tr>
</tbody>
</table>

**MODE 1 AND MODE 2 IN THE CURRICULUM**

| Focus on the undergraduate curricula | Disciplinarity | Interdisciplinarity (Because research-knowledge production, increasingly requires the engagement of specialists across a range of disciplines) |
| Mechanisms to undertake the curriculum | Year long courses | Modularisation |

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1 This table was included in Díaz and Gomez (2003) referencing the same table from Gibbons et al. (1994), and was complemented with Ensor (2004), Naidoo and Jamieson (2005) and Karseth (2005), to include Curriculum-Mode 2.

2 As Ensor (2004) suggests the next step is that Higher Education Curricula should shift from their emphasis on year long, discipline-based courses, to modules expressed in terms of credits.
### APPENDIX 3

**Tools for flexible provision in Higher Education**

<table>
<thead>
<tr>
<th>CONSTRAINT REMOVED</th>
<th>CONCEPT OF FLEXIBILITY</th>
<th>TOOLS (Examples of them)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time</td>
<td>1. Changing time restrictions to suit the learner individual needs</td>
<td>1. Semesterisation</td>
</tr>
<tr>
<td></td>
<td>2. Modularity and/or &quot;Cycle Education&quot;</td>
<td>2. Modularisation</td>
</tr>
<tr>
<td>Place</td>
<td>1. Changing place restrictions to suit the individual learner needs</td>
<td>1. Distance / Off campus learning programs</td>
</tr>
<tr>
<td></td>
<td>2. Use of ICT methods</td>
<td>2. Use of ICT methods</td>
</tr>
<tr>
<td></td>
<td>3. Print, video and online materials</td>
<td>3. Print, video and online materials</td>
</tr>
<tr>
<td>Contents</td>
<td>1. Building alternative choices and routes in course structures</td>
<td>1. Elective system in curriculum design</td>
</tr>
<tr>
<td></td>
<td>2. Learners rather than teachers emphasis in building the program</td>
<td>2. Systems of Credits for accumulation and transfer</td>
</tr>
<tr>
<td>Learning Style</td>
<td>1. Open learning</td>
<td>1. Emphasis on Student-Learning methods</td>
</tr>
<tr>
<td></td>
<td>2. Student active learning</td>
<td>2. Tutoring programs</td>
</tr>
<tr>
<td></td>
<td>3. Use of temporary staff (New kind of professor contracts)</td>
<td>3. Use of temporary staff (New kind of professor contracts)</td>
</tr>
<tr>
<td></td>
<td>4. Recognition of prior learning</td>
<td>4. Recognition of prior learning</td>
</tr>
</tbody>
</table>

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*This table is made by the author including ideas from Green & Lamb (1999), Ling et al. (2001) and Bridges and Tory (2001).*

*Those tools presented in bold letters are the ones which have close links with the Credit System for Accumulation and Transfer, and have been treated in this paper.*

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### APPENDIX 2

**Principles of a credit culture**

<table>
<thead>
<tr>
<th>FROM</th>
<th>TO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exclusion</td>
<td>Inclusion</td>
</tr>
<tr>
<td>Teacher</td>
<td>Learner</td>
</tr>
<tr>
<td>Process</td>
<td>Outcome</td>
</tr>
<tr>
<td>Direction</td>
<td>Guidance / tutoring</td>
</tr>
<tr>
<td>Failure</td>
<td>Achievement</td>
</tr>
<tr>
<td>Margins</td>
<td>Mainstream</td>
</tr>
<tr>
<td>Professional control</td>
<td>Individual choice</td>
</tr>
<tr>
<td>Structures</td>
<td>Cultures</td>
</tr>
</tbody>
</table>

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*This table is included in Trowler (1998).*
<table>
<thead>
<tr>
<th>Form of assessment</th>
<th>1. From teacher directed assessment to negotiated assessment.</th>
<th>1. Assessment based on problem solving and team-work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Access</td>
<td>1. Fewer restrictions in entry requirements</td>
<td>1. Open entry policies to higher education</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2. Alternative entry and exit points</td>
</tr>
<tr>
<td>Ways of learning collaboration</td>
<td>1. Accommodating content and assessment preferences</td>
<td>1. National and International student mobility programs</td>
</tr>
<tr>
<td></td>
<td>2. Building national and international learning relationships</td>
<td>2. Customised industry programs – Cooperative curriculum</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3. Systems of Credits for transfer</td>
</tr>
</tbody>
</table>