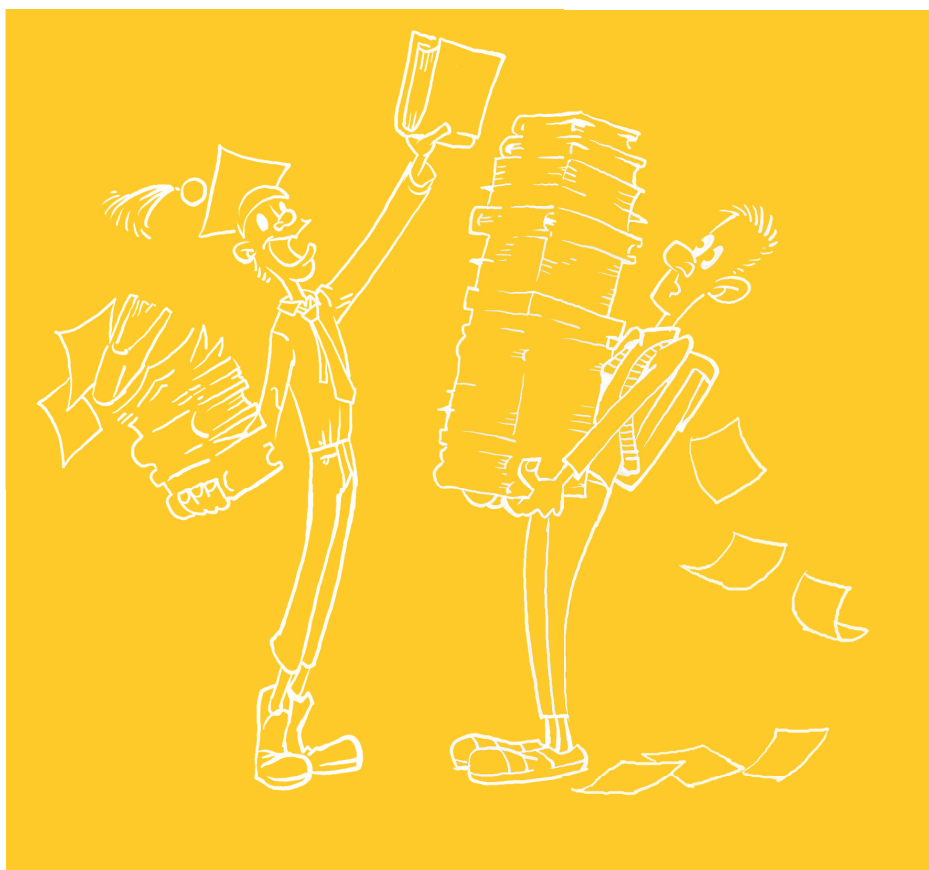# Student Centered Learning

An Insight Into Theory And Practice

Student Centered Learning

An Insight Into Theory And Practice

ABBREVIATIONS

EACEA	Education, Audiovisual and Culture Executive Agency
ECTS	European Credit Transfer and Accumulation System
EHEA	European Higher Education Area
EI	Education International
ERA	European Research Area
ESF	European Science Foundation
ESU	European Students' Union
EU	European Union
EUA	European University Association
HEI	Higher Education Institution
LLL	Lifelong Learning
LLP	Lifelong Learning Programme
OECD	Organisation for Economic Cooperation and Development
QA	Quality Assurance
SCL	Student-Centred Learning
T4SCL	Time for a New Paradigm in Education: Student Centered Learning
UNESCO	United Nations Educational Scientific and Cultural Organisation

1.   INTRODUCTION

The Bologna Process, initiated by 29 Ministers responsible for higher education in Bologna in 1999, has brought with it unprecedented reform across the European continent in terms of the huge efforts undertaken to make higher education programmes more transparent and comparable and to make higher education students and staff more mobile across the European Higher Education Area (EHEA). This has been guided by an ethos of greater transparency within higher education, with a greater emphasis on the student, encouraging higher education institutions (HEIs) and academic staff to place students at the centre of their thinking and to help them manage their expectations and be able to consciously and constructively design their learning paths throughout their higher education experience.

This has necessitated a shift from more organisational input-oriented curricular design, based on the description of course content, to outcome-based higher education. This has therefore resulted in a re-thinking of higher education course content in terms of learning outcomes; making students more aware of what skills, knowledge and competences they can expect to develop through their studies.

While the ongoing shift towards learning outcomes in higher educational course organisation across Europe is undoubtedly the fruit of the Bologna Process, student-centred learning (SCL) is a learning approach, which started to be researched and analysed long before the first Bologna Declaration of 19 June 1999 (Bologna Process, 1999) as one of the possible pedagogical approaches for higher education.

…[With] student-centred learning, students are responsible for planning the curriculum or at least they participate in the choosing. … [T]he individual is 100 percent responsible for his own behaviour, participation and learning (Brandes et al, 1986, p.12).

Student-centred learning, as the term suggests, is a method of learning or teaching that puts the learner at the centre (cf. MacHemer et al, 2007, p.9; Boyer, 1990). With the application of an SCL approach in higher education, there is necessarily a shift in focus from academic teaching staff to the learner.

This approach has many implications for the design and flexibility of curriculum, course content, and interactivity of the learning process. The fact that conventional teaching predominantly places its focus on the design, organisation and follow-through of the perspective of the academic teacher has made it difficult to determine what students see as constituting SCL, because often they have never been asked.

This study forms part of the of the project entitled Time for a New Paradigm in Education: Student Centered Learning (T4SCL), jointly led by the European Students' Union (ESU) and Education International (EI).This is an EU-funded project under the Lifelong Learning Programme (LLP) administered by the Education, Audiovisual and Culture Executive Agency (EACEA).

T4SCL, as a pioneer initiative, aims to assist policy makers in designing sound SCL strategies and approaches and to increase the capacity of student and staff organisations to be active partners in the materialisation of the paradigm shift. The project aims to provide a comprehensive insight into the necessary tools and already encountered challenges and success

stories in SCL, as a fundamental basis for lifelong learning (LLL). The project aims to provide concrete policy input during and beyond its lifetime, to ongoing discussions as to the future of the EU Education & Training Programme and the next phase of the Bologna Process.

This study is one of the first carried out as part of the above-mentioned project. Together with the results of a survey undertaken with both EI and ESU member organisations (higher education staff unions and national students' unions respectively) this study, designed as a desk research, will form the basis for future work on this project.

The desk research involved gathering already existing data from internal sources of the project applicant and partners, from publications of governmental and non-governmental institutions (including HEIs, governmental institutions and other major stakeholders in education), and other published and electronic material; in particular academic journals.

The desk research was designed as the first step in the research envisaged for this project in order to be able to set the backdrop to the topic of SCL, based on the premise that the various forms of SCL that exist are very diverse and good practice examples in the area are very heterogeneous.

Based on an analysis of the literature found, this study breaks down the concept of, and approach to, SCL into four key components:

▶ A discussion of the definition of SCL;

▶ An assessment of the conditions that need to be in place in order for an SCL approach to be implemented;

▶ A examination of the professional development and training that is required for academic staff in order to implement an SCL approach to teaching and learning; and

▶ An analysis of student perceptions to, attitudes to and experiences of, the learner-centred approach.

These four strands are reflected in the four main chapters of this study, elaborated below in Chapters 2 to 5. The conclusion then attempts to shed some light on key issues that emerge from this study and a way forward both for SCL as well as for the T4SCL project within which this study has been undertaken. ■

2. STUDENT-CENTRED LEARNING: THE NOTION AND ITS COMPONENTS

2.1 Introduction

Student-centred learning does not have one universally-agreed definition, despite it being a term often used by a number of higher education policy-makers. The lack of such a definition poses a challenge to higher education as a sector, to higher education institutions and to both academic staff and students across Europe. This must be taken into account when analysing and discussing SCL in all its possible forms and in all its relevant contexts.

In spite of the lack of definition, there is, a principle which has been agreed by all proponents and researchers of the SCL approach. This is that SCL is based on the philosophy that the student – otherwise referred to below as the learner – is at the heart of the learning process. This is a notion which underlies all attempts at applying the SCL approach. Whilst this means that the student is the focal point of the process, the role of the teacher remains paramount, particularly when one considers that students are not all the same.

Each student may require different ways of learning, researching and analysing the information available. Some students may require more support in embarking on a programme of studies that employs an SCL approach, particularly when it comes to making choices in their learning paths and in analysing the implications of any such choices. Others may already be accustomed to such an approach and need less assistance in this respect.

As a group, students represent a wide range of opinions, abilities and strengths. Whilst SCL puts students at the heart of the learning process, it is only proper recognition of this diversity that

empowers students to realise their full potential; engaging with their teachers and embarking on the learning process in the manner that will be most beneficial to them

2.2 Conventional versus Student–Centred Learning Approaches

Conventional learning (also referred to as traditional learning) tends to consider students as passive receptors of information, without consideration of the need to actively participate in the learning process. Within the conventional approach to learning, curricular design is based on low levels of student participation, as decisions in the learning process revolve around the privileged position of the academic as students' main source of knowledge. Indeed, it is a non-participatory approach, where students are rarely expected to ask questions or to challenge the theories of the academic.

Student motivation within conventional learning settings tends to take the form of competition between students, largely based on grades. The conventional approach to learning is usually based within traditional learning settings such as lecture theatres and laboratories. The academic, as the teacher, is responsible for designing the curriculum, setting tasks and formulating the assessment procedure, with the focus of learning being geared towards the next exam.

Within the conventional learning approach, the pedagogic method used is traditionally one of 'lecturing, note-taking, and memorising information for later recognition or reproduction' (MacLellan and Soden 2004, p. 254). The conventional learning approach, as defined above, has been subject to criticism in recent years, with the evolution of different

learning theories and approaches and with the application of new pedagogical methods within the higher education setting.

The *student-centred learning* approach is diametrically opposed, in its ethos, to the philosophy underlying the conventional method of learning. By its very nature, SCL allows students to shape their own learning paths and places upon them the responsibility to actively participate in making their educational process a meaningful one. By definition, the student-centred learning experience is not a passive one, as it is based on the premise that 'student passivity does not support or enhance … learning' and that it is precisely 'active learning' which helps students to learn independently (MacHemer and Crawford, 2007, p. 11).

Within SCL, students are given options in shaping their courses and in choosing particular units within their study programme. Some proponents of SCL assert that rather than devoting so much effort to teaching students what to think, SCL is based on the idea of teach them how to think' (Tsui, 2002, p. 740).

Furthermore, within SCL there is an intrinsic motivation for learning, with the emphasis being on cooperation, rather than competition, between students. As part of this approach students are given the opportunity to compare their ideas with their peers and their teachers, whilst contributing to developing their curricula in a meaningful manner. In this context, the student is encouraged to ask questions and be inquisitive and the academic is seen as a facilitator and guide, rather than as the main source of knowledge. This approach therefore changes the role of the teacher, from being entrusted with the 'transmission of knowledge to supporting and guiding self-regulated student learning' (Van Eekelen et al, 2005, p.447).

In an SCL learning environment, learning is no longer confined to lecture theatres and there is more focus on peer-review and continuous self-assessment, together with a broader perspective and openness towards lifelong learning.

2.3   The Origins of Student-Centred Learning

SCL was created as a concept within the field of educational pedagogy and has been a topic of discussion within many higher education institutions and within national policy-making fora over the past few decades. Whilst the concept of 'student-centred' learning in its most recent form is relatively new, the idea of looking at the way in which teaching is conducted and how learning processes work has spanned over almost two centuries.

Discussion of student-centred learning initially focused on changes to the pedagogical methods used and in making learning and educational processes more flexible, in order for students to participate as much as possible. The ethos behind this approach to learning in HEIs changed during the second half of the twentieth century, when theories of *constructivism* and *constructionism* gained popularity, the origins of which lie within Piagetian theory -

> *Individuals' cognitive schemes allow them to establish an orderliness and predictability in their experiential worlds. When experience does not fit with the individual's schemes, a cognitive disequilibrium results, which triggers the learning process. This disequilibrium leads to adaptation. Reflection on successful adoptive operations leads to new or modified concepts, contributing to re-equilibrium. Thus from a constructivist perspective, knowledge is not passively received from the world, from others, or from authoritative sources. Rather,*

all knowledge is created as individuals (and groups) adapt to and make sense of their experiential worlds (MacLellan et al, 2004, p. 254).

Constructivism is based on the idea that learners must construct and reconstruct knowledge, in order to learn effectively. Indeed, this is the assertion in constructionist theories -

[W]e take a view of learning as a reconstruction rather than as a transmission of knowledge (and) … extend the idea of manipulative materials to the idea that learning is most effective when part of an activity the learner experiences as constructing a meaningful product (Papert, 1986).

The methodology favoured by constructivism tends to discourage the traditional approach to learning, as outlined above. The emergence of constructivism brought with it the notion that more flexible learning paths and as outcome-based assessments of learning should be available to students. This theory was especially prominent in Anglo Saxon countries, but it did not permeate many institutions, which continued to use conventional methods of teaching.

2.4   The Development of Learning Paradigms

… [T]here has been a paradigm shift … from a focus on teaching to a focus on learning. (...) Beyond this rhetoric, possibly the most noticeable changes that can be seen ... are a greater emphasis on the development of skills, and in particular, general transferable 'life' skills (and the notion of lifelong learning), and the writing of course units and modules in terms of intended student-learning outcomes (Rust, 2002, p. 146).

The development of SCL over time is deemed to have produced a *paradigm shift* as 'the pace and extent of change [has been] … exceptional, beyond that of evolutionary or gradual change' (Nunan et al, 2000, p. 86). Nunan et al (ibid) do not perceive this to be the same kind of 'epistemological rupture that Thomas Kuhn (1962) uses to characterise scientific revolutions'. Rather, they see it as a 'shift in focus, the need for a new headset, and a set of changes of practical and political significance' (ibid). This widely-recognised paradigm shift has shown a move from 'instruction' or 'teaching' to 'producing' learning within universities (Barr et al, 1995).

This so-called *learning paradigm* has partly come about due to 'massification' of higher education, as the *instruction paradigm* came to be considered inadequate for the increase in student numbers and the greater diversity within the student body. Indeed, Jones (2006) asserts that massification of higher education is one of the three major external factors which can be considered as having had a substantial impact on 'the changing nature of academic work' (cf. ibid, pp. 317-318).

Yet this shift in paradigm has not been clearly defined in all cases. Indeed, within HEIs, tutors and students themselves are unclear as to how the SCL approach applies to their area of teaching and learning -

… [T]he nature of the knowledge and the range of institutional practices which tutors need in order to genuinely subscribe to [SCL] … are not well understood. Nor is it clear how students themselves see student-centred learning as being best supported (MacLellan et al, 2004, p.253).

The lack of understanding could be based on the misunderstanding that SCL is one notion,

to be applied in the same manner in all cases. As explained above, SCL is an approach which varies according to the type of students involved in the learning process and the type of environment in which such learning takes place, amongst other things. SCL thus needs to be tailored not only to student-types, but also to the discipline and the environment in which such learning takes place.

In spite of the variety of possible methods of implementation and application of the SCL approach, one can nonetheless identify some core aspects of SCL, which have been agreed upon in literature on this topic and which are referred to below as the *parameters* of SCL.

The first of these is *innovative teaching*, which has, as its main focus, the manner in which students are best able to learn and which promotes teaching methods which lead them to do so. This first parameter underlies the rationale of continuous professional development for teachers, which together with enough elbow room to adapt teaching methods, can achieve the desired SCL approach (Trowler et al, 2005, p.85). A recent study asserts -

> *Training can increase teachers' focus; (…) Training can improve a number of aspects of teaching as judged by students; [and, most importantly] … Training can change teachers such that their students improve their learning* (Gibbs et al, 2004, p.98).

In turn, innovative teaching is primarily geared towards enhancing students' critical thinking, thus grooming 'individuals to become independent lifelong learners' (Tsui, 2002, p.740). In its application, innovative teaching can take different forms; examples being team-learning, problem-based learning and the like, some of which are explored below -

▶ *Team Learning:* Also known as cooperative learning, this is one of many ways used to get students to be responsible for their own learning (Felder et al, 1996). This enables them to interact with course-mates, sharing their ideas and supporting each other in the way they learn.

▶ *Problem-Based Learning:* Hailed as a method of teaching which enables students to learn more effectively, this method is based on the premise that by applying the knowledge they gain early on during the course of their learning (thus not merely at exam time), students are more exposed to situations they would normally face outside of the classroom and can thus become more adaptable.

▶ *Student Self-Regulated Learning:* This method ensures that students take their own steps in order to learn, but that they 'also … take care of their own monitoring, motivation and feedback process during and after learning' (Van Eekelen et al, 2005; 451). Zimmerman (2002, p.66) presents eight skills, which are important in identifying student characteristics in self-regulated learning, namely -

1. Setting specific goals for oneself;
2. Adopting powerful strategies for attaining these goals;
3. Monitoring one's performance;
4. Restructuring one's learning environment to make it compatible with one's goals;
5. Managing one's time effectively;
6. Self-evaluating one's methods;
7. Attributing results to causation; and
8. Adapting future methods.

Whilst the onus is on the student to undertake the efforts listed above, it is unlikely to be possible for the student without having a context of student-centred learning.

Many of the above components are part of *active learning*, which refers to anything fundamentally being anything other than passively listening to a teacher. It is important

to note, however, that the call for *active learning* does not negate the need for lectures. Rather, it provides opportunities to reflect, evaluate, synthesize and communicate on or about the information presented in such lectures (cf. MacHemer et al, 2007; Fink, 2003).

In turn, *the use of learning outcomes* is identified in relevant literature as being the *second parameter of SCL*. Learning outcomes can be defined as the knowledge, skills and understanding a student would be expected to acquire as a result of the learning experience (cf. European Communities, 2009). Taking a strictly student-centred approach, learning outcomes refer to the achievements of the learner and thus do not relate to the perspective of the teacher or of the teaching process as such.

Similarly to the concept of SCL, there no strict definition of *learning outcomes*, which differ in type and detail depending on the subject-discipline and level of learning concerned. Learning outcomes may be dealt with both on a programme and unit level - these levels have different determinants, but both must, and can, be measurable. The use of learning outcomes serves to help students to manage their expectations both during and after their studies and enables them to handle their studies better. It also serves to enhance their employability, as employers can fully understand the extent to which the learning undertaken by potential employees has served to equip them with the knowledge, skills and understanding required for the job in question. In general terms, learning outcomes should -

▶ be written in the future tense;
▶ identify important learning requirements;
▶ be achievable and assessable; and
▶ use clear language be easily understandable to students.

There are then various methods of how to integrate *learning outcomes* into any given curriculum. Watson (2002), though with a specific reference to *learning outcomes* for professionals in the construction industry, identifies a number of criteria related to the integration of *learning outcomes* in a curriculum, which can be applied across various disciplines.

These are as follows -

1. The wording of a learning outcome may be modified ... relevant to a particular discipline;
2. The outcomes are independent of mode or method of delivery;
3. Providers of courses will only need to provide evidence that the outcomes have been achieved at least once during the programme of study;
4. The outcomes represent a minimum menu independent of time allocation, academic importance and worth, and frequency of achievement; and
5. A professional body may set its own standards of achievement expected for each learning outcome: for some disciplines a competency may be required; for others awareness could suffice (ibid, p.218).

While the above starts to provide some clarity on the matter, it also shows that there is still unease surrounding the use of *learning outcomes*, particularly in terms of how such learning outcomes can be clearly expressed. With the use of *learning outcomes*, the focus shifts from what the teacher is able to teach to what the achievements and level of understanding of the students are expected to be. The design of *learning outcomes* normally employs high usage of active verbs portraying what is expected to be learnt.

The use of a *system of transfer and accumulation of credits* then represents the *third parameter of SCL*. The European Credit Transfer and Accumulation (ECTS) system is a tool of this type -

> [ECTS] … *is a tool which enables students to collect credits for learning achieved through higher education. ECTS is a learner-centred system which aims to increase transparency of learning outcomes and learning processes'* (European Commission, 2010).

SCL maintains, as central components, the transferability and accumulation of credits for the purpose of admission into a higher education programme or for the continuation of one's higher education studies. This benefits students, because credits can be awarded both for a whole qualification as well as for the components of a qualification, which enables students to keep building on previous learning experiences. This parameter of SCL is closely linked to that of learning outcomes, since the design of such credits can only be meaningful if based on learning outcomes, in addition to considering students' workload. ECTS has been strongly promoted by the European Commission, which awards the *ECTS label* to those HEIs that apply ECTS to all first and second cycle higher education programmes.

Flexible curricula and learning paths represent the fourth parameter of SCL, which is in turn very closely linked to the use of a system of transferable and accumulable credits. Maintaining *flexible curricula and allowing students to determine their learning paths* empowers them to make their own decisions in constructing their learning, and also encourages them to take responsibility for their own learning. This is congruent with the notion of lifelong learning, in allowing students to build their learning path in a manner that suits their needs. This is particularly pertinent where it is only part-time, distance or evening study that

is possible for the particular student, due to the situation which they are in.

In line with this, student input on curricular design represents the final parameter of SCL identified in the literature examined for the purposes of this study. In this respect, HEIs, in promoting the use of SCL across their respective institutions, need to ensure that student input on curricula is ensured across all disciplines within the wider philosophy of the SCL approach. This will serve to enhance the relevance and usefulness of curricula in terms of the students' needs, aspirations and potential.

2.6   The Drivers of SCL

At *the European level*, SCL has increased in prominence over the past few decades. The Leuven/Louvain-la-Neuve Ministerial Communiqué (Bologna Process, 2009) attests to this -

> *European higher education also faces the major challenge and the ensuing opportunities of globalisation and accelerated technological developments with new providers, new learners and new types of learning. Student-centred learning and mobility will help students develop the competences they need in a changing labour market and will empower them to become active and responsible citizens* (ibid, p.1).

This assertion has an impact on the definition of SCL, raising the question as to whether the final aim of SCL is an educational or economic one. This needs to be juxtaposed against the experience that, unlike much change in higher education which has been initiated in a top-down manner, the rise of SCL has been due to more of a bottom-up initiative. This reinforces the idea that SCL cannot, as a notion, be enforced too

strictly and one cannot strictly prescribe the components and aspects to be included within it. Indeed, the student-centred approach to learning differs depending on the students, the teacher, the relevant department, the higher education institution and academic discipline. It also varies according the social norms and the organisation of any given society. Arguably, enforcing too rigid an idea of what SCL entails is likely to deter academics from subscribing to it, and if they do, it is likely that the manner in which it is carried through will not be beneficial to the student. Most of the components of the SCL approach have been part of the Bologna Process since its inception, including; a system of transferable credits, an outcomes-based approach to curricular design, the use of qualification frameworks and the greater involvement of students across all the higher education system. At the grass-roots there is however a 'tendency to apply [SCL methods] as procedures for pre-existing teacher-centred educational forms' (ESU, 2010, p. 99). This means that there is a need for a common broad understanding of SCL, focusing on the educational aim of SCL, in which new procedures are not mistaken for pedagogical change.

At both *national and institutional levels* there have been more general reasons driving the development of SCL, in turn shaping what is meant by the notion, within each particular context. As a number of countries have recognised the need to widen student participation in higher education, SCL has come to be viewed as more of a necessity in national policy discourse. As student groups in HEIs have become more diverse, a number of HEIs have also recognised the need for a shift from 'traditional' to 'student-centred' learning. As above-mentioned, SCL can take different forms with respect to different types of students, with each student within each group having different needs and points of view.

In turn, the lifelong learning (LLL) agenda, embedded within the Bologna Process as well as the Lisbon Strategy of the EU, has been emphasised at European, national and institutional levels. This has been a key driver of SCL, given the rise of the notion that one continues to learn throughout life, even after obtaining the highest possible tertiary education qualification. This also attests to the increasing diversity of the student group in higher education, as HEIs increasingly call back learners from all walks of life, which learners have varied educational qualifications. Whilst at the European level (cf. Bologna Process, 2009, above-quoted) one of the key drivers of SCL is the need for Europe to be globally competitive, it is also true that at the institutional level many HEIs are in stark competition with each other, as their work and quality of the student experience is compared to that in HEIs in other countries and continents. Competitor HEIs have thus also come to see SCL as a 'unique selling point'. While SCL signifies a strong pedagogical advancement and a marked improvement in higher education students' educational experience, the notion, and concomitantly, the definition of SCL is at times also marred by consumer-related forms of higher education provision, with students being seen as 'customers' in the learning process rather than the 'participants' in the learning process.

Within this context, SCL can become more 'customer-centred' rather than participatory. This is particularly so where higher education is provided at the cost of high tuition fees. Indeed, the 'ideal-type' of the paradigm of a student as a customer is diametrically opposed to the notion of a student as a constructivist learner. The student as a customer is a largely passive character who is driven by a rational-action scheme, where profit needs to return on an investment. Instead, the student as a constructivist learner needs to be intrinsically motivated by a desire to learn and be open to challenge his or her

own values and attitudes. While trends can clearly not be denied, the introduction of such customer-related concepts into SCL as a pedagogical concept threatens to mar the notion of SCL in its true form and mislead academics, students and society as to the real benefits of this progressive approach to learning

2.7   The Application of Theory in Practice

Notwithstanding the perceived paradigm shift in higher education teaching, the emergence of a number of parameters of SCL and a clear drive towards the application of the SCL approach, it remains very difficult to give a holistic definition of notion of SCL. This is due to the differing needs of students following different higher education programmes within varying cultures and contexts both within different HEIs and within different countries.

In this respect, there may be some aspects which, although perceived by some as being central to the SCL approach, may be considered to be peripheral for others, or considered unsuitable for a certain course-types. In addition to problems of definition and context, major problems have arisen in the application of the perceived shift in learning, as the 'paradigm shift towards student-centred outcomes-based approaches' (cf. Rust, 2002, p. 145) have not been widely adopted. Barr et al (1995) explain -

> [T]hey have been applied piecemeal within the structures of a dominant paradigm that rejects or distorts them. … [F]or two decades the response to calls for reform … has been an attempt to address the issues within the framework of the Instruction Paradigm. The movements thus generated have most often failed, undone by the contradictions within the traditional paradigm' (ibid, p.1).

Whilst theory had already started to assess the benefits of the *learner paradigm* at the time in which Barr et al wrote the above, the *instruction paradigm* was still being used pervasively throughout HEIs in practice. This can still be said to be the case for a large number of HEIs nowadays. While the shift in paradigm may prove difficult in practice, it can still be achieved.

2.8 Conclusion

In view of the considerations made above, it is clear that what is needed, first and foremost, is a culture shift in teaching and learning within the HEIs which still apply the instruction paradigm in order for the SCL approach to be put in place. In spite of the difficulty in defining exactly what SCL entails, it represents a learning approach which is clearly of great importance to both students and academics. SCL requires a paradigm shift at all levels, so that its definition is not merely a tick-box exercise, done solely for the purpose of fulfilling other requirements, such as quality assurance. Moving towards SCL entails both a shift in focus from what is taught to how and why it is taught, and also from thinking about teacher performance to student learning. Such a shift in looking at and defining learning not only requires a change in mindset of academics, students and management bodies in higher education, but also depends on a number of conditions which may be required for the success of the application of the SCL approach. The next chapter of this study will attempt to identify some of these.   ■

3. THE NECESSARY CONDITIONS FOR STUDENT-CENTRED LEARNING

3.1 Introduction

Stemming from developments of unprecedented reform across higher education systems in Europe, student-centred learning (SCL) is one of the defining elements, strengthening the outcome oriented approach highly advocated by the Bologna Process, which initiated such reforms in 1999 -

> *The use of the concept of learning outcomes and competences requires study programmes and its course units or modules to be student-centred/output oriented. […] The key knowledge and skills as student should acquire during the learning process should determine the content of a study programme* (Wagenaar, 2007, p.11).

Following the definitions of SCL examined in the previous chapter, it is now only natural to move on to an examination of the conditions which are necessary for SCL to be implemented within a higher education institution (HEI). When trying to identify conditions for SCL, it is more of a search of tried and tested elements and efforts which help to make SCL a success.

In examining the relevant literature, one comes across a lot of research and discussion on the conditions for SCL to occur, which seem to be most common in medical and nursing education, and which primarily addresses cognitive, pedagogic and practical aspects of implementing SCL, with an emphasis on the use of technologies and on the need for cultural change.

Within the classroom, practical implementation of an SCL approach can include a number of components; such as group project work, student-centred active learning (which does not have to be project work), problem-based learning, resource-based learning, use of the case method (particularly popular in medical and nursing fields) and case analyses, role plays, classroom workshops, group presentations, use of web-conferencing environment to enhance student discourse and interaction in distance education, and the use of learning logs for students to record their educational experience.

Yet, as shall be examined below, the concept of SCL extends far beyond the classroom. With this in mind, it is now pertinent to examine what the conditions for SCL are, with the aim of creating powerful learning environments in the philosophical, pedagogical, practical, organisational and infrastructural sense.

3.2 Organisational Development and the Power to Change

Pellert (2009) argues that in order to implement any form of change, such as that required by the Bologna Process (which, among other things, promotes new approaches to learning - cf. Bergan, 2007), organisational development is needed. Pellert defines this as -

> *[A] planned, systematic process of improvement in the social system of your organisation. It uses tools and methods from applied social sciences (especially action research) in order to trigger processes of planned social change* (Pellert, 2009, p.4).

Pellert explains that the focus of organisational development is on group and organisational processes, based on activities aimed at improving team relations, processes and performance of working groups, in which all levels affected by change are actively committed – including the

executive levels and people managers – in which self-organisation of all groups involved is critical (Pellert, 2009, p.5).

Similarly, De La Sablonnière et al (2009) discuss a normative theory of social change in order to apply a student-centred learning approach in Kyrgyzstan. They refer to the need for both students and teachers to modify their thinking and actions towards education, and via the Normative Theory of Social Change discussed by them, propose a concrete solution designed to facilitate the shift from a teaching/ expert approach, as an approach adopted by the majority, to a student-centred approach, as a minority influence (De La Sablonnière et al, 2009 , p. 630).

Both Pellert (2009) and De La Sablonnière et al (2009) discuss the need to overcome resistance to change to implementing a new approach within a higher education institution. Pellert (2009) views the issue of change as being controlled more from the top-down, thus by the management of an HEI which is trying to implement change within their respective institution. Whereas De La Sablonnière et al (2009) tackle this more as a minority vs. majority issue, where the minority does not represent management - thus in a more a bottom-up approach - and works to achieve a culture change within their respective institution in order to make the learning environment more student-centred.

Pellert (2009) refers more widely to Bologna Process reforms, and the findings from her work could prove highly suited to a focused change towards student-centred learning. With a top-down approach within HEIs, Pellert (2009) concludes that the ultimate goal should be to establish a teaching and learning model of higher education.

This must be able to fulfill the demands for critical and reflexive education within a higher education system, where the buzz-phrase 'from teaching to learning' is taken at face value. This, Pellert argues, depends to a great extent on the ability of individual HEIs to put in place and manage organisational development and change processes (Pellert, 2009, p.17).

Within such processes, Pellert highlights the following basic rules for overcoming resistance to change:
▶ The fear of what is going to happen by not opting for change must outweigh the fear of learning something new;
▶ As a constructive motivation to change, the members of the organisation (in this case HEIs) must be able to realise that the status quo is no longer successful;
▶ All information and data related to change, which may create feelings of insecurity, must be made transparent, convincing and accessible to everyone;
▶ Individuals need to understand that nothing important is going to happen at their level unless they learn something new;
▶ There is an essential need for communication, participation, support, dialogue and cooperation for the process of change to be successful;
▶ Time needs to be invested in shared decision-making, both to improve the quality of the decision as well as to reduce the resistance to the implementation of the decision;
▶ Overt resistance remains easier to handle than covert resistance (ibid.).

De La Sablonnière et al (2009), taking a bottom-up approach as explained above, examine the Kyrgyz higher education system in which the majority of educators are resistant to change. Nonetheless, they provide a solution for enabling change to happen via a minority influence, which, importantly, needs to be unified, vocal and

consistent. Thus, they argue that, as the minority which promotes that student-centred approach does not have the benefit of widespread support, any such minority needs to be acutely aware of its message compared to those favouring the traditional teacher-centred approach. They insist that such a minority needs to be determinedly vocal, unified and consistent in its arguments so as to make the majority engage in a 'validation process' in which they question and perhaps even doubt their own views.

De La Sablonnière et al admit that whilst the process of minority influence may be more difficult, when successful, it stimulates *genuine attitude and social change*; change which is not mere superficial compliance in the face of overwhelming numbers, but the genuine internalisation of change which is long-term (De La Sablonnière et al, 2009, pp. 632-633).

3.3 Working at the Institutional Level to Promote SCL

Whilst the SCL approach is a highly pedagogical matter and can and should be implemented by individual teachers in their respective classrooms, the institutional shift towards SCL, as discussed above, needs to be organised, consistent and transparent. In turn, the shift in culture towards the SCL approach needs to be promoted at all levels and in all places within an HEI, as explained by Kember (2009), who studies a comprehensive research-intensive university in Hong Kong to examine how SCL can be promoted across an entire university.

Kember (2009, pp.4-9) studies a system of promoting SCL, which includes five main components:

1. *Good Practice with Learning Activities:* When 18 academics who were awarded the Vice-Chancellor's award for exemplary teaching were interviewed in order to derive good learning practices, they gave evidence that SCL is applicable to all subject areas, including the hard sciences;

2. *Teacher Training Courses:* Teachers were trained to first discuss, then identify solutions to, problems in teaching and learning, whilst undertaking an SCL approach in their learning as well. Courses for junior teachers were also provided and specifically targeted to this group;

3. *Introducing New Innovative Learning Experiences through Projects:* By means of which active learning was promoted through the introduction of SCL forms of teaching;

4. *Progamme Evaluation by Students:* Undertaken via student evaluation questionnaires, for students to be able to give feedback on their perceptions of the development of eight capabilities and of the quality of nine facets of a holistic teaching and learning environment; and

5. *Programme Quality Review:* Whereby programme teams (made up of 4 persons, including an external examiner) produced a 'self-evaluation document, which contained sections on programme management, quality assurance, desired learning outcomes, content, learning activities, assessment and professional development of teacher', with related statements expected to be backed by evidence.

An important step after the review, in which the panel consults with teachers, students and alumni, is the drawing up of an action plan, and strategic implementation and follow-up of this action plan, monitored through annual reports. Such a review is central to the success of the SCL approach -

The outcome is an entwined ongoing process, which builds towards the climate of good practice in which there is continuous monitoring of, and reflection upon, programme design, which can evolve over time in response to changes to society, technology, student needs and higher education (Kember, 2009, p.9).

3.4   Collaboration between Teachers and Students

In turn, the role of the student is tied to that of the teacher in student-centred learning. Abel et al (2009, p.6) show how, as learning becomes less-teacher centred, teachers take on a role which is more that of a 'coach' guiding the student through the learning process, with the aim of instilling a culture of collaboration and cooperation. As part of SCL, teachers take on the role of promoting learning by lecturing less, in the traditional manner, and being more around the classroom than in front of it, signifying a shift of power for the teacher to a shared teacher-student relationship, thus creating mutual ownership of the education process (ibid).

Abel et al (ibid) contend that this cooperative relationship must ultimately be reflected in 'an assessment process which promotes mutual learning'. They argue that since students' primary learning comes from what they perceive that they will be evaluated on, sharing in the evaluation process will enhance students' ownership of the whole learning process. This leads students to have a greater sense of control over their own learning as they feel 'fully appraised of the criteria upon which the evaluation will be based' (ibid).

Within these new roles for both the teacher and the student, the key factor in implementing a new approach to learning, as well as in maintaining it, is motivation, of both teachers

and students. Greater involvement with students by the teacher is central to student *motivation*. Diekelmann et al (2004) show how a nursing teacher increasingly included students in 'co-creating compelling courses' and was surprised 'by the insights students shared regarding how to create compelling courses and their willingness to collaborate with … [her] to improve teaching and learning experiences' (Diekelmann et al, 2004, p.247).

Maclellan (2008) examines the issue of student motivation in depth as a psychological construct and finds that 'the higher-level cognitive competencies that are implied by the term, student-centred-learning, must integrate motivational constructs such as goal orientation, volition, interest and attributions into pedagogical practices (Maclellan, 2008, p.411). Maclellan finds that 'the teacher is involved in clarifying the subject matter, offering examples, or suggesting arguments for or against a point of view may minimize the students' need to think' while, equally, 'little engagement by the tutor, leaving students to determine both what and how to learn without any criteria to judge their process, is unsatisfactory, inefficient and makes a nonsense of formal, higher education as a planned and designed system (Maclellan, 2008, p.418). Maclellan finds that -

[A] judicious balance of students engaging in tasks through the stimulation of tutors (who perhaps ask detailed questions, have students present arguments, require students to analyse the cause of their problems) requires considerable sensitivity, strength of conviction to allow students regulate their motivation, and skills of negotiation since misperceptions may lead to scaffolding mismatch in instruction and negative perceptions of the interacting partners in certain learning situations (ibid).

This shows that the role of the teacher in SCL is by no means a small one. It is an ongoing endeavour, requiring a redirection of the teachers' efforts into -

> … creating a trusting classroom culture which promotes: (1) cooperative learning; (2) authentic learning; and (3) meaningful assessment of the learning process (2009, p.6)

This is a hefty task and often requires a shift in mentality and culture with respect to the teachers' approach to student learning, particularly where the teacher-centred approach is ingrained into the system of their HEI.

3.5 The Function of Professional Development of Academic Staff

For teachers in higher education, a shift towards an SCL approach, and maintaining this approach over time, is by no means a simple task. Where teachers are used to working in a teacher-centred environment, at the first stage it is difficult for them, as well as for students, 'to challenge their taken-for-granted assumptions' (cf. Diekelmann et al, 2004; Heise et al, 2010). The SCL approach involves an ongoing reflexive process for teachers, in which they are engaged in 'thinking about their thinking', in order to improve their conventional pedagogy and delineating how they teach (Diekelmann et al, 2004, p.245).

Lavoie et al (2007) show how both the shift to the student-centred approach as well as the ongoing development of such an approach within higher education institutions is largely determined by professional development of higher education teaching staff -

> [F]aculty who are motivated and supported can achieve teaching excellence. Yet, most do not have the guidance to enable them to

use the concepts of active student-centred learning and information literacy in their own development or in course development, which could further improve their teaching (Lavoie et al, 2007 , p.105).

As shall be examined in more detail in the subsequent chapter of this study, professional development models put forward by Lavoie et al (2007) and Kember (2009) use student-centred learning approaches in and of themselves, in order to train teachers in higher education towards the adoption of this approach. The philosophy and methods used in student-centred learning feature as a key aspect of the learning process for teaching staff, who, in this manner of learning by doing, are encouraged to develop their own SCL approaches, to be used in their own instruction.

As both Lavoie et al (2007) and Kember (2009) contend, such programmes of professional development for teaching staff are of key importance in leading to the application of an SCL approach, and are to be used both with new teachers and with teachers who are more experienced, thus reinforcing the idea that SCL is an approach which requires continuous, change, effort, reflection and updating.

3.6 The Role of Information Technology, Libraries and Information Systems

As methods of teaching and learning develop over time, so do the ways in which knowledge is imparted and the tools that students use to learn. This is attested in the rise of online distance-learning education and in the everyday day use of computers, internet and online interactive spaces in teaching and learning as well as in the advanced information management systems that a large number of HEIs employ.

Arko-Cobbah (2004, p.267) refers to the central role of ICT as a 'central component of the learning process, especially when it comes to SCL'. He refers to the advantages of e-mail (electronic mail) in enhancing SCL as an active rather than a passive medium, allowing for a combination of distance and on-campus learning in flexible mixtures and helping to build user feedback, staff monitoring and course revision in the process of running the course. He also refers to the advantages of internet in that -

> *The internet … enables education to occur in places where it normally does not, extends resources (information) where there are few, expands the learning day and opens the learning place as it connects place as it connects people, communities, and resources to support learning. Through the use of graphics, sound, video and other forms of interaction, it gives teachers and students alike multiple paths for understanding* (ibid).

Lu et al (2005) show how 'wireless internet has a positive and significant influence on student-centred learning in three dimensions: pedagogical, technological and cultural learning' (Lu et al, 2005,, p.530) as a step further to normal wired internet.

Pedagogically Lu et al (ibid)show how 'wireless internet improves collaboration and communication among classmates and teachers and make[s] class more active and interesting; technologically, they find that it can provide enhanced access to online resources; and culturally, they show that it 'helps students find information from a variety of sources, adapt[ing] to their personal learning styles and support[ing] critical thinking'.

Arko-Cobbah (2004, p.267) refers to the need to create the infrastructure necessary for students to engage in some form of interaction with teachers, study groups and librarians, in order to lead to the mastery of subject content. This infrastructure includes all forms of media, whether digitised, print or multimedia. Technology therefore can be of use *both inside*, to help teachers in creating an interactive classroom environment, *as well as outside* the classroom, in order to enhance students' learning processes and complement what is learnt in a classroom setting. This can empower students to access information and analyse it critically in their own time and space. It can also prove to be a highly useful component in designing professional development programmes, as proposed by Lavoie et al (2007).

In the literature examined for the purposes of this research, it is the out-of-classroom setting which takes front and centre stage in discussions about the use of technology in enhancing student-centred learning. This is because, whilst SCL within the classroom can take a number of different practical forms - which may or may not include the use of modern technologies - the continuing process of SCL outside the classroom setting is largely dependent on the use of such technologies.

Pinto et al (2008) examine the concept of 'information literacy' via the use of information technologies, as a measure to 'enable learners to master content and extend their investigation, become more self-directed, and assume greater control over their own learning (Pinto et al, 2008, p.53). Such information literacy technologies may take the form of e-portals via which access to information is made easier (Pinto et al, 2008, p.70).

Stoffle et al (2010) examine the case of a 'University Libraries Information Commons', which cuts across university libraries in the University of Arizona (US) in which 'technology,

content, and services converge in a dynamic and integrative environment that is unique among all other spaces on campus' (Stoffle et al, 2010, p.117). The mission of the Information Commons is 'to create an inviting out-of-classroom environment for active learning, growth and enrichment through student-focused research assistance, outreach to all students and innovative instructional services …[which] enables students to work at their own pace (Stoffle et al, 2010, pp.117-118). The underlying characteristic of the Information Commons is that it is the technology-rich environment which, in practice, serves as a physical space for student collaboration, discovery and innovation to support the learning that takes place inside the classroom. In addition, it also offers a number of virtual services by making assistance, courses and resources available online and at all times.

What is important to note, in this particular case, is that such a system is employed within the University of Arizona, which dates back to 1885, and which has thus, over time, had to adapt both its teaching style and tools, as well as the technologies which support learning. Stoffle et al (2010) find that this particular use of technology, within the wider approach to student-centred learning also helps to improve the retention rate of students at the University, attesting to the idea that students consider an SCL approach to be more worth their while.

The above leads us to consider the crucial role of libraries in SCL, as the main place where information is kept, accessed and disseminated. In this respect, much of the literature examined moves away from the traditional concept of a library, where writings are accessed in hard copy at the place in which they are kept -

Libraries are … expected to adapt to changes that catapult them into a central role within the teaching and learning environment or to be further removed from the institutional centre. […] Librarians are expected to play various roles in furthering the aims of SCL (Arko-Cobbah, 2004, p.268).

Arko-Cobbah (2004, pp.268-269) clearly defines the role of libraries and librarians, which, via the use of technology are central to the process of SCL in four key areas, as follows:

▶ *Providing Information Resources:* In such a way that the library's traditional role of selection, organisation, storage and retrieval of information becomes more crucial as such information needs to be made retrievable in off-campus sites;

▶ *Fostering Partnerships and Collaboration:* In such a way that librarians collaborate more with personnel from other departments within an HEI, including members of faculty involved in planning curricula and lessons as well as the staff employed to deliver the computing services of their HEI. This is in order for them to help teaching staff in using technology in innovative ways across the curriculum, to select appropriate technology resources and to collaborate with the learning community to plan, design, implement and continually refine an effective student-centred technology plan. This is also to help students evaluate the sources available to them and to help computing staff to understand students' needs in the design and implementation of ICT-based student-support systems.

▶ *Developing Students' Information Literacy Skills together with Members of Teaching Staff:* In order to ensure that students know when they need information, identify the information relevant to addressing their problem, find, evaluate, organise and use the information effectively in addressing the problem they are faced with. For this purpose, librarians themselves need to 'be equipped with the skills to deal with people's needs and technological usage in order to maintain the […] principle of

equal access to information; and

▶ *Developing Outreach Programmes:* In order to ensure that information can be accessed outside the physical walls of the library building, in order to accommodate varied student and teacher needs.

Modern technologies therefore have to be manipulated and used intelligently not only by teachers but also by librarians and all staff connected to the students' learning environment in such a way so at to provide multiple places and spaces for learning for students, with the highest possible degree of access to information and of interaction with others.

3.7   Conclusion

While the conditions mentioned focus highly on the institutional and pedagogical levels, promoting and maintain a change toward SCL environments also depends highly on the context in which HEIs operate. Thus, De La Sablonnière et al (2009) argue that beyond the walls of HEIs, any reform instigated by the minority to move towards an SCL approach needs to be supported by the organisations of its country - political, educational, economic or social - in order for them to create a reform-minded community. Within this context they stress that Ministries of education need to take a leadership role by emphasising a unified philosophy of education, which is student-centred, with a view to solidifying a well-defined policy of SCL (De La Sablonnière et al, 2009, p. 633).

Thus it is important to realise, that as a necessary condition, in any context and in any continental, historical or geographical setting, national policy is key. Further, any reform process, whether initiated by management of HEIs, or by minority groups within them, needs to involve a nationally articulated policy along the same lines, in order to ensure the success of a student-centred approach. With this in mind, De La Sablonnière et al (2009) caution that any student-centred approach needs to be clearly and simply articulated, and mechanisms need to be in place to allow for every stakeholder in the education process to be fully informed about the processes arising from educational reform. Thus, HEIs need to develop, in line with a national policy and wider reform-mindedness, a common identity and a sense of belonging to the wider reform-minded community (De La Sablonnière et al, 2009, p.633), if the application of the student-centred approach as opposed to the teacher-centred one, is to be applied with any measure of success. ■

4.   PROFESSIONAL DEVELOPMENT IN ACADEMIA

4.1   Introduction

As above-mentioned, the Bologna Process clearly manifests the need for a shift towards the student-centred learning (SCL) approach, otherwise referred to in Chapter 2 as the *learning paradigm*. In the discussion on the necessary conditions for SCL in Chapter 3 shows that such a change needs to be translated into a change in attitude of both teachers and students in higher education. Since academics comprise the more constant component within the higher education community, they are therefore as a matter of course the first group in which individual attitudes need to be addressed. This is increasingly so, as the move to an SCL approach entails, as discussed in both previous chapters, a shift from a teacher-centred to a student-centred approach.

As teachers have been the main focus in *conventional learning approaches*, it is with them that the responsibility for a shift towards the SCL starts, as the main group responsible for fostering a learner-centred approach within their respective higher education institutions (HEIs). Therefore any discussion of the SCL approach translates quite naturally into the area of the professional development of academic staff.

Professional development in higher education is of a distinct nature, particularly when considered in light of the SCL approach, as it reverts to an examination of the fundamental values that inspire the higher education community and may challenge traditional hierarchies in HEIs. In a way, this takes us back to the roots of the European university, where students represented the very essence of the university. The universities of Bologna and Sorbonne, the oldest universities in Europe, were founded by students, who engaged teachers to help prepare them for the higher-level professions.

At the start of the industrial revolution, Humboldt then returned to these roots by introducing the notion of *academic freedom* as a fundamental value of the university, applicable to the academic community as a whole. The university was based on lernfreiheit, constituting academic freedom for researchers, while *lehrfreiheit* extended the same principle to students (cf. Altbach, 2001; Commager, 1963). Even though these concepts remain visible in present-day debates about the history of the university, the two concepts of *lehrfreiheit* and *lernfreiheit* seem to have entirely lost their value in daily relations between teachers and students. Yet, as argued above, the shift to SCL requires a positive and rather fundamental change in the relation between students and teachers.

This chapter represents an attempt to reconnect academic freedom and student freedom in a discussion on professional academic development, on the basis of an examination of whether higher education staff are adequately trained and prepared for teaching in the manner required by the *learning* paradigm. Under this main heading, the following sections will, in turn, examine how the Bologna Process stimulates professional academic development; what the contextual restraints are for professional academic development; how professional academic development can be connected with academic freedom; and how professional academic development is organised.

4.2 The Bologna Process and the Need for Enhanced Professional Academic Development

The Bologna Process is an obvious starting point for a discussion on reconfigured teaching in Europe's HEIs. The European University Association (EUA) reports that 46 percent of curricula across HEIs registered as EUA members have been revised as a consequence of Bologna (Sursock et al, 2010). For this very reason, Clement et al (2004) examine in depth the opportunities and challenges that the Bologna Process presents for academic development.

The Bologna Process promotes practical elements which highlight the central role of academic development. As discussed above, these include the use of learning outcomes, the promotion of increased student participation and the setting up of quality assurance (QA) structures and practices. Taken at face value, these ought to lead to changes in both the structure of curricula, as well as in their underlying philosophy. *Structural change* is envisaged to come about through the implementation of the practical tools of the Bologna Process, such as the three-cycle system and the European Credit Transfer and Accumulation System (ECTS). A more continuous *change in philosophy* is then assumed to result from the involvement of students in curriculum development, and via a consistent process of assurance and improvement of quality. The promise of a change in philosophy is most present in the idea of a shift from a focus on teaching to a focus on learning. Whilst this is connected to structural changes, such as the introduction of learning outcomes in curriculum design, practice shows that this is not easy to achieve.

Looking at the Bologna Process from a critical angle makes the positive change envisaged by the Process a little less obvious. Too often, the Bologna tools have been used as bureaucratic measures rather than as instruments which lead to substantial changes (Geven et al, 2008). Governments have been persistently criticised by the European Students' Union (ESU) (cf. ESU, 2010) and other stakeholders (cf. Sursock et al, 2010; EI, 2010) for merely drafting legislation related to Bologna reforms and ticking boxes in the manner of a Bologna checklist, without having stimulated actual reflection and substantiated change in HEIs. This results in shallow modification on the surface, instead of the change actually envisaged by the Process.

Equally, stakeholders challenge the use of certain Bologna tools where they produce an effect directly opposed to the purpose for which they were originally intended. QA is a case in point, as this can actually inhibit creativity and innovation (cf. EUA, 2009), particularly when the focus is on accreditation, rather than genuine improvement in the quality of higher education programmes. This may harm academic freedom, add a bureaucratic burden and in some cases run counter to the academic improvement processes (cf. Harvey, 2004).

The implementation of Bologna reforms clearly needs to include measures of academic development if it is to be successful. Teachers in higher education need support, if a meaningful shift in teaching practices is to take place. Paradoxically however, even the tools which may appear promising for the introduction of the SCL approach in HEIs may inhibit the required shift to the *learning paradigm*. It is therefore necessary to take a deeper look at the realities within HEIs in which the relevant policies are to take root.

4.3 Contextual Issues for Academic Professional Development in Europe

This study cannot attempt to describe the extent of the change that the Bologna Process has stimulated across Europe. However it attempts to identify some contextual challenges for academic professional development, in the setting up of the European Higher Education Area (EHEA) envisaged by the Process. These should be a concern to policymakers at the European level, as the implementation of the Process currently hinges on a number of challenges for academic staff (cf. EUA, 2009, pp. 48-49; EI, 2010). Three main challenges can be identified in this respect. These are elaborated below.

The first of these challenges is the *deteriorating conditions of academic work*. Academics perceive an increase in their general workload and particularly in their bureaucratic tasks, while their job security has gradually eroded (cf. EI, 2010). In OECD countries, one of the main reasons for the increase in bureaucratic tasks has been the massification of higher education, which was not accompanied by an increase in teaching staff (Santiago et al, 2008, p.141), or with increased investment in higher education. Researchers have also been concerned about the attractiveness of an academic career in Europe (cf. Huisman et al, 2002) since the very beginning of the Process, adding more weight to the problem.

Linked to this is the second challenge, which is the *great diversity in academic career paths across Europe*. Comparative studies undertaken across a number of European countries (cf. Musselin, 2004) find that academic labour markets are still mostly nationally organised. In addition, young academics only tend to use mobility opportunities to improve their chances of promotion in their home country, making foreign academic careers an exception to the rule. For researchers, despite developments in the European Research Area (ERA), there is still an 'extreme heterogeneity of career steps and confusion of terminology' (ESF, 2010). It is only recently that the Bologna Process has become aware of the challenges of academic career. Ten years after the start of the Process, the Leuven/Louivaine-La-Neive Communiqué adopted at the 2009 Bologna Process Ministerial meeting provides -

> Attractive working conditions and career paths as well as open international recruitment are necessary to attract highly qualified teachers and researchers to higher education institutions. Considering that teachers are key players, career structures should be adapted to facilitate mobility of teachers, early stage researchers and other staff .... (Bologna Process, 2009, §20).

The third challenge is the *loss of control of academics over academic issues*, which is a problem that has become more evident over recent years. Other reforms implemented in parallel to the Bologna Process have aimed at transforming HEIs into more business-like structures. Altbach (2001, p.216) criticises this trend towards 'managerialism' in HEIs at the international level and contends that professors no longer remain in charge of curricula, of their classroom and of the selection of research topics, resulting in a serious loss of academic freedom.

EI (cf. EI, 2009), which analyses the status of the teaching profession triennially, has consistently reported, over the past decade, erosion of academic freedom across the globe, including in Europe.

If professional development is to take root in academic communities around Europe, these challenges need to be kept in mind. As the wave

of reforms in higher education has put pressure on the academic profession, the time and energy available for academics to develop new skills or upgrade existing ones may be limited. Any kind of European policy will also have to take into account the vast differences in the status of the academic career across the different countries. Furthermore, in the context of declining academic freedom, an approach has to be sought which reaffirms the professional standing of the academic. Indeed, where societies expect academics to deliver high quality teaching, teachers should be given a position in which they have full responsibility for their work.

4.4 Professional Development and the Research-Teaching Nexus

As HEIs in Europe undertake efforts to change their teaching practices, this places new demands on academics, who have to make the shift from *teaching* to *learning* possible. One may obviously ask whether, in the current everyday reality in HEIs, academics are adequately trained to coach their students in such a way so as to foster the *learning paradigm*. It also needs to be considered how this shift in pedagogy relates to other professional work, most notably research, which is usually attributed a higher value than teaching in academic work. This section tries to position the notion of professional development in higher education within the debate on teaching and research. Below, the notion of *scholarship of teaching* is introduced as a way to avoid the tension between teaching and research in higher education.

The *classical paradox* underlying most debates on academic development is that academics are formally trained to carry out research, but not to teach. The academic career structure is based on the principle that a young academic progresses by persistently striving for higher levels of

research prestige. The lack of teacher training is explained by the Humboldtian idea that teaching and research are intimately connected. Good researchers would develop their teaching skills automatically, whilst carrying out good research, as they should be good learners, be able to structure knowledge and be able to communicate findings.

Over the past century, the teaching-research nexus has remained a core value of the academic community, as it is maintained in the *Magna Charta Universitatum* (cf. Magna Charta Observatory, 1988). It is also a basic principle of the Bologna Process. This notwithstanding, from the much of the literature which addresses the issue, it seems that the classical paradox still gives rise to plenty of debate. A number of attempts have been made to either resolve (cf. Leslie, 2002) or summarise (cf. Jenkins, 2004) this debate.

Basing his research findings on an extensive survey of academic personnel in the United States, Leslie (2002) finds that academics value teaching equally to research, even so strongly that the importance which they give to teaching may override the value of rewards associated with research, such as better salaries and status as the academic career structure rewards research and publication more than teaching.

Taking a different approach, Jenkins (2004) identifies a way out of the paradox, referred to as the *scholarship of teaching*, as a more academic approach, which could be taken to investigate the links between teaching and research. The idea was originally developed by Ernest Boyer (1990) during his time as President of the *Carnegie Association for the Advancement of Teaching*. Boyer tried to define *scholarship* as being broader than just research, thus comprising 'the scholarship of discovery, the scholarship of integration, the scholarship of application and the scholarship of teaching' (Boyer, 1990,

p.16)'. This represents a clear attempt to interest academics in the quality of *teaching* as such, from an academic, rather than a technocratic, perspective. The introduction of this concept has sparked much debate ever since.

Recently, more advanced theories have emerged on the scholarship of teaching. Kreber et al (2000) define three perspectives of this concept, based on a historical analysis of the debate. The first of these identifies scholarship of teaching as merely a more *scholarly approach to teaching and learning* practices in HEIs, by researching and publishing on the issue. Kreber et al (ibid) provide the approach taken by Boyer (cf. 2000) as an example of this, as a researcher about the status of the teaching profession from a general point of view.

The *second perspective* identified by Kreber et al (2000) relates *to excellence in teaching*. In this respect, it is associated with the use of teaching awards and an analysis of exemplary teaching. The strategy within this perspective is simply to learn from the best teachers by using practical experience. Qualitative research into the practices of excellent teachers, by Hativa et al (2001) provides an example of this second perspective. Hativa et al (ibid) derive four dimensions of excellent teaching from the relevant literature: lesson organisation; lesson clarity; making lessons interesting or engaging; and classroom climate. Upon analysing of strategies of excellent teachers, they learn that each teacher employs some of these dimensions, but rarely all.

A *third perspective* of the scholarship of teaching (Kreber et al, 2000) is based on *the application of knowledge from the specific discipline of educational science to teaching and learning practices.* Kreber et al (ibid) contend that this perspective includes knowledge on how academics actually learn about educational

practices, hence making it useful for professional development. Accordingly, the authors propose a model of faculty learning on three levels of reflection: content reflection; process reflection; and premise reflection.

At first glance, the notion of the *scholarship of teaching* perfectly fits the SCL approach. Where the connection between research and teaching is strong, students can expect to be involved in interesting projects, and be taught in the spirit of scholarship. Jenkins (2004) finds that students generally have a positive attitude towards being more involved in the research projects undertaken by their teachers. As students become more engaged in the activities of the professor, they feel closer to the academic community and are more motivated in their studies.

The debate on changing the teaching practices of academics unavoidably results in a debate on the relation between teaching and research. Fundamentally, the academic profession is based on research and the teaching that derives from it. In practical terms, this means that professional academic development must take research into account.

Indeed, academics can only be convinced to change their practices if what is being proposed to them by way of reform is backed up by proper research (cf. Grant et al, 2009). Thus, *scholarship of teaching*, as an academic interpretation of the debate on teaching practices, is a significant step forward in the quest to understand professional academic development.

4.5   The Organisation of Professional Academic Development

The work of any professional in any given HEI has changed fundamentally over the past two decades. Aside from reforms such as the

Bologna Process, the processes of globalisation, technological change and the shift towards a service economy have directly influenced the daily life of the academic. Against this background of ongoing change, professional academic development would seem to be a necessity. Nevertheless, while most agree on the need for a framework for such a policy, there is still substantial disagreement about its principles. This section therefore looks at the debate on the organisation of professional academic development and ways in which the values of the academic community can be combined with the practice of professional development.

The varied positions on professional academic development can be classified on an axis, of which the poles are defined by who is responsible. At one end of the spectrum, professional development is seen as a *matter of national and HEI policies*, a stance put forward by the Organisation for Economic Cooperation and Development (OECD). This is associated with more flexible, and thus less secure, arrangements for staff, and sometimes with compulsory obligation on academic staff to undertake compulsory courses in teaching or specific to obtain specific certification in teaching.

At the other end of the spectrum, the responsibility for professional development is seen to lie more with *academics themselves*, which in a more rights-based approach, integrates within it the notion of academic freedom. This approach is more associated with the UNESCO *Recommendation concerning the Status of Higher Education Teaching Personnel* (UNESCO, 1997).

The OECD (cf. Santiago et al, 2008, p.171) finds that systematic professional development is not common in academia. As states actively try to find ways to organise professional

development in a more structured way, the usual recipe currently employed is a mix of periodical sabbatical leave and the creation of initiatives to improve the academics' pedagogical skills. Methods employed vary from one country to another.

In Sweden (cf. Askling, 2001) for instance, university teachers have a general right to get professional development and to have specific time in their work hours allocated for research. All junior and senior lecturers with permanent positions in Sweden must have some basic pedagogical training. In France (cf. Chevaillier, 2001), although there is no institutionalised form of teacher evaluation in higher education, there are training programmes which serve to help academics on a voluntary basis. In the United Kingdom, the *Higher Education Academy* (HEA) was set up in 2004 to enhance teaching and learning. Among other initiatives, the HEA has published its *Professional Standards Framework* (cf. Higher Education Academy, 2005) which outlines a set of progressively higher standards for the teaching profession, to which individual teachers can peg themselves.

In turn, the OECD (Santiago et al, 2008, pp.179-180) recommends a number of ways in to structure professional development. These include -

▶ Agreements which stipulate that academics are entitled to certain amount of time and, or, financial support to undertake recognised professional development activities;

▶ The option of linking professional development activities to needs identified via teacher appraisal;

▶ Participation by academics in professional development activities as a requirement for an increase in salary for promotion;

▶ Establishing quality or training departments which serve to link professional development of

individual academics to their respective HEIs' strategy and internal quality reviews; and

▶ Making opportunities available to academic, throughout their careers, for them to be able to gain experience outside academia through sabbatical leave, extended leave without pay, and job exchanges with industry.

There seems to be some evidence that an approach which is *excessively focused on national policy* will encounter problems at the stage of implementation. In an evaluation of state policies in the USA, Colbeck (2002) finds that policy makers 'don't pay enough attention to the systems in which teaching and learning occurs' Colbeck (ibid) finds that no policy considered the full spectrum of professional demands on academics, which rendered such policies minimally effective in changing actual practices.

Trowler et al (2005) put forward a popular example of policy that should be subject to careful scrutiny, this being *compulsory training for lecturers*. Taking a critical view, Trowler et al (ibid) find that these policies can only work if they are prioritised, properly resourced and if measures are taken to 'develop a hospitable environment for it both structurally and culturally'.

In turn, Knight et al (2000) find that there are several risks with a notion of professional academic development that is too focused on institutions and policies. This could lead to a situation in which teachers report an increased workload, and a rise in managerialism to the detriment of collegiality. Hence, a collegial approach is needed, which attempts to find a solution in the restrained structure of the academics' working environment.

Academic freedom seems to be a particular concern for many aspects of professional academic development. This should be an issue of concern to stakeholders as to policy-makers. With this in mind, the UNESCO *Recommendation concerning the Status of Higher Education Teaching Personnel* (UNESCO, 1997) takes quite a different approach to professional academic development, in which appraisal is taken to be an integral part of the teaching, learning and research process as a right for academics -

Higher education institutions should ensure that:

▶ *Evaluation and assessment of the work of higher-education teaching personnel are an integral part of the teaching, learning and research process, and that their major function is the development of individuals in accordance with their interests and capacities;*

▶ *Evaluation is based only on academic criteria of competence in research, teaching and other academic or professional duties as interpreted by academic peers;*

▶ *Evaluation procedures take due account of the difficulty inherent in measuring personal capacity, which seldom manifests itself in a constant and unfluctuating manner;*

▶ *Where evaluation involves any kind of direct assessment of the work of higher-education teaching personnel, by students and/or fellow colleagues and/or administrators, such assessment is objective and the criteria and the results are made known to the individual(s) concerned;*

▶ *The results of appraisal of higher-education teaching personnel are also taken into account when establishing the staffing of the institution and considering the renewal of employment; and*

▶ *Higher-education teaching personnel have the right to appeal to an impartial body against assessments which they deem to be unjustified (UNESCO, 1997, §47).*

The UNESCO Recommendation (ibid) thus adopts a more scholarly approach to academic development. This is not surprising, as the instrument aims to combine the values of academic freedom and university autonomy, with the reality faced by teaching staff in HEIs. Indeed, this interpretation seems quite well adapted to the notion of *scholarship of teaching* described above. In this respect, the nature of any evaluation of higher education teaching staff, and its follow-up, is a matter of key importance. When any such evaluation is based on academic criteria and is carried out by peers, there is a greater possibility that such an evaluation be rooted in mutual scholarly understanding. For instance, mentoring circles, in which staff work together to achieve better teaching, represents an innovative and effective option that fits within these principles (cf. Darwin et al, 2009).

As states actively look for policies to improve teaching and learning, the debate on this issue is ever more present. It is however not yet entirely clear how the principle of academic freedom can find its way into effective policy on professional academic development. In this context, the dialectic between state and institutional policy and professional autonomy or academic freedom needs to be resolved in a constructive way. The OECD calls for an interpretation of academic freedom that 'has to be framed within institution's obligation to society' (Santiago et al, 2008, p. 176). However, as the academic profession seems skeptical of embracing such a re-interpretation of this concept, it may be more effective to outline policies in which academic freedom is treated as a fundamental value fitting to the EHEA.

4.6   Examples of Professional Development in Practice

When referring to the shift from *the teaching to the learning paradigm* as a matter of a shift in pedagogy, it is also interesting to examine examples of professional academic development undertaken within HEIs, in order to foster such a shift from the teacher-centred to the student-centred approach.

Lavoie et al (2007) examine a faculty development model that uses an interactive SCL approach to teach faculty, who become students in this process, how to design courses that promote active SCL and information literacy in the classes that they teach. The faculty development model they examine encourages teaching staff in higher education to use technology in a relevant rather than a random manner, to work towards 'effective student-centred learning over efficient teaching', to ground information literacy contextually rather than to offer general bibliographic instruction and to use 'inclusive multiple styles of learning over exclusive pedagogy' (Lavoie et al, 2007, 106). On the basis of the success of this model, they conclude that:

> [F]aculty development should (1) be included as an *important part of the scholarship of teaching* and (2) parallel the active student-centred learning approach used for students to enable lifelong learning among faculty as well (Lavoie et al, 2007, p.105).

On the basis of the model examined by them, they also stress the importance that individual members of teaching staff in higher education are not only given the opportunity to develop their own approaches to learning in their respective courses, but also have the opportunity to provide constructive criticism to their peers and share common experiences in a dialogue as a community of scholars (Lavoie et al, 2007, p.115).

Similary, Kember (2009), in examining the promotion of SCL across an entire university, stresses the issue of professional development of teaching staff as a key component in process of transformation from the teacher-centred to the student-centred learning paradigm. He refers to teacher training courses in which participants are asked to identify problems they have encountered in their teaching, which are then discussed in order to identify potential strategies to overcome such problems. The model for faculty development put forward by Kember also incorporates a group project 'which allows participants to try out and experience forms of interactive teaching in a support environment (Kember, 2009, pp.4-5). As discussed in Chapter 3, it is particularly significant that, in a manner of *learning by doing*, professional academic development programmes targeted specifically to introducing the SCL approach within any given HEI, uses SCL methods to help teachers learn about the manner in which they could teach, given this new pedagogical approach. This method of professional development respects the academic freedom of such teachers to critically evaluate which practical mode of teaching would be better, within a re-formulated philosophy of the purpose and construction of the teaching and learning process. This mirrors the freedom, and the concomitant responsibility of any student engaged in a learning process which is student-centred.

4.7   Conclusion

The value of academic freedom is a constitutive notion for the debate on SCL, as it traditionally includes the student freedoms of lerhfreiheit and lernfreiheit. On a practical level, it means that any plans for professional development will have to take the specific nature of the academic profession into account.

As seen above, the *scholarship of teaching* is a notion that connects professional development with the nature of the academic profession by providing a scholarly approach to the issue of teaching, which should appeal directly to teachers and researchers. Moreover, it is well-suited to the concept of SCL, on the premise that if research becomes more prominent in the classroom, students become more motivated and perform better. Any successful SCL approach hinges on how academics perceive the *learning paradigm* to work in practice. As with students, the motivation of academics is key for the SCL approach to be successful within an HEI. Academics will prove more enthusiastic in developing this approach if assured of their professional standing and academic freedom. If, on the other hand, such fundamental values come to be treated as no longer applicable within the context of the present-day HEI, the student freedoms put forward in the SCL approach will fade to become into an empty promise in the Europe of rhetoric. ∎

5. STUDENTS AND THE LEARNER-CENTRED APPROACH

5.1 Introduction

Student-Centered Learning (SCL) approaches are typically implemented in higher education institutions (HEIs) by means of strategic top-down initiative, where the quality of this implementation, the support available to both academics and students, as well as consultation, play a role in determining the success of such a shift from teaching to learning. Nonetheless, the peculiar aspect of SCL is that it is an institutional initiative to put the *onus of learning on students*. For HEIs, the shift to an SCL approach fundamentally questions the philosophy of the organisation of educational programmes and the pedagogy that goes along with it. It produces a series of fundamental shifts in HEIs; from academics' productivity to student productivity; from academics' disciplinary interests to student interest; from academic teaching styles to student learning styles and from classroom teaching to student learning (cf. Guskin, 1994).

As seen in Chapter 2 above, the idea that learners construct their knowledge better when they are actively taking part in its construction became increasingly popular in the second half of the twentieth century, forming the basis for SCL. Theories such as *constructivism* and *constructionism* brought a new perspective on epistemology in numerous HEIs, often in those that typically focused on sciences as a field of study.

> *From constructivist theories of psychology we take a view of learning as a reconstruction rather than as a transmission of knowledge. Then we extend the idea of manipulative materials to the idea that learning is most effective when part of an activity the learner experiences as constructing a meaningful product* (Papert, 1989).

One can thus conclude that the rationale behind SCL is to give students a feeling of meaningful responsibility for their studies. As the main beneficiaries of the shift to an SCL approach, students' perceptions of such an approach and of the perceived shift from the *teaching to the learning* paradigm is of key importance in any discussion on SCL. The way in which students react to such a paradigm shift and their perception of the benefits it offers and to their studies generally, varies depending on numerous factors. These factors include previous experience with a learner-focused approach; the skills of the student-centred teacher in higher education; the subject-discipline and the content of the relevant higher education programme; and personal preference, needs and capabilities, among others.

The SCL approach has given rise to student reactions that have, to date, been both positive and negative, though the situation depends largely on the above-mentioned factors and on the particular aspects of what might be defined as a learner-centered education when implemented in practice. It is pertinent to note that the transition from a teacher-centred to a learner-centred approach is often correlated with other side-measures that may contribute to the popularity, or otherwise, of the new learning style.

Against this background, in view of the definition of, and conditions for, SCL put forward in the Chapters 2 and 3 of this study and in view of the appreciation of the need for academic professional development outlined in the previous chapter, this chapter now attempts to focus the SCL debate on the *student* as such. In this respect the sections below examine the impact of SCL on student learning and provide

a more in-depth look at student perceptions of the SCL approach. The chapter then looks at how SCL can become an acceptable reality in students' educational experience and the defining role of students within the SCL approach.

5.2   SCL and its Impact on Student Learning

As discussed in the previous chapters of this study, SCL has often been seen as a tool to change the purpose of education, by shifting its scope or by improving the way in which students develop soft and transversal competences, such as the ability to apply critical thinking or team-building skills, among others.

These cannot be *taught* in a traditional fashion. Now that the importance of developing such skills and competences is increasingly acknowledged, they are proving to be the motor of the paradigm shift in HEIs. For instance, the drive to foster increased critical thinking among higher education students is a key aspect that *conventional learning* traditionally applied in HEIs is incapable of addressing, as it is devoid of the tools that are needed for producing this change. This has long been identified as a problem. Logan (1976) conducted a study in a traditionally-organised HEI, involving 874 sociology students and found that students at every level scored very poorly in critical thinking, as measured by a test to assess students' abilities to recognise uncritical or unsound thinking.

As a result, various HEIs began using learner-centred approaches to education, in order to make a meaningful difference in terms of how students develop transversal and generic skills and competences. Simple tools such as group work and activity-based learning were first used in order to make the educational process more flexible and in order to make the educational tools used to develop such skills in

and of themselves. The extent to which higher education teachers encourage, praise or use student ideas, the amount and cognitive level of student participation in the classroom and the amount of interaction among students all positively correlate in the development of critical thinking and in the acquisition of other soft skills. Research on the notion of SCL developed further in the 1990s, as the idea of changing approaches to the teaching and learning began to gain more popularity.

Astin (1993) and Tsui (1999) find that self-assessed growth in critical thinking is positively related to such instructional factors as having a paper critiqued by an instructor, conducting independent research, working on a group project, giving a class presentation, and taking essay exams. On the other hand, Tsui (1999) finds that a negative relationship exists with the taking multiple-choice exams, as a mode of assessment popular in traditional higher education systems.

The level to which student-centred pedagogical approaches have a positive impact on meaningful student learning naturally depends on other factors, which include the number of students and the student-staff ratio within any given HEI. Furthermore, the notion of a multi-step approach to delivering tasks related to student work also needs to be examined, on the premise that a critical analysis of the steps leading to learning is necessary in any discussion on student learning. In the SCL approach, it is of paramount importance to make sure that such steps include student consultation and benefit from student feedback. As mentioned above, full cooperation of students is needed in order to make the learning process successful.

Concomitantly, teachers need to monitor the way in which the classroom activities are conducted,

in order to ensure all students take an active part in such activities and to minimise the risk of having a few assertive students monopolising debates and content work. By comparing the usefulness and impact of the SCL approach, as opposed to the use of conventional teaching methods, one can conclude the following –

▶ Conventional teacher-centred pedagogical approaches do not foster the development of critical thinking in higher education students, nor the development of other soft skills;

▶ Elements such as group work, critical analysis and greater interaction among peers positively correlate to students' capacities to accumulate generic competences and soft skills;

▶ Students who are involved more actively in the teaching and learning process and who receive and give a greater amount of feedback are more secure and assertive in transmitting academic content; and

▶ It is necessary to carefully monitor any process of switching to certain modes of SCL, such as group-work, so that no negative effects occur, such as the monopoly of the debate by a vocal minority.

5.3   Student Views on the Student Centred Approach

Trends show that in countries where *reform fatigue* and unpopular Bologna reforms in higher education have irked students, due to a wave of change that this has produced in higher education, shifts in teaching and learning styles have been typically met with significant opposition.

Indeed they have often been considered by students as attempts to cut back on education and to increase student workload beyond necessary levels, in order to attain pre-set outcomes. This notwithstanding, student perceptions of the SCL approach vary extensively across and within

HEIs. One of the best ways to gauge student perceptions of the SCL approach is by giving them the opportunity to study in education programmes, which employ different teaching and learning approaches. Results of such studies produce a wide range of student perceptions. As discussed above, such perceptions depend on students' personal preferences, the subject matter and the relevant context, among other things.

Wierstra et al (2003) undertook a study with a group of 610 Dutch students and 241 students from other European countries, who studied for at least three months outside their home HEI within the framework of an international exchange programme. In this study, the Dutch students undertook a mobility period in an HEI based in another European country and the foreign students undertook a mobility period at a Dutch HEI. The aim of the study was to measure students' perceptions of the three main characteristics of the learning environment in relation to their home institution, their host institution and their ideal learning environment. The study finds that the student-centred approach is largely the preferred one, and certainly closer to what students perceive as constituting the ideal learning environment. This study finds that students generally perceive the ideal learning environment to imply a less hierarchical relation between teachers and students than that traditionally in place in teacher-centred approaches, more interaction between teachers and students, better information for students and much more student involvement. In turn, Wiersta et al (ibid) find that the preference for a student-oriented learning environment is mainly associated with students who learn constructively and who are generally accustomed to such a learning environment. These conclusions seem to denote what students perceive as *improvement* in higher education learning, this being more information, more

consultation and more involvement. However, whether this is satisfactory to a student who is used to reproductive learning, when positive measures are taken is very debatable. Getting accustomed to new realities in the very short time span of a higher education programme is difficult by any standard.

5.4   Making Student Centred Learning an Acceptable Reality for Students

Making SCL a reality for students involves initiatives at the level of HEIs and the creation of models of good practice at the institutional level. Since, as mentioned before, the level at which students accommodate SCL approaches varies based on prior experiences, it is important in many cases to pilot SCL before going to mass implementation of such an approach within any given HEI. In putting forward an example of how SCL can be made an acceptable reality for students, Nunan et al (2002) examine the case of the Flexible Learning Centre, set up as a service unit of the University of South Australia comprising some 90 members of staff, with three principal foci of activity, namely: professional development for academic staff; teaching and learning resource development and delivery; and student support services.

Nunan et al (ibid) explain how, at the Flexible Learning Centre, all services are coordinated in terms of the University's strategic direction, either directly or through service contracts with the academic divisions. This clearly manifests the importance of the correlation between all levels of implementation as being crucial, and the vital nature of support at all levels. Ball et al (1996) find that developing methods differ from what teachers themselves experienced as students, requires learning opportunities for teachers that are more powerful than simply

reading and talking about new pedagogical ideas. Similar bewilderment can be expected in students if proper counselling and tutoring provisions are not set up to help them deal with a new approach to student learning.

The model of a multi-layer approach to SCL can thus prove to be valuable in actual implementation. As discussed in the precious chapter of this study, the way in teachers seem to accept and handle the SCL approach is what gives students the first impression of any new model of conducting the educational process. However, there also needs to be proper management and distribution of resources in such an approach, and, as discussed in Chapter 3, there is also a clear need to offer extra support beyond the classroom in order to help students make adequate educational choices.

5.5   Students' Defining Role in the Student-Centred Approach

De La Sablonnière et al (2009) advocate for strong stakeholder involvement in a shift towards a student-centred approach. A clear stakeholder in this process is students themselves. Geven et al (2008, p.12) argue that university leaders must start to understand the way in which students think and enable them to be a full part of the community of their respective HEI. In a wider institutional sense they argue that this requires a fundamental shift in the governance of higher education, in which students are seen as full partners in quality evaluations, social activities and teaching, amongst other things. They insist that an HEI which is student-centred, challenges students' talents at the highest level whilst also taking into consideration the social condition of students. In this context, Geven et all (ibid) argue that students must have a significant level of freedom in choosing their curriculum.

While Geven et al (ibid) refer more to flexibility in choosing curricula, Chung et al (2004, p.157) also emphasise the need for students to be included in curricular design by putting forward an example of students being involved, together with their teachers, in the design of a student-centred problem-based subject curriculum. This aimed to address the difficulties former students faced when learning through a problem-based approach and to align the contents and assessment of the subject with students' learning needs and potential. Chung et al (ibid) find that following such strategic subject curriculum planning by teachers and students together, students show a higher degree of motivation to learn and achieve better learning outcomes, also highlighting the importance of matching students learning capabilities to the right types of learning activities (ibid).

In putting forward an example of a 'course council' - in which teachers, together with a student representative discuss students' experiences in the classroom, laboratory and clinical settings within the framework of an undergraduate nursing programme – Heise et al (2010) show how this manner of enhancing SCL -

> [T]his creative approach to student-centered learning … [results] in a win-win situation … [where] students had a voice in their assessment and evaluation of their learning objectives and clinical assignments … [and] faculty developed stronger relationships with students and gained significant information to strengthen [SCL] … in the course (Heise et al, 2010, p.3)

The role of students in such a course council is to query classmates (in sections of 8 students each, with one student representative per section) 'regarding opinions, questions and concerns about the course and then bring those views to the council (Heise et al, 2010, p.1).

5.6   Student Services as a Determining Factor of the Success of SCL

In addition to student involvement, another factor identified as key, in the student-centred approach is that of guidance and counselling services for students. Rott (2006) argues for the need for strategic implementation of advisory services for students in order to support the student-centred approach (Rott, 2006, p.23).

In this respect, Rott (2006) puts forward ten golden rules to be observes when establishing effective guidance and counselling provision within HEIs, these being the need for HEIs to -

1. Define their vision of students' higher education;
2. Clarify the role of the learner-centred approach, among other components, in their strategy;
3. Link guidance and counselling to the clarified strategic objective of the HEI and describe their added value for learning environments and student development;
4. Identify internal and external resources and design their services to cover educational, psychological and special needs as well as career guidance and counselling;
5. Allocate role and personnel to promote students' personal and educational support as well as their management of educational and career paths;
6. Develop an IT-supported coherent information management system to enhance the transparency of the university and make available educational and employment resources;
7. Build strong internal networks to pool competences at faculty level and to set standards for career management skills,

cross-cultural counselling for international students, mental health etc;

8. Open up ways to user feedback and student participation in the consultations on how services should be constructed and to generate supportive standards in quality assurance;

9. Motivate guidance and counselling staff to strive for high professionalism and conceptual development of the services; and

10. Encourage guidance and counselling personnel to contribute to an open-minded, committed and inspiring academic learning atmosphere (ibid).

5.7 Conclusion

The level of student acceptance of the SCL approach manifests itself in the degree to which students are familiar to a new style of teaching and learning from previous levels of education, and to the extent to which teachers are prepared to act as facilitators in the learning process of their students. In addition, the quality of educational facilities available to the student is an additional factor in determining the success of the SCL approach. Positive examples of change may however be counterbalanced by a resistance to a paradigm shift to SCL, by a large number of students in countries where the pace of change in teaching and learning has been rather slow across the past few decades, and rapid change is often difficult to implement (cf. ESU, 2009). In such cases, a major problem is the lack of will to make real meaningful change that challenges the current pedagogical underpinning of higher education structure. In this respect, if an attempt to set up an SCL approach introduced interactive learning and team work within the classroom, yet the mode of assessment remained a multiple-choice tests based on a specific textbook, this limits the extent to which student-centred

learning will gain popularity and relevance for students is doubtful.

From the above it can be concluded that is SCL perceived as more suitable than traditional forms of education when it comes to the development and acquisition of generic competences and soft skills. In turn, whilst overall, students tend to favour a learner-centred approach where it is properly implemented and when they are actively consulted, the perception that students have of the shift to the learning paradigm differs based on a variety of factors, as discussed above. It is furthermore clear that consultation, feedback and the involvement of students are important elements which, in students' minds, determine the success or otherwise of such a shift in paradigm. In conclusion, from the considerations made above, it is clear that, in any SCL approach employed by HEIs, one needs to take into the account the multiple roles of students – as partners in community of an HEI, with their critical capability of contributing to this community and of choosing their learning path; as partners in subject-curriculum development for a better outcome to the learning process and; as a group in need of guidance in the best manner possible to able to draw, from the HEI community the best possible learning experience. ∎

6. CONCLUSION

As part of the of the project *Time for a New Paradigm in Education: Student Centered Learning* (T4SCL), this study, in the form of a desk research on student-centred learning (SCL) signifies the first step in understanding the notion of SCL. It offers some insight into the relevant definition, the implementation and practicalities of SCL and attempts to go into depth in relation to two major groups in higher education – academics and students – with respect to their perceptions of the SCL and their needs in the shift towards a meaningful *learning paradigm*.

From the discussion elaborated in the core chapters of this study, above, it is clear that the application of the SCL approach depends, to a large extent, on the *role played by national policy*, to enhance the use of such an approach. This policy needs to be support-oriented, and reforms need to be consistent with other reforms. In addition, there is a need for higher education institutions' (HEIs') teaching and learning strategies to be underpinned by the *realisation that the path to meaningful learning is to be acceptable to, and understood by, both students and staff*. This determines the success of any SCL approach and the realisation of concomitant student qualities and outcomes. In turn, the *overarching concept of flexible and interactive learning* is an enabling concept that relates to the provision of resources, the application of technologies and the provision of support and services enabling the SCL approach to function towards achieving educational outcomes. Thus, as Nunan et al (2000) contend, ends and means are inextricably linked.

From the discussion of the notion of SCL in Chapter 2 it is unequivocally clear that *SCL is subject* to the type of HEI, the subject-discipline, the student, the teacher, the general learning environment, the resources available and the societal context, among other things.

In turn, it becomes clear that SCL is essentially a *two way responsibility* between students and higher education teaching staff. Whilst the academic is charged with creating a stimulating learning environment, which is based on interaction, students must participate fully and take responsibility for their own learning.
Without this two-way responsibility, SCL cannot occur.

Alongside this two-way responsibility, Chapter 3 demonstrates that, as learning increasingly takes place outside the traditional classroom context, additional resources available to students need to be well-organised. This requires, in particular, *collaboration between academics, librarians and staff working on information technology and data information systems* within HEIs, so as to make it possible for students to able to handle all resources available to them so as to make critical and informed choices about their learning paths.

In turn, Chapter 4 shows how academics are not able to meaningfully own the SCL approach without adequate *professional academic development that takes academics' professional standing and their academic freedom seriously*. The notion of a *scholarship of teaching* is a practical concept to interest academics more in their teaching skills. In addition, it is clear that such professional development will be more successful if a learner-centred approach is used.

Chapter 5, in examining the role of the student in the SCL approach, recognises that although *student perceptions of the learning paradigm can be both positive and negative*, it is clear that piecemeal application of the SCL approach will

not reach the desired outcomes and cannot be perceived positively by students. In addition, the key role of the student means that *students are to be participants in their own education* (cf. MacHemer et al, 2007, p.10) and are responsible for their learning from the outset, making them more independent as learners and thus enable them to gain higher-level skills. *Student support*, more than ever, is necessary in helping students to successfully trail this path.

In addition to the four key elements examined in the four core chapters of this study, it is important, when examining *the implications of moving from a teacher-centred to an SCL approach*, to make an additional consideration. This is in terms of the general perception of the *teaching paradigm* and *learning paradigm* as being juxtaposed against each other as if they are two complete opposites that require two completely different sets of conditions for their success. Whilst it is clear that the underlying philosophies of the two are different, Elen et al (2007, p. 115) argue that the evolution towards student-centred learning results in a revision, rather than a reduction in teachers' tasks. Indeed, they argue that higher education teachers have as much of a role to play as teachers in SCL as they do in teacher-centred learning, therefore requiring the same, if not more, effort from them.

Elen et al (ibid) make a case for conveying a more subtle message than a simple shift from teacher-centred to student-centred learning, addressing instead the need for developing challenging and safe learning environments in higher education, which they refer to as 'powerful' learning environments in which -

> … [S]tudents assume full responsibility for the construction of their knowledge … in a comfortable context that offers targeted

support from teachers to render their activities as effective as possible (ibid).

Thus it is important to keep in mind that while a complete overhaul of approach may be needed in some cases for a shift from the *teaching* to the *learning paradigm*, this may not be the case in every instance. The focus should rather be one of 'transition' or 'transformation' to a student-centred approach, which, via a gradual introduction of the elements mentioned above would make the required shift in approach possible.

In turn, within the classroom, small changes can already start to produce the required changes as a start to implement an SCL approach, as Heise et al (2010) advise –

> Simple changes in courses often … [make] life easier for the students and enhanced learning (Heise et al, 2010, p.3)

A final consideration relates to the issue of resources, *mainly human and capital resources, which are required to implement SCL across an HEI and across a higher education system*. This must be taken into account as a central element in national policy on SCL, particularly where provision of education is public, but also where it is private, so that students do not end up bearing the financial brunt that it takes to implement SCL. This is also a key issue in terms of professional academic development and in the hiring of academic staff, where necessary, to ease the high workload currently on the shoulders of academics. ∎

REFERENCES

Abel, E.M., and Campbell, M. (2009) 'Student-Centred Learning in an Advanced Social Work Practice Course: Outcomes of a Mixed Methods Investigation'. In: *Social Work Education*, 28:1, pp.3-17

Altbach, P.G. (2001) 'Academic Freedom: International Realities and Challenges'. In: *Higher Education*, 41, pp.205-219

Arko-Cobbah A. (2004) 'The Role of Libraries in Student-Centred Learning: The Case of Students from the Disadvantaged Communities in South Africa'. In: *The International Information and Library Review*, 36, pp.263-271

Askling, B. (2001) 'Higher Education and Academic Staff in a Period of Policy and System Change'. In: *Higher Education*, 41, pp.157-181

Ball, D.L. and Cohen, D.K. (1996). 'Reform by the Book: What is - or Might be - the Role of Curriculum Materials in Teacher Learning and Instructional Reform?' In: *Educational Researcher*, 25: pp.6-8

Barr, R.B. and Tagg, J. (1995) 'From Teaching to Learning: A New Paradigm for Undergraduate Education'. In: *Change*, pp.13-25

Bergan, S. (2007) 'Promoting New Approaches to Learning). In: *EUA Bologna Handbook: Making Bologna Work*, B.1.1-1

Bologna Process (1999) *The European Higher Education Area.* (Bologna, Bologna Process)

Bologna Process (2009) *The Bologna Process 2020: The European Higher Education Area in the New Decade.* (Leuven/Louvain-la-Neuve, The Bologna Process)

Boyer, E.B. (1990) *Scholarship Reconsidered. Priorities of the Professoriate.* (New York, The Carnegie Foundation for the Advancement of Teaching)

Brandes, D. and P. Ginnis (1986) *A Guide to Student Centred Learning.* (Oxford, Blackwell)

Chevaillier, T. (2001) 'French Academics: Between the Professions and the Civil Service. In: *Higher Education*, 41, pp.49-75

Chung, J.C.C. and Chow, S.M.K (2004) 'Promoting Student Learning Through a Student-Centred Problem-Based Subject Curriculum. In: *Innovations in Education and Teaching International*, 41:2, pp.157-168

Clement, M., Mcalpine, L. and Waeytens, K. (2004) 'Fascinating Bologna: Impact on the Nature and Approach of Academic Development'. In: *International Journal for Academic Development*, 9, pp.127-131

Colbeck, C.L. (2002) 'State Policies to Improve Undergraduate Teaching: Administrator and Faculty Responses'. In: *The Journal of Higher Education*, 73, pp.3-25

Commager, H.S. (1963) 'The University and Freedom: "Lehrfreiheit" and "Lehrnfreiheit"'. In: *The Journal of Higher Education*, 34, pp.361-370.

Darwin, A. and Palmer, E. (2009) 'Mentoring Circles in Higher Education. In: *Higher Education Research and Development*, 28, pp.125-136

De La Sablonnière, R., Taylor, D.M., and Sadykova, N. (2009) 'Challenges of Applying a Student-Centred Approach to Learning in the Context of Education in Kyrgystan'. In: *International Journal of Educational Development*, 29, pp.628-624

Deikelmann, N. and Lampe S. (2004) 'Student-Centered Pedagogies: Co-Creating Compelling Experiences Using the New Pedagogies'. In: *Teacher Talk: New Pedagogies for Nursing*, 43:6, pp.245-247

EI (2009) *Education International Report to the Expert Committee on the Application of*

the 1966 ILO/UNESCO Recommendation on the Status of Teachers and the 1997 UNESCO Recommendation on the Status of Higher Education Teaching Personnel. (Brussels, Education International)

EI (2010) *Enhancing Quality: Academics' Perceptions of the Bologna Process.* (Brussels, Education International)

Elen, J., Clarebout, G., Léonard, R. and Lowyck, J. (2007) 'Student-Centred and Teacher-Centred Learning Environments: What Students Think'. In: *Teaching in Higher Education*, 12:1, pp.105-117

ESU (2009) *Bologna with Student Eyes.* (Brussels, European Students' Union)

ESU (2010) *Bologna at the Finish Line: An Account of Ten Years of European Higher Education Reform.* (Brussels, European Students' Union)

EUA (2009) *Improving Quality, Enhancing Creativity: Change Processes in European Higher Education Institutions.* (Brussels: European University Association)

European Commission (2010) *European Credit Transfer and Accumulation System (ECTS) Key Features.* (Brussels, European Commmunites)

ESF (2010) *Research Careers in Europe: Landscape and Horizons.* (Brussels, European Science Foundation)

European Communities (2009) *ECTS Users' Guide.* (Luxembourg, European Communities)

Felder, R.M. and Brent, R. (1996) 'Navigating the Bumpy Road to Student-Centered Instruction'. In: *College Teaching*, 44:2, pp.43-47

Fink, L.D. (2003) Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses (San Francisco, Jossey-Bass)

Geven, K. and Beek S. (2008) 'Students and the Future of the European Higher Education Area'. In: *EUA Bologna Handbook: Making Bologna Work*, D.1.1, pp.1-16

Gibbs, G. and Coffey, M. (2004) 'The Impact of Training of University Teachers on their Teaching Skills, their Approach to Teaching and the Approach to Learning of their Students'. In: *Active Learning in Higher Education*, 5:1, pp.87-100.

Grant, B., Lee, A., Clegg, S., Manathunga, C., Barrow, M., Kandlbinder, P., Brailsford, I., Gosling, D. and Hicks, M. (2009) 'Why History? Why Now? Multiple accounts of the emergence of Academic Development'. In: *International Journal for Academic Development*, 14, pp.83-86

Guskin, A. (1994) 'Reducing Student Costs and Enhancing Student Learning: The University Challenge of the 1990s'. In: *Change*, 26:4, pp.22–29

Harvey, L. (2004) 'The Power of Accreditation: Views of Academics'. In: *Journal of Higher Education Policy and Management*, 26, pp.207-223.

Hativa, N., Barak, R. and Simhi, E. (2001) 'Exemplary University Teachers: Knowledge and Beliefs Regarding Effective Teaching Dimensions and Strategies'. In: *The Journal of Higher Education*, 72, pp.699-729

Heise, B. and Himes D. (2010) 'The Course Council: An Example of Student-Centered Learning'. In: *Educational Innovation, Advanced Online Release*, 29 January 2010, pp.1-3

Higher Education Academy (2005) *National Professional Standards Framework for Teaching and Supporting Learning in Higher Education.* (York, Higher Education Academy)

Huisman, J., De Weert, E. and Bartelse, J. (2002) 'Academic Careers from a European Perspective: The Declining Desirability of the Faculty Position'. In: *The Journal of Higher Education*, 73, pp.141-160

Jenkins, A. (2004) *A Guide to the Research Evidence on Teaching-Research Relations.* (York, Higher Education Academy)

Jones, G.A. (2006) 'The Restructuring of Academic Work: Themes and Observations'. In: *Higher Education in Europe*, 31:3, pp.317-325

Kember, D (2009) 'Promoting Student-Centred Forms of Learning Across an Entire University'. In: *Higher Education*, 58, pp.1-13

Knight, P.T. and Trowler, P.R. (2000) 'Department-Level Cultures and the Improvement of Learning and Teaching'. In: *Studies in Higher Education,* 25, pp.69-83

Kreber, C. and Cranton, P.A. (2000) 'Exploring the Scholarship of Teaching'. In: *The Journal of Higher Education*, 71, pp.476-495

Lavoie, D. and Rosman A.J (2007) 'Using Active Student-Centred Learning-Based Instructional Design to Develop Faculty and Improve Course Design, Delivery, and Evaluation'. In: *Issues in Accounting Education*, 22:1, pp.105-118

Leslie, D. W. (2002) Resolving the Dispute: Teaching Is Academe's Core Value. *The Journal of Higher Education*, 73, 49-73.

Lu, E.Y., Ma, H., Turner, S. and Huang W. (2005) 'Wireless Internet and Student-Centred Learning: A Partial Least-Squares Model'. In: *Computers and Education,* 49, pp.530-544

Machemer, P.L. and Crawford, P. (2007) 'Student Perceptions of Active Learning in a Large Cross-Disciplinary Classroom'. In: *Active Learning in Higher Education*, 8:1, pp.9-30

Maclellan, E. (2008) 'The Significance of Motivation in Student-Centred Learning: A Reflective Case Study'. In *Teaching in Higher Education*, 13:4, pp.411-421

Maclellan, E. and Soden, R. (2004) 'The Importance of Epistemic Cognition in Student-Centred Learning'. In: *Instructional Science*, 32:3, pp. 253-268

Maclellan, E. and Soden, R. (2007) 'The Significance of Knowledge in Learning: a Psychologically Informed Analysis of Higher Education Students' Perceptions'. In: *International Journal for the Scholarship of Teaching & Learning*, 1:1, pp.1-18

Magna Charta Observatory (1988) *Magna Charta Universitatum.* (Bologna: Magna Charta Observatory).

Major, C.H. and Palmer, B. (2006) 'Reshaping Teaching and Learning: The Transformation of Faculty Pedagogical Content Knowledge'. In: *Higher Education*, 51:4, pp.619-647

Musselin, C. (2004) 'Towards a European Academic Labour Market? Some Lessons Drawn from Empirical Studies on Academic Mobility'. In: *Higher Education*, 48, pp.55-78

Nunan, T., Rigmor, G. and McCausland, H. (2000) 'Rethinking the Ways in which Teaching and Learning are Supported: the Flexible Learning Centre at the University of South Australia'. In: *Journal of Higher Education Policy and Management*, 22:1, pp.85-98

Papert S. (1989) *Constructionism: A New Opportunity for Elementary Science Education. A Proposal to the National Science Foundation.* (Cambridge, Massachusetts, Massachusetts Institute of Technology, Media Laboratory, Epistemology and Learning Group)

Pellert, A. (2009) 'Organisational Development and Promoting Change: the Deeper Dimensions of the Bologna Process'. In: *EUA Bologna Handbook: Making Bologna Work*, C.1.7-1, pp.1-20

Pinto, M. and Sales, D. (2008) 'Knowledge Transfer and Information Skills for Student-Centred Learning in Spain'. In: *Libraries and the Academy*, 8:1, pp.53-74

Rott (2006) 'Guidance and Counselling

Services as Part of a Learner-Centred Approach'. In: *EUA Bologna Handbook: Making Bologna Work,* C.3.8-1, pp.1-26

Rust, C. (2002) 'The Impact of Assessment on Active Learning'. In: *Active Learning in Higher Education*, 3:2, pp.145-158

Santiago, P., Tremblay, K., Basri, E., and Arnal, E., (2008) *Tertiary Education for the Knowledge Society: OECD Thematic Review of Tertiary Education. Synthesis Report. Vol.2.* (Paris, Organisation for Economic Cooperation and Development)

Stoffle, C.J. and Cuillier, C. (2010) 'Student-Centred Service and Support: A Case Study of Arizona Libraries Information Commons'. In: *Journal of Library Administration*, 50, pp.117-134

Sursock, A. and Schmidt, H. (2010) *Trends 2010: A Decade of Change in European Higher Education.* (Brussels, European University Association)

Trowler, P. and Bamber, R. (2005) 'Compulsory Higher Education Teacher Training: Joined-up Policies, Institutional Architectures and Enhancement Cultures'. In: *International Journal for Academic Development,* 10, pp.79-93

Tsui, L. (2002) 'Fostering Critical Thinking through Effective Pedagogy: Evidence from Four Institutional Case Studies'. In: *The Journal of Higher Education*, 73:6, pp.740-763

UNESCO (1997) *Recommendation Concerning the Status of Higher Education Teaching Personnel.* (Paris, UNESCO)

Van Eekelen, I.M., Boshuizen, H.P.A and Vermunt, J.D (2005) 'Self-Regulation in Higher Education Teacher Learning'. In: *Higher Education*, 50, pp.447-471

Wagenaar, R (2007) 'An Introduction to the European Credit Transfer and Accumulation System (ECTS)'. In: *EUA Bologna Handbook: Making Bologna Work,* B.2.4-1, pp.1-22

Watson, P. (2002) 'The Role and Integration of Learning Outcomes into the Educational Process'. In: *Active Learning in Higher Education*, 3:3, pp. 205-219

Wierstra, R.F.A., Kanselaar, G., Van Der Linden, J., Lodewijks, H.G. L.C and Vermun, J.D. (2003) 'The Impact of the University Context on European Students' Learning Approaches and Learning Environment Preferences'. In: *Higher Education*, 45:4, pp.503-523

Zimmerman, B.J. (2002) 'Becoming a Self-Regulated Learner'. In: *Theory into Practice,* 21:2, pp.64-70