STUDENT–CENTRED LEARNING: WHAT DOES IT MEAN FOR STUDENTS AND LECTURERS?

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Introduction

The term student–centred learning (SCL) is widely used in the teaching and learning literature. Many terms have been linked with student–centred learning, such as *flexible learning* (Taylor 2000), *experiential learning* (Burnard 1999), *self-directed learning* and therefore the slightly overused term 'student–centred learning' can mean different things to different people. In addition, in practice it is also described by a range of terms and this has led to confusion surrounding its implementation.

The concept of student–centred learning has been credited as early as 1905 to Hayward and in 1956 to Dewey's work (O'Sullivan 2003). Carl Rogers, the father of client–centred counseling, is associated with expanding this approach into a general theory of education (Burnard 1999; Rogoff 1999). The term student–centred learning was also associated with the work of Piaget and more recently with Malcolm Knowles (Burnard 1999). Rogers (1983a:25), in his book 'Freedom to Learn for the 80s', describes the shift in power from the expert teacher to the student learner, driven by a need for a change in the traditional environment where in this 'so-called *educational* atmosphere, students become passive, apathetic and bored'. In the School system, the concept of child–centred education has been derived, in particular, from the work of Froebel and the idea that the teacher should not '*interfere with this process of maturation, but act as a guide*' (Simon 1999). Simon highlighted that this was linked with the process of development or 'readiness', i.e. the child will learn when he/she is ready (1999).

The paradigm shift away from teaching to an emphasis on learning has encouraged power to be moved from the teacher to the student (Barr and Tagg 1995). The teacher–focused/transmission of information formats, such as lecturing, have begun to be increasingly criticised and this has paved the way for a widespread growth of 'student–centred learning' as an alternative approach. However, despite widespread use of the term, Lea et al. (2003) maintain that one of the issues with student–centred learning is the fact that '*many institutions or educators claim to be putting student–centred learning into practice, but in reality they are not'* (2003:322).

This chapter aims to:

- Give an overview of the various ways student–centred learning is defined,
- Suggest some ways that student–centred learning can be used as the organising principle of teaching and assessment practices,
- Explore the effectiveness of student–centred learning and
- Present some critiques to it as an approach.

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What is student–centred learning?

Kember (1997) described two broad orientations in teaching: the teacher centred/content oriented conception and the student centred/learning oriented conceptions. In a very useful breakdown of these orientations he supports many other authors views in relation to student–centred view including: that knowledge is constructed by students and that the lecturer is a facilitator of learning rather than a presenter of information. Rogers (1983b:188) identified the important precondition for student–centred learning as the need for: '*... a leader or person who is perceived as an authority figure in the situation, is sufficiently secure within herself (himself) and in her (his) relationship to others that she (he) experiences an essential trust in the capacity of others to think for themselves, to learn for themselves'*.

Choice in the area of the learning is emphasised by Burnard, as he interprets Rogers' ideas of student–centredness as '*students might not only choose what to study, but how and why that topic might be an interesting one to study*' (1999:244). He also emphasises Rogers' belief that students' perceptions of the world were important, that they were relevant and appropriate. This definition therefore emphasises the concept of students having 'choice' in their learning.

Harden and Crosby (2000:335) describe teacher–centred learning strategies as the focus on the teacher transmitting knowledge, from the expert to the novice. In contrast, they describe student–centred learning as focusing on the students' learning and '*what students do to achieve this, rather than what the teacher does*'. This definition emphasises the concept of the student 'doing'.

Other authors articulate broader, more comprehensive definitions. Lea et al. (2003:322) summarises some of the literature on student–centred learning to include the followings tenets:

1. '*the reliance on active rather than passive learning,*
2. *an emphasis on deep learning and understanding,*
3. *increased responsibility and accountability on the part of the student,*
4. *an increased sense of autonomy in the learner*
5. *an interdependence between teacher and learner,*
6. *mutual respect within the learner teacher relationship,*
7. *and a reflexive approach to the teaching and learning process on the part of both teacher and learner.'*

Gibbs (1995) draws on similar concepts when he describes student–centred courses as those that emphasise: learner activity rather than passivity; students' experience on the course outside the institution and prior to the course; process and competence, rather than content; where the key decisions about learning are made by the student through negotiation with the teacher. Gibbs elaborates in more detail on these key decisions to include: '*What is to be learnt, how and when it is to be learnt, with what outcome, what criteria and standards are to be used, how the judgements are made and by whom these judgements are made*' (1995:1). In a similar vein in earlier literature, the student–teacher relationship is particularly elaborated upon by Brandes and Ginnis (1986). In their book for use in second level education (post–primary), entitled 'A Guide to Student–Centred Learning', they present the main principles of student–centred learning as:

- The learner has full responsibility for her/his learning
- Involvement and participation are necessary for learning
- The relationship between learners is more equal, promoting growth, development
- The teacher becomes a facilitator and resource person
- The learner experiences confluence in his education (affective and cognitive domains flow together)

- The learner sees himself differently as a result of the learning experience.

The theoretical standing of student–centred learning is often surprisingly absent in the literature. However, it appears to relate primarily to the constructivist view of learning in the importance it places on activity, discovery and independent learning (Carlile and Jordan 2005). Cognitive theory also highlights activity but in a different form than that supported by the constructivists (Cobb 1999). The cognitive view supports the idea that the activity of learning is computed in the head, or as often described 'in the mind'. The constructivist view of activity is related more to performing physical activities, for example, projects, practicals. Student–centred learning has some connections with the social constructivist view, which emphasises activity and the importance of communities of practice/others in the learning process. However, the definitions of SCL do not necessarily highlight the importance of peers in learning (Cobb 1999; Bredo 1999).

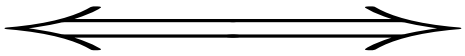
In summary, it appears from the literature that some view student–centred learning as: the concept of the student's **choice** in their education; others see it as the being about the student **doing** more than the lecturer (active versus passive learning); while others have a much broader definition which includes both of these concepts but, in addition, describes the shift in the **power relationship** between the student and the teacher.

How can you implement student–centred learning?

Learning is often presented in this dualism of either student–centred learning or teacher–centred learning. In the reality of practice the situation is less black and white. A more useful presentation of student–centred learning is to see these terms as either end of a continuum, using the three concepts regularly used to describe student–centred learning (See Table 1).

Tab. 1: Student–centred and teacher–centred continuum

Teacher–centred Learning	**Student–centred Learning**
Low level of student choice	High level of student choice
Student passive	Student active
Power is primarily with teacher	Power primarily with the student



In examining how you might look at this in practice, it is worth thinking how far up the continuum you are able to move within the contextual barriers in your teaching situation. The next sections will present some ideas for your practice to aid you in making that progression.

Implications for curriculum design

In relation to curriculum design, student–centredness includes the idea that students have choice in what to study, how to study. However, to what extent can this be carried out in the structures of today's Universities? Modularisation, which will be expected in all European undergraduate courses by 2006, provides a structure that allows students an element of choice in what modules they study. Donnelly and Fitzmaurice (2005) in their chapter in this collection on 'Designing Modules for Learning' highlight the importance of attempting to focus on the needs of the students at the early stage of curriculum design. Choice in the curriculum is not without its difficulties and Edwards argues about the dangers of individuality in the concept of the social learner and how this can in a seemingly contradictory way lead to disempowerment (2001).

One student–centred approach to curriculum design, Problem–Based Learning (PBL), allows for some choice within a programme of areas that students may study. It allows students to set some of their own learning objectives/outcomes, dependent on prior knowledge. Problem-Based Learning, through the use of problems/issues/triggers, encourages the students to develop their own learning goals, thereby filling in the gaps in their knowledge or understanding (Boud and Feletti 1997). This element of choice or control is referred to in many of the definitions of student–centred learning. This aspect of responsibility aligns with the Lea et al. (2003) view that student–centred learning involves '*increased responsibility and accountability on the part of the student'*. Problem–based learning is higher up the student **choice** aspect of the SCL continuum in Table 1, than the usual problem–solving or problem–oriented exercises performed in a lecture/tutorial. These approaches are more controlled by the teacher in their presentation and outcome (Davis and Harden 1999). However, they are useful in addressing the **active learning** aspect of student–centred learning. Other approaches to curriculum design also support the idea of student choice and activity in learning, for example, the systems–based approach, resource–based learning, and experiential/ personal relevance approach (Toohey 2000).

A growing practice in course design internationally is the writing of learning outcomes/objectives focusing on what the student will be able to do, rather than on the content being covered by the teacher (UCD Centre for Teaching and Learning 2005). This practice is an example of the move towards student–centred learning in the curriculum and helps to shift the emphasis on the learner as opposed to a coverage model by the teacher. Donnelly and Fitzmaurice (2005) re-iterate the importance of this shift in emphasis. This is also reflected in Gibbs' (1995) definition, i.e. an emphasis on the process and competence, rather than content. Table 2 presents some examples of student–centred learning outcomes.

Tab. 2: Learning Outcomes and Student–centred Learning

Student–centred Learning Outcomes: Some examples	**Traditional Learning Outcomes/Objectives**
*By the end of this modules: **you** (the student) will be able to:*	*The course will cover:*
Recognise the structures of the heart	The anatomy of the heart
Critique one of Yeats' poems	A selection of Yeats poems

Implications for teaching/learning methods

The University of Glasgow (2004) identified four main strategies in a study on student–centred learning practices in their University. The first strategy was to make the student more active in acquiring knowledge and skills and might include exercises in class, fieldwork, use of CAL (computer assisted learning) packages etc. The second strategy was to make the student more aware of what they are doing and why they are doing it. A third strategy is a focus on interaction, such as the use of tutorials and other discussion groups. The final strategy is the focus on transferable skills. This last strategy is not mentioned in other definitions of the student–centred learning but does look beyond the immediate course requirements to other benefits to the student in later employment. Table 3 highlights a sample of student–centred learning/teaching methods and includes some ideas for lecturers both within (more teacher–centred) and outside of the lecture format. You may consider, however, in striving to reduce the amount of lecture contact hours for more student–centred formats, where possible.

Implications for assessment practices

Tab. 3: Examples of student centred learning/teaching methods

Outside of the lecture format	**In the Lecture**
Independent projects	Buzz groups (short discussion in twos)
Group discussion	Pyramids/snowballing (Buzz groups continuing the discussion into larger groups)
Peer mentoring of other students	Cross-overs (mixing students into groups by letter/number allocations)
Debates	Rounds (giving turns to individual students to talk)
Field-trips	Quizes
Practicals	Writing reflections on learning (3/4 minutes)
Reflective diaries, learning journals	Student class presentations
Computer assisted learning	Role play
Choice in subjects for study/projects	Poster presentations
Writing newspaper article	Students producing mind maps in class
Portfolio development	

Black (1999) summarised some of the difficulties highlighted in the literature in the area of assessment, for example, a) that the giving of marks and grades are over emphasised, while the giving of advice and the learning function are under emphasised, b) pupils are compared with one another which highlights competition rather than personal improvement. He also explains the concept of self-assessment as essential activity to help students '*take responsibility for their own learning*', an important aspect of SCL (Benett 1999; Black 1999:126). Foucault argued that the examination was a technique of power, where a student is *'controlled through a system 'micro-penalties', the constant giving of marks which constitutes a whole field of surveillance'* (cited in Broadfoot 1999:88). The use of the written examination is still a strong practice in today's Universities and is primarily a summative assessment, i.e. an assessment for judgement or accreditation. The addition of more formative assessment, which emphasises feedback to students on their learning, would 'enhance their (student) learning' (Brown et al. 1997; Light and Cox 2001:170). By developing more formative assessment in your courses you can provide a focus for the student by highlighting their learning gaps and areas that they can develop. Examples of formative assessment include feedback on essays, written comments on assignments, grades during the year that do not add to end of year mark and multiple-choice questions/answers for feedback only. The addition of more formative assessment encourages a more student–centred approach.

Table 4 presents practical examples of student–centred assessments as presented by Gibbs (1995). Further details of some of these assessments can be seen on the UCD Centre for Teaching and Learning website (`http://www.ucd.ie/teaching`).

Peer and self-assessment both give some control and responsibility back to the student, emphasising *' an increased sense of autonomy in the learner'* as noted in Lea et al.'s definition of student–centred learning (2003). Learning contracts/negotiated contracts are goals set by the student, depending on their learning gaps, which are in turn negotiated with the lecturer (Knight 2002). The contract can also highlight the manner in which the student would like to be assessed in order to demonstrate that they have reached the goals. This can add choice in what to study and, in addition, choice in how the student will be assessed. Choice is one of the key terms in relation

Tab. 4: Examples of student–centred assessments (Gibbs 1995)

• Diaries, logs and journals • Portfolios • Peer/self assessment • Learning contracts and negotiated assessment	• Projects • Group work • Profiles • Skills and competencies

to student–centred learning. The concept of negotiation of learning also addresses the unique change in relationship between lecturer and student noted by Lea et al. (2003) in their definition of student–centred learning.

Gibbs (1995:1), as mentioned earlier, describes the range of choices available to students in relation to assessment as: *'. . . . . , what criteria and standards are to be used, how the judgements are made and by whom these judgements are made'*. In practice, how do we give students some autonomy and decision-making in an area such as assessment? Brown et al. (1994) highlight a range of suggestions on how lecturers can involve students in the assessment process: (Table 5).

Tab. 5: Assessment process and student–centred learning

Involving students at the stage when the task is set:	• Choosing the assessment task • Setting the assessment task • Discussion the assessment criteria • Setting the assessment criteria
Involving students at the stage after the task is completed:	• Making self-assessment comments • Making peer-assessment feedback comments • Suggesting self-assessment grades/marks • Negotiating self-assessment grades/marks • Assigning self-assessment grades/marks • Assigning peer-assessment grades/marks

(Brown, Rust, and Gibbs 1994)

The suggestions in Table 5 above may seem a large jump from your current practices, therefore, you might consider moving your assessment practice slightly up the teacher/student–centred continuum. An example of a small but significant change is to provide a choice of essay topics and exam questions as a manageable starting point.

The effectiveness and critiques of student–centred learning

The use of student–centred learning appears to be reflective of today's society where choice and democracy are important concepts, however is it an effective approach to learning? Lea et al. (2003) reviewed several studies on student–centred learning and found that overall it was an effective approach. A six-year study in Helsinki, which compared traditional and activating instruction, found that the activating group developed better study skills and understanding, but were slower in their study initially (Lonka and Ahola 1995). Equally, Hall and Saunders found that students had increased participation, motivation and grades in a first year information technology course (1997). In addition, 94% of the students would recommend it to others over the more conventional approach (Hall and Saunders 1997). Students in a UK University elaborated on the impact of student–centred learning on them, i.e. they felt there was more respect for the student in this approach, that it was more interesting, exciting, and it boosted their confidence (Lea et al. 2003).

Student–centred learning, despite its popularity, is not without its critics. The main critique of student–centred learning is its focus on the individual learner. In addition, there are some difficulties in its implementation, i.e. the resources needed to implement it, the belief system of the students and staff, and students' lack of familiarity with the term.

Simon (1999) describes that student–centred learning, in the School system, can be in danger of focusing completely on the **individual learner** and taken to its extreme does not take into account the needs of the whole class. Simon highlights the point that '*if each child is unique, and each requires a specific pedagogical approach appropriate to him or her and to no other, the construction of an all embracing pedagogy or general principles of teaching become an impossibility*' (Simon 1999:42). Edwards (2001:42) also highlights the dangers associated with student–centredness in adult education where in empowering an individual there is a potential danger of *'a person's physical isolation from other learners'*. The importance of the social context of learning and the value of interaction with peers is emphasised in the socio-cultural view of learning (Bredo 1999). The concept of being an independent learner choosing his/her own route of learning, may in fact drive some of the sociability out of the learning process if care is not taken to emphasise the importance of peers. In relation to this individuality, Lea et al.'s study on psychology students highlighted their concern over being abandoned or isolated from other supports in a student–centred learning approach (2003).

O'Sullivan (2003) described student–centred learning as a Western approach to learning and may not necessarily transfer to the developing countries, such as Namibia, where there are limited **resources** and different learning cultures. It can be equally hard at times to see how the approach can be economical in the large classes associated with many current University undergraduate courses. A comprehensive study was conducted in 2004, by the University of Glasgow, on the use of student–centred learning with full-time undergraduate students (2004). In this study they found that student–centred learning (SCL) was more prevalent in the later years of the student degrees, and this they believe is often down to class sizes.

Another concern regarding student centred learning is the **belief** that students hold in relation to their learning. Students who value or have experienced more teacher–focused approaches, may reject the student–centred approach as frightening or indeed not within their remit. Prosser and Trigwell's work in higher education emphasises the different belief systems held by staff and students (2002). They found that lecturers with a teacher–centred approach to teaching held views that students should accommodate information rather than developing and changing their conceptions and understanding. The reverse was true for those with more student–centred approaches to their teaching. Perry's work on the development of University students highlights how students move from a dualistic view that knowledge is right or wrong to a relativist view that all answers are equally valid (Perry 1970). This study highlights that even during the University years, students can change their view on learning and as they move through the years so to may their views on student–centred learning change. In support of Perry's work, Stevenson and Sander (2002) highlighted that 1^{st} year medical students were suspicious of the value of student–centred learning methods.

Finally, **students' familiarity with the term** can be poor. Lea et al. (2003) conducted a study on 48 psychology students in the University of Plymouth on students' attitudes to student–centred learning. They found that, despite a University student–centred policy, 60% of the students had not heard of the term.

Summary

The changing demographics of the student population and the more consumer/client–centred culture in today's society have provided a climate where the use of student–centred learning is thriving. The interpretation of the term 'student–centred learning' appears to vary between authors as some equate it with 'active learning', while others take a more comprehensive definition including: active learning, choice in learning, and the shift of power in the teacher–student relationship. It is used very commonly in the literature and in University policy statements, but this has not necessarily transferred into practice.

Student–centred learning is not without some criticism but in general it has been seen to be a positive experience, for example, Edwards (2001) emphasises the value of student–centred learning: *'Placing learners at the heart of the learning process and meeting their needs, is taken to a progressive step in which learner–centred approaches mean that persons are able to learn what is relevant for them in ways that are appropriate. Waste in human and educational resources is reduced as it suggested learners no longer have to learn what they already know or can do, nor what they are uninterested in'*. (Edwards 2001:37).

Although recognizing that it is not necessarily an easy task, it is hoped that this chapter has gone some way to providing evidence and ideas to move you higher up the continuum towards a more student–centred practice.

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