



STUDENT CENTERED LEARNING IN CLASSROOMS: A STRATEGY FOR INCREASING STUDENT MOTIVATION AND ACHIEVEMENT

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Abstract:

In facing challenges such as rapid globalization, tremendous impacts of information technology, international transformation towards knowledge-driven economy, strong demands for sustainable societal developments, and international competitions in the new century, numerous educational reforms and changes have been initiated in the different parts of the world. Policy-makers and educators in most countries have to think how to reform their education and prepare next generations for meeting challenges of the future (Cheng, 2003a, b; Hirsch & Weber, 1999; Kogan & Hanney, 2000; Mingle, 2000). Student-centered learning is an approach to learning in which learners choose not only what to study but also how and why. At the heart of the learning environment are learner responsibility and activity, in contrast to the emphasis on instructor control and coverage of academic content found in conventional, didactic teaching. Student-centred learning, as the term suggests, is a method of learning or teaching that puts the learner at the centre (cf. Mac Hemer 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, organization 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 paper elaborates why and how Student-centered learning is needed to re-conceptualize the practices of action learning to enhance multiple thinking and creativity in learning.

Index Terms: Globalization, Knowledge-Driven Economy, Higher Education, Policy Makers and Educators & Educational Reforms Etc

Introduction:

India has the second largest educational system in the world. A focus on quality, access and relevance of education to achieve the required social transformation for sustainable economic development of the country has been the national priority. The educational system of the future must embrace a learner-centered perspective to maximize high standards of learning, motivation, and achievement for all learners--for both students and their teachers. The learner-centered perspective begins with a focus on knowing and understanding each learner in the context of a deep understanding of the learning process itself. It couples a focus on knowing and respecting individual learners with the best available research and practitioner experience about learning. This paper reviews a number of approaches to the learner-centered classroom and provides a synthesis.

There has been increasing emphasis in recent years on moving away from traditional teaching toward student-centered learning. This paradigm shift has encouraged moving power from the instructor to the learner, treating the learner as a

co-creator in the teaching and learning process (Barr & Tagg, 1995). Instructors who deliver student-centered instruction include the learner in decisions about how and what they learn and how that learning is assessed, and they respect and accommodate individual differences in learners' backgrounds, interests, abilities, and experiences (McCombs & Whistler, 1997). The role of the instructor in student-centered classrooms is to encourage learners to do more discovery learning and to learn from each other; the instructor focuses on constructing authentic, real-life tasks that motivate learner involvement and participation (Weimer, 2002).

Meaning of Student-Centered Learning:

Student-centered learning has been defined most simply as an approach to learning in which learners choose not only what to study but also how and why that topic might be of interest (Rogers, 1983). In other words, the learning environment has learner responsibility and activity at its heart, in contrast to the emphasis on instructor control and the coverage of academic content found in much conventional, didactic teaching (Cannon, 2000). Additionally, learners find the learning process more meaningful when topics are relevant to their lives, needs, and interests, and when they are actively engaged in creating, understanding, and connecting to knowledge (McCombs & Whistler, 1997).

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 criticized and this has paved the way for a widespread growth of 'student-centered learning' as an alternative approach. However, despite widespread use of the term, Lea et al. (2003) maintain that one of the issues with student-centered learning is the fact that 'many institutions or educators claim to be putting student-centered learning into practice, but in reality they are not' (2003:322).

Objectives of the Study:

- ✓ To give an overview of the various ways student-centered learning is defined,
- ✓ To suggest some ways that student-centered learning can be used as the organizing principle of teaching and assessment practices,
- ✓ To explore the effectiveness of student-centered learning and
- ✓ To present some critiques to it as an approach.

How Can You Implement Student-Centered Learning?:

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

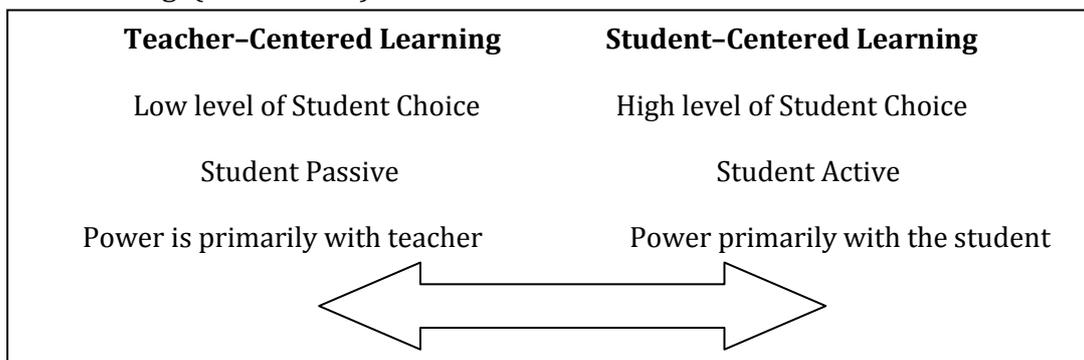


Table 1: Student-Centered and Teacher-Centered Continuum

Implications for Teaching/Learning Methods:

The University of Glasgow (2004) identified four main strategies in a study on student-centered 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-centered learning but does look beyond the immediate course requirements to other benefits to the student in later employment. Table 2 highlights a sample of student-centered learning/teaching methods and includes some ideas for lecturers both within (more teacher-centered) and outside of the lecture format. You may consider, however, in striving to reduce the amount of lecture contact hours for more student-centered formats, where possible.

Implications for Assessment Practices:

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

Table 2: Examples of student centered learning/teaching methods

Why do we want to Promote Student Centered Teaching? What are its Benefits?

Student centered teaching helps us design effective instruction for every member of the classroom, no matter what his or her diverse learning needs. By its nature, student centered teaching is adaptable to meet the needs of every student. In order to design any lesson, the teacher must first think of the students, rather than the content, and so we are assured that the students' needs are being considered.

- ✓ Student centered teaching has been proven effective in its ability to teach students the material they need to know. There are site numerous studies that followed students who were taught in the student centered approach that found that not only does student motivation increase, but actual learning and performance do as well. Students taught in a student centered classroom retain more material for longer periods of time. In order to learn, the brain cannot simply receive information; it must also process the information so that it can be stored and recalled. The active nature of the student centered approach helps students actually work with information, and therefore learn it and store it.
- ✓ For foreign language students, especially, the student-centered method has special benefits. When students use the language, they retain it more than if they

would hear it. They get practice in actively producing meaningful conversation and they take a more direct route to fluency than they would take, for example, if they filled out worksheets with sentences created by the teacher.

- ✓ Even beyond learning what they need to know, students benefit from a less academic side effect of student centered teaching -- they learn how to feel good about them. As they take on new responsibilities and succeed with these responsibilities, they come to gain confidence in themselves as competent problem-solvers. Even more, research shows that students have higher achievement when they have confidence in themselves and when they attribute success to their own abilities and not to luck or help. In a student centered approach, it is the students themselves who are responsible for the success of a lesson and therefore they tend to feel more responsible for the success of their own learning.

Teacher-Centered vs. Learner-Centered Paradigms:

Comparison of Teacher-centered and Learner-centered paradigms (Learner-Centered Assessment on College Campuses by Huba and Freed 2000)	
Teacher-Centered Paradigm	Learner-Centered Paradigm
Knowledge is transmitted from professor to students	Students construct knowledge through gathering and synthesizing information and integrating it with the general skills of inquiry, communication, critical thinking, problem solving and so on
Students passively receive information	Students are actively involved
Emphasis is on acquisition of knowledge outside the context in which it will be used	Emphasis is on using and communicating knowledge effectively to address enduring and emerging issues and problems in real-life contexts
Professor's role is to be primary information giver and primary evaluator	Professor's role is to coach and facilitate. Professor and students evaluate learning together
Teaching and assessing are separate	Teaching and assessing are intertwined
Assessment is used to monitor learning	Assessment is used to promote and diagnose learning
Emphasis is on right answers	Emphasis is on generating better questions and learning from errors
Desired learning is assessed indirectly through the use of objectively scored tests	Desired learning is assessed directly through papers, projects, performances, portfolios, and the like
Focus is on a single discipline	Approach is compatible with interdisciplinary investigation
Culture is competitive and individualistic	Culture is cooperative, collaborative, and supportive
Only students are viewed as learners	Professor and students learn together

Table 3: Teacher-centered vs. Learner-centered paradigms

How Can We Create Student Centered Teaching?

In order to allow students to gain this power in the class, teachers cannot simply lecture and let students take a passive role. They must design activities that let students take initiative and that let students discover meaningful information for their own lives.

They must also get to know the students on an individual basis so that they can better respond to the individual needs and interests of the students. In general, teachers need to focus on the student's needs, abilities, and interests -- they need to "look at how students learn, rather than at what there is to teach.

Moving From a Teacher/Expert Approach to a Student-Centered Approach:

Although an educational shift, from a teacher/expert approach to a student-centered approach, maybe associated with positive consequences, it nonetheless requires teachers and students to respectively modify their thinking and actions towards education.

First, teachers will need to change their role as professionals, to develop competence programs, to adapt their lectures to include interactions with the class, to consider students' prior knowledge and background (impact of cultures), as well as orient and guide students in their learning process (Frenay et al., 1998). In other words, teachers will need to accept that the relationship between teaching and learning is now different (Tagg and Barr, 1995). Second, students will be required to participate in their own learning process; that is become active learners, and focus on transferring information and knowledge to other disciplines and to real life situations (Frenay et al., 1998).

In sum, a change in approach signifies that both teachers and student change their attitudes and behaviors to education. The already existing normative structure in terms of education needs to be modified in order to support a new way of conceptualizing education. This is precisely what our Normative Theory of Social Change attempts to do. First, our Normative Theory of Social Change offers a theoretical framework for understanding people's reaction in face of dramatic social change that affects the normative structure of a group. Second, our Normative Theory of Social Change proposes a concrete solution designed to facilitate the shift from a teaching/expert approach to a student-centered approach: minority influence.

Assessment of Student Centric Learning:

In a student centered classroom, students are encouraged to participate actively in learning the material as it is presented rather than being passive and perhaps taking notes quietly. In the student centered classroom students are involved throughout the class time in activities that help them construct their understanding of the material that is presented. The instructor no longer delivers a vast amount of information, but uses a variety of hands-on activities to promote learning.

Four aspects of Creative thinking are involved in Student centered learning. They are:

Inquiry: It is closely associated with science, inquiry or research is the task of acquiring knowledge pertaining to empirical questions. Students should know the language of science like theories, laws, hypotheses etc. and principles of scientific method. They can be taught and instructed to evaluate the credibility of information sources.

Reasoning: Commonly also called inference is the relatively overt mental process which helps us to reach conclusions on the basis of evidence, lies at the heart of higher-order thinking as reasons can be communicated to others.

Inferential Errors: It is a means of inoculating people against mistakes.

Argumentation: Students should develop skills of argumentation by constructing and analyzing arguments which also plays a key role in purporting creative thinking.

The Effectiveness and Critiques of Student-Centered Learning:

The use of student-centered 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-centered 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-centered learning, despite its popularity, is not without its critics. The main critique of student-centered 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. Another concern regarding student centered 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-centered approach as frightening or indeed not within their remit. Prosser and Trigwell's work in higher education emphasizes the different belief systems held by staff and students (2002). They found that lecturers with a teacher-centered 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-centered 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-centered learning change.

Conclusion:

The ultimate goal for student-centered classrooms is for students to gain independent minds and the capacity to make decisions about their life-long learning (Brown, 2008). What makes learner-centered education transformative is that meaning is co-constructed and that self-regulation occurs through interdependence, with a focus on being and becoming fully functioning (McCombs, 2009, p.7). To achieve successful social change in terms of education, there are two necessary steps in order to maximize the likelihood of constructive change in education. First, a student-centered approach needs to be clearly and simply articulated. Second, mechanisms are needed that allow for every stakeholder in the education process to be fully informed about the processes arising from educational reform. For example, schools, institutes and universities need to develop a common identity and sense of belonging to the broader reform-minded community. Since traditionally the Ministries of education have been the major source of power in education, they need to take a leadership role by publicizing new programs and emphasizing a unified philosophy of education.

Student-centered learning is not without some criticism but in general it has been seen to be a positive experience, for example, Edwards (2001) emphasizes the value of student-centered learning: 'Placing learners at the heart of the learning process and meeting their needs, is taken to a progressive step in which learner-centered 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).

Technology can play an interesting and essential role in an institution's centralized approach to teaching and outcomes-based handling of student learning. For example, faculty may be required to use e-learning platforms such as Black Board or Web CT. This process-painful though it may be for many individuals-typically forces teachers to think more reflectively about course design, delivery, and assessment. It can stimulate creative new ways to engage students and to incorporate highly contemporary materials, while sensitizing faculty to the range of new challenges and possibilities inherent in the application of educational technologies.

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