



STUDENT CENTERED LEARNING STRATEGIES IN HIGHER EDUCATION

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Abstract

Quality education in Higher Education is needed today, so that people living in the society and nation as a whole, acquire the necessary skills and competencies which is required for living meaningfully in a competitive, global world. High quality education is education that meets the needs of the student and helps in promoting their future development. A teacher's role becomes very important for promoting quality education. An effective teacher understands that teaching involves wearing multiple tasks to ensure that the class runs smoothly and all students receive quality education. To bring about quality education, a shift of focus of activity from the teacher to the learners or often termed as Student-centered approach to teaching and learning is necessary. Student-centered approach includes active learning, cooperative learning, and inductive teaching and learning. This paper attempts to find out the importance of student – centered approach to learning in bringing about quality education in Higher Education.

Key Words: Higher Education, learning Strategies, Student Centered Learning, quality education

Introduction

Higher education is the backbone of any society. Higher education includes college and university teaching- leaning towards which students' progress to attain higher educational qualification. It is where in-depth knowledge and understanding is imparted to the students so as to advance to new frontiers of knowledge in different walks of life. It is about knowing more and more about less and less. Very importantly, it develops the student's ability to question and seek truth and makes him/her competent to critique on contemporary issues thereby broadening the intellectual powers of the individual within a narrow specialization, and also gives him/her a wider perspective of the world around (NAAC, 2006).

The student-centered learning environment has been discussed in the higher education literature for a number of years.

In a student-centered learning environment:

- * learning is an active search for meaning by the learner-constructing knowledge rather than passively receiving it, shaping as well as being shaped by experiences;
- * Learning requires frequent feedback if it is to be sustained, practice if it is to be nourished, and opportunities to use what has been learned; and
- * learning involves the ability of individuals to monitor their own learning, to understand how knowledge is acquired, to develop strategies for learning based on discerning their capacities and limitations, and to be aware of their own ways of knowing in approaching new bodies of knowledge and disciplinary frameworks.

Student-centered instruction [SCI] is an instructional approach in which students influence the content, activities, materials, and pace of learning. This learning model places the student (learner) in the center of the learning process. The instructor provides students with opportunities to learn independently and from one another and coaches them in the skills they need to do so effectively. The SCI approach includes such techniques as substituting active learning experiences for lectures, assigning open-ended problems and problems requiring critical or creative thinking that cannot be solved by following text examples, involving students in simulations and role plays, and using self-paced and/or cooperative (team-based) learning. Properly implemented SCI can lead to increased motivation to learn, greater retention of knowledge, deeper understanding, and more positive attitudes towards the subject being taught (Collins & O'Brien, 2003). Student-centred learning has student responsibility and activity at its heart, in contrast to the stronger emphasis on teacher-control and the coverage of academic content found in much conventional, didactic teaching (Cannon 2000). Student responsibility and independence help to develop characteristics of lifelong learners—motivation, self-evaluation, time management and the skills to access information. Research in student learning underscores the importance of concentrating on what learners do, and why they think they are doing it, rather than what the teacher does. Problem-based learning is an outstanding example of student-centred learning in higher education.

With a student-centred approach more is demanded from students than learning course content in order to pass an exam. If 'learning for the exam' is the kind of learning that got them into university, then student-centred learning strategies can threaten students' sense of competence or security if they are not sure exactly what learning is required and why. The focus on student learning and responsibility means, however, that teaching staff have an even greater

responsibility for providing learning outcomes, assessment and evaluation that support the students as independent learners.

Why Focus On Student Centred Higher Education?

To say that the purpose of colleges [universities] is to provide instruction is like saying that General Motors' business is to operate assembly lines or that the purpose of medical care is to fill hospital beds. We now see that our mission is not instruction but rather that of producing learning with every student by whatever means work best.

If learning, rather than instruction, is at the heart of the enterprise of higher education, then the weight of empirical findings decidedly supports the use of active, student-centred approaches over passive, teacher centred strategies. Teachers who believe their job is to cover their course systematically by transmitting information to students are more likely to encourage surface learning approaches among their students, where retention is temporary, generalisation of knowledge poor and learning how to learn is minimal. On the other hand, teachers who encourage student involvement in the learning process and focus on the quality of learning outcomes are more likely to encourage cognitively deeper and richer learning experiences for their students. In short, by focussing on instruction rather than learning, universities have confused means with ends, and created institutions that foster and promote the least effective methods for student learning.

"Why is there so much talk about student Centred now?"

Student-centred learning, while not new, has come into prominence because:

- **Mass:** universities are no longer catering to elite student populations.
- **Diversity:** we have large numbers of non-traditional and international students.
- **Competition:** we are competing for students as never before.
- **Employment:** there is great pressure to align the outcomes of university education with useful generic skills and jobs.

Information explosion: with the explosion of accessible information and knowledge, how people learn and manage information is becoming an essential outcome of a university education and sometimes more important than what they learn, especially when the shelf-life of information may be so short.

- **Research:** we have a growing understanding of how students learn
- **Practice:** the strong impact of values and departmental practices in shaping student learning.

Know Your Students

There is now a large body of research (Bain 1994, Biggs 1999, Entwistle 1991, Meyer & Boulton-Lewis 1997, Trigwell & Prosser 1991) that demonstrates the link between students' previous experiences and motivation and their performance as learners. Tapping into this information we are in a better position to assist students by increasing relevance and thereby enriching understanding. Previous experiences influence students' views of learning and the way they approach their learning. These experiences are also strong influences on their motivations for learning. Where students are motivated to come to an understanding of, and engage with the material with which they are presented, they are more likely to adopt strategies that will lead to deeper levels of learning compared with students who are motivated to pass the exam only. We connect best with students, and they with us, if we know a little about whom they are, their previous experiences and their understanding of our subject. What are our students' backgrounds, and what do they already know?

Getting To Know Students

- opens communication
- builds rapport between students and staff
- Reduces alienation and disruptive behaviour in large groups.

To tap into your students' motivation, know their aspirations. Do they merely want to pass? Or do they want to go on to postgraduate research? Are they aware of the possibilities of where their course can lead them? Of course many motivations will exist in most classes. Build on relevant student experience in the class—it could be cultural, geographic, work-based, or practical knowledge of the implications of a theory or related concepts from other disciplines.

Identify and Communicate Clear Learning Outcomes

Clear learning outcomes, when made explicit to students; enable them to appreciate what is expected of them and how they might know what they have achieved. In addition, when learning outcomes are specifically assessed and feedback provided to students, this demonstrates to students the importance of the desired learning. In student-centred learning it is very important to develop course objectives which will drive student learning goals and assessment. This means that learning outcomes are written in a way that describes what the student will be able to do, and know, as a result of their experiences. Learning outcomes also need to be written in ways that enable learning to be assessed. One standard way of tackling the development of course objectives is to work out what you would like the students to have acquired by the end of the course in terms of knowledge, skills, and attitude.

- **Knowledge** refers to subject content. Specific examples for your discipline might include the design and function of a dwelling, Australian coastal environments, and the causes of the French Revolution
- **Skills** refer to abilities. These may include conducting interviews, identifying flora or fauna, writing essays, and designing websites
- **Attitudes** refer to the thought processes involved in deploying the skills. Examples include the importance of critical thinking, the significance of active listening, a proactive attitude towards learning, and respect for the opinion of others.

Verbs used in learning outcomes that encourage deeper levels of understanding by students include reflect, hypothesise, relate, argue, theorise, explain, analyse. For example analyse the causes of the French Revolution versus Name the causes of the French Revolution. Students' assignments need to show you how well students are going about processes such as solving problems, making models, writing academically, critiquing what they read, applying principles, and thinking about concepts.

Use Flexible Learning and Teaching Strategies to Achieve Learning Outcomes

Once we have decided what students need to know, we need to design learning activities that allow students to demonstrate what and how they are learning. One of the fundamentals of good teaching is to move from the known to the unknown. This enables students to develop their understanding in terms of what they already know, allowing them to construct and climb a 'scaffold' of understanding. Of course, building on the students' current understandings requires knowing them. In addition to the examples below other forms of student-centred learning have their own 'prism' through which learning, and learning about learning, takes place. The element they share in common is the emphasis on student self-responsibility. This means that resources such as lectures and textbooks are viewed as a means to an end that the students can draw on when needed. The essential point, independent of the technique used, is to facilitate self-managed learning.

Real World Problems

One of the reasons problem-based learning is such a good example of a student-centred learning approach is that the problem focus is ideally on a real-world problem, with all the difficulties and excitement that follow. A real-world problem can motivate students and introduce them to new dimensions of the acquisition of knowledge: problems are not always technical; they may have human and social components as well.

Problem-solving motivates learning, requires students to think, to generate questions and find information. Knowledge acquisition becomes a means to an end, that of understanding and

application, rather than a means to the brief and short-lived end of passing exams. Problem-solving encourages these outcomes:

- learning the multi-dimensional nature of problems
- learning how to balance and design solutions with multiple constraints
- Learning when they need new knowledge and skills to achieve a solution.

When students have developed the skills for discovering when they don't know enough, and are confident to take control of acquiring that missing knowledge, they have taken a large step towards lifelong learning.

Assignments

Students are more involved and challenged when:

- working on a project
- designing their own experiment
- setting their own research topic or essay
- dealing with a problem and generating their own questions about it rather than staff doing it for them
- Reflecting on their learning. Journals are being used increasingly to encourage students to reflect on how they see its applications, and to give feedback to staff on students' understanding and reaction to topics

Lectures

Are there better ways of students gaining information than by listening for long periods? (We know how short attention spans are.) What can they learn from a lecture that they can't learn in some other way? Many students would find it more efficient to read the information, or be set assignments that require them to find answers, demonstrate their understanding or learn from each other. That can free lecturers to use contact time differently. Consider the contact hours or opportunities you have with your students as a total package, rather than as lectures, tutorials and so on. Several departments have collapsed contact hours to construct workshop/lab/tutorial/input times in a far more coherent fashion, or have changed seminars into interactive sessions where students learn to manage discussions, debate constructively and teach each other.

If you do have a large lecture group, you can overcome some of its inherent difficulties by getting feedback on how well students understand the key concepts and tailoring future lectures or tutorials as a response. Another approach is to split the larger group by devolving responsibility to students.

Tutorials

Tutorials have traditionally been considered opportunities for students to gather in smaller groups so that they can interact with each other and address subject material in greater depth. Increasingly they are now larger groups where some of the benefits of interaction have been diminished. For an example of a method for retaining the benefits of the smaller group when the tutorial sizes balloon see 'Supertutes' as used in Applied and Molecular Ecology.

Using IT

Many software packages can be used to give students practice, test themselves, self-evaluate, extend and challenge their understanding. They can encourage students to help each other, and come to lecturers for help only after they have worked at the problem and sought help from others first. Derek Abbott in Electronic and Electrical Engineering likes to communicate with students by email; others set up chat groups on specific topics to generate questions and answers among students. The most successful use of IT is probably where students learn to ask questions and to learn from each other so that personal learning networks are established and supported by staff.

Teamwork

One of the most common strategies used in a student-centred approach is for students to work in groups or teams. Not only is this an effective way for students to learn, but in work, family life and leisure activities the ability to work in teams is essential for most people, and it is one of the generic skills highly sought by employers. Learning in teams can be very effective, but teaching the requisite skills can be difficult. Teamwork involves process skills that must be taught and monitored, in addition to the content of the course.

Assess For Achievement of the Specific Learning Objectives

The best forms of assessment are aligned with the learning goals and the teaching methodologies we use and are designed to give feedback to students. We need to harness assessment to encourage the sort of learning outcomes we are seeking.

In student-centred learning we are emphasising knowledge, attitudes and skills such as:

- responsibility for one's own learning
- independence and co-operation
- problem-solving
- understanding
- Thinking for one

Assessment drives learning more than anything else because it represents the bottom line of students' performance. All assessment methods require that student's present evidence of their learning, yet in most cases (with the thesis and project work being notable exceptions) it is the teacher who controls the character of that evidence.

If we really believe in student-centred learning then we must work hard to ensure that our assessment practices reflect, encourage, and reward this belief. We need to be constantly aware of any discrepancies between what we are asking students and what we really want to know. We need to use forms of assessment that will show evidence of these; otherwise students get the message that we don't take such goals seriously.

Student-centred learning is encouraged by the use of formative assessment and criterion-referenced assessment:

- **Formative assessment** is assessment for the purposes of gathering feedback on learning and does not usually contribute to a grade. Assessment for grading purposes rather than feedback is called summative assessment.
- **Criterion-referenced assessment** measures students against the learning criteria in the course, unlike norm-based assessment which measures students against other students.

One of the benefits of criterion-referenced assessment is that both teachers and students can more easily see where students are succeeding and where they are not, which can be invaluable in improving the course for its next offering.

Role of Higher Education in the Society

Higher education is generally understood to cover teaching, research and extension. Higher education is the source or feeder system in all walks of life and therefore supplies the much-needed human resources in management, planning, design, teaching and research. Scientific and technological advancement and economic growth of a country are as dependent on the higher education system as they are on the working class. Higher education also provides opportunities for life-long learning, allowing people to upgrade their knowledge and skills from time to time based on the societal needs (NAAC, 2006). The report of the UNESCO International Commission on Education in the 21st Century titled "Learning: The Treasure Within" (popularly known as Delors Commission) emphasized four pillars of education: learning to know, learning to do, learning to live together and learning to be. While, higher education intends to inculcate all these four in individuals and the society, the report highlighted the following specific functions of higher education too: • To prepare students for research and teaching; • To provide highly specialized training courses adapted to the needs of economic and social life; • To be open to all, so as to cater to the many aspects of lifelong

education in the widest sense; and • To promote international cooperation through internationalization of research, technology, networking, and free movement of persons and scientific ideas (UNESCO, 1996)

Conclusion

Thus the increased emphasis on self-regulation poses some interesting challenges when students have not previously experienced this learner role. Learner-centered educators in higher education who are aware of students' preferences realize that many of them feel threatened when student self-regulation is a course expectation. In fact, students who have not previously taken responsibility for their choices and decisions in courses may not perceive that such a course is learner-centered at all. This means that instructors need to be prepared to scaffold the students' progress toward self-regulation. Some of the techniques described in this article have been structured specifically to prepare students in higher education to take responsibility for self-regulated learning.

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