

Problems based learning- A boon for higher education

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Abstract

As any good teacher knows, all students do not learn in the same way. In addition, it is common for a class of students to be at a variety of levels in any particular subject. Teachers need to use different methods in order to reach all students effectively because Higher level students are not mere learner but challenges in education for innovative and altruistic excellence. Students must be empowered to be able to withstand the global challenges of the 21st century. Basically teaching must include two major components: sending and receiving information. The teacher tries his/her best to impart knowledge as the way he/she understand it. This is why any communication methods that serve this purpose without destroying the objective could be considered as innovative methods of teaching. Innovative teaching and learning methodologies such as Discussion, Debate methods, E-learning, Projects methods, Role-playing and problem-based learning (PBL) are very useful in addressing the rapid technological advances that will be required in the foreseeable future. The paper gives the importance of problem-based learning as a very active style and students assume greater responsibility for their learning as they create meaning for what they are guided to. Problem-based learning for higher students is the flourishing approach to learning extremely useful in promoting analytical thinking.

Introduction

Education in the 21st century is undergoing rapid and startling changes. Students are not only mere learners but challengers in education for innovative and altruistic excellence. Students must be empowered to be able to withstand the global challenges of the 21st century. The **Oxford Dictionary** defines innovation as “**The introduction of novelties, the alteration of what is established methods**” Teachers are confronted with the numerous constraints in advancement of right minds of the learners who look forward to receiving right approaches right directions and

right strategies that call forth a harmony of humane awareness. Side by side with these, a continual sustained, spontaneous and living response from the society with regard to positive and vibrant education has contributed a lot to what education ought to be for enlightened global society.

A key performance indicator of any educational institution is the education quality in especially teaching and learning areas because teaching as learning areas are the tool of any institution. Effective and innovative learning include developing the capability of students to use ideas and information, testing of ideas and evidence, generation of new ideas and evidence, facilitation of personal development and development of a student's capacity to plan and manage their effectiveness in a question that plagues higher education for a number of decades (**Braskamp and Ory. 1994**).

Centra (1993) defines the effective teaching as **“That which produces beneficial purposeful student learning through the use of appropriate procedures.”**

Stensaken (2008) argues that in order to achieve quality teaching and learning greater attention must be paid to teaching as learning practice. Learning occurs place when right is gained, and when the process are understood in short. When interaction has taken place between learners and their peers.

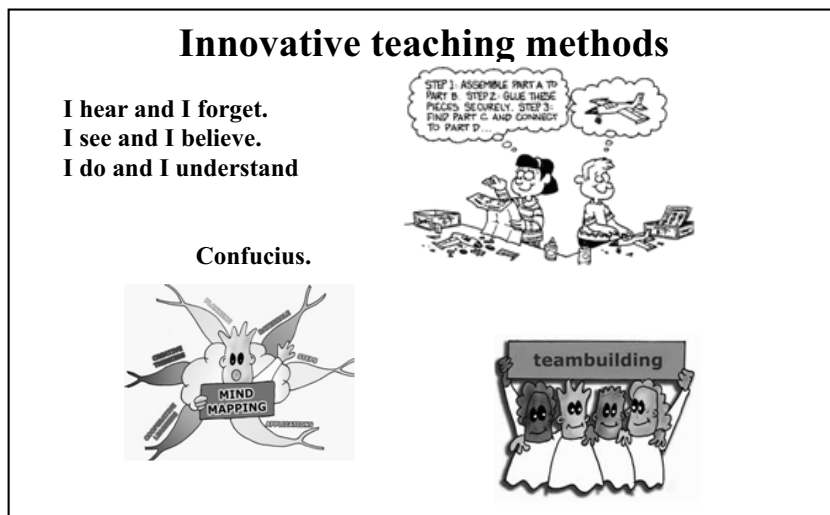
Braskamp and Ory (1994) include both teaching and learning in their definition “ Creation of situation in which appropriate learning occurs, shaping those situation is what successful teachers have learned to be effectively”.

As any good teacher knows, all students do not learn in the same way. In addition it is common for a class of students to be at a variety of levels in any particular subject. Teachers need to use different teaching methods in order to reach all students effectively. Basically teaching must include two major components: sending and receiving information. The teacher tries his best to impact knowledge as the way he understood it. This is why any communication methods that serve this purpose without destroying the objective could be considered as innovative methods of teaching.

The application of innovative teaching and learning methods is critical if we are to motivate and engender a spirit of learning as well as enthusiasm on the part of students, for learning while at universities and indeed for lifelong learning. Lectures should thus apply themselves to utilizing innovative methods so that the students learning process is as force flowing as possible and that the methodology they adopt is conducive to learning.

Hare (1993) points out in his book that there are a number of traits required of the innovative lecturer which include humility, courage, impartiality, open-minded, empathy, enthusiasm, judgment and imagination.

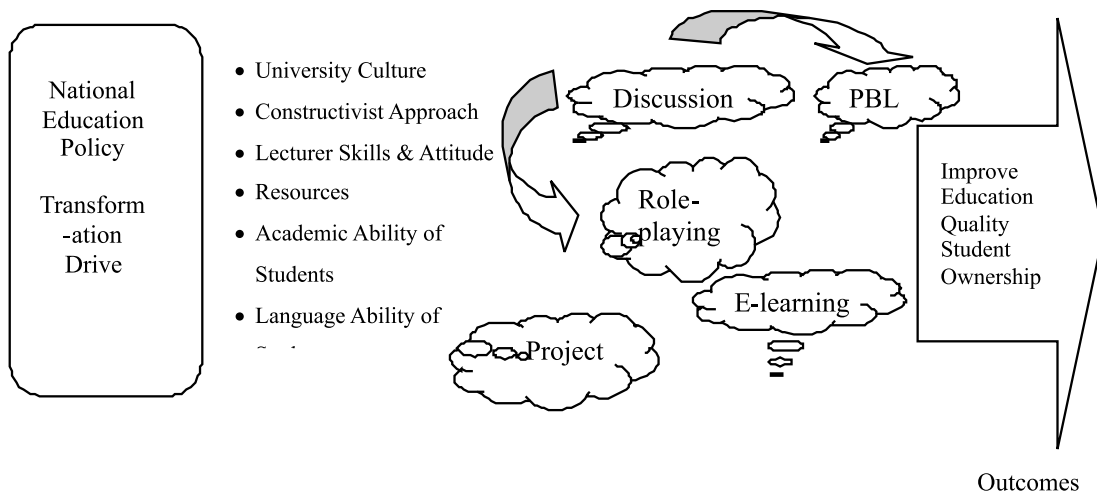
Each discipline undoubtedly has unique challenges as well as advantage and opportunities when it comes to innovative teaching. The development of student learning in higher education in the context of teaching and learning is currently a global cause for concern.



In the process of learning it is impossible to learn any concrete issue by using only one method. A teacher should choose the proper method according to the concrete aim and problem. In the higher education innovative teacher and learning methodologies such as discussion, debates, problem based learning (PBL), heuristic method, brain-storming, role playing, portfolio development , activity –oriented teaching, project method & E-learning are very useful in addressing the rapid technological advance that will be required in the foreseeable future.

In the National Education Policy, 1986 it is stated that – “The higher education is a means to achieve higher knowledge to discover new knowledge to prepare specialists for different field of the nation, to develop broad attitude among youth and all round development of the nation.”

So far the attainment of these objectives the teacher should make the innovative lecture room practice in the following way.



Innovative Lecture Room Practice

The following methods can be adopted in the innovation teaching practice at the higher level-

- Heuristic method
- Brain-storming method \
- Role playing method
- Portfolio development method
- Co-operative teaching method
- Collaborative work
- Analytical method
- Explanatory method
- Activity-oriented teaching
- Project method
- E-learning

Apart from these methods the problem based learning is a boon for higher education because it provides opportunity to the students for analyzing and solving a problem on the basis of the previous stock of their knowledge enrichment with the present means available to them, quite independently by following some systematic steps and arriving at some basic conclusion or results to be utilized in future for the solution of similar problems in identical situation.

Problem-Based learning for students is a flourishing approach to learning that is extremely useful in promoting critical and analytical thinking and in addressing the rapid technological changes and dynamic workplace of the 21st century.

Problem Based learning is founded on an unconventional pedagogical model when viewed alongside the conventional didactic one and it offers greater benefits to the quality of student learning (**Greening, 1998**)

The approach to education suggests a strong role for factors such as authenticity, as well as student independence, and is principally associated with the encouragement of deep learning (**Sutherland, 2009**)

PBL is a very active style and students assume greater responsibility for their learning as they create meaning for what they are guided to. Students either individually or in groups, acquire improved language and subject matter skills and knowledge and become more proficient in problem solving.

Students are more willing to express their ideas and they experience deeper learning as they are able to test out new concepts (**Warren, 2003**) PBL also supports language acquisition skills as students are often called on to try to express their opinions in group communication and this strengthens their language skill.

The nature of PBL means that it demands a unique relationship between the teacher and the student. This allows the student to determine their course of action to a degree with the help of the lecturer thus making the learning process for more interesting and engaging.

REFERENCES –

A. Nicolaidis Innovative teaching and learning methodologies for higher education Institutions Educational Research. Vol.3(8) pp. 620-626, August 2012

Bauer K, Bauer G, Revelt J, Knight K (2008). A framework for assessing problem based learning at the University of Delaware Presented at PBL 2002: A Pathway to Better Learning conference, June 20, Baltimore, MD

Braskamp LA, Ory J C (1994). Assessing faculty work: Enhancing individual and instructional performance. San Francisco, Jossey Bass, CA

Greening T (1998) Scaffolding for success in PBL.

Hare W (1993) What Makes a Good Teacher Reflections on some chareacteristic central to the Educational Enterprise, The Althouse Press, Ontario.

Monika Poszaj-Stan. Traditional and innovative teaching methods

Stensaker B (2008) Outcomes of Quality Assurance: A discussion of knowledge, methodology and validity, Quality in Higher Education, 14(1): 7-11

Sutherland G (2009) A Curriculum framework for an introductory programme in the National Diploma: Engineering at the Vaal University of Technology, doctoral thesis, University of Stellenbosch

S.K Mangal and Uma Mangal- Essentials of educational Technology PHL Learning Private Limited(2004) Teaching Strategies and devices (231-305)

Warren D (2003) Improving student retention : A team approach in proceedings of the Annual conference of the Institute for Learning and Teaching in HE University of Warwick, Coventry, 2-4 July,2003.

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