

IMPORTANCE AND IMPACT OF STUDENT'S ENGAGEMENT IN INDULGING INNOVATION AMONG MANAGERS AND ENGINEERS

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ABSTRACT

This paper describes the importance of student engagement in indulging innovation among managers and engineers. Even though there is 'n' number of job opportunities and also so many people are qualified for the job they are not fulfilling the skill set requirement of the job. Because of these reasons rate of unemployment is too high. Only solution to this problem is student engagement. The good education system should provide values to the students and also it should nurture adaptability. Traditional method of teaching theory in the classroom without exploring to the real world environment will no longer helps the students to compete in this changing and competitive environment. Since technology is changing inevitably and learning to deal with it is required. Exclusively for engineers and managers student engagement plays the major role in creating creativity and innovation. Innovation will not happen all of the sudden it needs interaction and openness between the system and environment. Instead of providing basic knowledge by teaching theory, the students has to be engaged with all practical knowledge and experience learning to inculcate innovation. Innovation can solve many economical problems. Inculcating innovations to students is more important. This can be achieved through effective student engagement strategies.

Key Words: Student Engagement, Innovation, Experience Learning, Adaptability.

INTRODUCTION

Long ago literacy rate was very low only few people got educated. So they got employed easily. But now in this current scenario literacy rate has increased to greater extent and the environment is more competing in nature. Even though there is more job opening and many people have required education qualification, but they are not getting employed because of lack of competency and lack of skill set. This problem can be overcome by enhancing the standard of education. As Nelson Mandela says "Education is the most powerful weapon which can use to change the world". And in the modern era and knowledge society, education creates competitiveness and global prosperity. In terms of knowledge, quality, skills, attitudes & capacity education enables the individuals to develop competency and also it act as the efficient tool to integrate knowledge, value, skills and culture. Due to the incredible development in science and technology the world is experiencing more changes in working environment and employment. So education should inculcate adaptability and sustainability to the students for facing the challenges in the changing environment. Perspective of education should be changed that is students shouldn't focus only on getting marks instead they should focus to again knowledge, knowledge based education system should be emphasized which induce the student's creativity.

INNOVATION

Innovation is the successful exploitation of new ideas; innovation is the process of creating, developing and implementing new process, service or product for improving its efficiency, effectiveness and also to build the competitive advantages over it. In simple words innovation is introduction of something new, if there is no innovation it means that there is no progress in the organization, if so the organization cannot exist in the competitive market. For today's global economy innovation plays the vital role to meet the changing needs and wants and also expectation of the customers are too high they are more demanding. It is predominate that an organization needs to nurture and create an innovative environment. Both the managers and technical engineers should think differently to again the competitive advantage it is highly essential that an organization should retain competitive advantage. Now a day's all organizations are having research and development department, this research and develop works exclusively to breakthrough innovation. Research and development stimulate on patent and other scientific innovations that leads to productive growth for the organization.

➤ Need for innovation

The real intention of innovation is to bring new ideas and technology that drastically increase the productivity and also produce more output with same input which intern increases the productivity. Innovation and productivity brings grater benefits to customer and business. For developing countries innovation helps to resolve many critical problems. Innovation plays the significant role for economical development. Technological innovation is considered as core cause for the economical growth, it helps to increase the GDP rate, since it increases the productivity and also it creates changes in career. According to new world economic forum report, nearly 133 new jobs may be created in 2022 but 75 million jobs are replaced by Artificial intelligence, automation and robotics. However nature of the work will continue to change. Innovation is the important reason for the development and existence of modern era. Although innovation may create undesirable consequences, change is inevitable and to the most innovation creates positive effect. Innovation will increase the standard of living.

➤ Innovation in education

Traditional education of teaching only theory will no longer helps the students to face the competing environment; they need proactive thinking to resolve the problem and to develop adaptability. Innovation in education will encourage both teachers and students to explore something new, indeed they get the potent to have a different view for the problem and solve it. The modern era requires more ability from the graduates to deal with this information society. Education is one of the most important elements for developing innovation in the country and also it is more important for creating next generation innovators and creative thinkers. In this era of knowledge society there is a shift from industrial to science and information technology. Education shouldn't prepare for something but instead it helps students to prepare themselves for everything. Innovative teaching methods better serves the students and enable them to think innovatively. To prepare students for the competing and changing environment it is important to innovate the education system. Even though we have innovative education system there should be proper and effective student engagement for increasing the effectiveness of the system. Active learning system is need engage student and to encourage innovation and creativity.

Student Engagement

Motivating students positively is one of the tedious and challenging tasks faced by the teachers in daily basis. Motivation and engagement of students is the vital role in academic achievement. Teachers play important in engagement and motivation of their students. Student engagement is making students behaviorally, emotionally, cognitively involve in the academic activity, so that they can achieve more and also it is what

student to learn in and beyond the classroom. Since our world is experiencing deep global changes students need to be prepared for future. The aim of the higher education is to help the student to develop higher order thinking to face the complex real world problems. Educator is expected to provide quality education to the students, for that beyond the classroom education is needed. Because teaching only the subject is not required now since all the theory explanations are very well available in the online more that their competencies should be developed. Students have to be engaged properly in the classroom. Teachers and Institutions plays the important in student engagement. There are various issues that need to be addressed for implementing the effective learning system. They are as follows.

Content creation and delivery mechanism:

Content of the course is the essential thing for creating the effective learning. So the teachers and the academicians should be careful in creating the content it should really develop the competency of the students and also it should be delivered in the proper way for more efficiency.

➤ **Assessments:**

Assessments are also highly important because only by assessments students and the effectiveness of the system will be evaluated. There are various types of assessments like assignments, quiz, group evaluation like GDs, multiple choice questions, fill-in the blanks etc.

➤ **Grading capabilities**

Grading must be given as the feedback to the students, so that the students will come to know about their performance level and also it will motivate them to assess themselves and improve their performance. But grading system should be implemented without any partiality for more efficiency.

➤ **Collaboration**

For the effectiveness and efficiency of the system collaboration is the important task. Students should have proper interactions with the teachers. This interactions should be healthy more than the subjects the real world problems and the ways to face and solve the problems should also be discussed. Everyone should be given equal chance and all of them should share their views without hesitation. Here again educator should form a small group in the forum for exchanging ideas and clarifying the doubts through queries.

➤ **Adherent to standards**

There should be some specific standards that have to be maintained in the effective learning system. Standard of education shouldn't be compromised. To meet out the competitive environment it is important to maintain the stipulated standard.

Various ways of effective student engagement:

The following are the various ways by which students can be engaged effectively and which intern increase their efficiency.

➤ **Motivation factor that are essential for student engagement**

It is evident that engaged students are working in competition and while learning they involve themselves whole heartedly with others and also they feel that they are competent enough to face any type real world problems and solve it easily. This enhance the self confidence strength based learning is the foundation of

education. Task which is challenging and can be achieved should be set to feel the competency. And it is more important to give timely feedback which should tell the student what they have achieved and things that they should do to improve it. Next is group project encouragement develops the interdependence and sense of belonging which induce student engagement.

➤ **Important principles of good teaching:**

- It is important to inculcate positive teacher-student relationship.
- There should be good collaboration and co-operation among students.
- Active learning should be promoted.
- Timely feedback has to be given without any biases.
- Talent based encouragement should be there.

➤ **Active Learning:**

“Active Learning involves students in doing things and thinking about the things they are doing.” Active Learning strategy includes group work, cooperative learning and peer instruction. It also encourage more engaging, enhance teaching, and increase the learning outcome. It gives opportunity to the students to work actively work with concept. First ask question to the students then make them to think for two to three minutes, then pair them in groups ask them to discuss their conclusion for five minutes and finally call the group to share their views. Active Learning includes Quick quizzes, group discussion, debate, case studies, problem solving.

➤ **Participatory Teaching :**

Participatory Approach also known as Freirean approach is a teaching strategy that includes themes or content area that creates more interest to the learners. It is also the content based instruction used for the specific purpose. It empower the learners to liberating themselves from their burdens and also used as the vehicle to solve the social problems. It makes the students to take ownership of their learning as they collaborate with their classmates to find and endorse solution for the social problem. This approach utilizes a two way transaction learning where teachers and students collaborate with each other and the teachers act as the guide and facilitators.

➤ **Flip the classroom:**

Flipped Classroom is the instructional strategy and a type of blended learning. It reverses the traditional learning here the students watches the online lectures and interacts and makes online live discussion. This flip classroom includes online learning and mostly it makes the students to learn outside the classroom. In this method teachers interact with students and it will be more personalized and less instructive, so that students involve themselves and acquire more knowledge and it is constructive because students participate and involve themselves and evaluate their learning.

➤ **Technology in Classroom:**

Now a day’s students need technology in the classroom for effective teaching and learning. Smart classroom, interactive board online lectures, mobile technology all these technologies are used for active learning process. And increase the student engagement.

➤ **Writing:**

Making students to write or exercise journaling, one minute paper, writing stories etc will increase the student engagement in classroom as well as improve thinking skill.

➤ **Set Expectations:**

Before starting the class the educator has to set the expectation like what they are going to learn and how the concept will help in real life situation. And also what the students expect from the educator and try to fulfill the expectation. These things will increase the student engagement.

➤ **Integrated Curriculum:**

Integrated curriculum is one which connects the different area study by cutting across the subject matter and unifying the concept. This makes the students more focused and allows them to engage in relevant and meaningful activities related to real life.

➤ **Make the course relevant:**

To increase the student engagement it is important to make the course relevant. That is the subject and the concept should be connected with the real life examples which makes the course interesting and also helps students to understand easily and relate the concept. It also enlightens the current needs of the students.

➤ **Cooperative learning:**

Arrange the students in the small group or partners to make them to achieve the learning goals. Always working in group will be effective and increase the outcome of learning. This may include group discussion, debate, case studies etc.

➤ **Authentic Learning Experience:**

Methods such as inquiry, experimentations help the students to solve the real life problems and help to find solutions to the problem. These solutions will help the society as these experimentations will solve the real world problems.

➤ **Social Media:**

Potential use of social media also helps to increase the student engagement. That is by posting the relevant videos and sharing the concepts and contents will increase the involvement and interests. But it should be in the stipulated way.

➤ **Prepare for class before class**

Preparation for class before going to class is important in student engagement. Because the educator should be clear about the objective of the course, the clear method to teach, if not it drops the interest of the students.

➤ **Assess early and often**

Assessment is one of the important processes which helps to know the level of understanding of the students. Whatever the concepts we are teaching and however we are teaching, it is important to know the reach of the concept.

➤ **Assess the attendance**

It is also important to assess the attendance of the students. If there is more absentism it means the students are not interested in the class, so it indicates that is the high time to change the method of teaching.

➤ **Problem-based/project based learning**

All the learning should normally teach to again knowledge and that knowledge should be practically used to solve the real world problems. Students are tasked with solving a problem or completing a project, but the focus is on the end product, allowing students to determine what resources are needed to solve the problem or complete the project.

➤ **Use visual representations**

Use visual representations like videos, 3D animations, concept maps to engage the students to increase the outcome of the learning.

➤ **Inquire based learning**

To answer questions posed by the instructor or by the students themselves, a learner undertakes his or her own research to arrive at an answer. Inquiry-based learning⁵ can be as simple as watching video lectures, or more involvement could come from designing and performing an experiment.

➤ **Use simulations**

Games or role playing place students in an imaginary setting defined by the instructor, providing for an interactive, participatory learning experience

➤ **Tell stories**

Wherever possible, tell stories to illustrate concepts when giving lectures.

Conclusion:

Student engagement is very important to increase the interest of the student learning and intern it increase the outcome of the learning. Without student effective student engagement it is difficult to improve the innovative skill. In the present competitive world it is not enough to have only conceptual knowledge it is important possess the problem solving capability. Student engagement is the basic for creating the competency to face the real world problems. Student engagement is important for both academic and behavioral success.

Reference:

1. Ojalvo, H. E., & Doyne, S. Five Ways to Flip Your Classroom With The New York Times. [Blog post] *New York Times*. Retrieved May 15, 2019 from <https://learning.blogs.nytimes.com/2011/12/08/five-ways-to-flip-your-classroom-with-the-new-york-times/>
2. Evans, C., Muijs, D. & Tomlinson, M. (2015). Engaged student learning: high-impact strategies to enhance student achievement. [White paper] Retrieved May 15, 2019 from: <https://www.heacademy.ac.uk/knowledge-hub/engaged-student-learning-high-impact-strategies-enhance-student-achievement>
3. Twelve Best Practices for Student Engagement and Retention. [White paper] Retrieved May 15, 2019 from Mansfield University of Pennsylvania: <https://www.mansfield.edu/academic-affairs/upload/Twelve-Best-Practices-for-Student-Engagement-and-Retention-2012.pdf>
4. Quevillon, K. (2017). Student Attendance Matters, Even If Lectures Are Online. Ask Harvard. [Blog post] Retrieved May 15, 2019 from Top Hat Blog: <https://tophat.com/blog/student-attendance-harvard/>

5. Inquiry-Based Learning. Retrieved May 15, 2019 from Queens' University, Kingston: <https://www.queensu.ca/ctl/teaching-support/instructional-strategies/inquiry-based-learning>
6. Burroughs, J. E., Dahl, D. W., Moreau, C. P., Chattopadhyay, A., & Gorn, G. J. (2011). Facilitating and rewarding creativity during new product development. *Journal of Marketing*, 75, 53–67.10.1509/jmkg.75.4.53 [[Crossref](#)], [[Web of Science ®](#)], [[Google Scholar](#)]
7. Broß, J., Noweski, C., & Meine, C. (2011). Reviving the innovative process of design thinking. In *Proceedings of the sixth international conference on internet and web applications and services* (pp. 142–149). St. Maarten. [[Google Scholar](#)]

