

INNOVATIVE TEACHING METHODS IN HIGHER EDUCATION

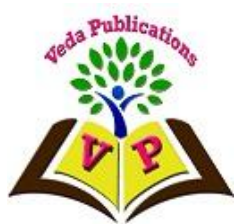
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ABSTRACT



Higher Education values plays a vital role in moulding the personality of an individual by contributing to Nation development, creating global competencies by skilled work forces, and inculcating human values with an attitude of attaining excellence. The traditional education system comprising of the use of text books and teaching tool has become a challenge for teachers in capturing student's attention effectively.

Currently, few new challenges in Higher education system include diversity, transition in society and modern technologies have posed the need for innovative teaching learning methods. Therefore, the use of innovative methods in education is mandatory to cater to the needs of the students which increases their level of self-confidence and competency by adapting the techniques like Flipped classrooms, gamification, designed thinking, mind mapping, self-directed learning, Information Communication Technology enabled learning, E-blogs etc. The advent of these methodologies facilitates learners to enhance knowledge. Even though, innovative techniques are powerful in developing the quality of education, it faces the challenges in introducing these methods in education due to lack of infrastructure and learning resources. In order to meet the requirements, Introduction of stringent Government policies is necessary in maintaining the total quality management in Education system.

Keywords: *Education, Innovative Methods, Quality, Challenges*

INTRODUCTION

An innovative teaching method contributes to enhance the quality of higher education. The term innovation is defined as the use of new ideas and methods. In education system, it ignites passion among students in effective learning process in day today life. Therefore innovative teaching methods in education play a significant role in student's participation in learning activity. There is evidence that innovations have helped the students to score better in exams as technology has brought more innovations in higher education. There is evidence that use of iPods in teaching learning revealed that 23% of improvement was found in examination evaluation on comparison to the classes without this device. Similarly, the use of tablets also contributes to the students to gain knowledge and helps in better communication. Hence innovation is mutually benefiting both teachers and students in teaching-learning and evaluation process. The creation of innovation in higher education system at various domains is a supportive strength in the wide spread academic environment in flexible learning. The use of electronic gadgets like smart phone, e-content, tablet, laptop, video conference device, smart boards etc are useful tools which energies the interest between teachers and students to accomplish advanced learning and to create eco-friendly environment. The advent of these methodologies facilitates learners and teachers to gain their knowledge for better performance than the traditional methods in higher education. Hence University Grants Commission emphasize on innovative methods as a component in assessing the quality of higher educational institutions.

REVIEW OF LITERATURE

The following are the literature reviewed linked to innovative teaching methodologies across higher educational institutions under the enforcement of policy making agencies. The current review of literature is a result of review articles, journals, research papers and relevant web sites.

Several educational experts and researchers have given importance for innovation in higher education. According to **Ashley** innovations should be flexible so that students are excited to learn and

make teachers easy to reach all the students and also creates a safe place to make mistakes, to take risk and ask questions.

In the words of **Mischelle**---"innovation in education is always seeking knowledge that will support new and unique ideas in instructional techniques that will reach the students in more effective and exciting ways.

Valerie---opines that allowing imagination to flourish is helping to create new things and makes one's feel awesome when it is a success. The great accomplishments would have missed if right attitude had missed.

Ruhela, Ryon, Resmi revealed that, the innovation process is vital to the up gradation of educational standards and complete utilization of the facilities available and developing the competencies of teachers.

According to **Narang** and **Arora** innovative methods is to improve the quality of teaching and one has to master over the modern methods and techniques of teaching. The lecture method is the oldest method in teaching. Therefore teachers should use the modern technological tools in teaching method.

From the study of **Bedell** it is found that the class size reduction improves student learning and teacher morale from the teacher's perspective. This will be also useful for the effective implementation of modern instructional strategies in the classroom.

The traditional concept of teaching learning process was pre-assumed ideas, information and concepts. But in the course of modernization and globalization the teaching and learning process was reformed to innovative techniques which enhanced the quality in education in teaching and learning atmosphere.

From the above reports, it is learnt that the introduction and implementation of innovative teaching methods in higher education has revealed that most of the students improved their productivity and output in knowledge. Hence the trend of innovate teaching methods is expanding continuously in higher education. Even the Knowledge of Human Development Authority (KHDA) emphasis on schools/ colleges to take more measures for improving the

quality of teaching and learning, these innovative ideas make teaching methods more effective.

OBJECTIVES

- To establish innovative teaching technique through effective need-based tool.
- To highlight various innovative methods in higher education.
- To analyze the challenges involved in introducing the innovations at higher level.

METHODOLOGY

The methodology of this paper is based on both primary and secondary data. For primary data a questionnaire was prepared and circulated to higher education in both science and humanities disciplines. A sample of 50 respondents were selected and interacted for our study on random basis.

Secondary data was also collected from internet, articles, journals and relevant books for our study.

ANALYSIS OF OBJECTIVES**1. To establish innovative teaching technique through effective need-based tool.**

In order to establish innovative teaching techniques the following need based tools are in practice.

Higher education system emphasizes innovative teaching methodology in education with respect to teaching, learning and training process. The modern curriculum frame work consists of learning outcome effectively achieved through chapter wise specific learning objectives (SLO). To achieve SLO's preparation of lesson plan facilitates the learner to participate in teaching learning activity effectively.

The process of introduction of pre-test before commencement of class and post-test at the end of the class evince the ability of the learners during participation. Preparation of students with timely assignments increases students reading, writing and recalling capacity. Introduction of small group discussion on particular content helps student's interaction. Seminars amongst student groups facilitate to impart their knowledge effectively. Participation of students in debate drives their communication ability to emerge out with leadership quality.

The use of teaching modular curriculum increases student's memory followed by their ability to recall their memories as mind mapping technique. Self-directed learning for teachers and learners by utilizing library as information and learning resources (e-books, e-question papers, blue print of learning objectives etc) update their skill and knowledge.

Adoption of choice based credit system (CBCS) in the curriculum of higher education institutions facilitates students for wider choice in interdisciplinary areas to improve their interest in terms of foundation course (Basics in computer application, English for communication), skill enhancement (Environment science, discipline based electives) and ability enhancement by introducing as elective subjects (Indian Constitution and other value added courses) in higher education system. Introduction of mentors- mentee program helps to track the student's ability (poor, average and better performers) through periodical interaction.

The adoption of innovative techniques in teaching, learning and training not alone benefits to the learners but it also update the knowledge of the teachers. The gradual improvement is attained by subjecting teacher into various training programs in order to fit them into global competency relating to teaching, training and in research field and to have a quality teacher's profile. Attending conferences, seminars, symposium, teacher training program, faculty development program and workshops helps them to update the current knowledge to disseminate knowledge to the students effectively. Carry out of advanced research by teachers and their scientific publications enhance their wider visibility in the scientific community the drives students to develop interest in the area of research.

Innovation strategies in higher education help the teacher to perform their roles effectively as a mediator for learning, a leader and an administrator of the process of learning, an effective interpreter and designer of study materials, scholars and researchers, and an impartial assessor of performance. The teacher is an effective innovator in controlling the class as it depends on the knowledge and expertise in delivering the subject to be required to impart necessary skills and techniques.

Innovations can be effective for teachers in the following ways—it facilitates visual and practical learning experiences, it encourages collaborative learning, it saves time for teachers and helps them to develop relationships with the students to enhance effectiveness in imparting knowledge education.

The conventional teaching tool “chalk and talk method” is substituted by Information Communication Technology (ICT) enabled teaching consists of power point presentation, interactive board, e-podium etc would induce visual learning ability among the learners and help them to gain skill based experiences which is the basis for better learning.

2. To highlight various innovative methods in higher education.

Capturing each student’s attention and conveying ideas effectively is the biggest challenge of teacher’s creativity in today’s life. Therefore, teachers should use innovative methods to attract the students and to make them comfortable in the classrooms.

The following are the innovative methods used in higher education.

Gamification:-Gamification makes the teaching method very popular as the students learn without having any traditional learning methods. This motivates the student to improve the involvement interest engagement and efficiency in learning.

Role play:- It helps learners to come out of their comfort zone and develop skills which are inter-personal. This method is very effective in subjects like history, literature, economics and political science.

Brain storm:-In this method multiple brains are made to focus on one single idea i.e, it helps to get numerous ideas as each and every one will involve in discussion.

Audio-video tool:- The tools like filmstrips, short movies, and slide shows supplement text books helps the students to increase their ability to listen, and to understand the concepts better.

Classes outside the classroom:- Arrangement of field trips that are relevant to their lessons taught makes the students fresh and exciting as it makes them to remember the lessons easily without any effort.

Creativity:- Creativity which includes puzzles and games, capture the learning interest of young minds .this method is more effective in science and mathematics rather than humanities.

Class-room environment:- It stimulates the students to explore their ideas as it creates positive impact on them.

Flipped classrooms:- In this method, students are introduced to the learning material before class, in classrooms discussion with other students is facilitated along with problem solving activities. This new method allows the students to have greater flexibility and ability to control the pace of learning.

Projects and research books:- Institution should expose students to projects and research activities to have in-depth knowledge in the subject chosen.

Design thinking process:- It is a structured framework for identifying challenges, gathering information, generating potential solutions, refining ideas, and testing solutions.

3. To analyze the challenges involved in introducing the innovations at higher level.

Implementation of any new method to an existing system is multifactorial and embedded with few difficulties that pose as challenges. This needs to be addressed for uniform and wider acceptance by the students and stake holders. Few such challenges are given below.

Change-resistance:-Generally,developing countries due to lack of information, hesitation to accept change and showing reluctance in adaptation of new change creates resistance to accept innovative technologies in higher education.

Lack of competence:-One of the reason for change resistance in a given system is lack of competence amongst participants. It creates a considerable gap in teaching learning and training. Therefore creation/ motivation to attain competence in the concerned area is very crucial and need for path towards success. Hence competence is of paramount importance in accepting the introduction of new methods. This restricts innovations as teachers are not confident in their capabilities.

Immense expenditure:- Government at macro level and institution at micro level inadequate funds

required for making investments for introducing innovations at higher education system.

Infrastructural disabilities:- Infrastructure is purely dependent on fund availability. The creation of good infrastructure as learning resource to create learning environment is highly significant. Insufficient infrastructure facility/ disability hamper the implementation of new technique. In such conditions the introduction of innovative techniques is time consuming and cumbersome.

Lack of professional training and teaching aids—

Teacher quality is of great importance befitting to the requirement of new system. Therefore specialization ensures quality teaching and the teachers are to be professionally efficiently trained in their respective fields through faculty development programs to get adjust to the change. Thus to make use of innovations as a part of their teaching-learning components, training aids are not up to the expected standards.

In order to improve the quality and access to education, the Government of India has provided facilities for expansion of quality education through (MHRD) Ministry of Human Resource Development). Few initiatives by MHRD through UGC are as follows:- National Digital Library: (NDL):- This program has already brought together 15 million digital books and journals and 31 lakh of learners including research scholars, students and faculty of all disciplines are beneficiaries of the program.

Study webs of active learning for young aspiring minds (SWAYAM) Massive Online Open Course (MOOCs) portal provides high quality education. The beauty of this is, it is available to anyone, anytime, anywhere at no cost. The portal has courses by the best teachers in the country with more than 1000 courses and more than 33lakh users registered in this forum. They offer video lectures, e-reading materials etc for learners to become successful.

FINDINGS

Analysis of primary data:

To analyze the impact of higher education, a small objective questionnaire was prepared and circulated to science and humanities department. A sample of 50 teacher respondents was selected to analyze the

importance of innovative methods in higher education. From this the findings observed is as follows:

In order to find out the effectiveness of innovative methods in higher education, teachers teaching science and humanities in different colleges were supplied a questionnaire to find out the practical applicability of innovations in class rooms.

All the science teachers opined that innovations and creativity is effective in teaching at higher level, but, online teaching is ineffective particularly in subjects like physics.

Creativity is necessary for inducing interest among science students but not very important criteria, as subject in science have less flexibility in introducing novel ways. English teachers have a great edge in this component. This means creativity as a part of innovation has more scope in literature and humanities and comparatively less in science subjects. However, the analyses have made it clear that online teaching-learning can be more effective in humanities rather than science.

Interaction with teachers and facilitators reveals that chalk and talk method of teaching is still effective in science subjects. In humanities emotional components in teaching as well as learning is more recognized than machine learning.

On the whole, both science and humanities teachers welcomed change in the educational system by introducing innovations with slight modification.

CONCLUSION

The study concludes that the change in the education system by introduction of innovative teaching techniques is accepted as need based between science and humanities. However, a stringent policy is essential to bring a remarkable change to the existing education system.

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