Interactive Teaching: The Role of Participatory Approaches in Higher Education

Manpreet Kaur
Student, B.Ed., DeshBhagat College of Education, Bardwal, Dhuri, Punjab

Abstract

The teaching methods adopted for educational process constitute an important role in education prosperity. Therefore, selection of an appropriate tool is determined by objective of subject matter. The individuals need of learner, teacher and society must be considered while selecting the method of teaching. The selection should be in responses of current challenges and trends prevailing in economic, social, technical, educational and R&D environment. There are various internal and external factors which directly or indirectly determine the selection of teaching method as desired level of learner, skills of teacher and environment of class. The level of expertise and experience of teachers along with present and desired level of knowledge of student lays down the basis of technique to be used for improving educational process. The present paper tries to explore all possible teaching and participatory methods which can be used to improve the efficiency and excellence of teaching interaction in higher education institutions.

Keywords*: Interactive Teaching, Motivation, Participatory Methods and Teaching Approaches.*

Introduction :

It is well said that education can be better implemented by students themselves only. An emotional state of mind along with disposition, educational and cultural background determines the motivational readiness of a learner. As per Maslow (1943), there is a hierarchy of needs which instills the feeling of achievement in an individual. Motive is an internal emotion that causes change in behavior of human to work towards achievement of objectives or needs. It is need of an Indian educational system that motive should be built among students to induce more creativity and logic-based intelligence. Indian higher education is being criticized for encyclopedic knowledge-oriented approach. More stress is given on acquiring theoretical knowledge rather than promoting skill based practical application of knowledge, which results in lack of problem-solving ability among the students. Students are unable to analyze the problem or identify the key alternatives involved in the problematic situation. Acquisition of encyclopedic knowledge can only help to understand the subject matter, but somehow prohibits the practical application to critically analyze the condition, stand up with own creative ideas, evaluate the current and futuristic solutions. Application of creative inducing tools or in other words participatory methods of learning can help to promote efficiency and effectiveness in education.

Interactive teaching is a dynamic educational concept that induces collaboration and engagement between educators and students. Unlike traditional methods, interactive teaching promotes active participation, allowing students to explore concepts through participative activities, discussions, and hands-on experiences. By creating an interactive learning environment, educators aim to

promote critical thinking, comprehension and retention, ultimately stimulating a more profound understanding of the subject matter. This approach not only induces curiosity but also promotes a dynamic exchange of ideas, making the learning process more enjoyable and effective.

In an interactive teaching system, educators leverage different tools and techniques to evoke student involvement. This may consist problem-solving sessions, group discussions, simulations, and interactive technology activities. The stress is given on creating a collaborative environment where students can freely ask questions, share their viewpoints, and actively get involve in their own learning journey. Furthermore, interactive teaching inculcates diverse learning styles, recognizing that students absorb information uniquely. By incorporating real-world experiences and practical knowledge applications, educators try to bridge the gap between theoretical concepts and practical application of it, making the learning experience relevant and enriching to students.

This paper discusses the teaching and participatory methods for promoting quality education along with importance of motivation required for better implementation of these methods.

A. Importance of Motivation in Teaching-Learning Process

Unfortunately, at universities, students like to choose study without periodic preparation, driven either by their lack of interest in their chosen field or due to a parental wish (Kucharčíková & Tokarčíková, 2016). While obtaining a university degree is praiseworthy, some students exhibit minimal interest and initiatives. In such cases various motivational factors come into play as interest in a subject establishment on teaching content, techniques, the relationship between educator and learners, and other variables. Timetables, class sizes, environment, teacher initiatives, and similar factors also play a role. To motivate students, it's important for teachers to draw the course content and objectives at the semester's start, calling students to express their expectations and interests. The feedback will help an instructor to tailor the course content to meet the expectations of both students and teachers. Motivation, as defined by Csikszentmihalyi& Nakamura (1989), boosts the effort and energy learners invest in activities aligned with their needs and goals. Motivation determines whether students approach tasks enthusiastically or lackadaisically. Larson (2000) notes that motivation increases students' time on task, significantly impacting their learning. Essentially, motivation is the driving force behind our activities, prompting action when we feel inclined and enabling sustained effort to achieve our goals (Ferreira, Cardoso, &Abrantes, 2011). Educational science distinguishes between intrinsic and extrinsic motivation, both with different consequences for learning outcomes (Standage, Duda&Ntoumanis, 2005). Intrinsic motivation, induced by pleasure, interest, and satisfaction stimulates directly from participation, is recognized as most self-determined type. Teachers should develop an active learning environment, promoting students' autonomy and competence, boosting intrinsic motivation that coordinates with higher perceived learning (Ferreira, Cardoso, &Abrantes, 2011). Moreover, motivation influences cognitive processes, decides what learners pay attention to and how they process information effectively (Ormrod,

2006). The use of suitable, well-versed, and interesting teaching methods stands out as an important motivational factor in the learning process.

B. Teaching Methods

Teaching methods encompass the broad assumptions, principles, pedagogy, and management techniques employed in classroom instruction. The selection of a teaching method depends on elements such as the teacher's educational philosophy, the classroom's surroundings, subject matter(s), and the school's mission statement.

Teaching theories generally are divided in two categories: teacher-centered and student-centered approaches.

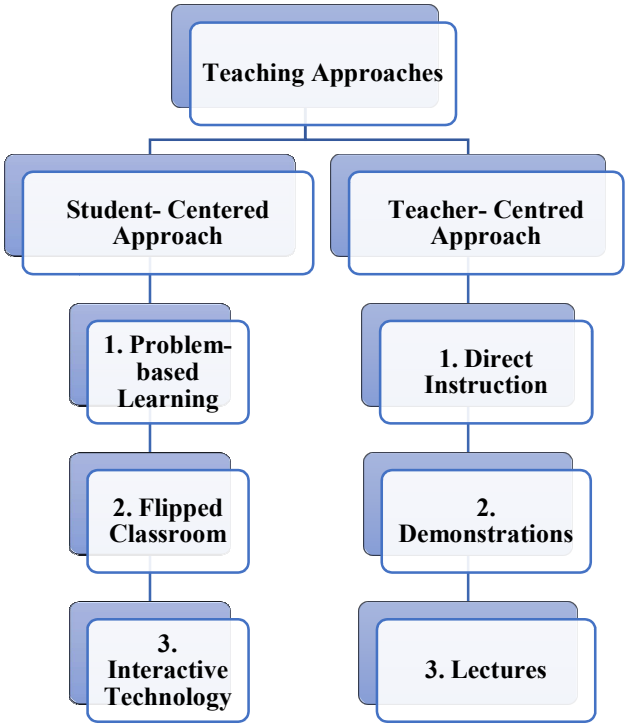


Figure 1: Teaching Approaches

The **teacher-centered approach** positions teachers as prime authority, viewing students as "empty vessels" passively receiving information through different modes such as lectures and direct instruction, with testing as the ultimate aim. Through direct instruction, the teacher leads explicit teaching, providing step-by-step guidance and structured content delivery. It makes teaching as clearer and more structured while covering specific content. In demonstration, the teacher shows how to perform a task or explains a concept while students observe. Demonstrating is effective for illustrating complex concepts. When the teacher presents information to the whole class, emphasizing one-way communication, this constitutes lecture which is an efficient method for conveying information to a large group. While lectures efficiently convey knowledge to large groups, but lacks interactive opportunities. Seminars,

consisting of discussions or collaborated projects, encourage exchange of information but rely on students' preparation.

Student-centered learning, on the other hand, involves active participation for both teachers and learners. In this model, teachers primarily instruct and facilitate learning, and assessment is incorporated into the teaching process. The effectiveness of teaching techniques depends on various factors, including the number of students, technical capabilities, experience of an educator, and the availability of resources. Problem-Based Learning (PBL), Students are able to work on real-world problems, fostering critical thinking as they collaboratively find solutions. Group Work on the hand collaborate students in small groups to discuss, share ideas, and collectively work on assignments or projects. In flipped Classroom, traditional lecture and homework elements are reversed; students learn content at home through materials, and class time is used for application and discussion which ultimately allows students to learn at their own pace. The rise of E-learning offers a faster, cheaper alternative, although its implementation is constrained by technological access (Fayyoumi et al., 2015). Integrating technology tools that allow students to actively participate and collaborate in the learning process enhances engagement, provides diverse learning resources, and develops digital literacy.

C. Participatory Methods

Participatory Methods, also known as learner-centered or interactive teaching methods, represent a shift from considering learners as passive recipients of information to acknowledging their capacity for self-directed learning. This method, cultivated in reflective teaching, emphasizes that students can construct knowledge if properly guided. It encourages a high degree of participation and active involvement in smaller groups, boosting better retention of learned concepts. Effective application of participatory methods is raised by audio-visual devices such as flipcharts, projectors, and whiteboards.

Table 2: **Participatory Methods**

METHOD	DESCRIPTION	OPPORTUNITIES	DISADVANTAGES
Workshops	Participants actively participate in hands-on activities, practical exercises of specific topic	Promotes active learning, interactions and skills with real-world application	May be longer in duration and requires significant preparation.
Group discussions	Engage students in open discussions or conversations to analyze topic collectively	Boosts critical thinking Improve communication skills	Dominated by few Challenging with large no of participants
Role playing	It is an experimental learning in which students act out roles to simulate real situations	Improve practical skills Enhance empathy	Uncomfortable to participate Need effective debriefing

10D10e10b10a10t10e10s10 10	10Students criticize opposing viewpoints on discussion, sharpen their critical skills	More critical thinking and persuasiveness	May involves adverse atmosphere and uncomfortable participation
Simulations	Mimicry of real-life situations is provided to get hand on experience	Hands on experience Practical application	Require important preparations
Brainstorming	Group setting in which students generates ideas without criticism	Promotes perspective diversity and creativity	Sometimes can be impractical and chaotic
Conferences	Larger gathering of experts to present their opinions on particular topic with question answer sessions.	Provides exposure to wide range of ideas and innovations discussed in conferences	Limited retention of information and proves costly mostly.
Aquarium	Controlled environment in which students observes and analyze the situation.	Promotes reflective thinking, structed setting and diversification.	Requires planned engagement Lack spontaneity of unstructured topic.
Labyrinth	Students navigate through step-by-step process of problem-solving.	Systematic approach Promotes sense of achievement	Careful designing required, sometimes too perspective for some learners
Case studies	Students try to solve hypothetical or real situation problems by applying their theoretical knowledge	Problem-solving Better application of knowledge	Consumes time Lack real-time relevance
Project-based learnings	Real life situations are solved by working on extended projects.	Encourage teamwork Real application of knowledge	Challenging assessment and time consuming

New technologies offer wider possibilities in education, but their incorporation should align with students' expectations and efficient learning (Wafta& Audi, 2015). Combining methods, like participative ones such as group work and role-playing, influences learning efficiency by promoting active involvement and better retention. Innovative teaching methodologies integrating technology, such as dynamic lecture notes and online video repositories, foster learner participation. Ultimately, the combination of different methods, including participative approaches, proves an essential tool for achieving higher educational efficiency. It is crucial for educators to experiment with technology aided tools and non-traditional methods to cater to the diverse areas and learning styles of students. For instance, in the field of Informatics, where students may resist studying managerial and economic topics,

introducing participatory methods there like discussions, group work, and role plays in subjects of Macroeconomics at the Faculty of Management Science and Informatics has proven effective. This approach enhances motivation, teaching efficiency, and practical understanding, and preparing students with valuable interdisciplinary skills for the evolving job landscape.

D. Participatory Learning Approach (PLA) Process

PLA encompasses a systematic process, and through planned instruction and content creation, the process can be facilitated (Shen et al., 2004). The assumption in this process is that students individually engage in each stage. However, collaborative groups can also upgrade the task at any stage, enhancing the overall learning experience.



Figure 2: Process of participatory learning approach

E. Expanding the PLA Process

The fundamental PLA process can be expanded and extended in various ways. Some enhancements are incorporated within the PLA Environment (PLAE) support software, aiming to enhance flexibility and customization for instructors (Shen et al., 2004). Additionally, certain extensions involve changes to the PLA model itself, necessitating corresponding adjustments to the PLAE software.

a. Collaboration:

Students can collaborate in small groups to create problems, resolve problems, evaluate, inquire, arbitrate disputes, and give final grades. PLAE is being equipped with detailed and comprehensive group support methods and tools.

b. Multiple Problems:

Students may develop and solve more than a problem within a provided assignment (homework, project, or exam), assuming different roles for different problems under the same assignment.

c. Sub-problems:

Problems can be designed with maximum sub-problems, either conducted sequentially or simultaneously upon completion of the one part. Each sub-problem is examined separately, and for sequential sub-problems, learners proceed to the next after examining and clearing the prior only. This approach facilitates, for instance, detailed examination of the design of a computer system before its final implementation.

d. Multiple Evaluation Opinions:

The PLA model subsistence any number of evaluations for each problem, providing flexibility beyond the provided two evaluations.

e. Separating Evaluation from Grading:

For larger projects where instructors aim to minimize potential bias, PLA supports segregating the assessment of the solutions from its final grade. Evaluators provide in detail assessments, and a separate evaluator gives a grade based on the evaluation. Clear separation between evaluation and grading instructions is important.

f. Evaluating Other PLA Activities:

Beyond solutions, the PLA model incorporates the evaluation (grading) of other PLA activities, such as problem statements, even evaluations and dispute arbitration. Separating these from one other reinforces the importance of PLAE clarity to avoid confusion.

g. Activity Rejection:

Evaluation can be employed to reject any kind of activity (problem statement, sub-problem solution, etc.) deemed inadequate, hindering the effective continuation of the process. The rejected activity can be performed again and re-evaluated, or an instructor-provided substitute can be introduced. For example, when evaluating a semester project report, evaluators may reject it, prompting a reperformance by the group with the aim of improvement based on evaluation justifications.

Conclusion:

In conclusion, the role of participatory methods in higher education is important, offering a dynamic and engaging approach to learning. Throughout this paper, we have explored various participatory methods, including group discussions, role-playing, case studies, and interactive lectures. These methods not only raise student involvement but also induce critical thinking, problem-solving skills, and better collaboration.

The benefits of participatory approaches in higher education are evident, promoting active participation and a student-centered learning environment. From workshops that facilitate hands-on experiences to seminars that bring expert insights into the classroom environment, these methods cater to diverse learning styles and contribute to a more enriched educational experience. However, it is essential to acknowledge the challenges related with implementing participatory methods. Factors such as resource intensity, time constraints, and the requirement for effective facilitation pose obstacles that educators must navigate. Striking a balance between structured guidance and open exploration is crucial for the success of participatory approaches.

As higher education continues to evolve, incorporates participatory methods becomes important for cultivating the skills and competencies demanded in the contemporary environment. The ongoing interaction of technology and innovative teaching strategies will further formulate the landscape of participatory education. In light of the findings presented, it is evident that the future of higher education lies in a continued commitment to fostering active, participatory, collaborative, and learning experiences that empower students for success beyond the classroom.

References :

Csikszentmihalyi, M., & Nakamura, J. (1989). The dynamics of intrinsic motivation: A study of adolescents. In R. Ames & C. Ames (Eds.), Research on Motivation in Education (Vol. 3). San Diego, CA: Academic Press.

Fayyoumi, E., Idwan, S., AL-Sarayreh, K., &Obeidallah, R. (2015). E-learning: challenges and ambitions at Hashemite University. *International Journal of Innovation and Learning*, *17*(4), 470-485.

Ferreira, M., Cardoso, A. P., &Abrantes, J. L. (2011). Motivation and relationship of the student with the school as factors involved in the perceived learning. *Procedia-Social and Behavioral Sciences*, *29*, 1707-1714.

Hersam, M. C., Luna, M., & Light, G. (2004). Implementation of interdisciplinary group learning and peer assessment in a nanotechnology engineering course. *Journal of Engineering Education*, *93*(1), 49-57.

Kerr, P. M., Park, K. H., &Domazlicky, B. R. (1995). Peer grading of essays in a principles of microeconomics course. *Journal of education for Business*, *70*(6), 357.

Klenowski, V. (1995). Student self-evaluation process in student-centered teaching and learning contexts of Australia and England. Assessment in Education, 2, 145-163.

Kucharčíková, A., &Tokarčíková, E. (2016). Use of participatory methods in teaching at the university. *TOJSAT*, *6*(1), 82-90.

Larson, R. W. (2000). Toward a psychology of positive youth development. *American psychologist*, *55*(1), 170-183.

Ormrod, J. E. (2010). How motivation affects learning and behavior. *Education Week.*Obtained from *http://www.education. com/reference/article/motivation-affects-learning-behavior*.

Shen, T., Wu, D., Archhpiliya, V., Bierbert, M., &Hiltz, R. (2004). Participatory learning approach: A research agenda. *Information Systems Department*.

Standage, M., Duda, J. L., &Ntoumanis, N. (2005). A test of self-determination theory in school physical education. *British journal of educational psychology*, *75*(3), 411-433.

Wahba, M. A., &Bridwell, L. G. (1976). Maslow reconsidered: A review of research on the need hierarchy theory. *Organizational behavior and human performance*, *15*(2), 212-240.

Watfa, M. K., & Audi, D. M. (2015). New learning methodologies using modern technologies. *International Journal of Innovation and Learning*, *17*(3), 275-297.

Wu, D., Bieber, M., Hiltz, S. R., & Han, H. J. (2004, January). Constructivist Learning with Participatory Exams.In *Proceedings of the 37th Hawaii International Conference on System Sciences, IEEE Press, Washington, DC*.