Study of Innovative Teaching Strategies and its Impact on the Student Engagement

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Abstract: *The innovative methods of teaching help us to reach out to the minds of the students and win the hearts of the audience while doing so. Before a decade, one would only see such innovative and effective teaching on the fiction movies; today technology has given teachers across the world a number of tools to enhance teaching methods. These innovative teaching-learning aids and strategies is improving the student engagement and level of learning. This paper focuses on the how these innovative teaching strategies are impacting on the student engagement.*

Keywords: Student Engagement, Teaching Strategies, Teaching Learning

I. INTRODUCTION

Innovative teaching is the process of effectively introducing new teaching strategies and methods into the classroom teaching. The purpose of introducing these new teaching strategies and methods is to improve academic outcomes and resolve the real problems to promote equitable learning.

The innovative teaching strategies begin with the development of mind-set. We generally focus on the room or infrastructure for improvement. Most of the time we invest our time in researching and thinking of better strategies to teach our students. We create roughly new or adapt existing methods. We take risks. We may fail. We try again. We restate and by doing so establish a culture of innovation and creativity in the classroom that inspires our students to do the same.

In this paper we are focusing on the popular innovative teaching strategies that help to get better student outcomes. These strategies frequently focus on student engagement. Students that are actively engaged in their learning are less likely to be absent from the class and more likely to prosper academically.

In many ways, applying innovative teaching strategies to the classroom is an implicit understanding that our teaching methods can be improved. It accepts the necessity to grow and develop, which is exactly what we ask of our students.

It is important to take a student-centric approach to our teaching-learning methods. As a student, do we have more from class by sitting passively in our seats for a 45-minute lecture? Or, are we more likely to learn by aggressively participating in the class by asking questions, collaborating on projects, and problem-solving? This paper focuses on the many strategies which are helpful in improving teaching learning so that which directly improve the student engagement ratio.

1.1 Objectives :
1. To analyse the new teaching-learning strategies.
2. To study the effect of student engagement on level of learning.
3. To study the effect of teaching learning on the student engagement.

1.2 Hypothesis
- H_0 : There is no significant impact of innovative teaching learning strategies on the student engagement.
- H_0 : There is a significant impact of innovative teaching learning strategies on the student engagement.

II. RESEARCH METHODOLOGY

50 Sample from the teachers of undergraduate college of Nagpur University will be collected using Random Convenient Sampling Method.

2.1 Innovative Teaching Strategies

The innovative teaching strategies in the classroom can make learning easier, effective and more effective. Experimenting with different strategies in the classroom is an iterative process that will assist teachers in promoting learning to encourage student growth. Following are the different methods to integrate innovation into the teaching-learning.

A. Personalized Learning

Personalized learning customizes what, when, and how every student is taught. Rather than using a single approach or plan to teach the entire class, teachers bend to the capabilities of each student to help them succeed.

65% of high schools in the foreign countries use personalized learning plans for their students, based on the teacher's exclusive knowledge of student learning styles and interests. Though each student's individualized learning journey is distinctive, the final aim is subject ability or achieving grade-level benchmarks.

This strategy includes:

- **Blended learning**: This teaching strategy gives the student more obligation over their own learning, with the teacher functioning as a general guide and overseer over a more discovery-based learning environment. Students are allowed to choose how and at what pace they transfer through the content.
- **Adaptive learning**: Adaptive learning technology collects data from student responses to specific questions on a computer. Then the software uses that information to provide immediate feedback or adaptation for the student and notifies the teacher so they can change the lesson plan accordingly.

B. Project-Based Learning

Project-based learning creates exercises that need students to identify a real-world problem and then devise a solution. Project-based learning is built on the development of specific, transferable skills like research, critical thinking, problem-solving, and cooperation. It is an active form of learning in which students gain knowledge via implementation of their knowledge rather than rote memorization.

Teamwork, digital tools, and using problem-solving skills to find a solution to the challenge at hand are important components of project-based learning. This strategy improves student engagement in education, enhances learning, and allows students to use technology in a variability of ways which can improve the enjoyment and satisfaction of learning. Teaching with this method links students and institutions to their communities and the outside world, demonstrating how all disciplines are interlinked and enhancing opportunities to experience learning facing real situations rather than contrived examples.

C. Jigsaws

Any trainer understands that being able to teach a concept to others successfully demonstrates true mastery. Jigsaws are a tried-and-true cooperative learning system that capitalizes on this idea by having students teach other students. Students are divided into groups, and each group is given distinct information that they must learn well enough to teach to other group.

When each group has learned their information, they are prearranged into new groups, each of which is made up of one member from each of the content groups, much like a jigsaw puzzle of several pieces coming together to create a whole picture. Each distinct member then discusses what they have learned, bringing the teachings to life and allowing students to build their learning by interacting with one another and the content. As they teach others, students become the experts in what they have learned.

The only problem in this method is when the "expert" in a group misinterprets facts or is not able to teach others well.

D. Asking Open-Ended Questions

Students frequently place too much reliance on finding the one right answer in their textbooks versus thinking outside the box. They may develop the belief that there are only right and wrong replies. However, most questions do not have single precise solutions.

To broaden student horizons, teachers should promote lively in-class deliberations by asking open-ended questions – those which have multiple possible solutions. Students can put together unified elements based on their own knowledge as well as present information to piece together a solution, which they can then support using evidence. This can help the students not just to find their voice, but also to express themselves and support their intellectual.

E. Flipping the Classroom

In this approach, standard lectures are set aside in favour of class time spent on research, application, and assessment to better connect learners and their needs. Outside of class, students study topics by reading, watching short pre-recorded video lectures, or researching jobs. Class time is used to assist students in working through the content in groups or individually during dynamic learning, emphasizing complex reasoning and problem-solving skills.

F. QR Codes

QR (Quick Response) codes are modest to develop and have several applications in classrooms of all grade levels. QR codes can direct students to information merely by scanning the code with a digital device.
Students can use QR codes to:

- Examine their responses
- Cast votes for solutions to problems
- Extend the scope of material found in textbooks
- Obtain survey data for math units
- Take part in scavenger hunts
- Access video tutorials on a subject
- Connect to Google Maps for lessons where geography is important

Students can use QR codes to get material quickly. They can also design own customized code to share their knowledge with peers and parents.

G. Inquiry-Based Learning

Inquiry-based learning involves more than simply asking a student what he or she wishes to learn. The main purpose is to generate interest to engage students in the material. However, stimulating a student's curiosity is a far more essential and challenging task than simply delivering facts. Notwithstanding its complexities, this strategy of learning can be easier on instructors because it shifts some duties from teachers to students and offers students' authority to engage with the material.

Taking notes in a class is passive and not always the most preferable or enjoyable way to learn. Inquiry-based learning, as opposed to memorizing facts from the teacher, improves the learning process by permitting students to explore issues on their own.

Students' cognitive talents can be used to develop a good sympathetic of all subjects while making connections to everyday life. Students are given the freedom to form their own viewson what they are studying, permitting them to develop a greater knowledge of a subject than through rote memorization and recalling data.

H. Culturally Inclusive Teaching

Teaching can be difficult due to students coming from many cultural backgrounds with diverse needs. Students are unique and obtain educational knowledge differently. Culturally inclusive education connects the subject matter to the cultures of the students, founding a personal connection. Teachers can get to know the students, their cultural backgrounds, and some basic cultural information, then use examples and exercises to join their study topic to different cultures. Note that incorporating dissimilar cultures must be done delicately and in a manner that respects and promotes diversity in the classroom.

I. Flexible Learning Environments

Teachers should know how to use their classrooms for dissimilar instructional approaches. For example, when teachers are willing to change the furniture around in the classroom, they may determine that it is a critical variable for boosting

student learning. As education has transformed, the classroom space must allow opportunities for students to work alone, communicate with their peers, and collaborate.

Many classrooms today are still not opened, cluttered, and noisy environments that make it difficult for kids to move about, inducing communication breakdowns and other obstacles to concentration and understanding. Learning environments should uphold fluidity to facilitate one-on-one learning, collaboration, free-thinking, and group debates.

2.22 Impact of Innovative Teaching Strategies and its impact on Student Engagement
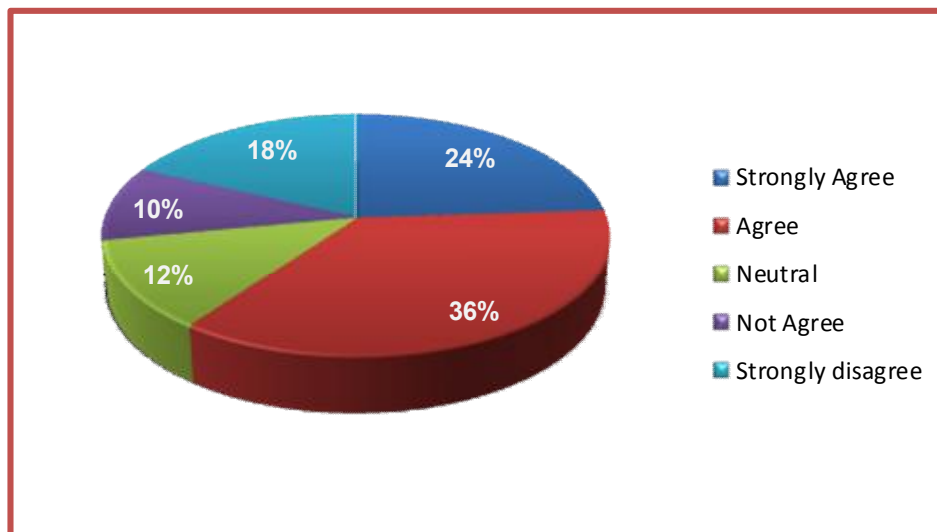
Innovative teaching strategies outperform the traditional classroom teaching. There is a positive impacts are found on both individual and group level. It fulfil the individual learning requirements and increases the interest level among the students of all classes. At the group level, more students are getting higher grades.

The impact of innovative teaching strategies is impacting on the student engagement at large; following is the analysis of data collected.

Table 1 : Does innovative teaching learning strategies impacts on the student engagement.

No. of Respondents : 50

Strongly Agree	Agree	Neutral	Not Agree	Strongly disagree
12	18	6	5	9

Graph 1 : Impacts of Innovative teaching learning strategies on the student engagement

From the above graph it is found that, Out of 50 teachers; 24% strongly agree with the statement "Innovative teaching learning strategies positively impacts on the student engagement"; whereas 36% agree with the statement, 12% are neutral with the statement, 10% are not agree with the statement while 18% strongly disagree with the statement.

Thus it is found that innovative teaching learning strategies positively impacts on the student engagement.

Hence the null hypothesis considered during the study "There is no significant impact of innovative teaching learning strategies on the student engagement" is rejected and alternate hypothesis "There is a significant impact of innovative teaching learning strategies on the student engagement" is accepted. Hence, it is found that innovative teaching learning strategies positively impacts on the student engagement.

III. CONCLUSION

The different strategies of Teaching-learning employs ways to encourage questioning, exploration, technology usage, and content analysis using available materials on many platform and research. Students are able to solve issues independently or with others, promote themselves to new heights, and report their discoveries to others, transferring their knowledge. The ultimate goal is to create and improve student engagement which will lead to increase in intellectual growth.

Implementing innovative teaching methodology in educational institution enhances students' engagement, especially academic challenges, active and collaborative, student-staff interactions domains. The majority of the students were preferred innovative teaching-learning method more than traditional way of teaching.

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