



Impact Of Selected Innovative Teaching Pedagogies On U.G. Students' Learning Outcomes In Maharashtra State

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<i>Abstract</i>	
	<p>Innovative teaching pedagogy represents a vibrant and developing approach to education that goes beyond traditional methods, embracing creativity, adaptability, and student-centered learning. This abstract discovers the key elements of an innovative teaching pedagogy, emphasizing the integration of technology, active learning strategies, and a holistic approach to education. In Maharashtra, there is a need to implement technology based teaching learning process. Innovative teaching pedagogies will always help to motivate new learning habits among the students. It helps to improve soft skills and continuous improvement of the students. This research paper helps to study the impact of innovative teaching pedagogy on the UG students learning outcome. The study is based on experiment conducted with the various groups of students. This experiment concludes the innovative teaching methods are useful and helpful for the students.</p>
CC License CC-BY-NC-SA 4.0	<i>Keywords: Pedagogy, Soft skills, Creativity, Critical thinking, Flipped Classroom.</i>

Introduction

Innovative teaching pedagogies incorporate a different range of strategies and approaches aimed at improving the learning experience and outcomes for students. These pedagogies prioritize creativity, critical thinking, collaboration, and adaptability, preparing students for the dynamic and evolving world they will encounter. An introduction to some of these innovative teaching pedagogies are as under:

1. Flipped Classroom:

The flipped classroom is the reverse method of traditional teaching. Students engage with instructional materials (e.g., videos, readings) at home and then participate in active learning, discussions, and problem-solving during class. This approach promotes personalized learning and allows teachers to provide targeted support to individual students.

2. Project Based Learning: (PBL):

PBL is a student-centered approach where students collaborate on real-world projects. They apply knowledge and skills to solve authentic problems, fostering critical thinking, communication, and creativity. Teachers guide and facilitate the process, encouraging inquiry and exploration.

3. Problem-Based Learning (PBL):

PBL presents students with complex, real-world problems to solve. Students investigate and analyze the problem, identify potential solutions, and apply critical thinking and problem-solving skills. This approach encourages self-directed learning and a deeper understanding of the subject matter.

4. Game-Based Learning:

Game-based learning integrates elements of gaming into the educational experience. It leverages interactive and engaging games to teach and reinforce concepts, making learning enjoyable and motivating for students.

5. Collaborative Learning:

Collaborative learning involves students working together in groups to achieve common learning goals. It enhances teamwork, communication, and peer teaching. Students learn from one another, and the responsibility for learning is shared among the group.

6. Technology Enhanced Learning:

Utilizing various technological tools and platforms, this pedagogy incorporates multimedia, online resources, simulations, and interactive applications to enhance the learning experience. It supports personalized learning, immediate feedback, and access to a vast array of information.

7. Experiential Learning:

Experiential learning integrates real-world experiences into the educational process. Students engage in hands-on activities, internships, simulations, or fieldwork to apply theoretical knowledge in practical settings.

Incorporating these innovative teaching pedagogies can enrich the learning journey, cater to diverse learning styles, and foster a culture of lifelong learning and adaptability among students. Teachers play a vital role in creating an environment that encourages experimentation and embraces these pedagogical approaches to benefit students' growth and development.

Objectives

- 1) To ascertain the learning outcomes of selected Innovative Teaching Pedagogies on the UG students of Maharashtra State.
- 2) To analyse student engagement in selected Innovative Teaching Pedagogies among the UG students of Maharashtra State.
- 3) To Analyze UG student perceptions and attitudes toward selected Innovative Teaching Pedagogies among the UG students of Maharashtra State.

Literature Review

1. A. B. Samuel, M. M. Rahman, and others (2018). A survey of the literature on innovative teaching techniques and entrepreneurship education. 10(1), 1807–1813, Journal of Research in Business, Economics and Management.

To be able to identify the numerous innovative teaching methods, as well as their advantages and disadvantages, in order to improve their application in promoting entrepreneurship as a topic of study, this work includes an examination of several articles, monographs, and books. Case studies, team or group discussions, business plans, guest speakers, individual and group projects, problem-based learning, games and simulations of business concepts, role plays, seminars, and site visits are just a few of the different teaching techniques.

2. Sharples, M., de Rock, R., Ferguson, R., Gaved, M., Herodotou, C., Koh, E., et al. (2016). 2016's Innovative Pedagogy (pp. 1–47). The Open College.

In order to assist educators and decision-makers in effective innovation, this series of studies examines innovative models of instruction, evaluation, and assessment for a world that is interactive. The fifth report makes ten suggestions for current technologies that have not yet had a significant impact on education.

3. F. Nascimbeni, U. D. Ehlers, and the year 2020. Open Teaching is the study and application of open, cutting-edge, and interesting pedagogies. 16(4), I-IV, Journal of e-Learning and Knowledge Society.

The recent changes have affected our higher education institutions and will eventually put their organization, reputation, and mission under pressure since they are tightly time- and space-bound institutions that are built around the metaphor of space expressed in terms like remote learning and distance learning. On top of the mountain, the pandemic avalanche has already begun, and it is moving downward.

4. Langworthy, M.; Fullan, M. (2013). Moving in a new direction: deep learning pedagogies.

The work of the worldwide partnership is built upon the information in this whitepaper. The first section of the document gives an outline of the partnership's objectives and the body of research that supports its theory of action. The implementation structure is then laid out for partners to mobilize in order to the deep learning objectives. The realization of deep learning objectives made possible by new pedagogies and accelerated by technology is the project's central focus.

5. Y. F. Yang and N. C. Kuo (2020). System, 90, 102218. New teaching techniques resulting from student teachers' pedagogical conceptual transformation.

The current study illustrated the viability of developing a CALL teacher education curriculum in which student instructors are encouraged and supported to implement their new CALL teaching methodology for language teaching and learning. When teachers observe, put their new teaching strategies into practice, and reflect on them, it is crucial that they understand the resulting change in their pedagogical idea.

7. E. E. Achor, R. Samba, and J. Ogbeba (2010). Science teachers' knowledge of and use of cutting-edge teaching techniques in Nigeria's Benue state. 032-038. *Educational Research*, 1(2).

This article examines the degree to which science instructors in Benue State, Nigeria, are aware of a few particular innovative teaching techniques and how they are being used there. It was also discovered how much the mean use varies per subject depending on the teachers' age, experience, and professional background. Nineteen carefully chosen teaching tactics were employed as questionnaire items in this study, and a sample of 166 teachers from a total of 986 teachers replied.

8. Rajasekaran, K.; Kalyani, D. (2018). innovative educational practices. 3(1), 23–25, *Journal of Applied and Advanced Research*.

This study focuses on new teaching and learning strategies that students can use to sharpen their skills in the classroom. encouraging educators to incorporate cutting-edge technology into the classroom and use multimedia to change the course content. It will assist the teacher in more meaningfully illustrating the teachings.

9. Maleko, E. V., Natal'ya A., Karpova E. V., Akulova I. S., Galina S., & Khakova N. A. (2018). applying cutting-edge teaching strategies when imparting cultural studies in higher education. info@mjltm.org, www.mjltm.com 18.

The article offers a useful resource for cultural studies professors at universities as well as any creative educators who are actively involved in developing new conditions for the classroom. The study looks at how well new teaching methods are used to shape students' personalities while teaching cultural studies. The pedagogical experiment, which asserts that learning cultural studies is a process of creative personality construction and development by becoming familiar with cultural heritage, is a major way of researching this subject.

10. I. Garca-Martnez, J. M. Fernández-Batanero, D. Cobos Sanchiz, and A. Luque de La Rosa (2019). enhancing learning results and teachers' professionalism with mobile devices. 6917; *Sustainability*, 11(24).

Due to the nature of the study, it is now able to give a summary of the literature on how M-learning techniques and e-learning platforms might improve students' academic performance by boosting their motivation and enabling them to develop ubiquitous and autonomous learning. The formation of e-learning and M-learning programs in higher education across the globe has been studied extensively over the past ten years, with this study compiling pertinent studies in the topic.

11. Kaiser, G.; Cevikbas, M. (2020). Using a flipped classroom to teach math is a reform-focused strategy. *Zdm*, 52(7), 1291-1305.

The flipped classroom (FC) is a cutting-edge pedagogical strategy that has the potential to revolutionize how math is taught. In the case study discussed in this paper, we looked into how one math teacher used FC-based interventions to change the way that math was taught in two different classrooms.

12. Musa, K., Hashim, Z., and Fuad, D. R. S. M. (2022). A thorough assessment of the literature on innovation culture in education. 36(3) of *Management in Education*, 135–149.

Additionally, there is still disagreement among researchers as to what characteristics innovation cultures in educational contexts should have. In order to determine the norms, beliefs, values, practices, a behaviour shared by educational innovation cultures, a comprehensive study of the literature has been conducted. This study analysed the 28 most pertinent papers from 156 total studies out of three categories: organizational cultures, sociocultural norms, and country cultures.

13. L. Sharoff, 2019. 13. Innovative and creative online teaching techniques: Active involvement facilitation. *Online Journal of Educators*, 16(2), n2.

The reflective practice method of one educator, who was a very early adopter of online learning, is examined in this paper. It will examine the administrative side of coordinating and delivering a dynamic, in-depth online course. In order to further improve the learning process, the educator must model an educator-facilitated active, student-center learning process in which students are held responsible for their active involvement and self-directed learning while juggling a facilitator role.

14. Zhu, C., Wang, D., Cai, Y., & Engels, N. What core competencies are associated with innovative teaching by instructors. 41(1), 9–27, *Asia-Pacific Journal of Teacher Education*.

This study aims to explore the relationship between instructors' core abilities and their innovative teaching performance. Four skills—learning competency, educational competency, social competency, and technical competency—are proposed as the fundamental competencies for teachers' innovative teaching based on the

literature and prior studies in this subject. The study also demonstrates how crucial it is for instructors to have supportive relationships with their peers in order to execute

15. Sava, R. (2018). innovative accounting education methods. In 25th International Economic Conference of Sibiu (IECS 2018) 25: Innovative Business Development—A Global Perspective (pp. 323–329). International Springer Publishing.

The fundamental ideas of accounting standards are frequently difficult for accounting students to grasp, and they frequently develop a negative attitude toward the topic. Teachers need to be adept in developing and utilizing cutting-edge teaching strategies for the subject of accounting. Certain techniques and strategies can actually improve student learning, and when used properly, incorporating cutting-edge learning and attention-management strategies into the classroom benefits both teachers and students.

16. Kaldi, S., Filippatou, & Govaris (2011). Effects of project-based learning on students' learning and attitudes in primary schools. 3-13, 39(1), 35-47; education.

The purpose of this study is to determine if project-based learning is beneficial in improving the topic knowledge and attitudes of primary school students toward self-efficacy, task value, group effort, and classmates from different ethnic backgrounds. Under the heading "sea animals," a cross-curricular project was carried out in the environmental studies curriculum area. This study used a quasi-experimental research design as its approach.

17. Handrianto, C., and M. A. Rahman (2019). Review of the research on project-based learning's results and implementation problems. *Journal of Language, Literature, and English Teaching*, 8(2), 110-129.

In order to offer the idea of using the PBL some constraints, this paper will explore the PBL based on constructivism theory and experience theory. The study will also talk about how PBL is put into practice. It has been discovered that some studies have a favourable impact and that it may also foster in students a critical thinking and learning attitude. There are, however, a number of concerns with the execution, such as the students' admission that their inability to come up with strong design concepts due to their insufficient understanding of current technological advancements.

18. Chang, C. P., Bennington, L., & Chuang, H. W. (2011). Innovative and inventive teaching environments in urban and rural schools. 935–951 in *Quality & Quantity*, 45.

The goal of this study was to advance previous research by examining the connection between innovative teaching practices and organizational climate factors in schools. We also looked at the effect of school location—urban versus rural—on teacher creativity. Research has shown that both individual traits and the environment have an impact on creativity.

19. Yu, T. F., & C. C. Yu (2013). An investigation of the effects of knowledge sharing across levels on organizational climate and innovative behaviour *International journal of social behaviour and personality*, 41(1), 143–156.

We looked into employee innovation and knowledge sharing at the person level, organizational innovation climate, and linkages between individual level knowledge sharing and organizational environment of innovation. In this survey, workers from public companies in Taiwan's banking and insurance sectors took part. A positive correlation between knowledge sharing and innovative behaviour as well as a positive correlation between organizational innovation climate and innovations was found via hierarchical linear modelling (HLM)

20. T. V. T. Nguyen, H. T. Nguyen, T. X. Nong, and T. T. T. Nguyen (2022). The mediating role of knowledge sharing and an innovative environment in inclusive leadership and inventive education. *Journal of Creativity Research*, 112.

According to the study, knowledge exchange, an innovative environment, and creative teaching are all positively impacted by inclusive leadership. In relation to inclusive leadership style and creative teaching, the mediating roles of knowledge sharing and an innovative climate were also highlighted. Our research has theoretical and applied ramifications, including suggestions for policymakers, educators, and governments.

Research Methodology

Research paper is based on Primary as well as Secondary data collection. Secondary data is collected from various research papers, thesis, articles and websites. Primary data is based on experimental research method. Experimental Research:

For the experimental study 4 groups of 10 UG students each was prepared. Students were selected randomly and assigned various teaching pedagogies and standardized test. Following 4 methods used for different 4 groups for the experiment:

- 1) Presentation
- 2) Project based learning

- 3) Flipped Classroom
- 4) Game based Learning

Observations after Implementation of the New Teaching Pedagogies

Teaching Method	Description	Time taken	Outcome
Presentation	Topics allotted to the group of the students for the preparation of presentation topics.	15-20 minutes per group	Helped students become active and understand their level of interest and provide practical experience.
Project based learning	Themes were provided to the students for preparation of projects. Projects includes visits to various places and preparation of reports.	Projects prepared and presented by the students. Overall time required for the process is 25 days.	Students became more interactive during the visits and develops interest about the topic. Also helped for relating the theory subjects and practical knowledge.
Flipped Classroom	In this method topics were allotted to group for the preparation before the actual class. In the class same topics were discussed.	Two days	It helps to improve level of understanding and learning habits among the students.
Game based learning	Various games were organized and conducted with in the classroom for explaining theoretical concepts.	Two days	Easily understands the topic, helps interesting learning of the theoretical concepts.

Impact of Implementation of the New Teaching Pedagogies

1. These methods are more interactive and activates participation of the students in the learning activity.
2. Helps to improve the critical thinking and problem solving approach of the students.
3. It helps students to connect with the practical knowledge and industry experience.
4. It improves personalised learning and independent decision making skill.
5. It helps to improve the learning speed of the students.
6. Flipped classroom technique helps to improve the critical thinking power of the students.

Conclusion

Education sector is now in the pattern of accepting new techniques and methods. The experiment conducted with the students shows that effective teaching pedagogy is very powerful in shaping the future of the students. It helps the students to build and improve the critical thinking and learning capacity. This paper concluded that it is necessary to improve the level of teaching methods so that interactive teaching can be implemented. For the better improvement in the education sector and fruitful outcome surely new teaching pedagogy will help.

References

1. Lauriala, A. (1992). The impact of innovative pedagogy on teacher thinking and action: A case study of an inservice course for teachers in integrated teaching. *Teaching and Teacher Education*, 8(5-6), 523-536.
2. Yu, T. F., & C. C. Yu (2013). An investigation of the effects of knowledge sharing across levels on organizational climate and innovative behaviour *International journal of social behaviour and personality*, 41(1), 143–156.
3. Handrianto, C., and M. A. Rahman (2019). Review of the research on project-based learning's results and implementation problems. *Journal of Language, Literature, and English Teaching*, 8(2), 110-129.

4. Chang, C. P., Bennington, L., & Chuang, H. W. (2011). Innovative and inventive teaching environments in urban and rural schools. 935–951 in *Quality & Quantity*, 45.
5. B. Samuel, M. M. Rahman, and others (2018). A survey of the literature on innovative teaching techniques and entrepreneurship education. 10(1), 1807–1813, *Journal of Research in Business, Economics and Management*.
6. Mahajan, A., & Kaushal, K. (2017). Impact of innovative pedagogical teaching methods on students' academic performance. *New Nigerian Journal of Clinical Research*, 6(10), 41.
7. Konst, T., & Kairisto-Mertanen, L. (2020). Developing innovation pedagogy approach. *On the Horizon*, 28(1), 45-54.
8. Peterson, A., Dumont, H., Lafuente, M., & Law, N. (2018). Understanding innovative pedagogies: Key themes to analyse new approaches to teaching and learning.
9. Sivarajah, R. T., Curci, N. E., Johnson, E. M., Lam, D. L., Lee, J. T., & Richardson, M. L. (2019). A review of innovative teaching methods. *Academic radiology*, 26(1), 101-113.
10. F. Nascimbeni, U. D. Ehlers, and the year 2020. Open Teaching is the study and application of open, cutting-edge, and interesting pedagogies. 16(4), I-IV, *Journal of e-Learning and Knowledge Society*.
11. Sava, R. (2018). innovative accounting education methods. In 25th International Economic Conference of Sibiu (IECS 2018) 25: Innovative Business Development—A Global Perspective (pp. 323–329). International Springer Publishing.
12. Musa, K., Hashim, Z., and Fuad, D. R. S. M. (2022). A thorough assessment of the literature on innovation culture in education. 36(3) of *Management in Education*, 135–149.