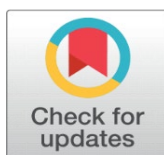
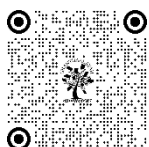


PROBLEMS AND CHALLENGES FACED BY EDUCATORS IN IMPLEMENTING GAMIFIED LESSONS IN INDIAN CLASSROOMS

Cinimol Joseph ¹, Dr. Satish Gill

¹ Research Scholar, Dr. APJ Abdul Kalam University, Indore, (M.P), India

² Assistant Professor, Dr. APJ Abdul Kalam University, Indore (M.P), India



DOI

[10.29121/shodhkosh.v5.i5.2024.4681](https://doi.org/10.29121/shodhkosh.v5.i5.2024.4681)

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

Copyright: © 2024 The Author(s). This work is licensed under a [Creative Commons Attribution 4.0 International License](#).

With the license CC-BY, authors retain the copyright, allowing anyone to download, reuse, re-print, modify, distribute, and/or copy their contribution. The work must be properly attributed to its author.

ABSTRACT

Gamification, the inclusion of game elements into educational settings, is widely used by educators as it augments student engagement and academic achievement. The implementation of gamified lessons in Indian classrooms, encounters many obstacles. This abstract delves into these challenges and complexities faced by educators while implementing gamification in the classroom settings. Main constraints include infrastructural constraints, disparities in cultural and circumstantial contexts, the necessity for teacher training, and the modification of games to meet curriculum standards. Overcoming these hurdles is essential for the effective implementation of gamification in Indian classrooms, aiming to cultivate meaningful and inclusive learning experiences.

Keywords: Gamification, Education, Indian Classrooms, Challenges, Technology, Cultural Diversity, Assessment



1. INTRODUCTION

Educators around the world are in a perpetual hunt for creative and adaptive teaching methodologies to captivate the attention and assessment results of learners. From many burgeoning techniques and strategies, gamification is the most accepted and growing strategy which uses game elements into lessons. The gamification market is shown a growth from USD 9.1 billion in 2020 to USD 30 billion in 2025. The implementation of gamified lessons in Indian educational settings encounters many hurdles due to the fixed mindset of some of the educators and the exam-oriented curriculum. Teachers find it difficult to complete the curriculum within a time frame is a main challenge. By scrutinizing the specific challenges, we can find possible remedies and strategies to create more interactive and engaging lessons for learners in Indian classrooms. This study delves into the challenges faced by educators in implementing gamification and the strategies to surmount these barriers.

Meaning of gamified lessons in teaching -learning Process

One of the major barrier encounters by the teachers in implementing gamified lesson is the precise meaning if the term gamification. Though gamification is the process of integrating game elements into lessons, still teachers confuse

with the parameters used in gamified lessons. This lack of clarity teachers struggles to create and implement gamification in the actual classroom. Gamification is the use of game design elements in non-game contexts as suggested by Deterding et al (2011). Teachers should receive proper guidelines to develop and implement gamified learning lessons and thus improve the learning outcome (Pradeep Kumar Singhet al.,2020).

2. OBJECTIVES

- 1) To identify the primary challenges faced by educators in implementing gamified lessons in Indian classrooms.
- 2) To analyze the impact of cultural diversity on the design and implementation of gamified learning activities.
- 3) To explore the role of technology and resources in facilitating or hindering the adoption of gamification in education.
- 4) To examine current assessment methods used in gamified lessons and their effectiveness in evaluating student learning outcomes.

3. SCOPE OF RESEARCH

The current study deals with challenges and barriers for implementing gamified lessons in Indian classrooms which helps future researchers to develop effective professional development programs for teachers. It also gives importance to integrating differentiated gamified lessons in Indian educational settings.

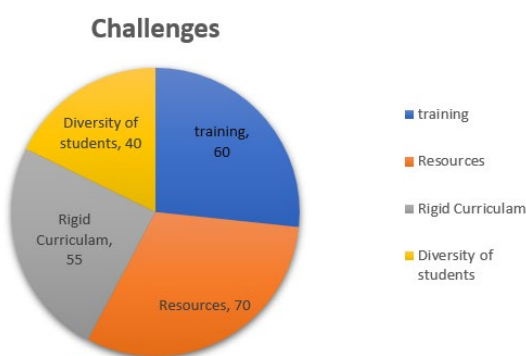
4. METHODOLOGY

This research paper utilizes a qualitative research approach involving different data collection methods like interviews, surveys and analysis of the learning outcome report from the school. The study selected 100 educators and 25 school administrators in different parts of India. The survey provided different perspectives of educators on the use of gamified lessons and the challenges they face in the classroom. The collected data is analysed by using thematic analysis and statistics to identify the challenges and the problems of implementing gamification in education.

5. ANALYSIS OF THE STUDY

The analysis of the collected data is given below:

Objective 1 Identifying the Primary Challenges Faced by Educators in Implementing Gamified Lessons in Indian Classrooms



The study reveals that 60% of educators reported they are unfamiliar with the designing and implementing gamified lessons. 70% of educators cited the accessibility of resources like internet and computers with good network. Most of the rural schools have limited technological structure, which is a great barrier for implementing gamified lessons in the classroom. 55% educators mentioned that exam-oriented curriculum as a major barrier to implement gamified lessons in their classrooms. They find it difficult to align the activities with the assessment requirements. A good percent of teachers (40%) finds difficult to cater the individual needs in the gamified learning sessions.

Objective 2 Analyzing the Impact of Cultural Diversity on the Design and Implementation of Gamified Learning Activities

The study analysed data from five culturally different schools and it shows that 70% educators are of the view to incorporating local stories and contents into gamified topics helps them to connect easily with the concepts to be learned. India has many languages and a major challenge is to produce or find multi-linguistic gamified lesson to cater the needs of students from diverse background. 55% of educators gave a positive report on the impact of culturally inclusive gamified lessons in the learning outcome of the students. Figure 1.2 below gives a comparison of student engagement levels with the culturally modified and culturally not modified gamified lessons.

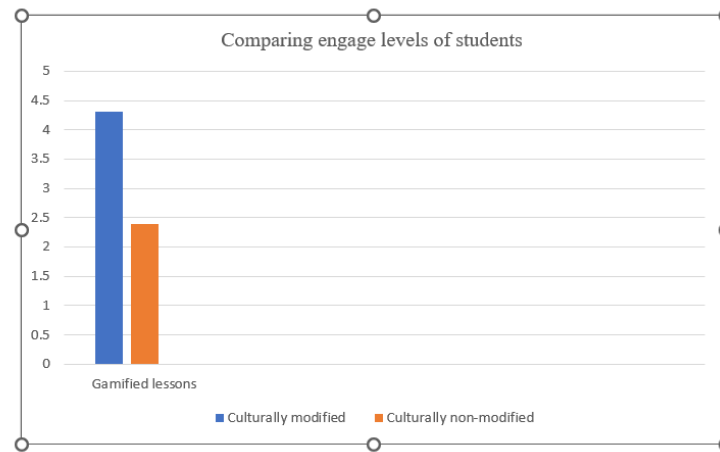


Fig 1.2 Impact of Culturally Modified Gaming Lessons to the Academic Achievement of Students

Objective 3 Exploring the role of Technology and resources in expediting or hindering the inclusion of gamification in teaching-learning process.

The surveys from educators gives a view on the fact that 75% of well- resourced schools have successfully implemented the gamification, but 25% of the schools are under resourced and they could not implment it properly. Schools with proper funding for technology can integrate gamification successfully but financial constraints are a major challenge in most of the schools in India.

Objective 4: Examining Current Assessment Methods Used in Gamified Lessons and Their Effectiveness in Evaluating Student Learning Outcomes

Gamified lesson often uses formative assessments like quizzes, drawing diagrams etc. Students love to play team games and thus it increases the motivation and engagement in the lessons. Gamified lessons provided immediate feedback which helps them to realize their goals and achievement and identify their mistakes. Survey shows that 70 % students found gamified assessments are less stressful. According to data 80% students showed some improvement in their formative assessments after the treatment with gamified lessons. The P value at 95% confidence interval is 0.0048 which shows that gamified lessons are very significant to contributing the learning outcome of students learnt with gamified lessons. Figure 1.3 below shows a line graph comparing student performance in traditional versus gamified assessments.

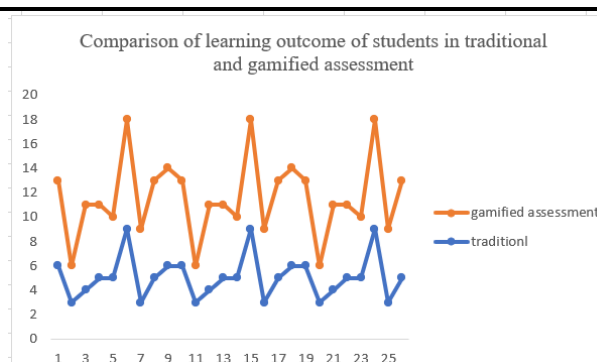


Fig 1.3 Comparison of Learning Outcome of Students in Traditional and Gamified Assessment.

6. FINDINGS OF THE STUDY

Challenges identified by the research are classified into the following headings

6.1. CHALLENGES FACED BY EDUCATORS

1) Fixed mindset

Teachers would love to follow traditional teaching methods because of the exam-oriented curriculum. Teachers also resistant to adapt gamification because of the perceived complexity and the additional work involved.

2) Training and Support

Most of the teachers find it difficult to create and implement engaging lessons based on gamification that meet curriculum goals without proper knowledge and assistance. Teachers should get frequent training and professional development opportunities to master the gamification techniques.

3) Time Constraints

It is difficult for teachers to find time to create and learn new strategies, if they are overburdened with large curricula and extracurricular duties. Teachers must finish the curriculum in a specified time that is a main barrier for teachers to adapt gamified lessons in Education.

6.2. CHALLENGES FACED IN IMPLEMENTING GAMIFICATION

1) Lack of Training and Resources

Many schools in lack enough resources and technology to support gamified lessons. The inability to completely integrate gamified lesson into the teaching- learning process is a barrier for educators who have limited access to the gadgets, internet connectivity and educational software.

2) Cultural Diversity

India is a multilingual country with multiple languages, different geographical variations, and different culture. Making gamified lessons that are culturally relevant and engaging to all students is a major challenge.

7. SUMMARY

Implementing gamified lessons in Indian classrooms presents educators with a myriad of challenges that impact the successful integration and adoption of this innovative approach. One significant hurdle is the infrastructural limitations, particularly in rural areas, where access to technology and reliable internet connectivity remains inconsistent. This digital divide impedes equal participation and engagement among students. Moreover, cultural, and contextual disparities pose another challenge, as games designed in Western contexts may not resonate with Indian cultural values or educational norms.

In conclusion, the challenges faced by educators in implementing gamified lessons in Indian classrooms are multifaceted and require careful consideration. The lack of access to technology, limited resources, and traditional

teaching methods are major obstacles that must be addressed to fully leverage the benefits of gamification. Additionally, the need for extensive teacher training and professional development cannot be overstated in order to effectively integrate gamified elements into the curriculum. Despite these challenges, the potential benefits of gamification, such as increased student engagement, motivation, and retention, make it a valuable tool in the modern educational landscape. Moving forward, it is essential for policymakers, educators, and stakeholders to work collaboratively to overcome these obstacles and create an environment that supports the successful implementation of gamified lessons in Indian classrooms.

The implementation of gamified lessons in Indian classrooms presents several challenges and problems, including a lack of training and resources, resistance to change, technological barriers, curriculum misalignment, and an overemphasis on rewards. However, by investing in professional development, improving infrastructure, aligning gamification with the curriculum, and balancing rewards with intrinsic motivation, these challenges can be overcome. Embracing gamification in education has the potential to transform the learning experience and enhance student engagement and outcomes.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

REFERENCES

- John Ivan F. Almario, Rafael Luis G. Castro, Carl Jemuel S. Pabustan, Christian Jay P. David, Allen J. Macabali, Julius Ceazar G. Tolentino, Luwy R. Valenzuela, "Fostering Pre-service Physical Educators' Retention of Concepts in a Professional Education Course Using Moneyopoly Game", 2023
- Astha Patel, S. Amadon, Deana Around Him, "Pre-K May Be Critical to Academic Success for American Indian and Alaska Native (AIAN) Children", 2023
- Pradeep Kumar Singh, Zdzislaw Polkowski, Sudeep Tanwar, Sunil Kumar Pandey, Gheorghe Matei, Daniela Pirvu, "Innovations in Information and Communication Technologies (IICT-2020)", *Springer Nature*, 2021-07-15
- Sangkyun Kim, Kibong Song, Barbara Lockee, John Burton, "Gamification in Learning and Education", *Springer*, 2017-09-19
- Zamzami Zainuddin, "Gamification in A Flipped Classroom", *Springer Nature*
- Deterding, S., Dixon, D., Khaled, R., & Nacke, L. (2011). From game design elements to gamefulness: defining gamification. In *15th International Academic MindTrek Conference: Envisioning Future Media Environments* (pp. 9–15). New York, NY: ACM