

SHIKSHA SAMVAD

International Journal of Multidisciplinary Research ISSN: 2584-0983 (Online) © Shiksha Samvad|Volume-02| Issue-04| June- 2025 Available online at: <u>https://shikshasamvad.com/</u>

Gamification in Higher Education for B. Ed. Students

Deepak Kumar¹, Preeti Manan²

¹Assistant Professor, School of Education, Lingayas Vidyapeeth ²Research Scholar, Department of Education, University of Delhi

Email: deepakcie2025@gmail.com

Abstract:

Gamification in higher education has emerged as a transformative approach to enhance student engagement and motivation, particularly for B.Ed. students. Traditional pedagogical methods often struggle to maintain interest, especially in distance learning environments. By incorporating game elements such as points, badges, and leaderboards, gamification fosters a more interactive and participatory learning atmosphere. Tools like Kahoot! offer real-time feedback and encourage involvement, proving effective in teaching complex subjects like mathematics and probability. Studies suggest that gamification not only increases student engagement but also improves course completion rates. This paper explores the potential of gamification in teacher education, aiming to inform the development of innovative and student-centered teaching strategies in higher education.

Keywords: Gamification, Higher Education, B.Ed. Students, Student Engagement, Interactive Learning, Distance Learning, Educational Technology, Teacher Education.

Introduction:

Gamification's integration into higher education offers a potentially game-changing method for student engagement, especially for those working towards B.Ed. degrees. Traditional teaching, it's often found, struggles a bit to keep students hooked, so gamification uses elements of game design to boost both motivation and learning. Not only might this help with high dropout rates often seen in distance learning, but it also creates a more interactive learning space where students can do well. Using gamified platforms – Kahoot!, for example – seems to really encourage active participation and provide immediate feedback, which is super important when tackling tricky subjects like math and probability (Mbete et al., 2022). Initial research even hints that gamification could significantly bump up course completion rates by simply making learning more fun and engaging (Budiyanto et al., 2025). So, understanding the role of gamification in universities is essential for creating effective teaching strategies that work for today's students.

Definition of Gamification

Generally speaking, gamification involves incorporating game-design elements and principles into non-game situations. The aim? To boost user engagement, motivation, and even learning outcomes. This innovative approach has been gaining traction in higher education in recent years, particularly within B.Ed. programs, because it presents a pretty unique way to encourage active learning. Educators can create dynamic classroom experiences that encourage student participation and collaboration by integrating gamification strategies--moving away from traditional pedagogical methods in most cases. Platforms such as Kahoot! have demonstrated significant improvements in student engagement, for instance, allowing for immediate feedback and a learner-driven approach to challenging subjects like mathematics (Mbete et al., 2022). Teacher training in gamification becomes increasingly crucial amid rapid technological advancements. To equip future educators with the skills needed to meet the demands of modern classrooms (Mollo et al., 2019). This multifaceted definition of gamification highlights its potential to transform educational practices and enhance learning for B.Ed. students.

Importance of Gamification in Education

Generally speaking, gamification has become a really interesting and potentially game-changing way to teach, especially for those studying to become teachers themselves. It's all about taking things we find in games and using them in education, which can really get students more involved and help them understand things better. For example, tools like Kahoot! have been studied and, in most cases, shown to get students more active and give teachers good feedback when teaching tricky subjects like Probability. This shows how gamification can shake up traditional teaching and make learning more about what the student needs (Mbete et al., 2022). Moreover, this approach fits well with today's educational needs, where tech is super important. Teacher programs, like B.Ed., need to prepare students with the right tech skills (TPACK), so they are able to teach well in today's classrooms (Mollo et al., 2019). When done right, these strategies not only make teaching better, but they also help to make learning fair and accessible for everyone which is super important for future teachers. The integration, however, requires careful planning and execution.

Overview of the Role of Gamification for B.Ed. Students

Gamification is quite important for teacher education, especially when we're talking about improving how B.Ed. students learn to teach. It's all about adding game-like things to classrooms to get future teachers more interested and excited. For example, studies show that using things like Kahoot! in math classes can really help; these tools not only make learning fun but also get students involved and give them feedback right away, which is a more student-centered way of doing things (Mbete et al., 2022). Plus, using gamification in MOOCs seems like it could help more people finish courses and stay engaged, thanks to things like badges and leaderboards. This shows how important it is for teachers to learn how to use new teaching methods (Budiyanto et al., 2025). In general, using gamification in a smart way can really improve how B.Ed. students learn and get them ready for the classrooms of tomorrow.

Theoretical Framework of Gamification:

When considering gamification's theory in higher education, it's a multi-faceted field that improves B.Ed. students' learning. A key point is incorporating game design ideas into learning, which boosts student involvement and drive. Post-COVID, this matters more, especially since teacher educators worried about updated teaching methods and keeping

students interested (Broza O et al., 2024). Also, tech skills are vital, as future teachers need to use digital tools to make interesting learning spaces. Studies show tech skill gaps between public and private schools, highlighting why tech should be in teacher training (Fazal N et al., 2024). By using gamification, teachers can tackle these problems, encouraging a more hands-on learning setting that fits current schooling needs. A participatory atmosphere is what they need.

Key Theories Supporting Gamification

When it comes to truly grasping how gamification impacts students, both their involvement and how much they learn, you really can't skip over the theoretical side of things. The TPACK framework—that's Technological Pedagogical Content Knowledge—essentially pushes teachers to blend tech seamlessly into how they teach. It's all about keeping content, teaching style, and tech in sync. This is super important for slotting gamification into college classrooms, especially for future teachers studying for their B.Ed. Now, adding to this, Vygotsky's idea about learning through social interactions steps in. Gamification can boost this big time through group games and a bit of healthy competition. So, by tapping into these theories, schools can whip up really engaging learning scenarios, upping student drive and shaking up how things are traditionally taught. Done right, gamification doesn't just jazz up learning—it also gets those future teachers ready to roll with all the changes happening in education (Mbete et al., 2022)(Mollo et al., 2019).

Psychological Impact of Gamification on Learning

Generally speaking, gamification's psychological impact on learning really has several facets that influence student engagement and, of course, motivation, particularly among B.Ed. students. By incorporating elements such as point scoring – or, really, competitive elements – and rewards, gamification transforms traditional educational experiences into environments that are more interactive and engaging, and that ultimately fosters a sense of achievement as well as community. Research does indicate that this approach can enhance intrinsic motivation, and in turn that encourages students to invest more effort and time into their learning processes. Furthermore, the competitive tasks in gamified settings can result in improved self-efficacy and resilience. Educators need to focus on technology leadership, as some studies show it is linked to technology adoption in classrooms (ANTHONY M S PALOMA, 2023), and diverse perspectives on gamification contribute to educational solutions, improving well-being and success (N/A, 2023).

Educational Models Incorporating Gamification

In higher education, particularly for B.Ed. students, using gamification offers both possibilities and problems. Studies suggest that things like badges and leaderboards can really help people finish online courses (Budiyanto et al., 2025), boosting engagement. Plus, tools like Kahoot! can change regular teaching into fun, interactive experiences where students get involved and receive quick feedback (Mbete et al., 2022). Such methods don't just make the material easier to grasp. They also connect with current educational ideas, like Vygotsky's focus on working together and learning from each other. Yet, whether gamification works well depends on things like how good the teacher is and whether there's enough support. So, knowing the local situation well is key to making the most of it for better educational results for upcoming teachers.

Implementation of Gamification in B.Ed. Programs

Generally speaking, B.Ed. programs stand to gain quite a bit from incorporating gamification, potentially revolutionizing how we approach pedagogy and positively impacting student outcomes. We can foster greater

engagement and motivation among future teachers by introducing gamified elements like point systems, badges, and even interactive challenges. Such strategies have demonstrated enhancement of learner engagement and completion rates within educational contexts; for example, recent studies on gamification in MOOCs show some positive effects on participant involvement and retention (Budiyanto et al., 2025). Consider Kahoot!, for instance: its use in mathematics instruction demonstrates how gamification can invigorate classroom dynamics by promoting active participation and a learner-centric approach, along with that immediate feedback (Mbete et al., 2022). The successful integration of gamification in B.Ed programs enriches the learning experience and equips aspiring educators with innovative instructional strategies for their future classrooms.

Examples of Gamified Learning Environments

Gamified learning setups are pretty important for getting B.Ed. students involved. They change regular classrooms into something more like an interactive experience. Like, virtual worlds can make teaching methods better, especially when there are learning problems to solve. A good example of this is Englehaven Island, a virtual world made to help students get better at English. It feels like real life, but it's all in a game. This way of learning helps students work together and feel more sure of themselves. You can see this because they get better at speaking and listening (Hoter E et al., 2023). Also, some teacher educators think that gamification can help close gaps in being able to work on your own and having freedom with the curriculum. This can help deal with issues about keeping students interested as things change with technology (Broza O et al., 2024). All this shows that gamification has a lot of potential to make college better, especially for people training to be teachers.

Tools and Technologies for Gamification

Gamification's successful use in higher education hinges on various cutting-edge tools and tech that are meant to boost how involved students are and how well they learn. A key example is Kahoot!, a tool that's become very popular with teachers because it lets them create interactive quizzes. These quizzes make for a competitive, but also fun, atmosphere for learning. Studies show that using these kinds of gamified tech can really get students more involved and motivated, specifically in subjects that are usually tough, like math. For example, one study looking at Kahoot!'s use in teaching probability showed it not only made learning more fun, but it also improved how much learners participated and gave quick feedback, turning regular teaching methods into experiences that are more dynamic (Mbete et al., 2022). Furthermore, putting gamification into MOOCs has been shown to have a good effect on course completion rates, showing how it can get students engaged and take care of retention problems in online learning (Budiyanto et al., 2025).

Strategies for Effective Gamification in Curriculum Design

To really get the most out of gamification in education, especially for future teachers in B.Ed. programs, educators need to be strategic. It starts with designing game-like activities that match what students need to learn. This not only gets them involved but also keeps them interested and helps them remember things better. For example, think about using adaptive learning, which gives personalized feedback and meets different

students where they are. Also, getting students to work together on challenges builds a sense of community, which is important for their emotional and social growth, particularly in online classes. Research has looked at what teacher educators worry about when it comes to teaching methods and what's taught (Broza O et al., 2024). On top of all that, it's vital to train these future teachers to be tech-savvy. Studies show that teachers from public and private schools have different levels of comfort with technology (Fazal N et al., 2024). Generally speaking, putting these ideas into practice can really change how students learn and get future teachers ready for what modern classrooms need.

Benefits of Gamification for B.Ed. Students

Gamification's incorporation into higher education, specifically for B.Ed. students, presents several advantages that improve the educational journey. Strategies like badges, leaderboards, and interactive challenges are employed to boost student engagement and motivation, vital for positive educational results. For example, studies indicate that gamification elements in MOOCs notably increased learner engagement and completion rates, hinting at their effectiveness in sustaining student interest in B.Ed. programs (Budiyanto et al., 2025). Additionally, gamification tech, like Kahoot!, promotes a learner-centered approach, boosts participation, and offers instant feedback, aiding deeper comprehension of course content (Mbete et al., 2022). Together, these results emphasize gamification's capacity to alter traditional teaching methods, creating a more engaging, effective learning setting for future educators.

Enhanced Engagement and Motivation

For B.Ed. candidates, the weaving together of game-like elements into higher education is quite important, especially when it comes to getting them invested and keeping them driven. Educators, you see, can build a sense of ownership in students by using things like rich, immersive settings and learning through doing. Take virtual worlds, as an example. They let learners get together in real-world situations, which seems to boost their confidence and makes them more likely to talk, and participants have actually said their language skills got way better when they learned in game-like ways (Hoter E et al., 2023). And, it's also key to grow self-led learning so we can make future educators who can then make class environments that give power to students. When student teachers do problem-solving activities during trips, this not only makes them feel more like pros, but it also gives them what they need to get around the complex world of teaching (Josef de Beer, 2023). All in all, gamification is a game-changer, if you will, that drives motivation and engagement, and also pushes key skills forward in higher education spots.

Improvement in Learning Outcomes

Gamification's integration into higher education, especially for B.Ed. students, demonstrates encouraging possibilities for improved learning. Engagement and motivation, vital for educational success, are often linked to gamified elements like badges, leaderboards, and of course, challenges. Implementing these strategies can, according to preliminary research (Budiyanto et al., 2025), improve course completion rates, especially in online learning, tackling problems such as high MOOC dropout rates. Moreover, the National Education Policy (NEP) 2020's call for joyful learning complements gamified learning's principles for a more

effective educational experience. This synergy can boost reflective thinking and self-regulated learning, contributing to considerable academic performance improvements, as studies on game-based learning have shown (Ramesh et al., 2022). Gamification, therefore, represents a potentially transformative approach to enriching B.Ed. students' learning outcomes.

Development of Critical Skills for Future Educators

As higher education continues to evolve in response to today's needs, the cultivation of critical skills in future teachers becomes ever more vital, especially through approaches like gamification. This teaching strategy, when implemented thoughtfully, can elevate pedagogical methods; teacher educators can actively engage students, encouraging the growth of key competencies like technological literacy and collaborative problem-solving. However, some research indicates teacher educators are concerned about current pedagogical methods, underscoring the necessity of versatile teaching in digital settings (Broza O et al., 2024). Furthermore, technological literacy is of critical importance; studies have noted differences between public and private institutions when it comes to competency levels among prospective teachers (Fazal N et al., 2024). Integrating gamification techniques into programs for future educators enables them to face these challenges, and improve essential skills. In most cases, they will be more adept at leveraging technology to improve student experiences. This approach holds the potential to enrich education, preparing educators to effectively meet students' evolving needs.

Conclusion

To summarize, gamification's use in higher education--especially for future educators--offers a way to revamp teaching methods and get students more involved. This forward-thinking plan not only encourages motivation but also helps students grasp subjects better with hands-on learning. As shown, teacher educators' worries about blended learning call for a well-rounded approach. This approach should respect teachers' independence, tackle tough curriculum issues, and consider the social and emotional parts of teaching in a digital world (Broza O et al., 2024). Also, different levels of tech know-how in public versus private schools show how important it is to improve ed-tech training to get future teachers ready (Fazal N et al., 2024). Looking ahead, schools need to focus on creating full gamified courses that not only get students excited but also prep them for the changing needs of today's education system, building both tech skills and teamwork.

Summary of Key Findings

The study of gamification's effects on Bachelor of Education students yields noteworthy results, highlighting its promise for improving educational results. Incorporating game-like features not only boosts motivation and involvement among aspiring teachers, but it also aids in their acquisition of essential technological skills. For example, (Fazal N et al., 2024) points out the differences in technological proficiency between public and private school systems, with higher levels of integration observed among educators in public institutions. These observations align with gamification's goal of encouraging active learning and flexibility, implying that educators with strong digital abilities are more likely to use gamified techniques successfully. Furthermore, concerns voiced by teacher educators regarding pedagogical approaches and emotional

connection in online settings, as explored in (Broza O et al., 2024), emphasize the necessity of carefully implementing gamification strategies. As a result, these results support a comprehensive approach to gamification that considers both the technical and pedagogical elements of teacher education.

Future Implications of Gamification in Higher Education

The integration of digital tools in education continues its upward trend, and the impact of gamification on B.Ed. students in higher education presents both opportunities and challenges. By incorporating game mechanics into learning, gamification can boost student engagement and motivation. Research suggests that focusing on pedagogical techniques and emotional bonds within digital learning is vital; flexible instructional design that creates a supportive atmosphere is also key (Broza O et al., 2024). Furthermore, it's crucial that future teachers are technologically proficient; differences in how public and private schools use technology show how important it is to thoroughly train teachers in digital skills (Fazal N et al., 2024). As teacher training increasingly includes gamified approaches, it is essential to give priority to technological literacy to ensure that future teachers have the skills they need to succeed in a rapidly changing educational world.

Recommendations for Educators and Institutions

Generally speaking, educators and higher education institutions might want to strategically consider adopting innovative practices to boost learning experiences, given the transformative potential of gamification for B.Ed. students. A key aspect: integrating compelling game mechanics into the curriculum which can foster engagement and motivation among future teachers. Also, institutions should prioritize professional development programs. Such programs can equip educators with the skills necessary to effectively implement gamified strategies. This addresses some identified gaps in technological preparedness (Fazal N et al., 2024). Furthermore, it might prove useful to leverage e-learning tools in courses like Understanding Disciplines and School Subjects; this could help bridge the disconnect between digital resources and pedagogical theory (S Padmini et al., 2023). Institutions can cultivate an adaptive environment by fostering a culture that embraces technology and gamification. Doing so nurtures future educators and enhances their readiness for the evolving landscape of teaching. These recommendations underscore, generally, the importance of progressive pedagogical approaches in shaping capable and innovative educators.

References

- Nadia Fazal, Muhammad Aslam, Nor Rabiatul Adawiyah Nor Azam (2024) DIGITAL LITERACY AMONG PROSPECTIVE TEACHERS: THE COMPARATIVE ANALYSIS OF PUBLIC AND PRIVATE UNIVERSITIES. Volume(3). Journal of Social Sciences Development. doi: https://doi.org/10.53664/jssd/03-04-2024-02-11-20
- S. Padmini, Pramila Ramani (2023) Assessing the Efficacy of e-learning Resources in Facilitating Course Teaching in Cuddalore District of Tamil Nadu, India. Volume(49), 214-230. Asian Journal of Education and Social Studies. doi: https://doi.org/10.9734/ajess/2023/v49i31149
- Orit Broza, Nurit Chamo, Liat Biberman-Shalev (2024) Moving on to a 'new normal': Teacher educators' concerns about blended learning in the post-COVID-19 Era. Volume(2), 44-54. doi: https://doi.org/10.29329/journalted.28

- Budiyanto, Cucuk Wawan, Pambudi, Nugroho Agung, Wahyudi, Muhamad Nur Azmi, Widiastuti, et al. (2025) Beyond Points and Badges: Deepening Engagement in MOOCs through Gamification. doi: https://core.ac.uk/download/640243285.pdf
- Mbete, Ayanda (2022) Gamification technology in teaching: Exploring how mathematics teachers make use of Kahoot! Gamification to facilitate learning of probability in classrooms. doi: https://core.ac.uk/download/592791298.pdf
- Mollo, Paseka, Patric (2019) Exploring Integration Of Information Communications Technology (ICT) In Curriculum Of Pre-Service Teacher Education And Training In South Africa. doi: https://core.ac.uk/download/482121661.pdf
- Ramesh, Rajendran, Sundaram, Sripriya (2022) Effectiveness of joyful game-based blended learning method in learning chemistry during COVID-19. doi: https://core.ac.uk/download/587989383.pdf
- Elaine Hoter, Hannah Azulay, Manal Yazbak (2023) Enhancing Academic Spoken English Skills Through an Immersive Virtual World: A Pilot Study Focusing on Motivation, Confidence, and Teacher Presence. doi: https://doi.org/10.32388/h5nkug.2
- Josef de Beer (2023) Excursions as an Immersion Pedagogy to Enhance Self-Directed Learning in Pre-Service Teacher Education. Volume(13), 862-862. Education Sciences. doi: https://doi.org/10.3390/educsci13090862
- (2023) PROCEEDINGS OF THE SLIIT INTERNATIONAL CONFERENCE ON ADVANCEMENTS IN SCIENCES AND HUMANITIES [SICASH]. The proceedings of sliit international conference on advancements in science and humanities. doi: https://doi.org/10.54389/ulbu6330
- MARK ANTHONY S. PALOMA (2023) Technology Leadership Standards of Education Leaders, Teachers' Technological Adoption and the Integration of Technologies in the Classroom. Volume(124). International Journal of Research Publications. doi: https://doi.org/10.47119/ijrp1001241520234818

PASSION TOWARDS EXCELLENCE

Attribution License CC BY-NC-ND 3.0) which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. All rights reserved

Cite this Article:

Deepak Kumar¹ & Preeti Manan², "Gamification in Higher Education for B.Ed. Students" Shiksha Samvad International Open Access Peer-Reviewed & Refereed Journal of Multidisciplinary Research, ISSN: 2584-0983 (Online), Volume 2, Issue 4, pp.97-105, June 2025. Journal URL: <u>https://shikshasamvad.com/</u>



CERTIFICATE

of Publication

This Certificate is proudly presented to

Deepak Kumar & Preeti Manan

For publication of research paper title

"Gamification in Higher Education for B. Ed. Students"

Published in 'Shiksha Samvad' Peer-Reviewed and Refereed Research Journal and E-ISSN: 2584-0983(Online), Volume-02, Issue-04, Month June 2025, Impact-Factor, RPRI-3.87.

Dr. Neeraj Yadav Editor-In-Chief

Dr. Lohans Kumar Kalyani Executive-chief- Editor

Note: This E-Certificate is valid with published paper and the paper must be available online at: <u>https://shikshasamvad.com/</u>