

• NEWSLETTER ISSUE NO. 18 - APRIL 2026

# *World Education Fellowship*

## Indian Section



## *Games & Gamification in Education*

### *In This Issue*

*Contributions from academics*

*Shared articles*

*Resources for Teachers*

*Books on Gaming and*

*Gamification in Education*

*News from WEF Global and*

*members of the community*

*ANNOUNCEMENT on the new  
format of the newsletter*



### *Dedication*

Dedicated to all those creative and individuals who make learning fun through the use of games and gaming strategies.

## Editor's Voice

**Dr. Priti Sachdev**

Honorary Secretary

World Education Fellowship, Indian Section

Dear Readers,

*I don't know about you, but I love playing all kinds of games! I imagine my pleasure when a teacher from my grade 9, many many years ago(!), decided that enough of this classroom academics, lets do something different! Let's play a game! – Students just stopped whatever they were doing and looked up at him, surprise all over their faces. Is this the same Mr. Mittal, our maths teacher, who would go on and on about trigonometry and algebraic equations etc?*

*But, he said, I'm not going to give you the game – you have to make the game! I'll just give you the solution! You can do it alone or chose up to two partners. The winner will be the first one who's game can have the final solution I just gave! You have this next 40 minutes to conceptualise and complete your game rules.*

*What chaos!!! The class was a mess! But ---- what involvement, even the weakest maths student trying – for this was not maths – it was game creation and how much critical and creative thinking!!!!*

If you've had the good fortune to have games in your class – as a teacher or as a student – this scene will be familiar.

This issue is dedicated to **gaming and gamification** in the classroom. You will find a few interesting articles by educationists who have tried theses strategies and a couple of shared articles on the subject.

We have some good news from WEF global, a call for a principal and updates on what members are doing for development of education in the city.

Enjoy

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*“Games have the ability to introduce, reinforce, or even assess learning of a given topic.”*

– Kara Carrero

## Contributor's To The 18th Newsletter

WEF Indian Section acknowledges with thanks the contributors to this newsletter as well as the staff who make the creation of a newsletter possible – **Ms Melita D'Souza** from the **Gujarat Research Society (GRS)** for formatting the articles and other material into the newsletter format; **Dr. Priti Sachdev** for conceptualizing and creating the space for academics to express themselves and for editing this newsletter; **Ms Jaymala Pardhiye (GRS)** for her continuous admin support. **Thank you Dr Asha Agrawal, Dr. Geeta Shetty and Dr. Priti Sachdev**

### *Dr Geeta Shetty*



Dr Geeta Shetty is currently the principal of the H J College of Education (Autonomous). She has been in the field of Education for several decades. Prior to her appointment as principal she served the St Xavier College of Education in Mumbai for over 3 decades.

Dr Shetty has had her early education in the Science faculty. Later, she obtained a Masters in Literature and an M Phil in Education - with a research focus on 'Gaming in Education', all from Mumbai University. During her tenure in the field of Education she worked at the University of Maryland, Baltimore and has attended an Education Leaders Programme at the Nanyang Technological University in Singapore.

Dr Shetty's doctoral research thesis was on 'Problem Based Learning to Develop Metacognition', from the SNDT University, Mumbai.

A double doctorate (in Education and in Management), Dr Sachdev is an established educationist having worked in schools, colleges, Teacher Training institutions and in Mumbai University over the last 5 decades plus. She moved on to become an independent faculty / teacher trainer in research, soft skills and pedagogy. She currently interests herself in promoting reflection, skill building and iterative teaching among teachers through organizing workshops and spreading progressive thinking in Education through the WEF Indian Section Newsletter.

### *Dr. Priti Sachdev*



### *Dr Asha Agrawal*



Dr Aggarwal is currently an Asst. Professor in the Commerce Department at the KES' Shroff College of Arts and Commerce . She has a number of qualifications to her credit : M.Com – (Gold Medalist), an MBA, and a PhD in Commerce. She has been awarded the Junor Research Fellowship during her student days and is currently a Co- Guide at JJTU. To her credit she has 15 Papers published, 3 Book Chapters, one book and one book edited by her.

## Contributor's To The 18th Newsletter

### Professor David Turner

Dr. David Turner, PhD, is Professor Emeritus of Education at the University of South Wales, and Professor at the Institute for International and Comparative Education, Beijing Normal University. Professor Turner is the President of Global CIE Forum and a former Treasurer, World Council of Comparative Education Societies. He is a Fellow of the Academy for Social Science and Honorary Member of the British Association for International and Comparative Education. After graduating in engineering,



Professor Turner became a science teacher in secondary schools for nine years, before moving into teaching in higher education. He has taught in a variety of higher education institutions, teaching comparative education at the University of London Institute of Education before moving to the School for Independent Study at the North East London Polytechnic, now University of East London, UK. His book, [Theory of Education](#), presented a novel approach to viewing education as a complex system, which is shaped by the choices that individuals within the system make. The book won the World Education Fellowship Book Award in 2005/6. That book was followed by [Theory and Practice of Education](#), published in 2007. Professor Turner believes that the role of theory in education is to provide a coherent and stringent critique of policy, and by that means to provide a framework for improving educational institutions. He is critical of much current policy in education, including the desire to see institutions ranked in league tables. He is committed to the view that the education system needs to accommodate diversity in all its expressions.

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*"The creation of something new is not accomplished by the intellect, but by the play instinct."*

*– Carl Jung*

## The Gamification of Education

**Prof Dr. David Turner**

Treasurer  
WEF Global

I have just got home from a trip to San Francisco. While I was there, I took the opportunity to visit the Exploratorium on Pier 19. Science museums, exploratoriums, places like that; I love them. I want to go and see how clever the designers are at presenting the principles of science in easily comprehended ways.

I came across one exhibit that had the following label: “Forever Falling Magnets: Spin the wheel at different speeds, including s – l – o – w – l – y. Now watch (and listen) for patterns.” The apparatus is shown in the picture. In the picture, the wheel is rotating clockwise.



Well, I span the wheel and started videoing the movement, while I thought about the forces on the magnets: gravity, attraction to the metal wheel, friction, centrifugal (or centripetal) force, and maybe coriolis. There was clearly a lot of theory involved here, and I was going to have to think hard about what was going on.

But I did not have to think long. About two seconds after I set the wheel spinning, a child, who did not read any of the instructions, stepped in front of me, grabbed the wheel to stop it, set it spinning again as fast as possible, got bored, and wandered off, without even glancing at the patterns the magnets made.

I cannot say that I was really surprised. One of the reasons I love science museums is because it is fun to wind the handles and press the buttons and see what happens. And science museums are always full of children who are obviously enjoying handle winding and button pressing.

But what is much rarer is the child who is actually learning something (apart from the vague notion that science is fun). Perhaps that is enough. Perhaps if every child leaves the building thinking that learning science is fun, that is mission accomplished for the science museum. But I was hoping for more. I was hoping they might also learn some rudiments of scientific theory.

I have seen, in different places around the world, the most ingenious pieces of apparatus, designed to illustrate scientific principles, but where you would need a degree in physics to understand what was going on. And not surprisingly, the children who engage with such apparatus appear to be devoted to the mindless pulling of levers and stepping on pedals. And the real conundrum that I come up against in science museums, time and again, is, “What on earth was going on in the mind of the person who designed this?” There is a kind of naive empiricism abroad, which suggests that if you just watch the cleverest demonstrations, you will be able to teach yourself anything. I think it dates back to around the beginning of the twentieth century as a reaction against the dull and rigid formalism that Dickens so effectively satirised in the person of Thomas Gradgrind. So you have Dr. Montessori suggesting that, in the

right environment, children would teach themselves. The idea that you could teach a child anything, so long as you do not try to engage their reason; an approach summarised in the sayings, “What the hand does, the mind remembers”, or “The senses, being explorers of the world, open the way to knowledge”.

It is not entirely Montessori’s fault, of course. In those passages she was talking about children under the age of six, and they are not the majority of children in science museums. She has simply been taken up in a period when the zeitgeist is tipped firmly away from theoretical understanding. I think that it is time to redress that imbalance, and to recognise the important place of theory and reason in our understanding of the world.

I say this, not because I think education should be dull, or because I think it is only doing you good if it hurts, but because theory and reason can inspire awe and wonder, and children need to see that, as well as exciting happenings. If anything can be turned into a game, then it should be. When I was a child, my father taught me cribbage. And if you want an excellent workout for your mental arithmetic, play cribbage. I started to pay closer attention to spelling after my father had taught me that solving crosswords is fun; if you cannot spell, the answers tend not to fit into the crossword grid properly. And I can think of innumerable examples of games that are an excellent way of conveying new knowledge, or of reinforcing and applying knowledge that has already been learned.

But what I think the experience of science museums shows is that gamification is not as easy as it might at first appear. If making something a game becomes the primary objective, then the content that can be learned from the exercise is likely to be pushed out of the way. If the educational purpose can be retained at the centre of the exercise, and still it can be turned into a game, then what could be better than that?

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*“Almost all creativity involves purposeful play.” – Abraham Maslow*

## Student Projects

**Dr Priti Sachdev**

Ex Reader, Dept of Education  
University of Mumbai

Many a time there are things that we do or things that happen and it is only later that there comes a name or a rationale for it. Many of our childhood games and pastimes fall into this category.

You would remember the pleasure and fun we had playing “hangman”, “name-place-animal-thing”, “I-Spy” and “Charades”. We would play these in any spare time we had in school and to pass time at home or while travelling!

We teachers now think of them as “Games to Teach English”. There are of course many new games now, many of them online which help learn English – There is wordle, squaredle, Tumble-words, crossword and many more- most of them free to a certain level - all of them can and do increase vocabulary and spelling.

Similarly , in mathematics too there are games that encourage children to think quickly and work out simple mathematical operations without using paper and pencil! Some of the many examples are Mathsframe”, “Topmarks”, “TimestablesRockstars”, Guardians of mathematica”, ‘Mindmap”, “Crossmath”, “Math learner” - online games currently available as apps. Teachers usually use classroom team games to help children master simple operations.

There are, as well, games in subjects such as Science and Geography, History and logic that engage students and help them learn concepts and ideas.

So why don't we use them all the time – Easy to understand - that conceptualising a game and preparing for it requires an immense amount of effort and time, or, maybe the intended results are not immediately visible. And many complicated concepts need concentration and focus which a game may not really provide.

But, making and playing games can play an entirely different role for older students. Making and playing a game to perfect it can itself be a project for your students.

Through conceptualising a game, formulating its rules , preparing the hardware required for it, and debugging it through actual play can be an excellent way to develop language skills (instructions need to be precise and clear), mathematics ( developing the scoring patterns),art and craft (creating the hardware), logic (explaining how the game proceeds) critical understanding (finding the bugs in the game), team-building ( through 2-4 persons working together on developing one game) and competitive spirit (through playing each other's game and judging these on a variety of criteria.

As an educationist, no matter how much subject matter teachers need to 'cover', a project on developing a game should be part of every curriculum – Perhaps one game a term alternating on concepts in different subjects each time so that teachers in different areas get their turn to inspire the students. And a good time to do this is when the school is in preparation mode for the annual functions! An excellent activity from grade 7 upwards!

Projects in classrooms build trust and teams that can last a lifetime! I hope you will be motivated to try this approach!

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*“Scientists have recently determined that it takes approximately 400 repetitions to create a new synapse in the brain — unless it’s done with play, in which case, it takes between 10 and 20 repetitions!”*

*– Dr. Karen Purvis*

## Games Matter for Grey Matter

**Prof. Dr. Geeta Shetty.**

Principal,  
H J College of Education (Autonomous),  
Mumbai

*“The creation of something new is not accomplished by the intellect but by the play instinct.” – Carl Jung*

The above quote by Jung squarely considers ‘play’ as more significant and superior than the ‘intellect’. In other words he emphasizes the role of play in heightening the intellect and enhancing creativity. Play comes naturally to children; they enjoy the very mention of games and playtime. Games have an innate tendency to excite children and motivate them to acquire learning. The role of games in the education of children has long fascinated educationists. Games formed a part of the curriculum in ancient India to train learners in various physical skills as well as life competencies.

Research studies have highlighted how the use of games in education provides an atmosphere of fun and enjoyment for learners to be engaged and involved in the learning process without any inhibition or intimidation, by facilitating freedom of expression and freedom of learning. It can be safely added that games help to accomplish the four pillars of education, established by UNESCO (Delors Report, 1996), namely **Learning to Know** (acquiring knowledge), **Learning to Do** (applying knowledge), **Learning to Live Together** (interacting with others), and **Learning to Be** (personal development).

Studies show how games help in developing cognitive skills like reasoning, problem-solving, memory, critical thinking and creativity. While the role of games in developing cognition is well-known, their influence in developing metacognition has also been extensively studied. Cognition is the ability ‘to think’ while metacognition is ‘thinking about thinking’. Metacognition involves the attention to one’s own thought processes and strategizing to regulate learning and maximizing it. It is more of a reflective process that leads the learner to take active measures to ensure learning. The use of games to teach various concepts, trains learners to analyze the previously acquired skills and learning and then apply in the current situation. At every step the learners are experimenting and trying new strategies to succeed in the game. Playtime is more like a child’s science laboratory; it’s their time to create, experiment and learn. The results of the game are not of great importance; rather it is the process of knowing and growing through the game that is of significance. As Nate Silver puts it, “By playing games you can artificially speed up your learning curve to develop the right kind of thought processes.”

The human brain, according to neuropsychologists, is capable of two major processes, namely neuroplasticity and neurogenesis. Neuroplasticity is the brain’s ability to change, remodel and reorganize for purpose of better ability to adapt to new situations. While we repeatedly practice one activity such as a sequence of movements or a mathematical problem, neuronal circuits are being formed, leading to better ability to perform the practiced task with less waste of energy. Once we stop practicing a certain activity, the brain will redirect these neuronal circuits by the principle ‘use it or lose it’.

Neurogenesis, simply put, is the formation of new neurons. Human brain is capable of generating new neurons based on new situations and learning tasks. Games stimulate the brain and facilitate both the processes in learners. While playing and participating in a game, the learners model and remodel their learning, work out various strategies to solve problems and synthesize information to arrive at a logical conclusion. When engrossed in such activities for a long time, the learners

Games that are carefully designed on selected concepts could be used to enable students to construct and create knowledge on their own. Instead of teaching the concepts directly in the classroom, where the students are only passive recipients of knowledge, games can be designed on those concepts such that learners explore and discover connections on their own. The importance of games that are challenging as well as rewarding at the same time is illustrated in the statement by Benjamin Spock when he says, "A child loves his play, not because it's easy, but because it's hard." Teaching through games, thus is based on the principles of the Constructivist approach.

Grey matter is a vital part of the brain and spinal cord that supports thinking, movement and memory. Its primary functions are;

- Information processing
- Controlling movement
- Receiving sensory input
- Supporting memory
- Regulating emotions
- Managing interactions

When games are used in teaching and learning, the grey matter is activated thereby revitalizing the neurons and making all its functions come to play. Playing games should form an essential part of growing up days not just limited to the playground, but it should also permeate into the classrooms. If classrooms have to be made vibrant centres of learning, the teaching learning experiences have to necessarily become dynamic and experiential. Games serve to make the classrooms active and alive, thus aiding learning in a free and uninhibited environment. Educational institutions need to invest more time in game-based learning for achieving greater learning outcomes.

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*"Play gives children a chance to practice what they are learning."*

*– Mr. Rogers*

## Learning Beyond Books

### The Power of Games in the Classroom

**Dr. Asha Agrawal.**

Asst. Professor  
KES' Shroff College of Arts & Commerce

*“Learning becomes more meaningful when it feels like play.”*

Games in teaching & learning make the classroom more engaging and interactive. They help students participate actively instead of just listening, which improves understanding and memory. By using simple games like quizzes, puzzles, or role-play, teachers can explain concepts in a fun and effective way. This approach not only reduces boredom but also builds important skills like teamwork, creativity, and problem-solving, making learning both enjoyable and impactful.

#### Introduction:

Education has undergone a remarkable transformation over the years. Traditional teaching methods, which focused heavily on lectures, rote memorization, and textbook-based learning, are increasingly being replaced or supplemented by more interactive and student-centred approaches. In today's rapidly evolving world, students are exposed to digital technology, social media, and dynamic environments from an early age. As a result, their expectations from learning have changed significantly. They prefer experiences that are engaging, interactive, and meaningful.

In this context, the concept of using games in teaching-learning has gained immense importance. Games are no longer seen merely as a source of entertainment but as powerful educational tools that can enhance learning outcomes. The integration of game elements such as points, rewards, challenges, competition, and storytelling into the educational process is often referred to as “gamification.”



The idea of using games in education raises several important questions. Do games truly engage learners? Are they effective in improving understanding and retention? Can they be used across all age groups, including older students? Is it practical for teachers to design games? Can students themselves contribute by creating games? This article explores all these questions in detail, supported by theoretical perspectives, practical observations, and real-life case studies.

#### Understanding Games in Education:

Games in education refer to structured activities with specific rules and objectives that are designed to achieve learning outcomes. These can include traditional classroom games, board games, quizzes, role-plays, simulations, and digital games. It is important to differentiate

between **game-based learning** and **gamification**. Game-based learning involves using actual games to teach concepts, while gamification involves incorporating game elements into non-game contexts, such as awarding points or badges for completing assignments. Games in education are based on the principle of **learning by doing**. Instead of passively receiving information, students actively participate in the learning process. This aligns with modern educational approaches that emphasize experiential learning and student engagement.

### Do Games Truly Engage Learners?

One of the most significant advantages of games is their ability to engage learners effectively. Engagement is a key factor in successful learning, as students who are actively involved are more likely to understand and retain information.

Games naturally capture attention because they involve elements of fun, curiosity, and challenge. Unlike traditional lectures, where students may lose focus, games require continuous participation. Students must think, respond, make decisions, and interact with others.

Psychologically, games stimulate both **intrinsic motivation** (learning for enjoyment) and **extrinsic motivation** (learning for rewards such as points or recognition). This dual motivation increases student involvement.

Games also create a sense of achievement. When students complete levels, solve problems, or win competitions, they feel a sense of accomplishment. This boosts their confidence and encourages further participation.

Additionally, games provide immediate feedback. Students can instantly know whether their answers are correct or incorrect, allowing them to learn from mistakes. This continuous feedback loop enhances understanding and keeps learners engaged.

### Theoretical Perspectives Supporting Game-Based Learning:

The effectiveness of games in education is supported by several learning theories:

#### 1. Constructivist Theory:

The Constructivist Theory, associated with thinkers like Jean Piaget and Lev Vygotsky, suggests that learners actively construct their own knowledge through experiences rather than passively receiving information.

According to this theory, learning is a process of **active engagement**, where students build new knowledge based on their prior understanding. Games perfectly align with this approach because they create environments where students explore, experiment, and discover concepts on their own. For example, in a simulation game related to business or economics, students make decisions, observe outcomes, and adjust their strategies. Through this process, they construct their understanding of concepts such as profit, loss, demand, and supply.



**Vygotsky's** concept of the **Zone of Proximal Development (ZPD)** is particularly relevant here. It refers to the difference between what a learner can do independently and what they can achieve with guidance. Games often provide scaffolding through hints, levels, or peer collaboration, helping students move from basic understanding to advanced learning.

Thus, games support constructivist learning by:

- Encouraging exploration and discovery
- Allowing learners to learn from experience
- Promoting social interaction and collaboration
- Building knowledge gradually through challenge

## 2. Experiential Learning Theory:

The Experiential Learning Theory, proposed by [David Kolb](#), emphasizes learning through experience. According to Kolb, learning occurs in a cycle consisting of four stages:

**Stage 1:** Concrete Experience

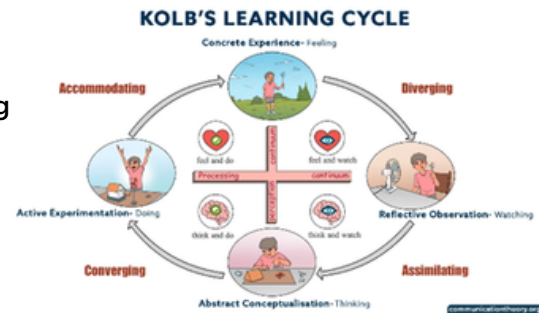
**Stage 2:** Reflective Observation

**Stage 3:** Abstract Conceptualization

**Stage 4:** Active Experimentation

Games naturally follow this cycle. When students participate in a game, they first experience a situation (Concrete Experience). They then reflect on their actions and outcomes (Reflective Observation). Based on this reflection, they form concepts or strategies (Abstract Conceptualization) and apply them in the next round (Active Experimentation).

For instance, in a role-playing game where students act as entrepreneurs, they may face challenges such as limited resources or competition. By experiencing these situations, reflecting on their decisions, and trying new strategies, they gain a deeper understanding of business concepts.



Experiential learning through games is particularly effective because:

- It connects theory with practice
- It promotes active involvement
- It encourages learning from mistakes
- It enhances long-term retention

This theory highlights that “learning by doing” is more effective than learning by listening, making games an ideal teaching strategy.

## 3. Behaviourist Theory:

The Behaviourist Theory, associated with psychologists like B. F. Skinner, focuses on observable behaviour and the role of reinforcement in learning. According to this theory, learning occurs when behaviours are reinforced through rewards or consequences. Games effectively use this principle by incorporating elements such as:

- Points
- Badges
- Levels
- Rewards
- Leader boards

These elements act as positive reinforcement, encouraging students to repeat desired behaviours such as participation, correct answers, and effort.

For example, in a quiz game, students receive points for correct answers. This reward motivates them to focus, think carefully, and participate actively. Over time, this reinforcement strengthens learning behaviour.

Behaviourism also emphasizes immediate feedback, which is a key feature of games. Students instantly know whether their responses are correct, allowing them to adjust their learning.

However, while behaviourism focuses on external motivation, games also support internal motivation when designed thoughtfully. Therefore, games provide a balance between extrinsic rewards and intrinsic satisfaction.



#### 4. Cognitive Learning Theory:

Cognitive Learning Theory focuses on the mental processes involved in learning, such as attention, memory, perception, and problem-solving. This theory suggests that learning is not just about behaviour but also about how information is processed and stored in the brain.

Games are highly effective in engaging cognitive processes because they require:

- Concentration
- Logical thinking
- Decision-making
- Pattern recognition

For example, puzzle-based games require students to analyse information, identify patterns, and solve problems. Strategy games require planning, evaluation, and decision-making.

Games also reduce cognitive overload by presenting information in manageable and interactive formats. Instead of overwhelming students with large amounts of information, games break learning into smaller tasks or levels.

Another important aspect is active recall and repetition, which are essential for memory. Games often involve repeated attempts, helping students reinforce their learning.

Cognitive theory explains why games:

- Improve understanding
- Enhance memory retention
- Develop higher-order thinking skills

#### *Benefits of Including Games in Teaching:*

The inclusion of games in teaching-learning offers multiple academic, psychological, and social benefits. When used effectively, games not only make learning enjoyable but also improve the overall quality of education.

##### 1. Enhanced Engagement:

One of the most immediate benefits of games is increased student engagement.

Traditional lectures often lead to passive learning, where students may lose focus. In contrast, games require active participation, keeping students mentally involved throughout the session.

Games introduce elements such as curiosity, challenge, and competition, which naturally attract students' attention. When learners are engaged, they are more likely to concentrate, participate, and complete tasks effectively.

##### 2. Improved Retention and Understanding:

Games promote experiential learning, which helps students understand concepts more deeply. Instead of memorizing information, students apply knowledge in practical situations during games.

This active involvement leads to better memory retention. Concepts learned through games are often easier to recall because they are associated with experiences and emotions.

For example, a student who learns accounting concepts through a simulation game is more likely to remember them than through rote learning.



### 3. Development of Cognitive and Life Skills

Games play a crucial role in developing essential skills that are important both academically and professionally. They encourage students to think critically, analyse situations, and make decisions.

- Critical thinking: Strategy games like chess require planning moves ahead
- Problem-solving: Puzzle games challenge students to find solutions
- Decision-making: Business simulation games involve choosing between alternatives
- Creativity: Designing a board game based on a topic enhances imagination
- Communication: Team quiz games improve discussion and expression
- Leadership: Group games assign roles where students lead teams
- Time management: Timed quizzes teach quick thinking under pressure

These skills are essential for real-life situations, making games a valuable learning tool beyond academics.

### 4. Encouragement of Teamwork and Collaboration

Many educational games involve group participation, which promotes teamwork and collaboration. Students learn to share ideas, listen to others, and work toward a common goal.

Collaborative games help students understand the importance of cooperation and respect for different perspectives. This is particularly important in today's world, where teamwork is a key skill in professional environments.

### 5. Inclusive and Stress-Free Learning Environment

Games create a relaxed and supportive learning atmosphere. Unlike traditional assessments, which may cause anxiety, games reduce pressure and make learning enjoyable.

This encourages participation from all students, including those who are shy or less confident. Games also allow students to learn at their own pace, making the classroom more inclusive.

Additionally, games help reduce the fear of failure, as mistakes are seen as part of the learning process rather than something negative.

### 6. Immediate Feedback and Self-Assessment

Games provide instant feedback, allowing students to understand their mistakes immediately. This helps them correct errors and improve their performance.

Immediate feedback also promotes self-assessment, as students can evaluate their own progress and identify areas for improvement. This leads to continuous learning and development.

## *Practical Experiences and Classroom Observations:*

#### • Case Study 1: Quiz-Based Learning

In a commerce classroom, a quiz competition was conducted after completing a chapter. Students were divided into teams and asked questions in a competitive format.

Observations:

- Increased enthusiasm and participation
- Improved attention
- Active involvement of all students

Outcome:

Better performance in tests and improved retention.

#### • Case Study 2: Role Play Activity

Students acted as buyers and sellers to understand demand and supply.

**Observations:**

- Improved conceptual clarity
- Better understanding of real-life applications
- Increased engagement

- **Case Study 3: Puzzle-Based Learning**

Crosswords and puzzles were used for terminology.

**Observations:**

- Enhanced vocabulary
- Increased interest
- Peer learning

- **Case Study 4: Digital Learning Platforms**

Online quiz tools were used for revision.

**Observations:**

- Immediate feedback
- Increased motivation
- Better performance

*Are Games a Waste of Time?*

This is a frequently debated question in the field of education. Many educators and parents worry that introducing games into the classroom may reduce seriousness and waste valuable instructional time. However, this concern arises mainly when games are misunderstood or misused.

Games can become unproductive if they are used without clear planning, lack relevance to the syllabus, or are conducted only for entertainment. For instance, playing unrelated games without linking them to learning outcomes can distract students and reduce academic focus. On the other hand, when games are **purposefully designed and aligned with educational objectives**, they can significantly enhance learning efficiency. In fact, games often help students understand concepts faster, thereby saving time that would otherwise be spent on repeated explanations.

Games also serve as a mental break, refreshing students and improving their concentration for subsequent lessons. They reduce boredom and increase classroom energy, making the learning environment more dynamic.

*Games should be:*

- **Goal-oriented:** Clearly linked to learning objectives
- **Relevant:** Directly connected to the syllabus or topic
- **Time-bound:** Conducted within a fixed duration to maintain discipline
- **Inclusive:** Designed to involve all students, not just a few
- **Engaging but controlled:** Fun without losing academic focus
- **Simple and clear:** Easy to understand rules and structure
- **Reflective:** Followed by discussion or feedback for learning reinforcement

Thus, games are not a waste of time; rather, they are a valuable instructional strategy when used thoughtfully and systematically.

**Scope for Older Students:**

The belief that games are only suitable for young learners is outdated. In reality, games can be highly effective for older students, including those in higher secondary education, college, and even professional courses.

At advanced levels, games can be designed to be more analytical and concept-driven. These include:

- Business simulations
- Case-study-based decision-making games
- Role-playing in subjects like economics, law, or management
- Strategic and analytical games

Such games help bridge the gap between theoretical knowledge and practical application.

For example, in a business simulation, students must manage resources, analyze market conditions, and make decisions that affect outcomes. This develops real-world skills that are difficult to achieve through lectures alone.

Games for older students also promote:

- Critical thinking
- Analytical reasoning
- Decision-making under pressure
- Application of knowledge

Moreover, they make learning less monotonous and more interactive, which is particularly important in higher education where subjects can become complex and abstract.

### *Role of Teachers in Game-Based Learning:*

Teachers play a central role in ensuring the success of game-based learning. They are responsible for planning, guiding, and evaluating the use of games in the classroom. One of the key responsibilities of teachers is to ensure that games are aligned with learning outcomes. They must carefully select or design games that reinforce the concepts being taught.

In addition, teachers should:

- Clearly explain the rules and objectives of the game
- Ensure equal participation among students
- Monitor behaviour and maintain discipline
- Provide guidance and support during the activity
- Conduct a short discussion or reflection after the game

The reflection stage is particularly important, as it connects the game experience with theoretical learning. Without reflection, the educational value of games may be reduced. Although teachers are not expected to create complex digital games, they can use creativity to design simple yet effective activities. Even traditional methods like quizzes, debates, or role-plays can be transformed into engaging learning experiences.

Thus, teachers act as facilitators, motivators, and evaluators in game-based learning.

### *Students as Game Creators:*

Involving students in creating educational games is a powerful extension of game-based learning. This approach transforms students from passive learners into active participants and innovators.

When students design games, they must first understand the topic thoroughly. They need to think about rules, objectives, and ways to make the game both fun and educational. This process deepens their understanding and encourages higher-order thinking.

Students can create:

- Quiz competitions

- Board games based on academic topics
- Flashcard games
- Digital presentations or simple apps

For example, in a commerce class, students can design a game where players manage a business and make financial decisions. This helps them apply theoretical knowledge in a practical context.

Additionally, peer-created games increase engagement, as students often feel more connected to activities designed by their classmates. This approach also promotes collaboration and innovation.

### *Skills Required for Game Creation:*

Game creation requires a combination of intellectual, creative, and interpersonal skills. These skills not only support the development of games but also contribute to overall personal growth.

Key skills include:

- Creativity and innovation to design unique and engaging game concepts
- Critical thinking to structure rules logically and ensure fairness
- Problem-solving to anticipate challenges and create solutions within the game
- Communication skills to explain rules clearly and guide players
- Teamwork and collaboration to work effectively with peers during game development
- Time management to complete tasks within deadlines
- Basic digital literacy is useful for creating online or technology-based games

Developing these skills prepares students for real-world situations, making game creation a valuable learning activity beyond academics.



### *Challenges in Using Games:*

While games offer numerous benefits, their implementation is not without challenges. Understanding these challenges is important for effective use.

Some key challenges include:

- **Time constraints:** Games may require additional time for preparation and execution
- **Limited resources:** Lack of materials or technology can restrict game-based activities
- **Design complexity:** Creating meaningful and curriculum-aligned games can be difficult
- **Classroom management:** Maintaining discipline during interactive activities can be challenging
- **Unequal participation:** Some students may dominate while others remain passive
- **Over-competitiveness:** Excessive focus on winning may reduce learning value

To address these issues, teachers should plan games carefully, set clear rules, and ensure equal participation. Using simple and adaptable games can also reduce complexity with proper management, these challenges can be minimized, allowing games to be used effectively in teaching.

### *Future Scope of Games in Education:*

The future of games in education is extremely promising, especially with advancements in technology and digital learning tools. Educational systems around the world are increasingly recognizing the value of interactive and experiential learning.

Emerging trends include:

- **Virtual Reality (VR):** Students can experience immersive environments, such as virtual laboratories or historical settings
- **Augmented Reality (AR):** Enhances real-world learning with interactive digital elements
- **Artificial Intelligence:** Provides personalized learning experiences based on individual performance
- **Gamified platforms:** Track progress, provide rewards, and motivate continuous learning



In addition, mobile applications and online platforms are making game-based learning more accessible. Students can learn anytime and anywhere through interactive content.

In the future, games are likely to become an integral part of formal education rather than just a supplementary tool. They will help create a more engaging, flexible, and learner-centred education system.

### Conclusion:

The integration of games into teaching-learning represents a significant shift from traditional, teacher-centred methods to more interactive and student-centred approaches. In today's dynamic educational environment, where students seek engagement and meaningful experiences, games offer an effective solution to bridge the gap between learning and interest.



As suggested, games are not merely tools for entertainment but powerful strategies that enhance engagement, improve retention, and develop essential cognitive and life skills. Supported by various educational theories, game-based learning promotes active participation, critical thinking, collaboration, and problem-solving. Practical examples and classroom observations further highlight how games can simplify complex concepts and make learning more enjoyable and effective.

However, the success of games in education depends on their proper implementation. Games should be carefully planned, aligned with learning objectives, and used in moderation to maintain a balance between fun and academic rigor. Teachers play a vital role as facilitators, ensuring that games contribute meaningfully to the learning process rather than becoming distractions.

Moreover, involving students as creators of games opens new possibilities for deeper learning, creativity, and ownership. It transforms learners into active contributors, equipping them with skills that extend beyond academics.

Looking ahead, the future of education will increasingly incorporate technology-driven and gamified learning methods. With advancements such as virtual reality, artificial intelligence, and digital platforms, games are likely to become an integral part of mainstream education.

In conclusion, games in teaching-learning are not a waste of time but a valuable and innovative educational approach. When used thoughtfully, they have the potential to transform classrooms into engaging, inclusive, and effective learning environments that prepare students for real-world challenges.

# Game-Based Learning: Pros, Cons &

## Implementation Tips for Educators

**Jordan Nisbet**



Gone are the days of textbook-only learning. As an educator, you've likely experienced first hand how challenging it is to meet the needs of different types of learners – all while trying to keep student engagement high.

**Game-based learning** is one teaching strategy that's growing increasingly popular to help students achieve their learning objectives. Especially as:

1. Students are becoming tech-savvy at a younger age
2. Educational technology companies are developing more products

And rightly so. In a [2018 study](#), researchers found "evidence that the use of educational games could support and increase the mathematics learning outcomes." Another [2018 systematic review](#) of game-based learning highlighted research that found "educational games play a successful role in terms of both a **better understanding** of the course content by the students and the **participation of the students** in this process."

Since then, the amount of research on game-based learning has continued to soar.

**Digital game-based learning keeps students engaged with educational content and can improve their overall success at school.** In fact, 74% of teachers have now implemented digital game-based learning into their lessons

Below, we'll dive into what game-based learning is, the benefits and drawbacks, as well as types of game-based learning educators like you can use every day.

### *What is game-based learning (GBL)?*

**Game-based learning is a teaching method that uses the power of games to define and support learning outcomes.**



A GBL environment achieves this through educational games that have elements such as engaging gameplay, immediate rewards and healthy competition. This can make students' motivation to learn soar.

The great thing about game-based learning is everyone can reap its benefits, from preschool all the way up to post-secondary education and beyond. Where and how doesn't matter, either — students can learn:

- With online games
- In person with physical objects
- Independently or as part of a team

### Game-based learning vs. Gamification

| GAMIFICATION                                                                                                                                        | GAME-BASED LEARNING                                                                                                                            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Gamification is adding game elements to a non-game scenario. You reward certain behaviors with benefits or by “unlocking” new features or services. | Game-based learning (GBL) flips gamification on its head. Rather than implement game-like tropes into lessons, GBL uses actual games to teach. |
| Adding game-like elements (badges, experience points, etc.) to a lesson                                                                             | Using games (such as Minecraft) to teach specific learning objectives                                                                          |
| Motivation: Likely <b>extrinsically rewarding</b> . I.E. the reward is tied to grades.                                                              | Motivation: Games are designed to be <b>intrinsically rewarding</b> . May also be extrinsically rewarding.                                     |
| Assessment is <b>not within</b> the “game.”                                                                                                         | Assessment is <b>in-game</b> .                                                                                                                 |
| Game-like aspects are adjusted to fit the lesson content.                                                                                           | Lesson content is adjusted to fit the game.                                                                                                    |

If you're experienced with GBL, chances are you've come across the terms “gamified” or “gamification.” And while they're similar, the two applications are quite different.

In **game-based learning**, teachers incorporate learning activities through games to refresh old concepts or solidify new ones.

Using the increased knowledge that today's students have of gameplay, teachers can create exciting learning environments that increase student engagement.

**Gamification** is about bringing aspects of game-design into the learning process. This includes features like:

- Earning badges
- Using points systems
- Getting on leader boards
- Collecting other rewards

*However, the biggest difference between game-based learning and gamification is its application in non-game settings.*

### Example: Game-based learning vs gamified learning

Here's an example to illustrate the differences between GBL and gamified learning:

Scenario: Teaching mathematics to students in 3rd grade.

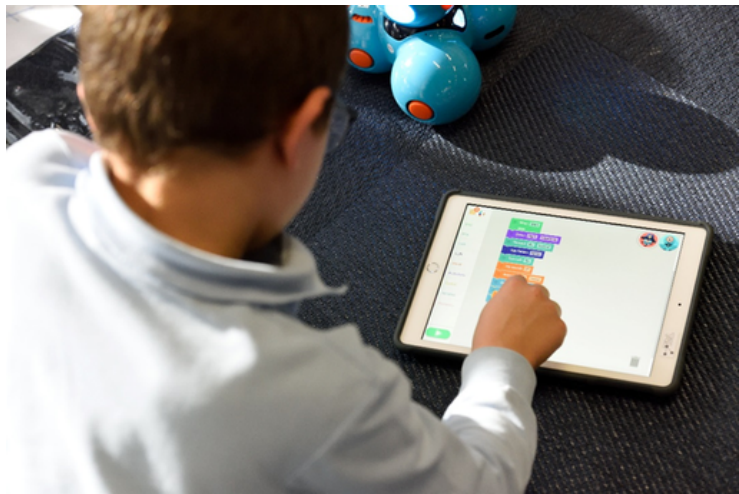
**Game-Based Learning:** You would use an application like Prodigy Math. In this game, players explore a fantasy world where they complete quests, take part in magic battles and collect in-game "Pets". To progress, students must answer standards-aligned questions set by their teacher.

**Gamified Learning:** Students earn points or badges for completing problems or math worksheets for third graders. A leader board could be used to track progress and create a sense of competition.

### Digital game-based learning (DGBL)

In an increasingly tech-filled world, DGBL takes things one step further and harnesses technology to help make game-based learning even more engaging and effective.

DGBL offers a balance between in-class lessons and educational gameplay. Teachers introduce students to new concepts and show them how they work. Then students practice these concepts through digital games.



A good DGBL platform should seamlessly track progress as students work through subject matter and help identify where students are excelling, as well as where they need support.

### Types of digital games

How do we differentiate games that are appropriate for helping students learn in the classroom from those that are used purely for entertainment? Researchers have classified games into two categories:

- **Video games** – Games designed for pure entertainment.
- **Serious games** – Games designed to teach or help students practice specific skills or content.

While intended for fun, certain video games can be shifted to teach different skills – bringing them into the realm of serious gaming. On the other hand, serious games can incorporate elements of video games to make them more entertaining and engaging.

There is a distinct balance that needs to be reached between these two types of games, to create something educational and fun for students.

### Is DGBL effective at school?

Integrating DGBL is easy enough with the software available today, but is it the right move for your students, class, and school?

Several studies have looked at this question and the overall conclusion appears to be –YES!

Research shows:

- Improved engagement with DGBL and students having **more motivation** to complete schoolwork.
- **93%** of class time was spent on task when using game-based learning, compared to only 72% without it.
- Nearly 71% of teachers using DGBL report that games have been effective in improving their students' mathematical learning.

When students fall behind – especially in cumulative subjects like math – they can lose confidence in their abilities and develop things like a feeling of anxiety. DGBL helps combat these pain points by pinpointing strengths and weaknesses and letting students practice at their own pace.

DGBL platforms offer many tools for educators to take advantage of – they just need to be implemented and used effectively for positive results to take hold.

### *Example of DGBL: Prodigy Math*

**Prodigy Math** is an engaging, standards-aligned, digital game-based learning platform that checks all those boxes. Success in the game requires students to correctly answer math questions which adapt to their learning needs. And the game even gives you the ability to differentiate what your students are learning!

Combined with your teaching style and continued lesson plans, you'll likely have a lot of success when you implement digital game-based learning in the classroom.

### *Traditional game-based learning*

GBL wasn't always digital, of course. Take formative, non-digital childhood games like Simon says or Duck-Duck-Goose, for example.

Teachers can pepper the traditional learning environment with games like these to help teach students how to understand classroom rules, the importance of paying attention and to improve motor skills.

### *Top benefits of game-based learning*



Some educators and researchers are skeptical of the benefits of game-based learning.

However, studies continue to show that games can positively impact things like students' math and language learning in many ways. Game-based learning:

**Helps problem-solving** — Game-based learning can help students understand causation, use logic and grow their decision-making skills to become great

problem solvers. These skills easily translate into ones they can use in life outside of school.

- **Encourages critical thinking** – Research has shown that GBL can improve students' critical thinking skills, including ones that help them collaborate with others and reflect on their own past experiences.
- **Increases student engagement and motivation** – A 2019 research paper found when teachers incorporated digital game-based learning elements such as feedback, choice and collaboration into their instructional design, students become more engaged and motivated to learn.
- **Introduces situational learning** – Learning doesn't only occur in our heads; in fact, it's a fundamentally social process. Proposed in 1991 by Jean Lave, anthropologist, and Etienne Wenger, a computer scientist, situated learning helps students understand new concepts in the context of their social relationships.
- **Addresses special education needs** – GBL positively impacts special education classrooms, too, according to this 2020 literature review. Researchers found that for students with individualized education plans, "game-based learning is a must to help guide instruction, create a positive environment, and generate academic success... [And students] with autism [are] more successful and motivated when using computerized games for academic lessons."

### *Potential drawbacks of game-based learning*

As we mentioned above, not everyone is convinced of game-based learning just yet. GBL was never meant to replace teachers and traditional learning. Instead, its goal is to improve it.



Depending on your personal teaching approach or a student's individual learning style, there can be drawbacks to game-based learning including:

- Students get too much screen time.
- Games aren't always created equally.
- Games can be a source of distraction.
- There can be a technology learning curve.
- GBL doesn't replace traditional learning strategies.
- Games are not always aligned to teaching or learning goals.

Researchers still have much to study about GBL and, if not implemented effectively, teachers and students can have a poor experience.

However, we hope resources such as the one you're reading now help empower educators and students alike to benefit from game-based learning – in school and beyond!

### *7 Types of game-based learning*

Exploring the world of GBL will open the door to many types of games available, whether you teach pre-kindergarten, elementary or high school students.

Here are some of the most common digital and traditional game-based learning examples.

1. **Card games** – Card games use a traditional or game-specific deck of cards. “War” is a traditional card game that can have a mathematical twist. Check out our list of classroom math games to learn about more card games.

2. **Board games** – Board games are played on a board that usually involves the movement of pieces. Chess and checkers are popular ones, but there are hundreds if not thousands of board games for kids to learn with.



3. **Simulation games** – Simulation games are designed to closely simulate real-world activities. Simulation games can teach about business and finances, the environment, product production and many more real life processes.

4. **Word games** – Word games are typically designed to explore the properties of language or the ability to use a language itself. Scrabble is an example of a traditional word game, while the app Words With Friends is a more modern one.

5. **Puzzle games** – Puzzle games emphasize puzzle solving through one’s use of things such as logic, word completion, sequence solving, as well as spatial and pattern recognition. For example, Sudoku and 2048 are popular math puzzles.

6. **Video games** – Video games are electronic games where players can manipulate what appears on the screen with, for example, a joystick, controller or keyboard. A couple that might pop into your head are the decades-old classic Pac-Man, or, more recently, Fortnite.

7. **Role-playing games (RPGs)** – RPGs are games in which players assume the role of imaginary characters who engage in adventures. A popular fantasy tabletop RPG is Dungeons & Dragons and was first introduced in 1974. Prodigy Math is also a massively multiplayer online role-playing game (MMORPG) where 1st to 8th grade students go on exciting adventures and correctly answer curriculum-aligned math questions to progress.

Of course, the types of game-based learning you choose to use may depend on the students you are teaching, what you want them to learn and what resources you have available. But you have plenty of options if GBL is something you want to try this year!

### *How game-based learning drives a strong learning experience*

Do you remember the first time a new concept finally clicked after learning through play? Maybe you experienced something similar as a student or in an effective professional development session.

If you have, you recognize the power game-based learning can have on one’s personal learning journey. As a company rooted in game-based learning, we witness it every day: students who play Prodigy Math develop a love of math that wasn’t there before.

Whether you’re planning to apply game-based learning to in-person learning or e-learning, do so with an open mind. You may be surprised how much you – and your students – love game-based learning.

### *3 Successful case studies of game-based learning in action*

#### **1. Prodigy Math helped bridge learning gaps in West Haralson Elementary School**

When educators at West Haralson Elementary School used Prodigy, they reported many benefits, including:

- More engagement in student learning
- Better support in spotting and solving learning gaps
- Better academic outcomes in grade level performance

## 2. Game-based learning vocabulary acquisition

Higher education is known for being slower to respond to technological changes, but there might be some promising news for instructors at this level.

In a recent 2020 study, an educational video game, named 'Programmer Adventure Land', was created to improve college students' understanding of computer programming. Using a problem-based strategy, the game served as an innovative courseware that aimed to make learning more engaging and effective.

The findings of the study were quite promising. The problem-based approach used in 'Programmer Adventure Land' not only improved students' enjoyment and motivation but also boosted their satisfaction with learning.

Most significantly, the study suggests that such interactive game-based platforms can be an effective teaching tool, especially for challenging subjects like computer programming. It indicates that leveraging the power of games can greatly enhance the learning experience.

## 3. Quizziz boosted vocabulary acquisition

In a 2023 study involving 69 eighth-grade students learning English as a foreign language (EFL), a digital game-based learning tool, "Quizziz," was used to test vocabulary acquisition skills. Similar to the popular Kahoot game, Quizziz has a quiz-style approach embedded in its game mechanics.

For this study, the students were divided into an experimental group, which used Quizziz for vocabulary practice, and a control group, which practiced vocabulary traditionally in their native language.

The results showed that the experimental group notably outperformed the control group, demonstrating the effectiveness of digital game-based learning.

The students expressed positive views about this approach, noting that game elements like power-ups, competition and instant feedback boosted their motivation to learn. Hence, digital game-based learning has been targeted as a way to boost foreign vocabulary acquisition in foreign languages.

## Add Prodigy Math to your digital game-based learning toolset

Prodigy Math is a game-based learning platform for 1st to 8th grade. In this fantasy-inspired game, students are magical wizards who complete quests and take part in thrilling wizards battles. To progress in the game, students answer standards-aligned math questions set by their teacher.

Prodigy Math includes a teacher dashboard with features that let teachers tailor content to their teaching, curriculum and individual student needs. They are also able to get insightful data reports on how each student is progressing, ideal for spotting gaps in knowledge. Our Co-CEO and Co-Founder Rohan Mahimker shared three ways Prodigy can help support educators, parents and students alike:

(Quote) Because it's online, adaptive and highly engaging, Prodigy's math platform is ideally

suited to help parents and teachers ensure their students are learning math in either an in-person, virtual, or hybrid learning environment. There are three product attributes that I'd like to highlight here which can help in either scenario: [world-class student engagement](#), [easy assessment and remediation](#), and [a shared data set between home and school](#).

Source: <https://www.prodigygame.com/main-en/blog/game-based-learning>

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*“By incorporating gamification elements into lesson plans, educators can harness the power of play to increase student motivation, participation, and retention, transforming the learning process into an engaging and immersive experience.”*

— Asuni LadyZeal

# Game On: Teachers Should Continue to Gamify Classrooms

**Joe McAllister**

Learning Environment Advisor at CDW-G

*Use Google, Microsoft and others to bring an element of fun to learning.*

Let's be honest: If a student had a choice between playing a game or doing a math worksheet, he'd pick the game 100 percent of the time.

That doesn't mean teachers have to turn over their classrooms to "Fortnite," "Clash of Clans" and "Pokémon Go." Instead, there are clever ways to use games to engage and enthuse students in learning.

**MORE FROM ED TECH:** [Find out how augmented and virtual reality expand the classroom!](#)

## *Get Your Gamification On*

The topic of gamifying a classroom isn't new. Several years ago, **gamification was an emerging trend** and even named one of the Horizon Report's Top 10 things driving educational change. The gaming industry thrived, and educators looked for ways to capitalize on that. [Microsoft](#) purchased "Minecraft," an immensely popular world-building game, in 2014, and immediately churned out an education edition. Now, "Minecraft," with [74 million monthly users](#), is as common in K-12 classrooms as creativity and collaboration — and it encourages both.

Just this February, **Microsoft launched a new way to use Minecraft in the classroom** by adding a chemistry update. For example, students can see what elements make up a grass block or use helium to make pigs fly, a ["Minecraft" blog](#) reported.

"Concepts like state of matter, structure of atoms and chemical reactions become accessible in Minecraft through the immersive world and these brand-new tools," Minecraft Education Director Neal Manegold says in the blog.

## *Break Out of the Digital Mold*

Of course, you don't need an actual game or app to use elements of gamification in the classroom. **Teachers can create digital breakouts using several Google functions**, including Sites, Forms, Drawing and Slides. Digital breakouts are exactly what they sound like — an escape room experience where students use clues and answers to educational questions to break out of a digital space and move on to the next question.

Speaking of [Google](#): Do you remember the Google Art project where students — and everyone else — could discover and view art online? It has been replaced by a revamped Google Arts & Culture platform with loads of content to explore. Embedded in the platform are several quizzes that can be used as games. One asks viewers to match a painting with a style of art.

**The best game is the viral sensation "Art Selfie," in which**

users upload their pictures or selfies and find out how their faces resemble someone in a painted portrait. Calling it a game may be a stretch, but users learn about art and artists by

engaging the app. It's a great way to break out of the old standby art lesson.

### *Teachers Learn Something, Too*

Finally, micro-credentials or digital badging are another terrific way to make learning more fun. This time, however, the teachers learn.

Digital badging is a tool used in professional development to give teachers tangible goals. It validates their skills by giving them a badge to display.

A [four-part playbook](#) from Advancing K12 outlines ways to launch a badging program at your school or district level. According to the playbook, it would take very little disruption and can be set up, communicated and launched over a summer break without additional staff. (Here's how you can enroll your teachers in a [free future-ready teachers badge group](#).)

**Gamification allows teachers and students to connect.** Teachers get instant feedback from students and adjust their teaching methods accordingly. And, most important, it's **way more fun to play a game** than complete a worksheet.

*This article is part of the "Connect IT: Bridging the Gap Between Education and Technology" series.*

Source: <https://edtechmagazine.com/k12/article/2018/09/game-teachers-should-continue-gamify-classrooms>

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*"I tried to teach my child with books, he gave me only puzzled looks.  
I tried to teach my child with words, they passed by him often unheard.  
Despairingly, I turned aside, 'How shall I teach this child,' I cried?  
Into my hand he put the key, 'Come,' he said, 'play with me.'"*

*— Anonymous*

# BOOKS on GAMES & GAMIFICATION

**Collated by Dr P Sachdev**

(Available introductions to the books included)

## 1. The Gamification of Learning and Instruction

**Author: Karl M Kapp**

Games create engagement--the corner-stone of any positive learning experience. With the growing popularity of digital games and game-based interfaces, it is essential that gamification be part of every learning professional's tool box. In this comprehensive resource, international learning expert Karl M. Kapp reveals the value of game-based mechanics to create meaningful learning experiences. Drawing together the most current information and relevant research in one resource, *The Gamification of Learning and Instruction* shows how to create and design games that are effective and meaningful for learners.

Kapp introduces, defines, and describes the concept of gamification and then dissects several examples of games to determine the elements that provide the most positive results for the players. He explains why these elements are critical to the success of learning. *The Gamification of Learning and Instruction* is based on solid research and the author includes peer-reviewed results from dozens of studies that offer insights into why game-based thinking and mechanics makes for vigorous learning tools. Not all games or gamification efforts are the same, the gamification of learning and instruction requires matching instructional content with the right game mechanics and game thinking. Moving beyond the theoretical considerations, the author explores how to design and develop gamification efforts. Kapp discusses how to create a successful game design document and includes a model for managing the entire game and gamification design process.

*The Gamification of Learning and Instruction* provides learning professional with the help they need to put the power of game design to work.

Follow Karl on his widely-read "Kapp Notes" blog at [www.kaplaneduneering.com/kappnotes/](http://www.kaplaneduneering.com/kappnotes/)

## 2. Classroom Games

**Author: Bex Band**

**The essential resource for new or seasoned teachers.**

A pocket crammed with easy low-prep games and activities you can use in the classroom. Bring fun and focus to your class and get your students **excited** about learning!

*Classroom Games* includes over 100+:

- Games used for fun to refocus and energise your students
- A section dedicated to educational games - perfect to aid learning especially useful for recap or revision lessons
- Ice-breaker activities
- Fun ways to deliver homework assignments or to get your students into random groups for tasks

## Book Recommendations

- Riddles and 'would you rather' scenarios

Games and play aren't just about having fun. Used in the classroom games can improve engagement and concentration boost energy and build confidence, communication and enjoyment.

All games shared in the book require **minimal preparation** and are **fast to deliver**. Most games take just 3 to 10 minutes to play making them perfect for the start or end of class or used as a fun transition between topics or activities.

Written by a qualified teacher with years of experience working with children in a play setting at summer camps. Whether you're new to the classroom or a seasoned teacher Classroom Games is a valuable resource to add to your tool belt. Take your classroom from boring and tired to engaged and energised!

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### 3. Gamifying Education- How to engage and Motivate Students

Author: Cheryl Angst

Looking for a way to engage and motivate your students?

Look no further than "Gamifying Education"! This easy-to-read guide shows you how to apply the principles of game design to your classroom transforming learning into an exciting interactive experience.

This book provides practical strategies for using game mechanics to increase student engagement boost motivation and improve learning outcomes. From defining your objectives and identifying your audience to choosing your game mechanics and planning your content you'll learn all the key steps needed to successfully gamify your classroom.

Discover how to:

- Introduce the concept of gamification to your students
- Set clear expectations and provide regular feedback
- Celebrate successes and adjust as needed
- Measure the success of your gamification efforts

You'll also explore the future of gamification including the impact of emerging technologies like virtual and augmented reality artificial intelligence and social learning.

Whether you're a seasoned educator or just starting out "Gamifying Education" will help you create a dynamic learning environment that your students will love

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## Book Recommendations

### 4. Educational Game Design Fundamentals

Author: George Kalmpourtzis

Can we learn through play? Can we really play while learning?  
Of course! But how?!

We all learn and educate others in our own unique ways. Successful educational games adapt to the particular learning needs of their players and facilitate the learning objectives of their designers.

Educational Game Design Fundamentals embarks on a journey to explore the necessary aspects to create games that are both fun and help players learn. This book examines the art of educational game design through various perspectives and presents real examples that will help readers make more informed decisions when creating their own games. In this way readers can have a better idea of how to prepare for and organize the design of their educational games as well as evaluate their ideas through several prisms such as feasibility or learning and intrinsic values.

Everybody can become education game designers no matter what their technical artistic or pedagogic backgrounds. This book refers to educators and designers of all sorts: from kindergarten to lifelong learning from corporate training to museum curators and from tabletop or video game designers to theme park creators!

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### 5. Game On

Transform your classroom and captivate your students with gamified learning!

Author: John Riggs

This practical book equips educators with strategies and tools to integrate game elements into their teaching. Learn how to boost student engagement motivation and academic achievement.

Author John Riggs draws from his 10+ years of experience revamping his own middle school classes with gamification. He guides you step-by-step through concepts like rewards competition storytelling and technology integration to create an interactive game-inspired learning environment. Discover how to design engaging gamified lessons deliver impactful instruction and overcome implementation challenges.

Packed with real-world examples and insights from teachers already using gamification successfully this book details proven techniques to unlock your students' curiosity and agency. Help them take ownership of their learning develop collaboration skills and think critically. Aligned activities and immersive experiences fuelled by game mechanics will transform your classroom culture.

## Book Recommendations

Whether you're new to gamification or looking to improve your current strategies *Game On!* will equip you with the knowledge and confidence to create joyful learning through gamification.

Your students will be eager to unlock new levels of skills and understanding as education becomes an adventure!

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### 6. G. A. M. E. S.: Games & Activities for Motivating & Educating Students

Author: Teresa Ferguson

G.A.M.E.S. offers a fun and interactive way to improve students' social and literacy skills. The G.A.M.E.S. system consists of originally created, hands-on activities that provide useful practice in the development of language proficiency skills for English Language Learners (ELLs); however, any student needing extra assistance in reading can also benefit from these interactive learning activities. More importantly, every child can achieve success while playing these G.A.M.E.S., as the activities cover a full range of readers from beginners to advanced learners.

This practical yet fun educational resource provides teachers with a wide variety of motivational activities for empowering their students to learn reading at their own pace. Here are some of the included benefits in this resource guide

- All four primary learning modalities are being used in order to teach and improve student skills in reading, writing, listening, and speaking.
- They are versatile and can be changed to meet the developmental needs of individual students.

Best of all-G.A.M.E.S. are easy to use, fun to play, and ready for all students to play today.

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### 7. Teaching In The Game Based Classroom

Author: David Seelow

Teaching in the Game-Based Classroom is a hands-on guide to leveraging students' embrace of video games toward successful school performance. Evidence tells us that game-based learning can help teachers design classes, develop transformative learning tools, and assess progress on multiple levels not dependent on one-size-fits-all bubble sheets. Authored by game-savvy teachers in partnership with classroom-experienced academics, the highly varied chapters of this book are concise yet filled with sound pedagogical approaches.

## Book Recommendations

Middle and high school educators will find engaging new ways of inspiring students' intrinsic motivation, skill refinement, positive culture-building, autonomy as learners, and more.

### Table of Contents:

Introduction: The Urgency of Innovation

1. Improve Student Engagement with Gameful Learning
  2. Videogames, Feedback Loops, and Classroom Practice
  3. Minecraft and Socially Situated Student Learning
  4. Minecraft and Transformative Teaching
  5. "The Whole Enchilda" a Game for Teaching Mathematical Fluency
  6. Level Up Science: Design Thinking, Games and Project-Based Learning
  7. Cellverse: Using Virtual Reality to Learn About Cells from the Inside Out
  8. "Living in Media: Why Teach the World's Most Controversial Video Game?"
  9. Engaging History through Student Authored Text Adventure Games
  10. An Overview of Live Immersive Social Interactives and their Educational Value for Grades 6-12
  11. Don't Split the Party: Using Games to Enhance Social-Emotional Learning Strategies
  12. Promoting Student Health and Well-being with Digital Games
  13. Using Games for Empathy, Compassion and Care
  14. What We Learned from Games to Make Assessment Playful
- Conclusion: Once We Defeat the COVID-19 Boss Battle, What then?" Afterword

## 8. Purposeful Play

Author: Kristi Miraz et al

Play is serious business.

Whether it's reenacting a favourite book, negotiating the rules for a game, or collaborating over building blocks, Kristi Mraz, Alison Porcelli, and Cheryl Tyler see every day how play helps students reach standards and goals in ways that in-their-seat instruction alone can't do. And not just during playtimes. "We believe there is play in work and work in play," they write. "It helps to have practical ways to carry that mindset into all aspects of the curriculum." In *Purposeful Play*, they share ways to:

- optimize and balance different types of play to deepen regular classroom learning
- teach into play to foster social-emotional skills and a growth mindset
- bring the impact of play into all your lessons across the day.

"We believe that play is one type of environment where children can be rigorous in their learning," Kristi, Alison, and Cheryl write. So they provide a host of lessons, suggestions for classroom setups, helpful tools and charts, curriculum connections, teaching points, and teaching language to help you foster mature play that makes every moment in your classroom instructional.

## Book Recommendations

Play doesn't only happen when work is over. Children show us time and time again that play is the way they work. In [Purposeful Play](#), you'll find research-driven methods for making play an engine for rigorous learning in your classroom.

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### 9. Teaching With Games: The More You play, The More They Learn!

Author: [Lourens Oberholzer](#) & [Thea Oberholzer](#)

The aim of this book is not only to equip you with games to brighten and enhance your teaching ability, but it will specifically inject that energy into your classes which is much needed during this post-pandemic era. So, welcome to the wonderful world of classroom games where you'll be entering into the privileged position of taking your teaching ability to a brand-new level. Again, it's not just about the games but about everything that it involves, and this includes your energy, your attitude, your ability, your creativity and your passion.

Playing energetic games in the classroom allows young children, who struggle to sit quietly for long periods of time, to blow off steam and actively take part in a fun activity. Games have the ability to grab and hold the attention of students, improving their concentration span, allowing them to remain focused and involved for longer periods of time.

Furthermore, games serve as an informal and non-threatening assessment tool to help you determine whether the class understands the work.

You will find that, by using games, you are enabling the students to use their visual and auditory senses while enhancing their speaking ability, which ensures longevity in retaining the material they are being taught. In short, games promote multi-sensory learning as well and set you apart as an expert teacher – all while having fun!

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*“Play is our brain’s favourite way of learning.”*

– Diane Ackerman

## Interesting Resources for Teachers

Collated by  
**Dr Priti Sachdev**  
 Honorary Secretary  
 World Education Fellowship – Indian Section

1. <https://physics-help.info/blog/best-games-to-learn-physic-engaging-tools-to-master-physics-concepts/>
2. <https://truthforteachers.com/classroom-games-to-make-student-learning-fun/> Describes 24 games which can be adapted to different levels and make learning fun!
3. <https://www.education.com/resources/games/> Explore millions of printable games and activities today to support your child's education. Using Educational.com's materials saves time by providing ready-to-use activities and resources that make learning engaging and effective.
4. <https://uwaterloo.ca/centre-for-teaching-excellence/catalogs/tip-sheets/gamification-and-game-based-learning> The article distinguishes gamification vs gaming , both of which teachers can use to increase engagement and motivate students. It includes gamification and game based learning tools which teachers can incorporate into their teaching learning strategies.
5. <https://citl.indiana.edu/teaching-resources/teaching-strategies/games-learning/index.html> This article from the Centre for Innovative Teaching and Learning focuses on the use of specific games in teaching. It differentiates between games and the gamification of learning.
6. <https://www.legendsoflearning.com/> This page gives access to thousands of games in math, history and science for teachers, students and families. The games could well fit into a school curriculum and help keep students engaged and assist learning.

Enjoy the research!!!

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*“Necessity may be the mother of invention, but play is certainly the father.”*  
 – Roger von Oech

*Announcement of Change*

With this (the eighteenth) issue of the WEF-Indian Section Newsletter we complete over five years of sustained effort to improve and support innovation and growth in thinking on teaching – learning at all levels. We have tried to reach out to schools, colleges, teachers, students and the community in general, on issues related to education.

It is time to grow and change!

From the coming academic year, we change the format to accommodate more diversity and newer ideas from the WEF community.

The WEF newsletter will now become bi-monthly, shorter and more inclusive.

We request members and supporters to keep us in the loop with all the new efforts they and their institutions are making for student-learning and professional development of the teaching community. We would like to be your 'agents of dissemination' so that ever more people become aware of the good work you are doing.

As always, WEF-IS membership is free – all you need to do is fill up a simple registration form!

[Click here to join](#)

This new format is on trial for one year and if seen to be a more acceptable format will be continued in the coming years

*WHAT'S SPECIAL ABOUT THE NEW FORMAT?*

- Bimonthly (6 issues in the year)
- Shorter – may contain at most one/two articles (contributed / shared)
- All readers invited to contribute articles /thoughts on education issues/information on education related programs they are aware of/ Professional contributions or advancement news from members (These will be highlighted)

*News from WEF Global*

There has been interest and queries from Scottish Academics in the history of WEF and its role in the educational reforms of the 1940s. They seem interested in invigorating WEF and advancing good educational principles in the UK.

Meanwhile, The HQ confirms that after a long struggle with the previous hosting agency, the new website should be up and running very soon.

(Meanwhile our own Facebook page -World Education Fellowship – Indian Section- continues to be active with members contributing often and being visited regularly by followers!)

It might be of interest to review what WEF has always stood for -- WEF has always been open to a wide range of ideas, and stood to promote individualism, and to encourage learners to be active participants in their own education. The discussions with the Scottish academics brought to fore that, perhaps, WEF should work more towards social cohesion and discipline as was visualised as the requirement in the current world scenario. Their message – that WEF

should reformulate its message! Perhaps it is time to have a debate about the principles of WEF for a new generation. This can only really come about by involving the new generation in the debate.

**We look forward to your take on these new ideas!**

### *News from Members*

- **Dr. Pramila Kudva:**

The academic year 2025-26 has been a period of deep professional growth and resilience. Navigating a year of personal health challenges alongside the & 'new norm' of digital pedagogy has reinforced my belief that while online teaching provides the 'fodder to chew on' the human spirit provides the energy to digest it.

§ Conducted online sessions for the Career and Professional Progression Centre in the Philippines, empowering K-12 teachers with modern pedagogical tools.

§ Collaborated virtually with the Rashtrottthan Schools in Karnataka, ensuring high-quality training reaches educators regardless of geography.

§ NCF-Aligned Innovation: Masterclass for the Lead Group titled 'Building Future-Ready Classrooms' focusing on aligning modern teaching with the National Curriculum Framework.

§ Mumbai University, Department of Education – Talk on 'The Pramanas and Panchakoshas'

### *A Question for the Community:*

As we continue to navigate this hybrid era, how are you ensuring that the 'human' of mentorship remains at the heart of your digital classrooms?

I would love to hear your thoughts and experiences.

- **Dr. Ritu Uppal**

Dr Uppal reports on the latest initiative of 'GetSetLearn' the education initiative of the Mafatlal Group. They have just completed an online, interactive workshop in collaboration with 'Harvard Business Impact' on "The Pedagogy of Impact: Case-Based Excellence with Harvard Business Impact" facilitated by Dr Indrasena Mukhopadhyaya

- **Workshop on Gaming and Gamification**

Members would recall that WEF IS had to postpone the above workshop earlier scheduled for April 1, 2026, at the request of several principals due to April being end of academic year, and teachers could not be freed from their duties at schools.

The new date will be announced in June 2026. We hope that you will be able to make time for this interesting half day workshop.

- **Teaching Through Games**

In line with the above the competitive opportunity for teachers, - demonstrations of Innovative Teaching Learning Strategies Using Games and Gamification has also been pushed to the next academic year. The exact date will be announced in June 2026.

We trust that teachers will take the coming vacation time to think of benefiting from this delay to plan their presentations in a more relaxed manner!

*Do let us know what has been your professional activity and interest and we would love to share your ideas and progress with our other readers.*