

Toy Based Pedagogy Promotes 21st Century Skills in School and Beyond: A New Path to Education Reform



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ABSTRACT: The paper aims at to gain an effective understanding of toy-based pedagogy, which encourages students to develop new skills like reasoning, communication, creativity and critical thinking, problem-solving, and adaptability. This pedagogy's main goal is to encourage students to learn via first-hand experience while also making amazing memories. Students can also benefit from these experiences as effective resources that can advance them and enhance the educational system as a whole. It is imperative that teachers develop appropriate teaching and learning strategies in an appropriate manner in order to meet these goals. By using this pedagogy, it is ensured that the students can understand the teacher. For students of all ages, toy-based pedagogy can be a useful strategy. With toys, students can explore, imagine, observe, create, express, and above all-engage in play. The process of creating toys and then playing with them can help foster a variety of skills both inside and outside of the classroom. So that we have to take care of concepts and subjects are mapped out properly and strategically.

KEYWORDS: Skill, Toy-Based Pedagogy, approach, 21st century skills, education reform

INTRODUCTION

It's fun to imagine a world beyond reality when one is young. Games and toys contribute to this joy. They transport children to their own world, where they create reality and things happen according to their terms. Rabindranath Tagore once said, "When I bring colored toys to you, my child, I understand why there is such a play of colors on clouds, on water, and why flowers are painted in tints." In addition to providing entertainment, toys are crucial for a child's mental and physical growth.

Before reaching their current state, toys have gone through a lot. From the time of the Indus Valley civilization, they have been present in India. Indian toys and games were traditionally simple and drew inspiration from nature, in contrast to the fancy, expensive toys that are becoming more and more popular today. Toy designers considered how a child would play with and relate these toys to everyday situations when creating them. These expensive toys are currently out of reach for most kids. Insufficient toys for them to play with are also not being supplied by schools. In addition, because there is no longer a market for locally produced toys, they are gradually disappearing.

Toys are an excellent educational tool. Intriguing ways exist for toys to support experiential learning. They are helpful when teaching science, math, and language, among other subjects. There are many different types of toys, including rattles (like dug-dugi), dolls (like wooden and soft dolls), miniature kitchen utensils (like bhatuki), outdoor games (like Gilli-danda, Apparapi), spinning toys (like Lattoo, Firki), dynamic toys (like gravitational toys, drum toys, etc.), walking toys, and puppets. From preschool through upper secondary education, toys can be utilized. If children up to the primary stage can be entertained with a variety of rattles, spinning toys, puppets, and stuffed animals, then older children can be entertained with toys like board games, completed circuits, etc.

A critical question is raised by these data and developments in the science of learning: What can replace a limited, solely content-focused perspective on education to ensure that all students receive high-quality instruction in the twenty-first century? A scalable, empirically based education reform that prioritizes equity, educator skill, and student engagement is long overdue. It is specifically advised that teachers implement a strategy for maintaining student engagement in the classroom that takes into account the most recent research on how kids learn best. By using this method, educators and students will see that education can be fun, socially interactive, active, meaningful, and iterative. Toy-based Pedagogy is a component of Play-based Learning, according to the most recent NCERT handbook (2022). "Play is a process, unlike with toys, board games, or outdoor games."

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OBJECTIVE

- **To promote student learning through firsthand experience**

An appeal for a wide-skills approach to education and toy-based learning

Equality, educator skill, and student engagement should be at the core of a scalable, evidence-based education reform. More precisely, we advise implementing a strategy for maintaining student interest in the classroom that takes into account the most recent research on how kids learn best. Teachers and students will see that learning can be fun, socially interactive, active, meaningful, iterative, and joyful with this approach. Our six Cs—collaboration, communication, content, critical thinking, creative innovation, and confidence—are all evidence-based, flexible, and, to some extent, quantifiable. Toy-based learning helps achieve these objectives and will support instruction using this broad skills approach.

Instead of forcing teachers to follow a set curriculum, toy-based learning respects their experience in the classroom by providing universally applicable teaching principles. This low-cost strategy makes sure that every student has access to the knowledge and experiences needed to develop into active problem solvers and critical thinkers who are ready to apply what they have learned to achieve their objectives. Regardless of the path they choose or the cultural context in which they live, we hope that our recommendations will support all students in staying engaged in the classroom and in developing the critical skills needed for success in the twenty-first century.

How children learn: Toy Based learning principles

One flexible approach to learning is called "toy-based learning," which gives students the chance to explore, imagine, observe, create, express, and—most importantly—engage in play. Making toys and then playing with them can turn learning into an experiential process. A teacher's job is to set up areas where students can make connections between learning new concepts and subjects and how to use toys wisely and strategically.

Toy-based learning environments come with six essential features. Studies reveal that children learn most effectively when they are actively involved in learning that is joyful, socially interactive, meaningful, and iterative.

- **Active (“minds on”):** With the use of toys, children can learn through active engagement in the form of questioning and reflection. This type of learning is more beneficial than passive learning, in which students simply listen and memorize facts. Anecdotal and experimental evidence both support this claim.
- **Engagement:** Children's ability to block out distractions and concentrate on the task at hand is one of the main challenges in learning environments. Learning requires engagement, particularly during the toddler and preschool years when children's focus and attention spans grow noticeably. For instance, asking kids to split an apple pie or pizza evenly so that each member of the family receives an equal piece is not the same as teaching them about fractions using flash cards.
- **Socially interactive:** We actively seek out social interactions from an early age. The need for social interaction is a basic aspect of education. Vygotsky went on to say that the best learning happens when students are working together with their teachers, peers, and other people in their surroundings. Dewey was a pioneer in experiential learning, emphasizing the approach as a social process. Toy-based learning incorporates cooperative learning, sharing, and waiting one's turn—all crucial components of social development.
- **Iterative:** A child can think creatively and learn new things on their own with the help of toys. Through the generation, testing, and revision of hypotheses while interacting with their environment based on data, they improve their ability to think logically and abstractly, solve problems, and focus.
- **Joyful:** Children are naturally joyful and full of positive emotions, and toys are the fundamental objects that allow a child to express his emotions and make the world a joyful place. In a happy environment, people created simpler structures and communicated more positively.

Thus, Preschool teachers can structure the toy based approach according to the child's need and providing materials and offer guidance towards learning goals,

Why Toys as Alternative Medium of Learning in 21st century

According to psychology, a child's pedagogy would not be complete without toys. Children, particularly preschoolers and toddlers, can benefit from a toy-based learning approach that encourages creativity and curiosity. Therefore, toys have a profound impact on learning and can help children acquire critical skills like creativity, problem-solving, logical thinking, and conflict resolution. Youngsters typically learn via play, hone their motor abilities, and develop their social and emotional intelligence.

Why we should include toys in our kid's lesson?

- Toys are a great way to get children excited to learn, engage and participate. Here are some important reasons we should consider toys in our kids' study time:
- **Intelligence:** Educational toys can help increase IQ. Children tend to ask questions and clarify their doubts when they play.
- **Imagination:** Toys allow kids to explore the world by using their imagination.
- **Personality:** STEM (Science, Technology, Engineering and Mathematics) toys are also designed to boost their growth and development in all areas of personality.

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- Learning: difficult subjects such as science, engineering and mathematics may be challenging for the students to learn within the four walls of the classroom.

Benefit of Learning with Toys

Playthings facilitate children's cultural connections. Children will develop a positive lifelong connection to their heritage through the use of traditional Indian games and toys in schools. Using a child's interests and curiosity, toys can also be an easy way to teach many challenging concepts. They aid in accelerating language acquisition as well. Not much money is needed for expensive equipment or accessories to play traditional Indian games like skipping, Gilli-danda, Sagargote (five stones), and many more. Traditionally, children have gathered to play board games and outdoor games that promote social interaction and teamwork.

Promoting the use of indigenous toys in education

In order to give kids easy and affordable access to native toys, we must promote them. "Toy Libraries or Toy Rooms" are required in schools. To encourage the use of locally made toys, consider implementing the following strategies: Raising awareness To prepare students to explain the scientific principles underlying indigenous toys, curricula may include these toys as learning resources. Indigenous toys may be included in the curriculum (to be developed) as a preschool learning resource, in accordance with NEP-2020's recommendations for promoting preschool education.

They can be included in activities as well. Building Capabilities: The following platforms may be used to promote toy makers, who can be recognized as job roles under vocational education. "- Indigenous toy creation can be incorporated as a theme for Kala Utsav, an annual event organized by NCERT. Toy Hackathons, which could be started under Samagra Shiksha, are a great way to showcase creative toys and earn rewards. They can be held in all the states and union territories, much like Yoga Olympiad.

CONCLUSION

In order to become what they are today, toys have gone through a lot. Since the Indus Valley Civilization, they have been a part of India. Typical Indian games and toys were straightforward and drew inspiration from nature, in contrast to the ornate, costly toys that are becoming more and more popular today. When toy designers created these objects, they considered the play value and the way a child would interact with them. A child's physical and mental development is greatly aided by toys, which are not just for amusement.

Intriguing methods are also used to encourage tactile learning. They help children learn how to better manage their own emotions, experience a new environment, and are helpful in teaching science, math, and language both inside and outside of the classroom. Kids can find their area of interest for internships with the aid of Toy-Based Pedagogy. If there are opportunities in the area, internships in toy-making, coloring, packaging, and other related fields can also be pursued.

It is becoming more and more important that kids not only learn, but also learn how to learn, given the shifting demands on and opportunities for employment in the global ecosystem. The objectives of education in schools must be to help kids learn how to solve problems and think critically, to grow as creative and multidisciplinary individuals and to innovate, adapt, and take in new information in fields that are new and evolving. Less attention to detail and less content will be needed as a result. It may be possible to include the use of toys as a pedagogical resource in the pre-service teacher education curriculum and in-service teacher education programs. Classroom pedagogy could be revolutionized by using toys as a teaching-learning resource.

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