



Departments under the Centre Balbhavan • Toy Innovation • Toy Based Pedagogy





Toy Science

The Centre of Toy Science aims to fulfil the university's objectives by using toys to enhance children's skills, language and knowledge. It envisions a world where children play, build toys and learn scientific principles through fun. The centre promotes children's scientific perspective, critical thinking, creativity and skills while embracing the best of Indian culture through toys. Collaborative learning and joyful assessment for children and teachers are emphasized. The centre embraces a learning culture by bringing researchers, teachers, children and toy manufacturers together under one roof.



Objectives



To develop imagination and creativity in children through play with joyful learning





To develop a toy-based pedagogy and learning methodology



To research the impact of toy-based learning on children's physical, cognitive, social, emotional, and moral development



To collaborate with national and international apex bodies in the field of toy research



To organize workshops, seminars and programs to create awareness among teachers, parents and consumers about the educational benefits of toys



To advocate the recognition and integration of toy-based learning approaches into educational policies and frameworks



To Develop and Cultivate interest in STEM (science, technology, engineering and Mathematics) subjects by using toys as educational tools



To establish a toy library, Laboratory and museum

Toys help enhance activity, they also give wings to our aspirations. Toys not only entertain, they also build minds, instill goals. - Narendra Modi



Curriculum Development

Develop courses for teachers, children, parents and producers in the context of toybased education.

Educational Resource Building

Creating educational resources, activity guides, and teaching materials to help teachers implement toy-based learning in their classrooms.

Organizing workshops and seminars

Conduct training programs and workshops to equip teachers and students with toy-based professional development and pedagogical techniques.

Collaboration for research and development of toys / play of pedagogy

Collaborate with schools, educational institutions and educational policymakers for conducting research in the play / toys and integrate toy-based learning approaches into existing educational systems for their implementation.

Outreach and Community Engagement

Engage with parents, families and the community through workshops, events and educational campaigns to raise awareness of the benefits of toy-based learning and encourage its adoption in both formal and informal learning settings.



Centre of

Departments under the Centre :

- Balbhavan
- Toy Innovation
- Toy Based Pedagogy





Children's $U \cdot N \cdot I \cdot V \cdot E \cdot R \cdot S \cdot I \cdot T \cdot Y$

Subhash Chandra Bose Shikshan Sankul, Road No. 5, Nr. Circuit House, Sector 20, Gandhinagar, Gujarat, India. Phone : 079 - 2324 4576/69

🔀 toyscience@cugujarat.ac.in 🔒 www.cugujarat.ac.in



Department of Toy Innovation

About Department

The Department of Toy Innovation is a creative hub dedicated to designing and developing innovative toys that inspire imagination and learning. Its multi disciplinary team of designers, engineers, and child development experts collaborates to bring unique and engaging play experiences to children of all ages. Through research, prototyping, and testing, the department aims to create toys that foster creativity, cognitive development, and enjoyment.

S Functions

Research and Development

- Conduct in-depth research to identify areas market gaps and develop toys
- Investigate emerging technologies and educational theories
- Create compelling products for intended audience's needs and interests

Innovation and Creativity

- Foster a dynamic and collaborative environment
- Encourage creativity, originality, and experimentation
- Explore unconventional concepts and approaches

Patenting and Intellectual Property

- Protect innovative designs and concepts with patents
- Support patenting process for designers and inventors
- Encourage further creativity through protection measures











Educational Impact

- Develop tools that promote critical thinking and problemsolving
- Collaborate with educators to align with learning outcomes
- Enhance subject-specific skill acquisition Social and Environmental Responsibility
- Promote sustainable and ethical practices in design and production
- Develop environmentally responsible products
- Positively impact both the environment and society





O Technology Integration

- Incorporate emerging tech like AR, VR, AI
- Enhance interactivity and educational value
- Balance digital and physical play experiences
- Positively impact both the environment and society

Diversity and inclusion

- Reflect various cultures, origins, and abilities
- Ensure inclusiveness and acceptance for all children
- Accommodate diverse interests and requirements



Collaborations and Partnerships

- Partner with industry, academia, and nonprofit organisations
- Leverage resources and expertise for innovation
- Enhance impact on child education and development

Development of Toys & Game









Department of





About Department

The Department of Toy Based Pedagogy focuses on integrating play and learning through the use of toys. This department aims to develop creative and innovative teaching methods and curriculum that enhance children's cognitive, social, and emotional skills while ensuring a fun and enjoyable learning experience.

😳 Functions

- Understand the impact of play patterns on children and identify which ones will be conducive to a child's overall development.
- The department of Toy based pedagogy develops and designs curriculum that focuses on toys as educational tools.
- This department conduct research to explore the benefits and effectiveness of toy-based pedagogy. They are responsible for staying up-to-date with the latest research findings and incorporate new innovations into teaching practices.
- The department is responsible for evaluating and selecting appropriate toys for educational purposes.
- The Department will provide training and professional development opportunities for teachers and educators on how effectively incorporate toys into their teaching methodologies. This includes workshops, seminars, and ongoing support to enhance teaching skills and knowledge about toy-based pedagogy.
- Assess the impact of policy intervention as well as implementation for NEP (National Educational Policy) 2020 with Toy based pedagogy and recommend policy level suggestions to various govt. organizations, schools and educational institutions.
- The department collaborates with toy manufacturers, educational institutions, and other stakeholders to promote and develop toy-based pedagogy.





Department of

About Department:

This department is affiliated with the Centre of Toy Science. The primary goal of the department is to enhance the creative capacity of children through the provision of various activities. Our department offers a diverse range of engaging programs and activities that cater to the holistic development of children aged 6 to 16. Department is established to provide a variety of educational, artistic, and creative activities for children. The major functions of this department are cultural enrichment, creative expression, life skills development, sports & physical activity, performing arts, summer camps & workshops, educational enrichment, exhibition & exploration and holistic development.

Balbhavan

Functions :



- **Cultural Enrichment:** Department offers programs that expose children to traditional music, dance, arts, crafts, and storytelling, helping them connect with their roots and appreciates cultural diversity.
- Creative Expression: Department encourages children to explore their creative potential through various art forms such as painting, sculpture, pottery, and crafts.





- Life Skills Development: Workshops and classes focused on life skills help children build essential abilities such as communication, problem solving, decision-making, and teamwork. These skills contribute to their personal growth and future success.
- Sports and Physical Activity: Health and play go hand in hand at Department. Our sports facilities include indoor and outdoor spaces for activities. We believe in promoting physical fitness while fostering teamwork and sportsmanship.





- **Performing arts :** Through dance, drama, music, and theatre workshops, Department helps children build self-confidence, express emotions, improve communication skills, and develop an appreciation for the arts.
- Summer Camps and Workshops: Department organizes summer camps and workshops during school breaks, offering children an enriching and enjoyable learning experience outside of the regular academic year.





- **Educational Enrichment :** These can include science experiments, hands-on workshops, educational games, and interactive sessions designed to make learning fun and engaging.
- Exhibition and Exploration:: Department provides different exhibition & exploration of different Culture of India, Toys, Science & Technology revolution with highlighting their historical and cultural importance across decade and geographical locations.





Holistic Development : Overall, Department strive to facilitate the holistic development of children Physical, Moral, Social, Emotional, Cognitive and Aesthetic by offering a well-rounded range of activities and opportunities.







