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## Implementation of Art-Integrated Education in Maharashtra State for School Education in Science Textbooks under the National Education Policy (NEP) 2020: A Content Analysis

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### Abstract

The National Education Policy (NEP) 2020 advocates Art-Integrated Education as an effective pedagogical approach to promote experiential, competency-based, and multidisciplinary learning. This study examines the implementation of Art-Integrated Education in Maharashtra State Science textbooks for Grades III, IV, and VI through content analysis. The analysis focuses on identifying art-integrated activities, examining their scope, distribution across grades and science concepts, alignment with NEP 2020 recommendations, and pedagogical quality. The findings reveal that the textbooks incorporate a variety of visual, performing, and craft-based activities, including clay modelling, drawing, painting, songs, role play, model making, and environmental projects. These activities enhance conceptual understanding, creativity, critical thinking, and experiential learning by connecting scientific concepts with artistic expression and real-life contexts. The study concludes that Maharashtra State Science textbooks have made meaningful efforts to implement Art-Integrated Education; however, greater consistency and systematic integration across all grades and science concepts would further strengthen the objectives of NEP 2020.

**Key words-** NEP 2020, School Education, Science education, Science textbooks, Art integrated education, Art integrated pedagogy

### Introduction:

Art-integrated learning is one of the essential and important subject areas proposed for students at all levels of schooling under the National Education Policy 2020. As art education is a multifaceted subject, it proves useful in clarifying concepts from other subjects and making the learning process more enjoyable and engaging. Guided by the principles of "integrated art education" and "learning through art," it is essential to consider the students'

age group, developmental stage, and learning capabilities when selecting concepts, tools, or techniques for teaching activities across all subjects. Art integration is a pedagogical approach within a comprehensive curriculum that utilizes various facets and forms of art and culture as a foundation for learning concepts across all subjects. Art-integrated education is significant as a component of experiential learning; however, its importance lies not merely in making the classroom environment joyful, but in instilling Indian values by integrating art and culture into the teaching-learning process at every level. Art-integrated learning helps achieve the objectives of other subjects. Integrated art education is useful and complementary for clarifying shared concepts; it places emphasis on concepts and processes. Incorporating arts-integrated learning into science education to explain various scientific concepts helps strengthen students' grasp of these concepts and enhances their comprehension skills. For this reason, arts-integrated learning has been incorporated into the Maharashtra State textbooks for science education.

### Objectives:

To identify the art integrated activities for science concepts into Science textbooks.

To examine the scope of Art-Integrated Education for science concepts within Maharashtra State textbooks at the school level under NEP 2020.

To analyze the distribution of art-integrated activities for 3<sup>rd</sup>, 4<sup>th</sup> and 6<sup>th</sup> stds. , units, and science concepts in the textbooks. 4.To evaluate the alignment of art-integrated activities with the objectives and recommendations of NEP 2020. 5.To assess the pedagogical quality of art-integrated activities in promoting conceptual understanding, creativity, critical thinking, and experiential learning.

The National Curriculum Framework for School Education was prepared in accordance with the National Education Policy 2020. Accordingly, a State Curriculum Framework for school education was prepared for the State of Maharashtra. Art-integrated learning was incorporated across all subjects. Similarly, art-integrated learning was included for the subject of Science at all levels of school education, as suggested therein. In this art-integrated learning, specifically addressing for Science Competency goal 6 (CG-6)—which involves using data and information from various sources to investigate questions related to the immediate environment and Competency C 6.2, which entails presenting observations and findings through various creative modes (such as drawings, diagrams, poems, plays, skits, and oral or written expression). Accordingly, for this the following learning outcomes have been formulated: 1) Observing living organisms in the surroundings and creating drawings; 2) Drawing pictures and diagrams based on various concepts; 3) Presenting various concepts

using these drawings and diagrams; 4) Presenting various concepts through plays, games, and poems; 5) Presenting various concepts and dialogues through oral or written mediums; and 6) Presenting observations and conclusions regarding various activities through diverse mediums. For middle stage Curriculum Goal 8 is Understands and appreciates the contribution of India through history and the present times to the overall field of Science, including the disciplines that constitute it. Competency is Knows and explains the significant contributions of India to all matters (concepts, explanations, methods) that are studied within the curriculum in an integrated manner. The Art-Integrated Education recommended in the National Education Policy 2020 is a learner-centered pedagogical approach that uses various art forms as a medium for teaching and learning academic subjects. In Science education, Art-Integrated Education helps students to understand scientific concepts through creative expression, hands-on experiences, and interdisciplinary learning, making science more engaging, meaningful, and enjoyable. In accordance with the recommendations, the Maharashtra State Bureau of Textbook Production and Curriculum Research (Pune) developed new textbooks based on the new curriculum for all Maharashtra state government schools, starting from 2026. New textbooks were prepared for Standards 3<sup>rd</sup>, 4<sup>th</sup>, and 6<sup>th</sup>, and these textbooks were subsequently studied and analyzed. Art-integrated learning has been incorporated throughout these textbooks. Few examples are given below

**Art integrated Concepts for 3<sup>rd</sup> grade is** – Creating various objects and vessels from clay, and painting designs on them. Poems about sense organs and a road safety song accompanied by illustrations. Setting up a kitchen garden and drawing a picture of a house. A skit performance where students role-play as pets and family members to demonstrate how to care for them. Singing the 'Health is Wealth' (Arogyam Dhanasampada) song and creating music using household objects. Producing various sounds. Drawing a picture of an electrical appliance and coloring it appropriately.

**Art integrated Concepts for 4<sup>th</sup> grade is** – Creating models of various objects or animals using clay. Making cardboard or clay models that depict the internal and external parts of the human body. Designing bookmarks featuring safety rules. Creating emergency signs and presenting them in class. Crafting useful items from waste materials, creating bird images using vegetable prints, and making wings by collecting found bird feathers. Making toys using magnets, as well as drawing, coloring, and presenting the work in a sketchbook.

**Art integrated Concepts for 6<sup>th</sup> grade-** Draw diagrams illustrating the angles of incidence and reflection; construct a model of a laboratory thermometer using materials such as a plastic tube and colored thread. Organize an exhibition of these models under the guidance of

teachers. Identify transparent and opaque materials using newspaper, notebook paper, and the colored, glossy paper used for gift wrapping. Prepare seed balls. Create decorative and useful items out of clay. The content analysis of Maharashtra State Science textbooks for Grades III, IV, and VI indicates a positive implementation of Art-Integrated Education as envisaged in NEP 2020. The first objective was achieved by identifying numerous art-integrated activities such as clay modelling, drawing, painting, songs, role play, model construction, poster making, vegetable printing, sketching, and seed-ball preparation, which are linked to different science concepts. Regarding the second objective, the textbooks provide ample opportunities for experiential learning by integrating artistic expression with environmental studies, human body systems, safety education, sound, electricity, light, and materials. The third objective revealed that the distribution of activities is progressive across grades, with higher classes emphasizing scientific models, experimentation, and exhibitions. Analysis of the fourth objective shows that the activities strongly reflect the principles of NEP 2020 by promoting multidisciplinary learning, creativity, collaboration, and competency-based education. Finally, the pedagogical quality of the activities supports conceptual understanding, critical thinking, observation, communication, and problem-solving through hands-on experiences. However, the integration varies across units, suggesting the need for more balanced inclusion of art-based activities throughout the Science curriculum to ensure uniform implementation across all concepts and grade levels.

### Conclusion:

The study concludes that Maharashtra State Science textbooks have made significant progress in implementing Art-Integrated Education in accordance with the vision of NEP 2020. The inclusion of diverse artistic activities such as drawing, clay modelling, role play, music, model making, and creative projects enriches science learning by making it engaging, experiential, and learner-centered. These activities promote conceptual understanding while fostering creativity, collaboration, critical thinking, communication, and problem-solving skills among students. The analysis also demonstrates that the textbooks encourage interdisciplinary learning by connecting scientific knowledge with artistic expression and everyday experiences. Nevertheless, the distribution of art-integrated activities is not entirely uniform across all grades and science concepts. Future textbook revisions should ensure systematic integration of art-based pedagogies in every unit, supported by appropriate teacher guidelines and competency-based assessment strategies. Such improvements will strengthen the effective implementation of NEP 2020 and contribute to holistic, inclusive, and meaningful Science education in Maharashtra schools.

## References

- Ministry of Human Resource Development, National Education Policy-Final Document. Government of India, Ministry of Education. Retrieved from [https://www.education.gov.in/sites/upload\\_files/mhrd/files/NEP\\_Final\\_English\\_0.pdf](https://www.education.gov.in/sites/upload_files/mhrd/files/NEP_Final_English_0.pdf)
- Maharashtra State Council of Educational Research and Training. (2024). Maharashtra State Council of Educational Research and Training School Education - Abhyaskram 2025: All Subjects [PDF file]. Retrieved from [http://www.maa.ac.in/index.php?tcf=shala\\_masuda](http://www.maa.ac.in/index.php?tcf=shala_masuda)
- All Subjects [PDF file]. Retrieved from <https://drive.google.com/drive/folders/1vbeuXI0zE5h6-DqzclaF4ReCl157RtyL>
- National Council of Educational Research and Training. (2019). *Art-Integrated Learning: A Handbook for Teachers*. New Delhi, India.
- Maharashtra State Bureau of Textbook Production and Curriculum Research. (2024). *Science Textbooks for Standards III, IV and VI*. Pune, India.

