

COMMENTARY: ROLE OF SCIENCE IN CURRICULUM

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NEP-2020* inculcates within the curriculum the very essence of toy-based pedagogy. Play, as an activity, has always been an essential and integral part of human culture. The child's involvement with play is vital in early childhood as this has a significant bearing on the child's physical, psycho-emotional, social, and cognitive development (Rensick and Ocko, 1990). In addition, toys are the carrier of the cultural heritage of any country, and the local heritage connects the student to their soil and thus induces the spirit of patriotism within. The role of introducing toy-based pedagogy in the upcoming NCF, as envisioned in NEP 2020, will change the way toys have been perceived and will find their proper place in the curricula.

The teachers, by virtue of using the toys as learning resources and developing them into pedagogical practices, should slowly introduce the student to the ethos of Indian culture. The developmental level of the child, the interest the child has in the toy, the availability of the toy and the impact of cultural beliefs are key factors that aid in the selection of toys (DuBois, 1997). This, in turn, will inculcate creativity and problem-solving

skills. Using analogy, puzzles, and games to teach science and mathematics are a few exemplars that should find their place within the lesson plan. The use of indigenous local toys will bring out the local traditions and essence of the background in which the student develops and will always reflect their personality. Play-based learning promotes academic readiness and outcomes (Hirsch-Pasek and Golinkoff, 2008). It also adds to sustainability as going local with crafted local toys will curtail the use of plastic toys and avoid adverse environmental repercussions.

The development of toy-based pedagogy should be seen in all four aspects of science, social science, mathematics and language. In addition, one may embed it within the existing tools and techniques of delivery by inducing critical thinking, decision-making and problem-solving within them. However, research has shown that the traditional approaches to professional experience generally provide insufficient integration of theory and practice, and have been criticised for resulting in a lack of classroom readiness in early career teachers (Allen and Wright, 2014; Craven et al., 2014). Therefore, the

*The original reference was Draft NEP-2019 but by the time of publication of this issue, NEP-2020 was published and hence modified accordingly.

teacher Education Curriculum Framework must reframe itself to accommodate the vision of the upcoming NCF, and pre-service teachers must learn the art of embedding,

which will allow rethinking, restructuring, and reimagining of the curricula through the created pedagogy.

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