

Ved Patki: Revisiting Indian Education with STEM: The Game Changer Teaching Methodology in NEP2020



Three Days

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Innovation in Teaching-Learning & Evaluation Process in Higher Education

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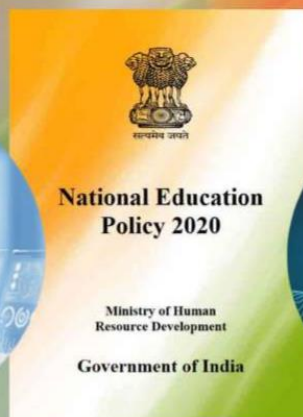
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Re-Visiting Indian Education with a STEM: The Game Changer Teaching Methodology in NEP 2020

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Abstract

Science Technology Engineering Mathematics (STEM) subjects are gradually being acknowledged as being an essential component of education. Consequently, STEM education plays a crucial part in the National Education Policy 2020. When discussing the lack of trained people and subpar education in certain disciplines, the term "STEM education" has become popular. Modern technology is used in STEM education to improve STEM abilities. Additionally, this promotes interest in STEM disciplines.

Keywords: Indian Education; STEM, NEP 2020

1. Introduction

Because of our growing reliance on technology, the world's workforce is now both smaller and more competitive. Likewise, nations must make sure that their future leaders are able to adapt to change, think critically, and work quickly. Science, Technology, Engineering, and Mathematics, or STEM, is a term that was first used in the US in the 1990s. It was formed in the early 2000s as a way to demonstrate how the four disciplines are interrelated. Simply said, STEM illustrates the needs of the future global workforce.

STEM-related job postings have grown by 44% in India between 2016 to 2019. The National Science Foundation estimates that 80 percent of the new occupations developed around the world in the upcoming ten years will involve some kind of math or science. A number of nations, such as the UK, Canada, and Australia, have national STEM strategies to close the skills gap in their workforces [1].

According to NEP, the child's report card must include both objective and skilled or vocational issues. A child's learning was formerly evaluated on the basis of rote memory of the subjects. Currently, it is competency-based, which encourages more analysis and conceptual clarity in the learning graphs of the children. This evaluation goal satisfies the need to enhance the educational system as a whole and brings about ongoing revisions to the teaching-learning process for the growth of a student. STEM fosters the highest performance for evaluation, aids in reviewing and analyzing prior learning, and aids in a child's overall growth [2]. It denotes

- Marks will be nothing more than a number.
- Your child's future is entirely dependent on the knowledge and abilities that he or she can keep. When we refer to someone's skills, we imply how well their theoretical knowledge translates into real-world application.
- STEM education can cover this type of instruction, particularly for areas like science and math. For nations like ours, which have a large youth population, the aforementioned, high-quality education will do best to enrich their talent and do the best resource utility over the next ten years.
- Only school-level instruction will now be provided in the high-quality, practical education that we previously received in colleges and other higher education institutions.

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