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Impact of Innovations in Teaching and Learning Methods for Higher Education

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ABSTRACT: 21st Century is the age of cataclysmic change and creativity. India needs educated man power in huge numbers. Traditional teaching learning methodology is outdated and best methods are to be identified to improve the required skills of the teachers and students. There exists a strong need to change pedagogy from fact-based traditional lecturing to interactive teaching with the aim of fostering durable and employability skills. To address this problem, innovation in teaching and learning has become essential. Adoption of various methods and strategies as mentioned in the paper will help in getting the desired outcome. The present paper describes innovative teaching methods being adopted by higher educational institutes in the country.

Education plays a key critical role universally for development of skilled workforce. Education is vital for the growth and development of any society. It imparts knowledge, skills and inculcates values and is responsible for building human capital which, drives and sets technological innovation and economic development. In the 21st century, information and knowledge stand out as very important and vital input for growth and survival of mankind. Education is not only the means of achieving social development but also an engine of advancement in an information era propelled by its wheels of knowledge and research. Educationists around the globe are advocating for innovating and improving the existing learning methods, and also for experimenting with new teaching styles. The use of innovative teaching methods by teachers helps to enhance the performance of students of diversity

KEYWORDS: Innovative Teaching Methods, Higher Educational Institutes, Traditional Teaching

I. INTRODUCTION

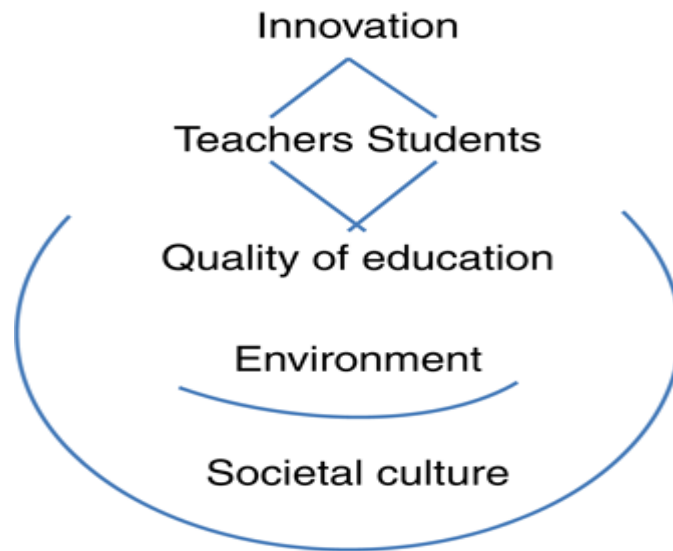
Education plays an important and critical role globally in developing a skilled workforce. For many decades, the use of textbooks has been the traditional method of instruction; however, the emergence and implementation of teaching effectiveness assessment techniques has revealed that most students do not absorb the course content up to the expected level. As a result, many researchers have focused on advancing and improving the existing learning methods, as well as introducing and experimenting with new teaching styles. Unfortunately, researchers have been unable to agree on the effectiveness of the new teaching methods; consequently, they require further investigation. To address this problem, five innovative and effective teaching methods across all the engineering disciplines were selected (flipped classroom, gamification, design thinking/ case study, self-learning, and social media), [1,2] and in-depth content analyses of them should be conducted. The advantages associated with each of the targeted new teaching method are now explored, and data pertaining to teaching methods are identified and assessed. The results revealed that between the years of 2000 and 2017, the self-learning method was researched and written about in journal articles significantly more often than other teaching methods. Most of the researchers distributed surveys/questionnaires to collect the data needed for the assessment of the adopted teaching techniques. The outcomes of this study have proved the potential to substantially help instructors, lecturers, and professors adopt the most effective teaching styles, based on their course learning objectives. [3,4]

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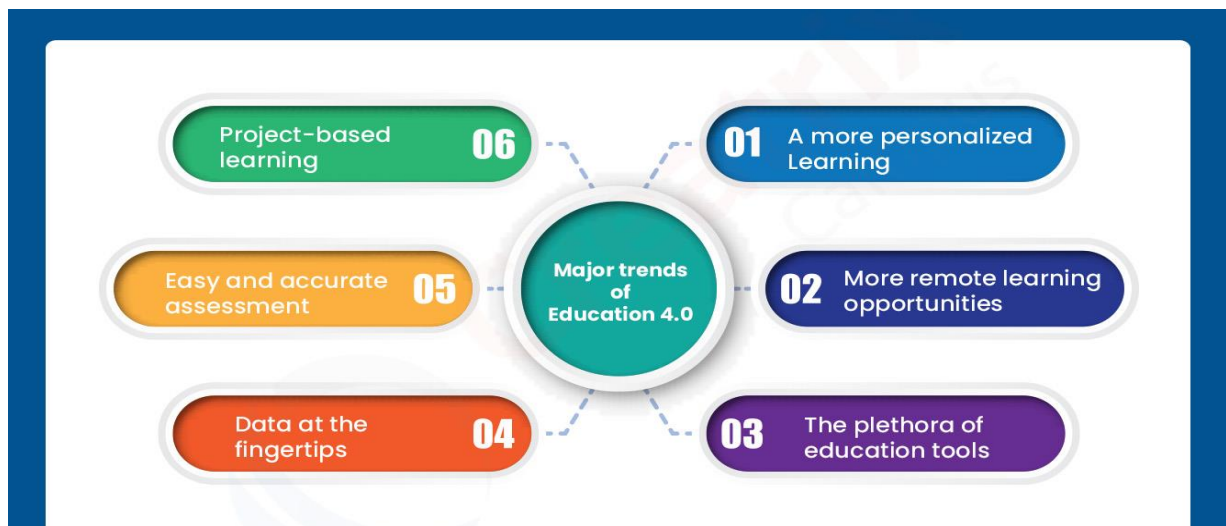
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New Innovations in Teaching and Learning in Higher Education presents primary examples of innovative teaching and learning practices in higher education. The authors – scholars of teaching and learning from universities worldwide – all share the ambition to develop educational provisions to become much more learning-centred. Such learning-centredness is key to the quality enhancement of contemporary higher education and may be achieved with various methods. The chapters document innovative teaching and learning practices within six areas:

1. Engaging Students through Practice
2. Student-Centred e-Learning
3. Technology for Learning
4. Simulation
5. Effective Transformation
6. Curriculum Innovations[5,6]



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II. DISCUSSION

Classrooms nowadays are exemplified by student diversity. The students in universities are diverse in different aspects such as culture, religion, family background, region, and schools where they have been studying (this is very important in current scenario). Due to such diversities, students' learning needs are also becoming increasingly diverse. A new challenge is to look for the teaching ways that can address their needs. To respond to such diverse needs of the students at higher educational levels, different innovative teaching and differentiated strategies and methods are being used by the teachers in their classes. Since the last three decades, innovative teaching methods to deal with the diversity of today's students are widely being used worldwide . [7,8]

Inclusive Learning Environment
**Everyone fits together in an
Inclusive Education classroom**

 All students learning together	 Giving teachers assistance & support	 Focusing on abilities, not disabilities
 Teachers learning to expand their skills	 Connecting with individual learning styles	 Honoring the needs of all pupils, equally
 Valuing other cultures & perspectives	 Celebrating diversity & individuality	 Nurturing shared respect & empathy

In recent decades, global trends in cultural and economic development have also brought forth reforms in educational paradigms. These reforms have been accompanied by changes in the ways educational practitioners or educators design the curriculum. Compared with subject-centered approaches, learner-centered and problem-centered designs are often described as having greater potential to impart to the next generation. Over the years, there has been a big change in the thinking process of educational theorists. Major policies are more concerned about equality of opportunity for education and employment opportunities for graduates . Worldwide government and private education institutions are focusing on the need of meeting diverse needs of students, and they are more focused on learner-centered teaching. Teaching methods and strategies are more flexible now. There seems to be close interrelation between the diversification and flexibility patterns of higher education. The more diversified and flexible higher education systems are, the more they will exercise a universal access policy to meet diverse needs of the students . [9,10]

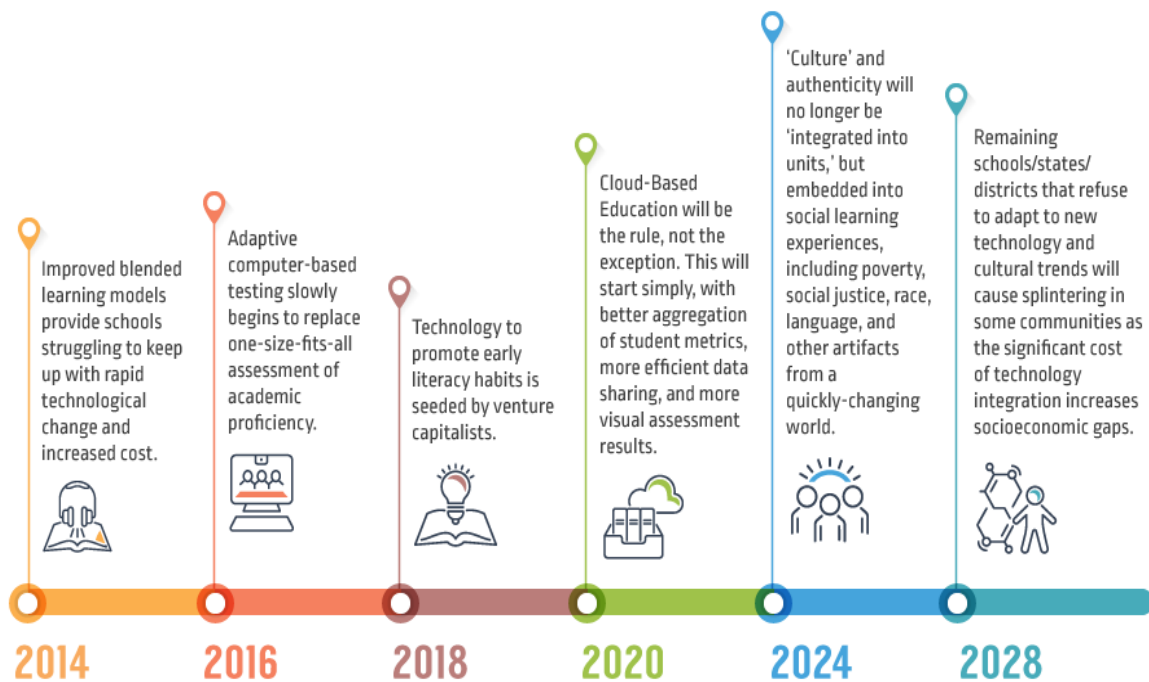
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WAYS EDUCATION WILL CHANGE BY 2028



teachthought

Advances in technology are opening-up new learning opportunities, having an impact on the conventional concept of teaching and learning. The roles of teachers, students and universities are also being transformed worldwide.

Therefore, it is crucial that teaching methods and learning experiences in higher education are dynamic and continuously incorporate innovative approaches as well as integrate new technologies in order to be prepared for the way the students learn nowadays and for the future demand coming.[11,12]

With the advancement of the fourth industrial revolution in particular, the reconceptualization of learning and teaching emerged as a critical topic in all areas of educational research. The aim of this section is to encourage and disseminate new, innovative empirical research on learning and teaching for the betterment of our teachers, students, and ultimately the society. The scope includes, but is not limited to, research on advances in theories of learning and teaching targeting all age levels (investigated via true- or quasi-experimental designs, qualitative data analysis methods, or mixed methods. Empirical studies on learning and teaching analyzed with newer methods such as machine learning techniques are particularly valued.[13,14]

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Educational Transformations !

Pick Teachers & Timings	Flexibility & Quality
Frame your Courses	Needs & Interests
Design your Degrees	Student Centricity
Study through any mode	Real World
Learning or Exams on Demand	When Ready

III. RESULTS

From computers to tablets and smartphones, most learners have easier, faster, and more affordable access to information, learning resources, experts, peers, and a wider community of educators. This serves as a platform for research on a variety of issues related to digital technologies for innovative education. The scope of digital technology for learning and teaching includes, e-learning, massive open online course (MOOC), mobile learning, virtual reality (VR), augmented reality (AR), mixed reality (MR) and extended reality (XR), Internet of Things (IoT), and Robots. There is encouragement of papers on research on provocative education, including deeper learning, crossover learning, maker education, future education, and so on for all levels of education[15,16]

Lecturers should thus apply themselves to utilising innovative methods so that the students' learning process is as free-flowing as possible and that the methodology they adopt is conducive to learning. Innovative teaching and learning methodologies such as short lecture, simulation, role-playing, portfolio development and problem-based learning (PBL) are very useful in addressing the rapid technological advances and developing workplaces that will be required in the foreseeable future. This article which is important in the broader transformation debate in higher education, focuses on skills that can strengthen language acquisition and content knowledge for students. PBL inter alia, is promoted as an innovative teaching and learning methodology that is highly relevant and meaningful and worth utilising.

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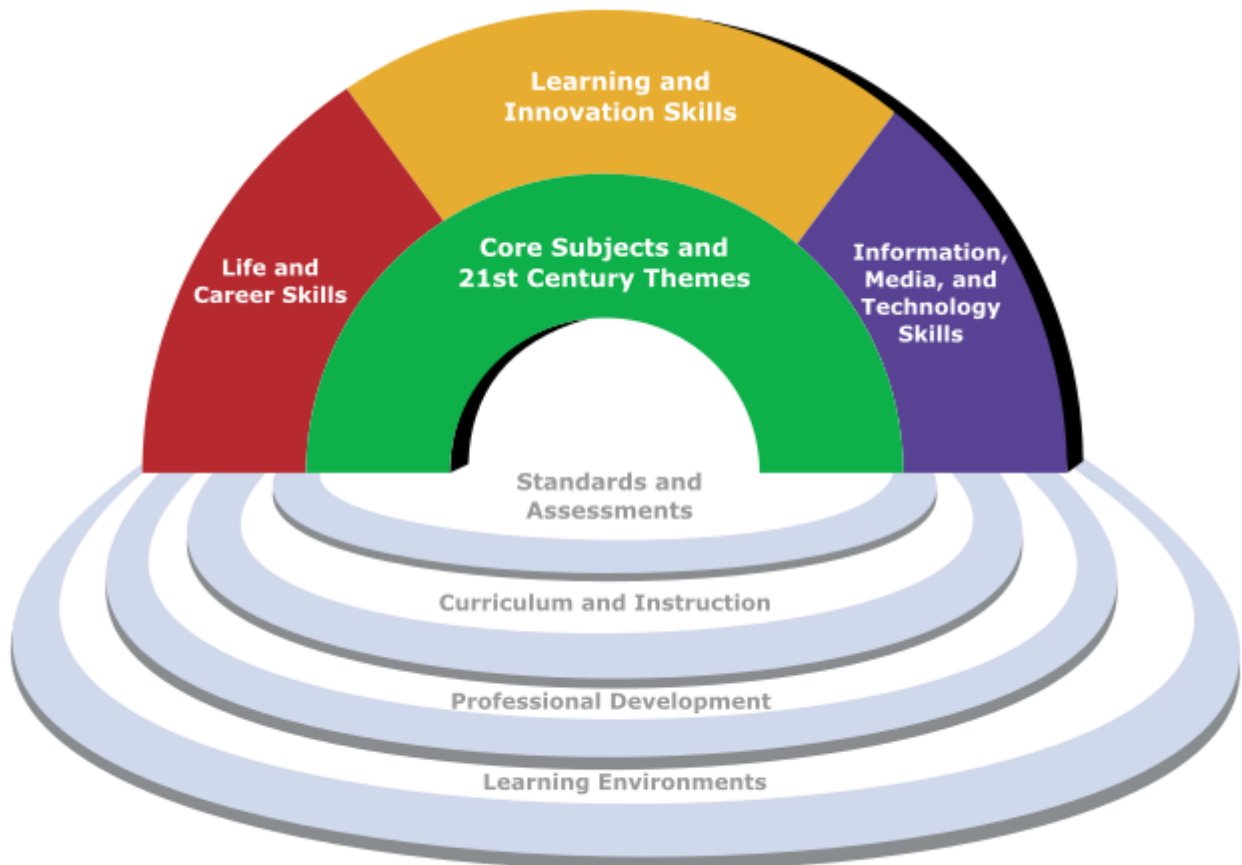


Figure 1 - P21 Framework for 21st Century Learning

IV. CONCLUSION

The civilization achieved by humanity has shown that human beings have learned from anywhere, anytime in the history. The notion of lifelong learning points out that learning is a fundamental and enduring process throughout life. Lifelong learning has emphasized cooperation across different sectors of education such as schools working with community, higher education working with various educational institutions, and organizations working for recognition of prior learning experiences. In this sense, “innovation” meets “lifelong learning” to understand coherence across the whole of the educational system. Introducing and sharing lifelong learning issues from different countries is encouraged. [17,18]

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