TEACHING GENERATION NEXT: CHALLENGES AND PERSPECTIVES

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Abstract:

Teaching has always been an important exercise for human race as it continues to play an important role in its evolution. However changing world dynamics have resulted in several developments across the globe that pose serious challenges in its path. The paper endeavours to discuss the several challenges that teaching the next generation would have to face in this regard. Further, a perspective of current teaching scenario is recounted with an attempt to suggest a broad framework to tune the teaching processes to suit the requirements of the world, as well as enhance the effectiveness of teaching in the context of growing dearth of need-based and effective learning experiences through the right mix of content and pedagogy has been discussed in the context of increasing diversity in learning styles and subsequent changes in teaching methodologies.

Index Terms: Learner-centric teaching, multimodal education, experiential learning, application-driven learning, outcome-based education.

I. Introduction

Teaching has evolved and has gone through tremendous overhaul in the past decade more than ever. The advent of internet with the subsequent information explosion, and the unraveling of different learning styles of individuals, coupled with a variety of courses offered in multitude of learning platforms, techniques and media, has made teaching an endeavor that struggles to combat with the ever dynamic curricula. Teaching is no longer confined to classrooms and seminar halls, but is spread into a global classroom with technology and

The old world teaching methodologies are long replaced by a more blended and learner centric processes that are mostly outcome based. A host of factors dictate the faster penetration of such novel pedagogy and curricula. The changing societies, advancement in technologies and dynamics of economy world over are considered to be the three major factors leading to a change in the education system (Veen, W. (2007). First and foremost increased connectivity has taken over the learning arena. Internet and connectivity have led to the infusing of fast paced modules as the world of education is revolutionized by digital resources available in no time, and referencing and information gathering have never been so fast and less pain staking as in these recent times. Another important development because of the advent of internet, is the birth and growth of online communities and fora that aid in sharing of resources, opinions, feedback as well as information and knowledge which make the learning atmosphere which was hitherto nascent to be vibrant and absolutely vulnerable to new ideas and exploring new possibilities that are revolutionizing the teaching-learning scenarios. Also the mushrooming online education portals with their vast global reach and ease of operation and approach have led to customized classrooms and learning that pose great challenges to nurture natural intelligence in the background of growing demand for artificial intelligence.

II. The challenges in teaching the generation next

The modern day teacher is not only expected to be a subject expert, but also is supposed to be a mentor, facilitator, guide, practical instructor as well as counselor thus fulfilling several roles at one go. The changing

dynamics of the teaching world have posed many questions to the traditional style of teaching nudging it towards a more multifaceted and multi-dimensional approach called as differentiated education (Tomlinson, C. A. 2000). A specially designed and concerted effort has to be put in to tailor make learning platforms and aids to meet the learner half-way as it is increasingly being agreed upon that one single curriculum would not fit all.

The following are some of the challenges that the teaching fraternity faces across the world in equipping the generation next with the skills and knowledge they require in future:

1. Shortening spans of attentions due to information explosion: With information being available on the fingertips through smartphones, the attention span of students is dwindling and is a growing concern for all the teaching fraternity. Further, the fast paced lifestyles with zero waiting times being the watch wards in all businesses and services, have rendered man impatient and unwilling to concentrate for longer periods of time. The average attention span of on an individual is supposedly less than ten seconds according to a recent study (Watson L. 2015). It also varies depending on the conduciveness of the learning environment, the teaching style and the personal interest of the individual in the topic. In this context gaining and sustaining the attention of individuals is a challenging task for any teacher.

2. Confluence of several streams: The world economy has been undergoing a harrowing time with simultaneous and impactful changeovers taking place. These are presenting specific challenges as regards to the bases of knowledge. They are not only warranting individuals to be trained in multiple areas of interest at a go, but also are presenting the present day teachers with a requirement that nudges them towards accepting the fact that subjects and topics taught cannot be pure in their base, and should be coupled with several dimensions of the same stream or should be a confluence of different related streams aided by differentiated curricula and assessment techniques (Brooks, J. G. (2004). One of such recent developments is the STEM education gathering momentum across the world, which focuses on educating students in Science Technology Engineering and Mathematics.

3. Multiple intelligences of the individuals: Individuals are more informed than before and teaching needs to be beefed up to suit the specific areas of concern that would be addressed by the informed students. The incidence of more and more differences in the learning abilities, interest and pace presents a challenge to an average teacher to not only be abreast with the current trends and developments in his/er area of expertise but also to be well prepared to handle difficult students with diversity that stretches from gender, social backgrounds, IQ levels to the teacher's approach to imparting knowledge, and objection handling abilities that require a thorough beef up (Fischer, K. W., and Rose, L. T. (2001).

4. Excessive dependence on, and usage of advanced technology: Technology advancement is one of the major areas that has impacted the education and learning systems as it follows a natural S-shaped growth curve from growth to maturity phases (Nolan, 2000; Rogers, 2003). With most of the courses going online and some of them even being offered on mobile, the technology advancement has resulted in causing a major impact on education (Underwood, 2003). The entire process of teaching in undergoing a mega change, and the attitudes of teachers and the students are being reshaped towards learning as a whole. Education is increasingly being dependent on internet (Guptha & Sanocki, 2002). Online discussions and working with peer groups and classrooms on intra/internets, sharing of resources and submissions as well as presentations through webinars and vide conferencing, online examinations and assessments have changed the dimensions of modern day teaching. This has led to the enhancement in quality of learning through better and quicker accessibility to resources across the globe (Kamba, 2009). Simulations and introduction of gaming to infuse exploratory learning (Gee, 2003; Goodson, Lankshear & Mangan, 2002) Virtual classrooms using Skype and Facebook and social media and hangouts created for discussion on class work is also becoming common place in the modern day education. In this scenario, teaching evolves more and more as an interface with its foundations in technology.

5. Faster and result driven curricula to suit the growing demand: The present day learning is need-based, and because of the time constraints, evaluations and assessments are carried out according to the student's time constraints where in the student could opt for the time and type of the same. Results are

immediately released and feedback shared simultaneously so as to expedite the whole process to suit the learner's requirements. The usage of internet has been vastly instrumental in bringing this change in the education system and although it serves the purpose of the system, it presents the teacher with a very challenging situation so as to develop a mass customized curriculum as well as mechanize most part of an evaluation which is quite a task keeping in view the differences in learning patterns and learners' IQ levels.

6. Increased accent on learning-performance integration: Teaching has assumed new role with the growing incidence of practicality in learning. Theoretical and conceptual learning has been found to be lopsided in aiding an individual's complete development and has been replaced with practical applications of theory, which is not always possible in classroom environment Hence in depth and further research is warranted in this aspect. The out of class methods are being explored and several pedagogical aids are being designed to deal with the issue, as conceptual understanding without experiential and application driven learning is being considered useless by most employers.

7. Multimodal learning: Lectures and Seminars have given way to multimodal learning system that takes up several modes of learning including textual, aural, linguistic, spatial, and visual resources are the order of the day.
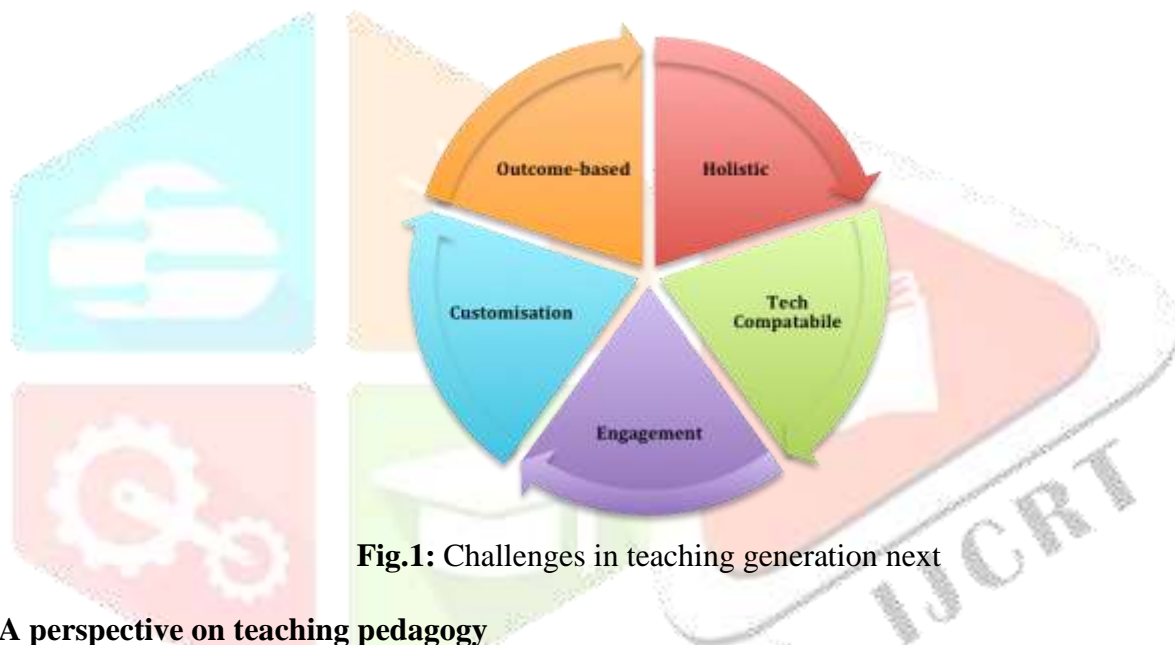
Fig.1: Challenges in teaching generation next

III. **A perspective on teaching pedagogy**

The teaching pedagogy must be duly equipped in dealing with the context of teaching the generation next. The following are the tentative characteristics that would enhance the effectiveness of teaching pedagogy:

1. Customisation: Teaching has never been more tuned to the requirements of the specificities of individual than in the present day (Tapscott, D. (1998). Modern learning is not only considered irrelevant if it doesn't address individual learning needs as it recognizes that individuals are different in their learning styles, but also the growing competitiveness in knowledge centres in order to garner authenticity and usefulness has lead to a super customized curriculum that suits every learners personality, purse and even their learning styles and patterns and lifestyles (Forsten, C., Grant, J., and Hollas, B. (2002). New teaching schedules and modules are being developed to fit the learner's intelligence quotients, their immediate requirements in terms of assistance and also in a way that fulfills their career and personal aspirations.

2. Engagement: Next generation teaching is supposed to be dynamic with the pedagogy and curricula changing based on the student interaction, and is supposed to be focused on enhancing the learning experience by ushering in more engagement and creativity (Davis et al., 2000)

3. Tech compatibility: The future learning modules no doubt are expected to be absolutely technology compatible to give the maximum coverage at the minimized costs of imparting and conducting of the courses. Virtual multimodal classrooms are here to stay.

4. Holistic: Specialised knowledge taught in isolation is giving way to holistic and integrated learning that assembles the jist of various related faculties to empower the learner with a more complete and concrete view of the subject. This entails for the curriculum and the skills to be enhanced and diverse as against specific specialisations.

5. Outcome-based: Learning outcomes are assuming importance as the world is focusing more and more on outcome based education that would be measurable and also useful in generating employability as well as application of the earned knowledge making the education system robust and a support function for upliftment of communities and economies.

The process of learning is undergoing several changes and correspondingly teaching has been evolving to provide for an enriching and simpler solution for all the learning needs. The evolution process has been based on the results of several brain research theories, and knowledge of the learning patterns of students, but one can summarize the requisite framework under 8C s.

IV. Revisiting teaching through the Seven Cs:

After listing out the challenges and understanding the general requirements of the changing education scenario, the following are the dimensions to teaching strategy that could bring out the much-needed balance between effective teaching and progressive imparting of knowledge.

The effective teaching methodology should be a combination of these seven 'C's that would be instrumental in creating effective learning-teaching platforms for the current and future generations. These are listed as follows:

1. Compliance: The teaching programmes must go hand in hand with the latest technology, laws and regulations and under the purview of the concerned academic and authenticating body.

2. Concurrence: Teaching methodologies must be in concurrence with the latest knowledge and its application, and with a capacity to absorb futuristic developments also. They should be quipped with ushering the learner with all the necessary skills and techniques that would naturally be required to undergo the learning process.

3. Competitiveness: Learning must stand above clutter and aim at developing superiorly qualified individuals and learning centers without duplication.

4. Convergence: The multidimensional platforms for ingraining not one, but several facets of the bases of specialized knowledge, should allow for a complete learning experience, which is seamless and specialized at the same time.

5. Conscientiousness: Complimented with the human touch, the modern day programmes should be inclusive of values and ethics that go with the application aspect of the acquired skills and knowledge. Schools and learning centers much teach empathy coupled with compassion and conflict resolution apart from domain specific knowledge so as to make education complete as well as the learning process humane.

6. Competence: Every programme should provide for a leading edge advantage to overcome any challenge based on self-efficacy through increased and steadfast competency.

7. Creative: The learning scenario must be involved in deriving and utilizing novel ways to entice the learners to actively engage in the whole experience of learning.

Fig.2: Seven Cs of teaching pedagogy

V. Conclusion

The diversified learner base have been posing serious challenges to teaching methodologies world over with the high incidence of technology based learning bringing in more complications along with ease of operation at one end. Addressing several issues at the same instance in this context, teachers all over the world have to gear up for challenges in not only content and delivery and domain knowledge and expertise, but also in addressing specific issues of diversity in culture, learning aspects as well as the multimodal applications to modern day teaching.

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