



ENHANCING 21st CENTURY SKILLS FOR THE PROSPECTIVE TEACHERS: NEED FOR A PARADIGM SHIFT IN THE TEACHER EDUCATION INSTRUCTIONAL STRATEGIES

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The problem with Indian higher education, especially teacher education, is it's stagnant with a focus on traditional teaching and learning methods without pragmatic transformation. The students are not trained with the skills necessary to compete with 21st-century demands. All learning activities are school-teacher based. Students learn from the limited number of teachers and they are confined to minimum resources. Lack of contextualization in curriculum and curriculum transaction and evaluation is also a major issue in the educational scenario of India. It demands everyone to think and design a methodology to enable the students to attain the necessary skills needed to be successful in the present competing globalized world by deriving inputs from his/her context and applying them to diverse challenging situations. The present study's objective is to analyze the need to enhance 21st-century skills among prospective teachers and the urgency of a paradigm shift in teacher education instructional strategies.

Keywords: *21st Century Skills, Prospective Teachers, Teacher Education, Instructional Strategies.*



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1. INTRODUCTION

As the wheel of development progressed making use of science and technology, various needs and manifestations of the learners arose gradually. As a result, the prime purpose of education became to satisfy the necessities of the learners as per the needs and challenges of contemporary society and prepare them for facing future challenges. By assimilating the fact that education can bring development and

transformation, each country made changes in the contents of the teaching and learning process, the method of transaction of contents, and above all, the nature of the educational process. By seeing the demands of the time, the governing agencies of each nation emphasized the need to change the methodology of education. This can be attributed to the success of all the developed nations.

In the post-1990s, as the world witnessed a technological revolution, Indian education also

experienced the unavoidable need for technology. Computers, the internet, and other forms of technology totally changed the educational system. As a result of globalization, students received the chance to get a quality education and compete in a global society. Those countries that gave red-carpeted welcome to technological advancement could give quality education which allowed the students to excel and meet life challenges. In this aspect, if Indian education is to be compared with that of the developed nations, we can identify that, to a certain extent, we are still testing and rusting to the traditional methodology.

The nature of 21st-century education demands a changing agenda for teachers. As the demands for skills essential for students change, the competencies and skills needed to teach in the 21st-century classroom also vary. In the previous century, a general assumption was that whatever is taught and learned lasts for a lifetime, and hence teaching a fixed syllabus was the Centre of the educational process/general education. But in the 21st century, knowledge is at the fingertip of any learner and has accessibility to any kind of information in the digital repository, the service economy has been replaced by the industrial economy and hence complex ways of thinking and working have been appreciated and promoted. In today's education, there has been a shift from delivered wisdom to generated wisdom. In the past, the learners were taught in the same way but the teachers of the present system have to follow diverse pedagogical styles. In short, the nature and features of the 21st-century classroom are entirely different from that of the previous century and hence teachers require a high level of knowledge, professional experience, skills, and competencies essential for dealing effectively in the 21st-century classroom.

2. 21ST-CENTURY SKILLS FOR THE PROSPECTIVE TEACHERS

Dewey (1910) had very rightly viewed that “if we teach today's students as we taught yesterday's, we rob them of tomorrow”, which infers that we have to prepare the learners with suitable learning experiences to confront the needs and challenges of the 21st century. The present education is profoundly affected by the influence of society: globalization, migration, advancements in science and technology, changes in the economy and labour market, etc. (**Cretu,**

2017). The changes and features of the 21st century necessitate that teacher be well-prepared, trained, and equipped with the teaching and learning skills and competencies which strengthens them in their teaching professions and contributes to national development (**Trilling & Fadel, 2009**). The influence of advancements in science and technology, globalization, the explosion of information access, and the knowledge economy has created various requirements for education such as the incorporation of 21st-century skills (**Stewart, 2014**). Various frameworks and associations related to 21st-century education have confirmed that prospective teachers need to be prepared with 21st-century skills and learn how to incorporate these skills into their classroom practices (**AACTE, 2010; OECD, 2012**).

21st-century learners must not only be prepared for the technology of this fast-changing world but also need to be prepared well with skills such as problem-solving, creative-critical thinking, leadership, and communication skills which are essential for the 21st-century workplace (**Clark, 2009**). And hence, in order to prepare the learners with these skills, they need to be taught by teachers who possess these skills and have good command to transmit the skills to the learners (**Saavedra & Opfer, 2012**). Various countries have undertaken reforms of curriculum, pedagogy, and evaluation methods with the purpose of preparing learners for the educational requirements of life and work in the 21st century. Their major concerns were to answer the two relevant questions what are the skills and competencies needed for 21st-century learners to be successful in their workplace and what skills do the teachers need to effectively teach the learners of the present century (**Schleicher, 2012**). But the reality is that many countries confront with the issue of a lack of qualified and skilled teachers to fulfil the demands of their educational system (**Santina, 2014**). As a result, many countries emphasize producing teachers giving importance to the necessary teaching and learning skills essential for teachers to be productive in the 21st-century classroom (**Saavedra & Opfer, 2012**). In this regard, **Bill Clinton (1998)**, reported in his ‘Call for Action for American Education in the 21st Century’ that every society must have skilled, talented, and committed teachers and he stressed the relevance of integrating essential skills into

teacher training without which will be a wastage of resources. The quality and achievement of learners depend on the skills and competencies of teachers (NCFTE,2009). Hence qualified, skilled, and dedicated teachers are the determining factors of global development and their training is one of the major global priorities (Kumar & Azad, 2016).

Partnership for 21st-century skills (P21) presented a framework for 21st-century skills (Dede, 2010), and the term 21st-century skills. P21 is a union or partnership with educators and business leaders. It is a public-private organization that is actively engaging to fill the gaps between skills and knowledge. This organization was formed in the year 2002 by the U.S. Department of Education, Appalachian Technology in Education Consortium together with various member organizations and strategic partners (Consortium for School Networking, Tech Corps, ISTE, SETDA). The chief aim of this organization is to develop a successful framework of learning for the 21st century by incorporating the skills into the teaching and learning process. According to P21, is commonly used to refer to competencies (such as creativity, critical thinking, problem-solving, communication, collaboration, digital literacy skills, leadership, adaptability, self-direction, accountability, cross-cultural interaction, etc.) that first teachers should possess and need to teach to learners (Pacific Policy Research Centre, 2010; Saavedra & Opfer, 2012) because, today's learners have to confront a wide-ranging and challenging world, necessitating them to learn beyond the basic formulaic knowledge and skills. Hence there is a strong demand for a paradigm shift from rote learning and memorization of information to the acquisition and enhancement of 21st-century skills (Urbani, Roshandel, Michaels & Truesdell, 2017). This shift could be traced back from National Curriculum Framework (2005) to National Education Policy (2020). The meaning of learning in the 21st century is all about producing, analyzing, synthesizing, and assessing knowledge from various subjects and sources with an understanding of diverse cultures (Rich & Elizabeth, 2010). In this context, Fadel & Trilling (2009) explain 21st-century skills as the new set of skills essential for successful living, learning, and working.

The COVID-19 pandemic has divided the entire realm of the world into a dichotomous system in pre and post-COVID eras. It is a fact that the tools and techniques which were overwhelmingly magnified and used in the pre-COVID-19 practices have become outdated and expelled from the scene. It necessitated a new kind of imagination in every fact of life. The youth of the present-day living system has to be meticulously trained even to find out answers even for ontological issues. Here lies the deliberated decoding of 21st-century skills enabling them to propel in a sustained manner. The pragmatic changes that we have to bring about as a result of COVID-19 clearly assert that there is a greater demand for generating and transferring new skills as the situation demands in a dynamic manner.

3. NEED FOR A PARADIGM SHIFT IN THE TEACHER EDUCATION INSTRUCTIONAL STRATEGIES

Obviously, the question that emerges at this point is where we have to start. It is considered that teacher quality is the responsible factor for students' achievement (UNESCO-ILO, 2010). Therefore, teacher education programs must be oriented to enhance quality among future teachers. As far as teacher education is concerned, India has the largest teacher education system in the world (Kumar & Azad, 2016). National Curriculum for Teacher Education (2009) places various expectations and duties on teachers at pre-service and in-service levels. Mohanty (2015) viewed quality teachers are the products and results of well-equipped and quality teacher education programs and policies. But it is a fact that, for each and every nation, it becomes a challenge to produce qualified and well-prepared teachers. In recent years, in India, there have been various programs and Acts implemented for the universalization of elementary and higher education such as Sarva Shiksha Abhiyan, Rashtriya Madhyamik Shiksha Abhiyan, Rashtriya Uchchar Shiksha Abhiyan, Right to Education Act, etc. These programs have created a huge requirement for teachers and to meet these challenges, our nation wants a good number of teachers (Kumar & Azad, 2016). Several studies have identified numerous problems in Indian teacher education. Institutional inertia, quality crisis, less humane and professional teachers, lack of skill integration in the curriculum, lack of

innovation, poor monitoring, lack of commitment among the teachers, lack of robust teacher education policy, etc. (Chand, 2015; Desai, 2012; Jamwal, 2012; Goel & Goel, 2012). Justice Verma Commission in 2013 reported that around 90% of teacher education institutions belong to private sectors and most of the northeastern states of the country have a shortage of teacher education institutions as per the need. This all points out that the Indian teacher education system has been affected by malnourishment and several needs which required urgent care and treatment. Together with these, the Indian teacher education program must incorporate life skills, technopedagogic skills, and emotional skills and there must have a proper focus on creative and critical thinking, problem-solving skills, communication, and collaboration (Goel & Goel, 2012). In this regard, Jamwal (2012) also pointed out that there must be the integration of digital literacy skills in the educational activities of teacher education programs. Kaur (2013) emphasized on the significance of skills needed for a teacher to effectively deal with 21st-century learners. In this line, there is a great need for the enhancement of 21st-century skills among prospective teachers in the context of the Indian teacher education program. Rhetorically, if we travel, the further advancements happened in the field of Indian teacher education reformation perspectives, one can see a kind of glorification in NEP (2020), taking the pedigree pathway from Kothari Commission Report to Justice Verma Commission Report. A kind of rigorous vibration has been there as a resultant effect of all these attempts. The theoretical backings of the curricular approaches of Indian teacher education are still redundant with the fallacies of multiple intelligences (Gardner, 1983). Thinkers who have been exposed to the vibrance of economic reformations brought out as a byproduct of globalization which had silently regulated all the policies including education across the globe strongly advocate that Gardner's Multiple Intelligences (MI) is too basic and minimal to address the complexities of neoliberal economic world order. Moving to the present system where humanity has to practice a new normal to ensure survival. It needs new theories and new tools. Several studies have acknowledged the relevance of exploring 21st-century skills in the classroom (Girlando, 2013; Rotherham & Willingham, 2009; Saavedra, &

Opfer, 2012; Scott, 2015; Yoest & Kane, 2015) because the skills and competencies essential to be successful in the 21st-century have become more universal. 21st-century teaching must permit the learners to develop the skills needed when they enter higher education and even after completing higher education, in the workplace, and during all spheres of life (Scott, 2015). Integrating 21st-century skills into the teacher education curriculum will engage prospective teachers in the learning and teaching process and allow them to graduate better prepared to succeed in a growing global economy (Girlando, 2013). Teaching Skills such as creativity, communication, interpersonal skills, collaboration, critical thinking, and problem-solving are crucial to ensure the success of students (Girlando, 2013). Hence, teacher education programs must have an innovative teaching strategy to promote 21st-century skills for future teachers.

4. CONTEXTUALIZED MULTIPLE INTELLIGENCES (CMI) BASED INSTRUCTIONAL STRATEGY

To keep future citizens competitive and to make their dream of equal educational opportunity a reality, we need to recruit, reward, and train a new generation of talented teachers. Today teachers are asked to achieve significant academic growth for all students at the same time that they instruct students with ever more diverse needs. In this context, the prime question is that are we adequately preparing future teachers to effectively deal with the demands of the century. Various paradigms have been well celebrated in a fallacy mindset. By taking learnings from empirics and observations of others, strongly inclined to the theoretical conceptualization of Contextualized Multiple Intelligences (CMI) and Triplization (Individualization, Localization, and Globalisation) (Cheng, 2000, 2001) which will promote 21st-century skills among the youth who are the future citizens of the country. This educational design will enable the students to make triplication, i.e., individualization and localization together with globalization, in their own education and self-development (Cheng, 2000). For, all our educational endeavours like learners' learning and teachers' teaching should be well placed in a globalized, localized, and individualized context. This will be possible only when there is an instructional strategy that is based on CMI which

will create a workforce who are technologically advanced, economically sound, socially balanced, culturally enhanced, and politically updated to create a country that is self-sufficient. For that, both in-service and pre-service teachers of the 21st century should be updated and enhanced with 21st-century skills. Therefore, educational methodology in higher education and especially in teacher education programs should be in connection with an instructional strategy that is based on contextualized multiple intelligences which will promote 21st-century skills among the learners. It is a well-known fact that teaching is a human enterprise with an amalgamated configuration of knowledge, skills, and attitude. Further, it is a fact that training, pre-service training, is having a longitudinal threshold that is capable to make a mindset that may last till the end of teachers' life. Hence, any reformation attempted for ensuring quality teaching: at the school level, and higher education level, be tested for validation at the preparatory level.

Recently, educators, policymakers, and curriculum planners have determined that learners must-have 21st-century skills to be successful in the present century (Rotherham, & Willingham, 2009), and learners who lack these skills will be at risk and disadvantage when selecting careers or higher education (Girlando, 2013). In a similar fashion, teachers must have a deeper understanding and knowledge of 21st-century skills to be successful teachers in a constantly evolving global society (Williams, 2017). The present system of education demands that students be equipped with 21st-century skills, the question remains: do prospective teachers possess the skills to effectively transmit these skills to future learners? Saavedra and Opfer (2012) vehemently argued that if 21st-century learners are not possessing and learn the skills and knowledge needed to successfully deal with the life situation, it is because teachers are not teaching them. Hence, it is the duty of the teachers to prepare the learners for a comfortable future whether it be in higher education or the workforce and it is vital for pupils to understand the core academic contents and learn how to make use of the information they learn and apply it to the real-world (Girlando, 2013). Therefore, there needs a paradigm shift in the duty of the teachers that they must go from an instructor of information to the facilitator of education (Girlando, 2013). Hence,

they must possess 21st-century skills that can educate their students through various innovative strategies and methods (Heick, 2018). In this regard, the teacher education program must prepare prospective teachers to acquire 21st-century skills. The fact is that our teacher education is theoretically sound but lacks sufficient vigour when it comes to the transactional part. The transaction of the curriculum must be based on a strong paradigm; a paradigm that can answer the call of contemporary needs and aspirations. Earnest effort must be there from the educational researchers to bring out curricular frames, and instructional designs so that the teacher education curriculum sustains vibration and vigour to address any challenges. In this regard, an instructional strategy based on Contextualized Multiple Intelligence (CMI) may be helpful to promote 21st-century skills among prospective teachers. Contextualized Multiple Intelligence (CMI) enables prospective teachers to become triplized (globalized, localized, and individualized) in learning. To enjoy learning through self-exploration and actualization in the learning process one must attain the skills needed to live in one's context.

Contextualized Multiple Intelligences based Instructional Strategy is meant to enhance various 21st-century skills, especially those needed to teach in the 21st-century students in all the spheres of their thoughts and deeds. By acquiring these skills, they become more systematic and realistic in their thinking, learning, and teaching along with a better understanding of the concepts they engage in the classroom. Once prospective teachers get thorough training, they can apply this in every sphere of their life.

5. CONCLUSION

Contextualized Multiple Intelligences based Instructional Strategy (CMI-IS) is a framework to enhance 21st-century skills which are very essential for the teachers of the century to effectively deal with students. 21st-century skills are a set of skills and competencies that 21st-century learners must possess. The acquisition of these skills can happen through the different teaching strategies that teachers adopt in classroom settings. So, in order to find out the ways of developing the 21st century skills, the educationalists, academicians, and curriculum

planners in the teacher education programme should give up the traditional pedagogical impositions and design Contextualized Multiple Intelligence based Instructional Strategies to facilitate twenty-first-century skills among the prospective teachers at all levels.

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