

Incorporating 21st Century Skills in Curricula

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Abstract

This paper attempts to discuss the need for fostering 21st century skills in schools, especially in English Language classrooms. Our school systems need to respond to the changing world. The new generation is to be prepared for the new careers, by connecting their learning with real life. Schools should build the young generation for the future. This is possible only when the curricula incorporate the 21st century skills to frame the syllabi to meet the changing needs. The teaching- learning process should be made challenging, inspiring, interesting and effective. Language classroom can contribute much to this effect by connecting physical and virtual environment that can connect the learners with a “variety of learning resources, and with people of different cultural backgrounds.” This may enhance learning experiences and individual development. The present century is technology rich and immensely complex. Learners in the present century need abundant opportunities to participate in connected learning environments that can ensure perfect learner engagement. Classroom environment should provide the learners with the opportunities to acquire the skills like critical thinking, problem solving, creativity, innovation, celebration, team work, leadership, cross-cultural understanding, etc. This can equip the learners with the ability to face the challenges of the modern society. Learning is a lifelong process. So the learners must get chances to update themselves with the latest trends and information. English is the ideal context for introducing and building 21st century skills.

Keywords: Life skills, learning environments, curriculum, virtual environment, competence, etc.

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INTRODUCTION

“Education is relevant to the demands that students will face over the course of their lives—such as the demand to live long and healthy lives, to contribute positively as active members of their community, to participate economically and politically in institutions that are often local as well as global, and to relate to the environment in ways that are sustainable” [1]. In this context, students need to develop certain skills, competencies and knowledge that are essential for attaining success in the 21st century. We are living in a world of rapid change that necessitates the mastery over certain issues generated by technology, globalisation, international competence, changing markets, transnational environmental and political challenges, etc. The very survival of the students of the contemporary world of technology depends widely on their ability to use certain skills that include higher order thinking, deeper learning, complex thinking, strategic thinking, critical thinking, communication, system thinking, self-management, non-routine problem solving, adaptability, etc. They need to be able to solve problems that are complex, collaborate and communicate well with others, acquire new skills and information independently, and adapt to

rapidly changing conditions. These broad cognitive and affective abilities are often referred to as 21st Century Skills [2]. It is very important that the children of today are provided with certain learning opportunities and experiences beyond the traditional classrooms that guarantee chances to take risks, create new work, try new things, solve problems creatively, explore the possibilities of digital tools, communicate effectively, work independently and collaboratively, and analyse myriad resources in a variety of ways. Such learning will take place only in an environment which include 'community environment, virtual environment and blended environment, in addition to schools and classrooms.' Since society's problems are far too complex for one point of view, it is high time we jumped off our disciplinary bridges onto the fertile ground between the disciplines and move away from the traditional classroom environments to an environment that promises a variety of support systems. Children today need learning environments that support not only retention, but also the use and application of skills, knowledge and competencies.

21st Century Skills

“Twenty-first century competencies are a blend of cognitive, interpersonal, and intrapersonal characteristics that may support deeper learning and knowledge transfer. Cognitive competencies include critical thinking and innovation; interpersonal attributes include communication, collaboration, and responsibility; and intrapersonal traits include flexibility, initiative, and metacognition” [3]. It refers to a set of various skills and multidimensional abilities like: 1) Learning skills, 2) Higher-order thinking skills, 3) Life and career skills, 4) Multiple Fluencies, 5) Specific Literacies 6) Awareness and Analysis skills, 7) Meta-cognition and 8) Deeper Learning Skills.

The 21st century evidently witnesses a shift from 3Rs to 4 Cs- Critical thinking, Creative Thinking, Collaborating, and Communicating. These skills prepare the learners for the challenges they have to face in the 21st century. They learn to perform well independently and collaboratively in an atmosphere which is highly technologically advanced. Their adaptability, flexibility and creativity help them to solve problems and to turn any environment into a learning environment.

Critical Thinking empowers the learners to analyse, question and challenge the existing situation, and to assess the credibility, accuracy, effectiveness and value of any information which enables him to make appropriate decisions and take wilful actions. It involves abilities like analysing, arguing, classifying, comparing and contrasting, defining, evaluating, explaining, Problem solving and tracking cause and effect.

Verbal and Non-verbal communication is crucial in in a 21st century world where human connections and interactions are critical skills in an increasingly automated workforce. Effective communication implies analysing the situation, choosing a medium appropriate for the context, evaluating the messages received and responding in a suitable way using acceptable conventions. A person who is capable of communicating ideas, thoughts and perspectives to a variety of audiences effectively for different purposes using appropriate forms and conventions becomes highly employable. Communicating using digital media and technological tools is the need of the times. The learner who can articulate ideas and perceptions clearly and effectively can collaborate with diverse teams in diverse situations and can increase flexibility in making negotiations, a necessary factor required for collaborative relationships and social networking.

Creativity demands the learners to think in a new and innovative way and to demonstrate originality and inventiveness. It enhances the ability to identify opportunities and act upon them, and to take risks and

responsibilities. It helps learners to visualise things from a new perspective and employ intuitive thinking to answer questions and accomplish goals. Some of the creative thinking abilities are: brainstorming, creating, designing, entertaining, imagining, improvising, innovating, overturning, problem-solving, questioning, etc.

Collaboration is one of the key skills of the 21st century as it involves the ability to work effectively with others. The learners will acquire the ability to become an integral part of the global economy. It promotes deep learning and leads to intellectual growth. Working with others and sharing and accepting divergent views and perceptions to apply the information and knowledge to a common goal helps develop strong relationships and solve complex problems effectively. Some of the skills are: Allocating resources, brainstorming, decision making, delegating, evaluating, goal setting, leading, managing time, resolving conflicts, team building, etc.

Learning essentially is a simultaneous development from lower order skills to higher order skills. Lower order skills are very common in curricula. But real learning takes place only when the learners understand how to transfer new knowledge to suit the contexts. According to Bloom's taxonomy, remembering, understanding, applying, analysing, evaluating and creating are the higher order skills.

The North Carolina State Board of Education published a document which identifies five major life skills that can help students to be future-ready and to prepare them for success in work and life in the 21st century.

(Arts Education and 21st Century Skills in North Carolina)

- Flexibility and Adaptability (adapting to varied roles and responsibilities)
- Initiative and Self-direction (monitoring one's own understanding and learning needs and going beyond basic mastery of skills and/or curriculum to explore and expand one's own learning and opportunities)
- Social and Cross cultural Skills (Working appropriately and productively with others and bridging cultural differences and using differing perspectives to increase innovation and the quality of work)
- Productivity and Accountability (Setting and meeting high standards and goals for delivering quality work on time)
- Leadership and Responsibility (Using interpersonal and problem-solving skills to influence and guide others toward a goal and acting responsibly with the interests of the larger community in mind)

21st Century education demands the development of specific literacies such as the Basic literacy, Art and Creativity literacy, Scientific literacy, Information literacy, Visual literacy, Technological literacy, historic literacy, Civic literacy, Eco literacy, Cyber literacy, Physical Fitness and Health literacy, Global Competency and Multicultural literacy, Social and Emotional literacy, Media literacy and Economic literacy. It will prepare the learners to manage, analyse and synthesise various streams of information and evaluate and apply these to multiple environments that are challenging. These literacies are connected with the multiple fluencies like media, information, collaboration, solution, creativity, etc.

How to Foster the 21st Centruy skills in English Language Classroom

The present world needs an educational framework that can create the most competent, most creative and most innovative citizens with cross-border perspectives, enviable openness to novel ideas and perfect adaptability. James W. Pallegriano and Margaret

I. Hilton recommend deeper learning as a means of helping the learners to develop the skills required for the 21st century [4].

Deeper learning, as opposed to rote learning, helps the learner to apply what he learns to new situations (i.e. transfer). It involves shared learning and collaborative learning. Deeper learning allows the learners to transfer his knowledge and information to solve problems and promote fluid intelligence (Verbal and quantitative reasoning abilities) and Crystallised intelligence (accumulated skills such as verbal comprehension, listening skills, etc.)

The National Research Council, in a report entitled “*Education for Life and Work: Developing Transferable Knowledge and Skills in the 21st Century*”, groups the clusters of 21st century skills into three overarching domains (cognitive, intrapersonal, and interpersonal). The following table illustrates the domains, skills and clusters presented.

Table-1: Clusters of 21 st Century Competencies [2]

Domain	Cluster	Terms used for 21 st century skills
COGNITIVE COMPETENCIES	Cognitive processes and strategies	Critical thinking, problem solving, analysis, reasoning/argumentation, interpretation, decision making, adaptive learning, executive function
	Knowledge	Information literacy (research using evidence and recognizing bias in sources); information and communications technology literacy; oral and written communication; active listening
	Creativity	Creativity, innovation
INTRAPERSONAL COMPETENCIES	Intellectual Openness	Flexibility, adaptability, artistic and cultural appreciation, personal and social responsibility, (including cultural awareness and competence) appreciation for diversity, continuous learning, intellectual interest and curiosity
	Work ethics/ conscientiousness	Initiative, self-direction, responsibility, perseverance, productivity, grit, Type 1 self-regulation (metacognitive skills, including forethought, performance, and self-reflection), professionalism/ethics, integrity, citizenship, career orientation
	Positive Core Self-Evaluation	Type 2 self-regulation (self-monitoring, self-evaluation, self-reinforcement), physical and psychological health
INTERPERSONAL COMPETENCIES	Teamwork and Collaboration	Communication, collaboration, teamwork, cooperation, coordination, interpersonal skills, empathy/perspective taking, trust, service orientation, conflict resolution, negotiation
	Leadership	Leadership, responsibility, assertive communication, self-presentation, social influence with others

A radical change in the curriculum is required in order to provide the learners to develop the

competencies for ways of thinking, ways of working, tools for working, skills for living, and social and

emotional competencies. Curriculum should incorporate the 21st century skills and the teachers should integrate them in classroom activities. A dynamic curriculum which changes according to the changes in the society alone can ensure learning environments for systematic, purposeful and progressive reconstruction of knowledge and experiences. The global changes and rapidly changing trends demand a shift in the orientation and design of the curriculum promising widely planned vision and pragmatic feasibility with a view to preparing the learners for the world by encouraging and nourishing the differing attributes of the learners. Introducing flipped classrooms, digital based learning, etc. that promote blended learning and delivering content outside of the classroom can foster 21st century skills in the classroom.

Instead of relying on conventional instructional materials and assessments that cannot engage students in higher-order processes such as creating, evaluating, critiquing, or applying, we need materials that can encourage not merely intellectual development, but also moral and civic education, aesthetic development, and the skills necessary for making the learner the productive member of the society.

It is also important that satisfactory and effective learning environment should be created to contribute to the development of ‘innovative and sustainable life world solutions’, by using all available semiotic resources, including linguistic, prosodic, interactional, nonverbal, graphic, pictorial, auditory, and artifactual resources.

Learning Environments

Learning does not take place in the classroom alone. It crosses the spacial and temporal restraints of the schools. Students of the 21st century need environments that allow them to participate in flows of action, promote development of tacit knowledge through enculturation and collateral learning, and to go through a wide range of experiences and activities. Learning environment should be flexible, inspiring, supportive and involving. The environments for our schools should be sufficiently fostering the four dimensional education focusing on character, knowledge, skills and meta-learning. There are three basic environments desirable for academic excellence—physical environment, Emotional environment, virtual environment and academic environment. Learning should be integrated and interdisciplinary.

We need teachers who resort to the best practices, and who expect the highest standards from all of their students, and who, when a student fails to achieve the desired standards, strive to design activities to help him achieve high standards. As Douglas Kellner suggests, educators need to “restructure schooling to respond constructively and progressively to the

technological and social changes that we are now experiencing [5]”.

CONCLUSION

Using 21st century skills in the classroom can spell success for learners in the future. It creates multilingual, multiliterate, multicultural critical thinkers. Fostering the new literacy skills can contribute enormously to the linguistic competences. Since Teaching English as a Second Language in the present century is viewed as a socially, culturally, cognitively and affectively challenging process of intercultural initiation, it can support the acquisition of 21st century skills. It can help the learners to develop linguistic proficiency with the tools and technology. It makes learners productive contributors to society. It empowers the learners to use authentic texts to be creating his own texts and become the author of his own ideas, in collaboration with the peers. We should create a welcoming classroom climate, one that provides each student with a variety of ways to be an active participant and successful contributor. Let me quote.

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