EDUCATION IN 21ST CENTURY

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Abstract

"Education is the process by which society deliberately transmits its accumulated knowledge, skills and values from one generation to another. In the twenty-first century, significant changes are occurring related to new scientific discoveries, globalization, informatization, development of artificial intelligence and robotics. This century is called the age of digital technologies and knowledge. Now the world is a Global Village. The most observable phenomenon is now the Internalization of the world and the integration of digital technologies into teaching and learning. Digital technologies change our way of life, way of communication, way of thinking, feelings and social behavior. Technology will replace the printed books and bring them in digital form."

Key Words: 21st Century, Education, Innovation, Pedagogy

NATURE OF EDUCATION IN 21ST CENTURY:

The world is changing rapidly and the knowledge network is expanding exponentially. To be successful in this environment of the future, learners need a rich network of knowledge focused on innovations, critical thinking, vast communication and collaboration. Educational systems need to be transformed to meet the demands of the next generation learners. Innovation is a phenomenon that carries in itself the essence, methods, techniques, technologies and the introduction of novelty. In 2010, UNESCO recommended the following teaching strategies for the twenty-first century: experiential learning, storytelling, value education, enquiry learning, appropriate assessment, future problem solving, outside classroom learning, and community problem solving.

OBJECTIVES OF EDUCATION IN 21ST CENTURY:

Education has a vital role to play in developing the knowledge, skills, attitudes and values that enable people to contribute to and benefit from an inclusive and sustainable society. Learning to form clear and purposeful goals, work with others with different perspectives, find opportunities and identify solutions to problems will be essential in the future. Education needs to aim to do more than prepare young people for the world of work. It needs to equip

students with the skills and values they need a set of knowledge, skills, attitudes and values in action to become active, responsible and engaged citizens. The following competencies are essential in learners to transform our society and shape our future:

- search for truth
- meet the workforce needs
- Critical thinking
- Creativity
- Interpersonal skills
- Sense of social responsibility
- Plan and carry out investigations
- Think logically
- Cultural literacy
- Global marketplace competition skills
- Understanding and appreciating the interconnectedness of people
- Sense for the environment and ecology

FUTURE CLASSROOMS:

The key of teaching and learning is to identify the learning behaviors in which learners should be engaged. Looking for ways to make your classroom more collaborative and build students for 21st century skills. provide helpful information on creating your own collaborative classrooms, as well as engaging collaborative lessons. All lessons meet the standards with or without technologies. It is such student-centered, engaging and cooperative classrooms where students can learn to interact with their peers, society and educators on a more profound level and consequently gain a new understanding of the world, which they share with others.

FUTURE CURRICULUM:

Curriculum has a strategic position in the educational process because it is the practical translation of educational aims, plans and trends in the society. It is one of the main components in the educational system which consists of aims, content, teaching methods, teaching aids, school activities, and evaluation. Curriculum is the element that affects the

changes in the society. Work force development depends on curriculum to meet these changes. Curriculum is a means to meet the goals of education in all phases. The present curriculum does no longer support the students' preparation for both life and work. Teachers are teaching the same subject matter exactly in the same way as they taught before one decade: reading, writing, Mathematics, Science, Social Sciences and languages. Debates about the future of education centre on changing how we teach? how we learn?, how we learn to learn? to embrace technology in the classroom, but there is almost no debate about changing what we teach. Any discussion of the future should go hand-in-hand with a discussion of the future curriculum. To prepare all students with the creative, collaborative and digital problem-solving skills of the future, schools must teach computer science as part of the core curriculum as it deals with collaboration – skills, cyber security. networking and robotics.

FUTURE TEACHERS:

"We Cannot Create What We Cannot Imagine." We cannot transform our schools unless we first imagine major changes to the profession of teaching. The future teachers should be critical thinker and imaginative. An effective 21st-century educator should be a "guide on the side," not a "sage on the stage." 21st-century educators must be lifelong learners. A good 21st-century educator is one cognizant of the rapidly changing technology trends; one in tune with the direction of the economy, and future projected needs for business and industry; one aware of the career opportunities for children in the coming years, and all of the requisite educational skills and talents necessary to allow kids to position themselves to compete. In the learner-centered knowing-learning process, the teacher is not only a transmitter of discrete segments of knowledge but the teacher helps constantly to connect to the larger network of the knowledge. Teacher is learners' guide, counselor, mentor and role model. In the perfection of the teaching and learning process, the teachers and the learners are partners, enquiring and exploring together. Aristotle referred to it as "a moral type of friendship" and St. Thomas Aquinas called this kind of teaching "an act of love and mercy". As the discussion facilitator, the teacher is responsible for the creation of an environment in which students will feel comfortable enough to participate in the discussion and share various perspectives.

FUTURE LEARNERS:

The ways people interact, socialize, and work are shifting rapidly. Unprecedented opportunities for collaboration, the progressive automation of lower-skilled jobs, employers' demands for workers with more well-rounded skills, and students' desire and expectation to operate with autonomy and choice all indicate that our education system needs to prepare students for the future in a very different way than it has in the past. The strongest signal from studies was the need for teachers, schools, curriculum and school leaders to help students develop stronger social-emotional skills. Social-emotional skills provide students with the perspective and flexibility necessary to function at a high level even when faced with uncertainty, change, pressure, stress, and other work and life challenges.

FUTURE LEARNING:

Modern learning experiences design should center attention on the needs of students; holistically. It should include inquiry-based learning, project-based learning, challenge-based learning, phenomenon-based learning, and personalized learning to develop deeper cognitive skills. A shift in school philosophies and practices to place greater emphasis on the individual needs of students can help students develop a stronger sense of self-efficacy, a skill that is shown to be a key indicator of success in learning, life, and work. To make learning more student-centric, strategies and tools must help identify where students are in their learning, help understand what motivates them, and provide the flexibility for students to move through content at a pace that best suits them. Technology can enhance the learning process by enabling learners to save time, providing student-specific insights, driving inclusivity and providing immersive learning experience. Collaborative activities promote better learning outcomes as it engages learners. Applying artificial intelligence to understand students' skills and motivations Incorporating the technology skills of tomorrow into the classrooms of today will help bridging the knowledge gap for future employability. Tablets will replace text books in technological context.

INNOVATIVE PEDAGOGIES:

The world around the school is complex, interdependent, rapidly changing, and uncertain. It is also increasingly digital. There is a need for thorough analysis of education system. This century is called the age of digital technologies and knowledge. Now the world is a Global

Village. The most observable phenomenon is now the Internetization of the world and the integration of digital technologies into teaching and learning. Digital technologies change our way of life, way of communication, way of thinking, feelings and social behaviour. Technology will replace the printed books and bring them in digital form. The following transformation are mandatory in education system:

Twentieth century model	Twenty first century model
Books → reading perception	Display—visual
Single tasking	Multitasking
Linear approach	Multimedia
Approach	
Perception through reading	Iconic perception
Individuality	Connectionist
Ambiguity	Cooperative
Passive	Active
Pure mental performance tools	Intellectual ICT
Knowledge acquisition creation	Knowledge
Closed classroom community networks	Extended
Off line working, F2F networking	Socio-digital
Own interest by community	Interest supported
Knowledge and Skills	Competencies

LARGE CIRCLE DISCUSSIONS:

While much of the work occurs in various workshops and small groups, large group discussions serve a very important purpose in the classroom. It is during this time that the whole group comes together and may share their thoughts, experiences and questions.

THE WORLD CAFE METHOD:

The World Cafe is yet another method that allows for a structured conversation to take place among students, with minimal input from the teacher.

MEDITATION AS A TEACHING TOOL:

Researchers have shown that meditation is an excellent tool that helps individuals reduce stress, clear the mind and allow for better concentration and thus for better learning.

USE OF ARTIFICIAL INTELLIGENCE:

Information and Communication Technology is providing new opportunities for high quality interactive learner-driven learning USING Artificial Intelligence.

EDUCATION SYSTEM AS OPEN SYSTEM:

We are faced with the challenge of redefining a foundational education to keep up with the evolution of skills required to solve problems, innovate and succeed. But, as a society, we are failing to meet that challenge and consequently failing to adequately prepare the next generation for the future. We should use Critical thinking, Collaboration, Communication, and Creativity, the 4 Cs Model of Teaching and Learning.

TOWARDS THE LEARNING SOCIETY:

Learning to learn, continuing to learn and lifelong learning are all linked. Basics to the process are learning to learn which sums up the educational purpose and goal of learning and teaching. The important point to make is that the motivation and the ability for continuing learning are realized in the style and habit of learning that are nourished in the learner.

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