Teaching for the 21st Century: Challenged Environment with Fresh Requirements

Selvi santosham¹, Dr. M.V. Sudhakaran²

¹Ph.D. Research Scholar, Department of Education, Mother Teresa Women's University, Kodaikanal ²Associate Professor, School of Social Sciences, Tamil Nadu Open University, Chennai

ABSTRACT

"Schools have to prepare students for jobs that have not been created, techniques that have not yet been invented and problems that we don't know will arise....."Andrea Schleirxr (2010)It is a privilege for an Educator to serve as a 21st century Teacher. The mission demands the teacher to be dynamic, creative constantly innovating new methods to reach the 21st century child and make an impact thereby contributing to shaping the future citizen.

Keywords

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21st Century Education

Success looks different now than it did in the past. Highachieving people are frequently choosing to opt out of the traditional job market and create their own jobs. Successful people increasingly expect to be able to:

- Live and work anywhere in the world
- Travel as often as they like, for as long as they like
- Change what they're working on to keep up with their interests and abilities

• Enjoy earning potential that is not capped by a salary figure

- Work with peers across the globe
- Outsource things they don't like doing
- Choose their own hours and office

For people who don't live like this it can sound far-fetched, but this kind of lifestyle is growing rapidly. What does it take to access and thrive with this kind of freedom? The answer is surprisingly simple, and can be best summed up as 'a 21st century education'.

In the preface to the 2011 revised edition of his book 'Out of Our Minds', <u>Sir Ken Robinson</u> observes that 'The more complex the world becomes, the more creative we need to be to meet its challenges', and this is becoming increasingly clear in education and the workplace. People now need to be creative to be successful, but while the idea of success has changed, the education system has not always adjusted its methods or goals to meet it.

Who are the 21st century students?

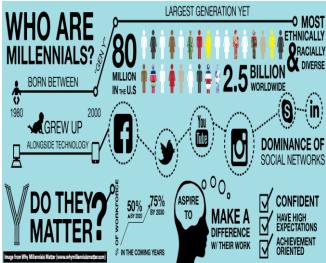
Generation Z – born between 1995 and 2009 – most do not remember life without the internet, and have had technology like smartphones, iPads, smartboards and other devices available throughout most of their schooling.

Generation Alpha – born since 2010 – they are younger than smartphones, the iPad, 3D television, Instagram, and music streaming apps like Spotify. This is the first generation likely to see in the 22nd century in large numbers.

Growing up with this level of technology means growing up with a completely unprecedented amount of information at

your fingertips. There are kids who have never been more than a few seconds away from the answers to their questions, with everything just a quick search away. They are able to teach themselves about any topic they are interested in without even leaving their bedroom. The current cohort of students come from Generation Z and Generation Alpha. These two generations have grown up with advanced technology as a given in their homes and classrooms. They are digital natives, as comfortable using apps and code as their grandparents were flipping pages.

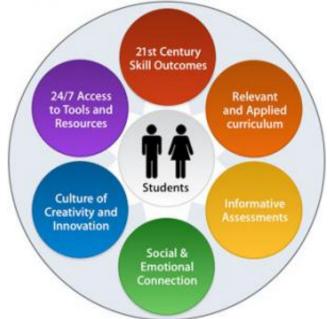
This generation of learners are over protected, over served young adults. These young students spend a minimum of 3 hours a day on social media. This generation does not believe in remaining in a job after graduation for more than 3 years. This generation, yearns for appreciation and they are often referred to as the "Trophy generation", demanding instant feedback.



This generation of students want to belong before they believe. This generation of students are also referred to as the EPIC generation, i.e Experience participation - images connection

This is a generation that wants a guide on their side not a sage on the stage. They are a generation that want to play

before they pay, they want to use but not be used by others, and they long for transformation not merely a touch.



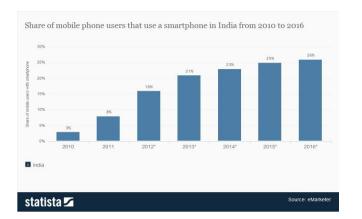
The two buzz words in the 21st century learning is "Mastery of core academics and mastery of the 21st century skills" The students in our schools today are intelligent, independent and extremely capable. They are skilled with technology and comfortable with global and intercultural communication. We can expect that future generations are going to have even more experience in these areas.

Teacher learner and the taught in the 21st century

"Education can be encouraged from the top down but can be improved from the ground up" - Ken Robinson

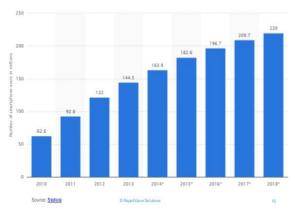
The Learner in the 21st century requires personalized instruction. The "one size fits all" no longer is applicable students in the 21st century are creative and well exposed as they have access to technology. The student in the 21st century thrives on experience and experimentation, thus the teacher handling such students must be equally competent and capable

Share of mobile phone users that use a smartphone in India from 2010 to 2016

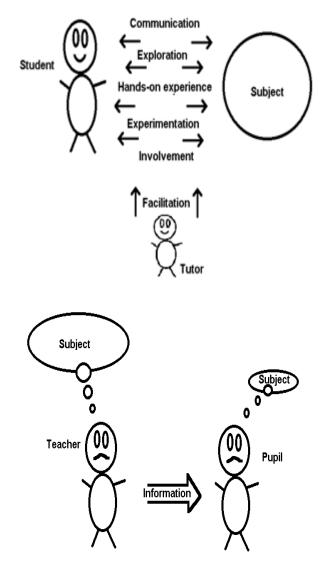


Number of Smartphone Users in USA

Number of smartphone users in the U.S. from 2010 to 2018 (in millions)



Characteristics Of An Effective 21st Century Education



Based on several hundred interviews with business, nonprofit and education leaders, Tony Wagner (2008) had deducted that students need seven survival skills. Teachers need to be empowered as facilitators and motivators for learning, so that they can empower their students in turn.

This shift is great news for teachers. Instead of struggling to give kids all the information they need to succeed in areas the teacher knows little about, they can support students as they make their own steps into different fields. It's about preparing kids to go beyond their parents and teachers, making sure they have the skills to do it, and then helping along the way as they build confidence to achieve.

Teachers need to be forward-thinking, curious and flexible. Teachers must be learners: learning new ways of teaching, and learning alongside their students. Simply asking questions like "what will my students need twenty or fifty years from now? How can I help give them those skills?" can change your mindset, make you a leader, and help you bring about change in your classroom, school and community.

In a time when mental health and wellbeing is one of the biggest challenges facing young people, a 21st century education can give students the skills they need both for now and for the future. Skills like communication, critical thinking and EQ go beyond the workplace: they can help people through the most difficult times of their life. Finding your passion, doing it well, having a sense of purpose and focus, and being able to control your own work and life are all significant steps on the path to wellbeing.

The ability to think critically and creatively, to collaborate with others, and to communicate clearly sets students up for success in their careers, but also empowers them to lead happier, healthier lives.

21st Century: Challenges, Key Skills And Innovation A Teacher Requires

Head of La Trobe's Department of Education, Associate Professor Barbousas says the most important skill a teacher needs in the 21^{st} century is *adaptability*.

'A teacher needs to be able to formulate, construct, arrange, modify and make sense of information so that it understood as knowledge.'

In a crowded curriculum, 'a teacher needs to be able to adapt those imperatives of literacy and numeracy skills social and cultural needs in various contexts.

In other words, a teacher who is able to adapt astute decision making to practical things, situations and events and who is able to provide opportunities to see things in different ways.

Associate Professor Barbousas says one of the biggest challenges for the teachers is working within a structure that is based within the 19th century.

"We are determining practices that are fundamentally within a paradigm that was constructed in the Industrial Revolution. Students are coming into or engaging in a learning space that is actually not constructed by teachers or educators at all."

Associate Professor Barbousas says digital innovation is pushing the boundaries of the 19th century paradigm, and teachers and teacher educators 'can't be doing things the same way anymore'.

The 21st century educators must be lifelong **learners**...and must be willing to learn not only from their peers, but from

their students as well. The most important quality is to be flexible and willing to accept and change.

The Adaptor: The 21st century teacher must be able to adapt the curriculum and the requirements to teach to the curriculum in imaginative ways. They must also be able to adapt software and hardware designed for a business mode into tools utilisable by a variety of age groups and abilities. The educator must also be able to adapt to a dynamic teaching experience, and be able to understand and apply different learning styles.

The Visionary: The educator of the 21st century must be able to imagine and see the potential in the emerging tools and web technologies and manipulate them to serve their needs. The visionary teacher is able to look across disciplines and through curricula. They can make links that reinforce and value learning in other areas. Finally Good 21st century teachers are not teachers in vacuum they are progressive in pushing, for systems change, curriculum sequencing and prioritization of money and prudent strategic scrutiny of decision - making to ensure that the preparation of today's children is always focussed on preparing them for the world they live and work - and not the current world where the teachers have to navigate and dwell - Amy Balridge.

The Collaborator: In the 21st century technology can foster isolation, therefore as an educator we must be able to leverage the collaborative tools to enhance and captivate our learners. Ning, Blogger, Wikispaces, bebo, MSN, my space etc are some tools that are commonly used by educators.

Technology Savy: The teacher in the 21st century must be fluent in tools and technologies that enable communication and collaboration. The teacher must also recognize that technologies can help students learn more and faster. Classroom technologies can also make more efficient use of a teacher's time whether it is used for lesson preparation, lesson presentation, lesson feedback or grading assignments and homework grading assignments and homework. An effective 21st century teacher must be adept in judging the educative and non-educative use of technologies made available to them and their students.

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The Communicator : The 21st century teacher must be a good communicator. The teacher must know and how to facilitate, stimulate, control, moderate and manage classroom discussions and debates.

A Model: The 21st century teacher must model the behaviours that they expect from the students. The Educator must model tolerance, global awareness and reflective practice, whether its the quiet personal inspection of their teaching and learning.

The Challenges: The skills that the students need in the 21st century are not new. Collaboration, critical thinking, problem solving and good communication skills have been components of human development and progress throughout history. Whether it is the invention of early looks to advancements in agriculture, science and technology. What is new new is the changes in our economy and the world that determines the individual and collective success based on possessing such skills.

In order to ensure that the 21st century skills are uniformly given to all students across the globe, educators and policy

makers must ensure the vision is uniformly shared and they must ensure - that the instrumental programme is complete and holistic.

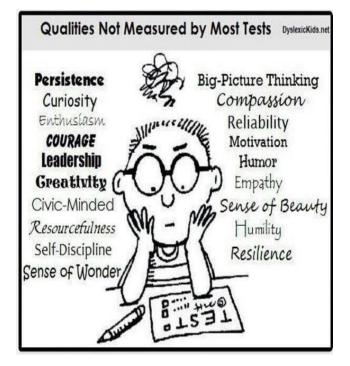
The second most important challenge is to equip and empower the human capital i.e. the educators - in particular the teachers. Finally we need a new assessment system that can accurately measure the complexity of learning and skills acquired by the students.

Fine-tuned curriculum: As educationists it is important to understand that both content and skills are essential while formulating learning modules for student. Teaching self-direction, collaborator, creativity and innovation is also challenging for educators. Most educators believe that giving students more experiences will develop these skills - but experience means that students use a skill, practice means that you give the students opportunities to improve them and work out better strategies. Practice also requires that feedback is obtained from someone more skills that you are. Thus, the 21st century requires teachers to teach skills in the context of particular content. knowledge and treat them both equally.

Professional Teaching: The 21st century requires a teacher to lead the class by simultaneously engaging with content, classroom management and the ongoing monitoring of students progress. Collaboration among teacher is very essential in the 21st century but do schools provide the technical infrastructure, time and space to collaborate? All these raise pertinent questions whether today's school is compatible with the goals of the 21st century skills movement.

Professional development is the need of the hour to equip teachers including lesson planning that deal with high cognitive demands and potential classroom management problems of using student centered methods. As there is a widespread belief that teacher already knows how to do this understanding the challenge of implementing such methods - this has led to ignoring the lack of capacity of the teacher in the field today.

Better testing tools: Assessment is a very important component of education it helps one to evaluate what is not being accomplished in the classroom. No doubt today assessments have been produced to measure thinking skills, that are reliable and comparable between students and schools. Higher level skills like critical thinking and analysis, how students arrive at answers, and collaborated - such measures would involve greater investment on the part of the policy makers and intensive research and development effort to faster genuine change. Thus, without better curriculum, teacher expertise and assessment the emphasis on "21st century skills" will be a superficial one



Characteristics of a 21st-century teacher:

• Learner-Centered Classroom and Personalized Instructions

- Students as Producers
- Project-Based Learning
- Go Global
- Be Smart and Use Smart Phones
- Use Twitter Chat
- Connect
- Build Your Positive Digital Footprint
- Code
- Innovate

• Keep Learning and update yourself

Thus we can see that, the need of the hour is not reform in Education, but revolution in Education

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