# Reinventing the Virtual Classroom for Learners: A Portal into the Future of Education

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Abstract- Ancient tales will tell of a time in the past when learners and educationists rebelled against the forces of a futurist virtual realm. But given the current scenario, we seem to be living on the cusp of a new and incumbent reality. The 21st century came with its age of the internet and is here to stay and grow for generations to come. Online platforms and Information Communication Technology (ICT) tools are swiftly becoming a way of life; and as educationists and educators we can no longer turn a blind eye to its vast prospects. With a new advent in time and medical challenges, an era of futuristic change and development arises. The world of resilience dawns new hope; a promise that humans though not indestructible, their fighting passion to live and push through, breaks ground for virtual immortality. Although the recent Covid-19 pandemic has pushed for virtual learning, the true value and extent of this field seems to be misunderstood and under-utilized. A virtual education means not just providing exposure to a broader interactive and interconnected world but also as a means to narrowing any learning gaps, vocational possibilities and more. This paper projects a strong belief that, having emerged somewhat victorious from our battle against a pandemic, victory is a step into the future of education; and in doing so revolutionizing the virtual space for learners, bringing it to the mainstream of education. It also explores the possible ways of teaching and catering to a multiplicity of learning abilities, and methodologies, as well as highlighting its merits and demerits thereby making it an effective study in the future of learning.

Index terms- ELT Methodologies, Future of Learning, Information Communication Technology (ICT) tools, Learner abilities, Merits and Demerits, Online platforms, Virtual education

## 1. INTRODUCTION-

 ${f W}$  ith the 21st century dawned a new world;

the age of the internet. Social media platforms like Facebook, Twitter, and Instagram among countless others, have dominated the scene for a considerable amount of time, creating a generation of digitally innate beings.

Gen X were the first digital creators who were soon taken over by tech savvy Millennials or Gen Y, whose place was soon superseded by Gen Z, the digital natives; proving that along with a global evolution, each new generation is evolving technologically as well. Psychologists call it the 'Flynn Effect', which describe each generation as having developed more intelligent and progressively more advanced than the previous ones. This means not just higher IQ levels, but also more technological adaptability; all from a very young age. All of a sudden, the idea of a future superhuman doesn't seem so far-fetched any longer, as one need only observe an infant or

toddler learning to use a tablet or smartphone without the assistance of a generation of digital creators or tech savvy enthusiasts. Moreover, the current pandemic situation is a further propelling force into the development and need of a virtual environment for our tech savant Gen Z s.

For a generation born in and subsequently growing up in a futuristic world, virtual education seems like a promising avenue to venture into. For us; the X, Y and earlier generations, online learning may not be entirely understood, utilized or even acceptable. However, for future generations to come, it will be soon be a normal way of life with its endless possibilities and prospects.

As educationists and educators we must now begin to open up to and adapt to a broader dimension within the digital realm and refurbish the archaic teaching spaces to accommodate our future learners and educators.

## 2. OPENING UP THE PORTAL TO A NEW

## DIMENSION OF LEARNING-

#### 2.1 Digital Boot Camp

For assured growth and awareness, we need to be prepared to take digital preparedness like a bull by the horns. We are already living in a digital world where online transactions, e-payments and crypto currencies like Dogecoin and Bitcoin are fast becoming a reality, not to mention a world of space exploration and travel. So it is a little hard to believe that we haven't evolved as much in the field of digital education.

Teacher training courses and certifications, colleges and universities all need to design and offer trainings for ICT tools, online platforms, newer methodologies suited for a communicative digital classroom and more.

A more positive approach to this new method of teaching needs to be streamlined, teachers and learners need to be made aware of the tools and approaches that will only help to reduce the amount of time, effort and money they used to spend in a physical classroom. Not to forget that the learning gaps could also be reduced as well as the endless possibility of vocational positions being created by this field.

Creation of MOOCs (Massive Open Online Courses), LMS (Learning Management Systems) portals, Cloud classrooms, Virtual Reality Simulations among other platforms could be our portal into the virtual dimension of education.

# 2.2 Next dimensional vehicles (ICT tools and other means)

In a bid to get to the future of education, one needs to have a good knowledge of the different means and tools to get the work done.

Some prominent ICT tools to aid the system include-:

- Video conferencing/ Meeting platforms-Zoom, Google Meet, Microsoft Teams, Livestorm, Zoho meeting, Pexip, TeamViewer, Skype, Cisco Webex, Google Hangouts, ezTalks Meetings and more.
- LMS platforms- Moodle, Google Classrooms, OPEN, TalentLMS, MyClassCampus, WiZDOM LMS, WizIQ, ACADASUITE, ProProfs Training Maker, among countless others.

- Online Exam Testing Platforms- Google Forms, ProctorU, Talview, Examus Al Proctoring, Pesofts- Free Online Exam, FlexiQuiz, ClassMarker and other testing platforms.
- Quiz and Gaming tools for the classroom- Kahoot, Quizlet, Flipgrid, NearPod, Tackk, ClassDojo, JeopardyLabs, Padlet, Quizzizz, TurtleDiary and more.

Granted though the above mentioned ICT tools may not all be free or have extremely communicative, learner-friendly features; newer and better conferencing platforms, learning tools, proctored sites for asynchronous testing and evaluation are constantly being designed and reinvented in a daily bid to win more consumers. So it is safe to say there is no dearth to free, userfriendly and convenient webbing platforms in the near future.

#### 2.3 Using next dimensional vehicles (ICT tools and other means) to teach and cater to a multiplicity of learning abilities without comprising on current ELT methodologies

In order for educators to get a glimpse into the methods of using ICT tools to suit their learners' abilities, and keep in accordance with current ELT methodologies, here are some insights into a future in communicative and well-integrated online education.

Adapting to Learner abilities- The virtual platform can accommodate the different learner styles i.e. Visual (spatial), Aural (auditory), Verbal (linguistic), Physical (kinaesthetic), Logical (mathematical), Social (interpersonal) and Solitary (intrapersonal). Just because the classroom isn't a traditional space anymore, doesn't mean we necessarily forfeit on its prime methodologies.

- Visual learners' needs can be most easily catered to in the virtual classroom as they traditionally prefer learning with visuals, power points, videos and more which are a given in the online setup through the screen share, whiteboard and computer audio share facilities. Since the entire class is in the virtual mode most of the material is taught visually, thereby allowing these students the highest benefit in the learning process. Futuristic facilities like virtual reality classrooms, virtual simulators and AI equipment would add to this learner's engagement in the learning process. *Google Earth VR, Number Hunt, Apollo* 11 VR, 4D Anatomy, The Body VR, Immerse Me and Mondly are a few of the ICT tools that would aid in this process.

- Auditory learners too don't seem to face too much of a problem in an online setup, as most of the platforms have a connection to the device's microphone, camera and speakers allowing for learners to listen and share easily. Here too, these learners have an advantage as most of what is taught is auditory. MOOCs, Self-Paced courses or Pre-recorded courses also work well with these learners. *Canvas Network, Udemy, Coursera, edX, WizIQ, and Khan Academy* are a few platforms to name that provide MOOCs and self-paced courses. Other tools that cater to auditory needs include *Spotify, Audible, Podbean* etc.

-Kinesthetic learners may be the most susceptible to adverse effect by the virtual realm. However, this too can be easily tackled with activities like a Treasure Hunt or Clue Hunt, Board Games, Quizzes, Art Gallery, Miming, Role-palying etc. that can be modified to fit in with the virtual norms. Here is where tools like Kahoot, Ouizlet, Flipgrid, NearPod, Tackk, ClassDojo, JeopardyLabs, Padlet, Quizzizz, TurtleDiary and more, come in handy. Kinaesthetic learners like visual-spacial learners would also greatly appreciate virtual reality classrooms, virtual simulators and AI equipment. SimmLabs, Uptale, iSpring Suite Max, BranchTrack, Articulate 360 are a few tools and platforms that deal with virtual simulation.

- Mathematical learners like to solve puzzles, decipher codes, fix problems, come up with solutions; involving skills such as critical thinking and decision making which can also be easily catered to in a virtual setting. Quizzes, Puzzles and critical thinking games are readily available on many ICT tools as mentioned above and can be integrated into the learning process to help these learners. Pad, Maxima, Geometry Pattern Shapes, FluidMath, Geogebra and SymPy are a few good tools to name.

- Interpersonal learners' needs could also be easily accommodated with activities ensuring a more communicative approach i.e. using conferencing platforms that have the BOR i.e. breakout room facility. (most platforms do have the option available for either free or a nominal charge) Using this facility helps students to discuss, do group or paired work without too much interruption. It makes the practise more communicative and reduces Teacher Talk Time (TTT). Platforms like *Zoom, Google Meet, Microsoft Teams, Zoho meeting, Cisco Webex, SeeSaw, Debate Graph* and more are great for these features.

- Intrapersonal learners may also seem to adversely affected by the virtual realm. However, these learners could be helped with the flipped classroom approach i.e. where they are given activities and tasks to introspect, analyze or research about topics, project-making, self-introspection and they need only produce those ideas and thoughts in the classroom. In a synchronous classroom setting, they could be given more activities like diary entries, blogging, creative writing, mock speeches, and advice giving etc. which helps cater to their analytical and introspective qualities. Journey, MindNode, Padlet, and Strides are some tools to aid this learner.

The virtual platform holds endless possibilities in adaptive learning strategies and can clearly be used to aid different and their abilities learners and intelligences while staying in tune with the latest ELT methodologies. These tools can even improve the engagement and learning pace of the newer digitally innate generations, all without even remotely compromising their holistic on development; thereby making it a perfect avenue to venture into for the future of education.

# 2.4 Benefits of a new dimension of virtual education

Investing in a new space for education will never be a lost cause or an attempt in vain. ICT tools and platforms have existed for a while now and though it may be more apparent now due to the current pandemic, its use and practicality were long thought of. The only new objective that crops up is the constantly growing need for us to learn and adapt to its features.

Mankind is known for its fighting instinct to survive and thrive despite the trying times and conditions that threaten to defeat its existence. Virtual education may just be our ticket to increasing our chance of survival.

Virtual education can benefit not just the teachers, but also the learners in a plethora of ways. The time, money and effort spent on a daily basis in the physical world may be reduced and conserved through the virtual one; cutting down use of paper and other stationery items, reducing pollution and ultimately saving bodily energy and diverting it to other productive tasks. For learners and educators this entails putting in a minimum input for a maximum output in the long run. Since all the information is easily stored into the computer, it makes for reduced work and fewer working hours. MOOCs and other gaming ICT tools ensure that the learner is actively participating and engaged in the process of productive learning. As we have already established earlier how the newer generations are more digitally adept, it makes for more engrossed learners and perhaps even catering to a new type of learner; a virtual simulation learner. With virtual reality and simulation in our hands, the possibilities of teaching are endless; imagine sitting in the comfort of your home and yet virtually transcending borders, meeting people, building bonds, learning languages or experiments, conducting all within you could hospitable confines. So potentially be in a million places at once, making the world an even smaller and more remote field to operate in.

Virtual simulation is already in use for training pilots, astronauts and the likes to deal with and learn using practical means in a near real environment. Bringing this world of virtual reality, simulations, AI equipment and/or robot or hologram educators could reduce chances of viral infections, contagious diseases or other problems caused by exposure to elements in the natural world. And it's not just about saving humanity or saving the world at large, it would also bring cause to more employment and newer vocational pathways. Creating a virtual world doesn't necessarily mean losing out on teachers and educationists, in fact it increases opportunities and lucrative means for industrial growth- virtual educators can use up saved time and energy to invest in more classes or teach at multiple online educational institutes. Business in Information Technology, Artificial Intelligence, and creation of ICT tools, apps, platforms among other areas would also take off, possibly branching out into further and more micro skilled avenues to support the system at hand.

Overall, though the claims seem quite farfetched and unrealistic in the current world, we need to take a step closer to understanding and accepting that we may soon require and rely on these futuristic ideas.

# 2.5 Limitations of this new futuristic dimension

The concept of virtual education taking precedence over the traditional classroom does seem like a looming possibility, though it doesn't come without its fair share of limitations.

As earlier mentioned, using a host of platforms, ICT tools and AI equipment may seem the like order of the day in a new age of education. We need to look at the multiple flipsides to this means as well. For instance, one of the biggest drawbacks to a virtual classroom is the lack of human touch or emotion. Physical classrooms have a better platform for proper emotional and social growth in a physically interacting child; and communicating can be reinvented but never replaced by the virtual realm. As a result, the future generations may see reduced socio-cultural or interpersonal

skills; they may even evolve to reduce kinesthetic learner needs, completely relying on tools and equipment for their understanding and development. Learners would probably also develop less of an emotional connection to their educators, to knowledge and even towards their peers (if at all they have any). Receiving information at the click of a button would significantly reduce its value, not to mention the grim possibility of not being able to rely on their own intelligence in the event that virtual intelligence fails.

A virtual education also means tons of equipment, billions of dollars in investments and a detailed plan of its functioning. Many countries do not have the means to afford such avenues, still others may refuse to allow smooth flow of funding to a mere futuristic idea, let alone the billions of people from developing countries that do not own or have limited privilege to the internet, latest gadgets and/ or other necessary equipment.

Virtual education also has a crippling need to be invasive and obtrusive, reducing the privacy of individual lives and playing them into the hands of hackers and other ill-wishers. People from more closely knit cultural backgrounds tend to be fiercely protective of their privacy and refuse to be invaded by a webcam watching their every move in the virtual space.

Other problems like failure to truly check learning outcomes, a more stunted physical, emotional, social and psychological development and inadequacies in dealing with learner requirements, styles, methodologies in a truly communicative and effect manner are just some of the limitations to this new dimension of teaching and leaves more to be desired.

In hindsight, though the avenue can be a great boon for future society, it needs to be judiciously developed and thought out. Perhaps, keeping it as a permanent yet flexible and optional resource, running

parallel alongside a traditional education; a blended future dimension.

## 3. CONCLUSION-

The present paper endeavors to revolutionize the virtual space for learners and bring it to the forefront of mainstream education. It has managed to explore the endless possibilities and has suitably succeeded in presenting it as a plausible case for the future of education.

The paper also sufficiently contributes to the needs and requirements of the learners of varying backgrounds, ages and learning abilities, the possible pedagogies and methodologies of teaching.

The information aids educators and educationists in knowing how and which ICT tools and platforms to use to cater to learner needs and communicative sessions. Lastly, it also weighs out the merits and limitations of this form of education to help in understanding this vast double edged sword.

Most of all, it hopes to provide a looking glass into the future of education; reducing the stigma of online learning and increasing the need for a new necessary evil.

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