

# 21st Century Teaching and Learning: What it entails...

SHEELA PARAMASIVAM & KAARTHIYAINI SUPRAMANIAM

Akademi Pengajian Bahasa, UiTM Kampus Seremban & Fakulti  
Pendidikan UiTM Kampus Shah Alam

The onset of the Covid19 pandemic has put everyone on a learning curve, be it in the education field, business sector, or even domestic life. The restriction of movement as well as not having face to face meetings has become a real challenge for all of us. This is also the scenario in the teaching and learning domain, with both academics and students having to embrace Online Distance Education (ODL). We now have online classes, online webinars and meetings and even celebrations such as students graduation and convocation, not to mention co-curricular activities are conducted online. Various online platforms and technology is utilised to achieve this need. This then brings to mind the question: where are we heading in education, what are the challenges of the 21st century education and how is it different from the traditional setting we are so accustomed to?

One of the most noticeable aspects of the 21st century classroom is that teachers are now seen as “facilitators” of student learning and not merely as “content” providers. The focus of the 21st century classroom is that students experience the environment that they will enter as 21st century workers. Thus, the need for more interdisciplinary learning as well as collaboration in all aspects of education including the industries and workforce students will enter. According to Salleh (2019), the 21st century is seen as the century of digital literacies, technological advances, multicultural societies, human mobility, global communication, social networking, innovations and creativity and inclusiveness. In other words, 21st century students need to develop the necessary 21st century skills.

## **Changes in the classroom**

The 21st century classroom is student-centred. As such, learning can occur anywhere using a variety of platforms and the need for physical classroom setting may no longer be necessary. These past two years, owing to the pandemic, we have witnessed and experienced online learning happening everywhere. There were many challenges to face such as Internet connectivity and infrastructure. Students learn by “doing”, having real hands-on experience and the teacher is-

now a “coach” helping students work on their assignments or projects. Subjects learnt are now interdisciplinary and no longer in isolation. For example, a project in Science may now require the use of ICT skills or mathematics in completing projects or assignments. Textbooks too may no longer be a necessity as seen in traditional classrooms as now there is unlimited access to materials and information on the various social platforms and without fail, Google is now every student’s best friend to seek information. Usage of multiple sources of technology to find and gather information is the “new norm”. Technology is now the other instructor besides the teacher. In this new mode of teaching and learning, there is collaboration as students now form their own groups and this too gives room to cater to individual needs or special needs.

The focus of learning too is now different. If in the traditional mode, it is more of memorising and recalling information, the 21st century classroom focuses on “learning how to learn”. Students “learn by doing” and this is evaluated in the form of assignments, projects, quizzes etc. Courses too now cater for performance-based assessment and not 100 per cent exams. Students are required to know how to find information and use it appropriately to fulfil their course needs as well as familiarise themselves with technology in completing projects and assignments. This is all with the aim of creating global and lifelong learners and preparing them for the workforce.

### **Role of the 21st Century Teacher**

Teaching is a noble profession where teachers impart their knowledge and expertise to their students. As such, the 21st century teacher is now seen more as a facilitator than a content provider (Ansari, 2013). Moving with the change in learning styles, the 21st century teacher no longer teaches in isolation. He or she needs to get the academic fraternity of the institution involved. This being the stakeholders of the institutions such as the administrators, board members, parents, students, alumni, NGOs who now need to work hand in hand with the teacher to ensure a successful learning environment. In order to deliver effectively, the 21st Century teacher needs to build rapport with his/her students as well as the institution stakeholders. They also need to keep abreast with the changes in instructional materials to impart the latest knowledge and methods to their students. This can be achieved by them attending short courses and now in the ODL mode attending online webinars as well. As learning is a life-long matter, the 21st century teacher needs to be an active participant in their own learning. Teachers in the 21st century enjoy access to information and resources that their predecessors could not imagine state-of-the-art information available on the internet 24/7 (Irving, K). As such, they need to embrace technology and utilise this in teaching and learning.





## Qualities of the 21st Century Teacher

- **Passionate about the teaching profession**

The 21st Century teacher ought to be passionate about the teaching profession and his/her job and the teaching profession. For him/her, teaching should be a job and not merely to get a paid salary. Only then will he or she give her best in the job.

- **Good communication skills**

Having good interpersonal skills, both verbal and non-verbal, is crucial in engaging rapport with students and stakeholders to establish a conducive working environment. These skills include honesty, enthusiasm, efficiency, curiosity and liberating themselves from being bound to prescribed teaching materials by developing their own customised materials for the students will definitely win them over. Motivating students, especially the 'uninterested' ones is the ultimate goal of the 21st Century teacher.

- **Effective Instructional methods**

The ability to teach well and having knowledge of the subject matter is utmost important. The 21st century teachers need to adapt to the various learning needs of the students using different instructional methodologies.

- **Life-long learner**

As the saying goes "learning is life-long", the 21st century teacher needs to realise that while he/she is imparting knowledge to students, he is also learning, absorbing and gaining knowledge from students. It's a two-way process and the teacher should not be shy to learn and share along with students. Students being the Z generation and 'digital natives' may possess more technical skills and it's not wrong to learn and share along with them.

- **Life beyond classroom**

The 21st Century teacher is aware that teaching-learning is not confined to the walls of the classroom but extends beyond it. They need to also be responsible for the welfare of their students even outside the classroom. They show care and go the extra mile by extending help to students in completing their assignments, having consultancy for projects or even inquiring about the students being absent in class. This is to ensure wholesome individuals who are ready to join the workforce are created as a product of the teaching-learning process.



## Skills needed for the 21st Century classroom

The 21st century has brought about a drastic technological revolution. With Industrial Revolution 4.0 and 5.0 in teaching and learning, the demand in teaching and learning has shifted from traditional classrooms to technology-enabled platforms that compels students to have self-learning skills. As such, the 21st century classrooms harness the potential of digital technology whereby now students have access to open educational resources. IR4.0 also requires students to be trained, mentored and facilitated and not taught in the conventional way by the teacher (Oke and Fernandes, 2020).



Students of today are leaders of tomorrow. As such, there are 8 important skills needed for the 21st century classroom. These are:

- Rational thinking and problem-solving tactics
- Collaboration across social circles and networks
- Leadership skills and influence
- Adaptability skills
- Efforts and Entrepreneurialism
- Effective interaction and conversational skills
- Examining and Manipulating information skills
- Curiosity and creativity

(Source: Ansari, U. (2013). Image of an effective teacher in a 21st century classroom. *Journal of Educational and Instructional Studies in the world*, 3(4)(8). ISSN: 2146-7463)

Students of today mostly comprise of Gen X, Y and Z. They are called “digital natives” while teachers are referred to as “digital immigrants” (Jones et.al, 2010). This being the transition of the role of the teacher from traditional classrooms to modern technology equipped learning platforms. Students today live in a world of technology information. Owning a mobile handphone has become a necessity not only for communication in daily life but having to access the various learning platforms available. Youngsters of today, being the teachers or students are exposed to multi-tasking using technology in embedding videos, pictures in their assignments or projects and presentations. Doing an oral presentation today is made more fun by using technology in the form of visuals, sound, songs, pictures and videos. Research and projects with various communities is being encouraged as part of the learning curriculum. Incorporating higher order thinking skills (HOTS) has become a norm. Students practice self-directed learning and have become independent learners. They learn through teamwork, collaboration and feedback and no longer rely merely on textbooks for knowledge. Knowledge is gained and constructed through hands-on experience. Thus, the 21st century teacher is viewed as an enabler of these skills.

Here is a glimpse at the 20th century classroom vs 21st century classroom.



The reality on the ground in the new norm



### 20th century classroom

- Physical setting confined to classroom
- Memorising facts
- Lessons on LOTS(Lower Order thinking skills, understanding and comprehension: Bloom taxonomy)
- Text-book based
- Passive learning
- Learners work in solitude, isolated classroom, closed campus
- Teacher-centered( teacher is source of content)
- Single discipline
- Exam oriented
- Focus is to pass exams
- Technology enabled

### 21st century classroom

- Digital platforms, learning can happen anywhere
- Hands-on-knowledge
- Lessons on HOTS( Higher Order thinking skills, analysis, synthesis and evaluation :Bloom's taxonomy)
- Hands-on experience and research
- Active learning
- Learners collaborate in teams, cooperative learning, and global networking
- Student-centered (teacher is facilitator)
- Inter-disciplines
- Assessment-based
- Focus is to enter workforce
- Technology infused

In conclusion, the 21st Century teacher needs to be proactive rather than reactive. The saying “The pen is mightier than the sword” is true as teachers need to see their role as creating a future generation of leaders in their students through their approach in teaching and learning. Teachers are key persons in ensuring the National Education Policy is achieved. In doing so, the 21st century teacher needs to change and adapt to the curriculum, teaching practices, learning spaces and approach to the use of technology in the current era. They need to be creative in creating interesting and relevant materials and activities for students. The 21st century teacher should not only know how to use technology but also how to teach with technology effectively while imparting good moral values to students in producing holistic and global students.

### References

- Ansari, U. (2013). Image of an effective teacher in 21st century classroom. *Journal of Educational and Instructional Studies in the world*, 3(4)(8). ISSN: 2146-7463
- Educational and Instructional Studies in the world, 3(4)(8). ISSN: 2146-7463
- assessment “of” and “for” learning. *Science Educator*, 15(1),13-20.
- Md Amin, M. T. (2018, October 10). *Cari langkah terbaik tangani insiden lemas*. <https://www.bharian.com.my/rencana/komentar/2018/10/484125/cari-langkah-terbaik-tangani-insiden-lemas>
- Oke, A., & Fernandes, F. A. P. (2020). Innovations in teaching and learning: Exploring the perceptions of the education sector on the 4th industrial revolution (4IR). *Journal of Open Innovation: Technology, Market and Complexity*, 6(2).
- Salleh, S.E. (2019). Critical thinking as a 21st century skill: conceptions, implementation and challenges in the EFL classroom. *European Journal of Foreign Language Teaching*, 4(1).