

Teaching Methods In The 21st Century

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Introduction

With one prominent exception, 21st-century teaching and learning best practices are essentially the same even if the century numbers are inverted. Sound, effective educational best practices in the 21st century share specific strategic, timeless characteristics. To that end, we have identified fourteen experiences based on Hallmarks of 21st Century Teaching and Learning that can be used as touchstones in the educator's pedagogical approach to teaching and learning.

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Flipped Classroom

The flipped classroom is a well-known term in the pedagogical method. You have known about this undoubtedly. Its name, 'Flipped Classroom,' makes it unique. It is one of the vital modern teaching methods that have been used these days. In this method of teaching, the teaching procedure takes place in a flipped manner.

Unlike traditional ways, students study new material or content at home and practice the same at school. The method is the reverse of providing content at school and asking students to rework it or practice it at home. The students practice this method at home by watching a video tutorial, searching online, or working on the content usually shared by the teacher. They do not need to complete the homework at home; instead, they end it at school.

Through the practice of modern flipped classroom teaching methods, students get enough time to grasp the topic, unlike in school, where they get only a few minutes to understand the content. If necessary, they can work more on one issue.

Students prepare themselves with the content before arriving at school, and if they face any doubt, they can discuss it in the classroom or ask the concerned teacher. They can also suggest and share their ideas related to the content with other classmates. Moreover, another advantage of this modern teaching method is that students would not have to suffer due to their sickness. Sick days won't interrupt their learning.

The flipped classroom is a renowned term in the pedagogical technique. The method is the converse of providing content at school. In a flipped classroom, students watch a video tutorial, research online, or work on the content shared by the teacher at home. They then solve class assignments based on this content in school. Students prepare themselves with the content before arriving at school, and if they face any doubt, they can discuss it in the classroom and resolve their queries. They can also recommend their ideas related to the content and share them with their classmates. Through the practice of flipped classrooms, students get enough time to grasp the topic.

Project-Based Learning

Project Based Learning is the primary gateway through which the Hallmarks are realized. There are consistent characteristics that make a Project viable. Some of these are that Projects should be:

- Hands-On
- Collaborative
- Multi-Disciplinary
- Student-Centered
- Real-Time
- Real-World
- Flexible

Just as any discussion about the design of 21st-century teaching/learning spaces includes, by nature, the flexibility of those spaces, the method of 21st-century teaching and learning must also be flexible. With technology an integral aspect of our lives, our students have individual learning styles that must be considered more than ever. PBL provides many opportunities for students and teachers to be engaged in ways best suited to their optimum learning styles.

With the arrival of new information and communication technologies in schools, new teaching methodologies and new versions of existing methods, now revised and updated for

the digital generation, have emerged. One of the most used classes is Project-Based Learning (PBL). In essence, PBL allows students to acquire essential knowledge and skills by developing projects that respond to real-life problems.

Teaching based on projects or integrated tasks is today the best didactic guarantee for the effective development of critical skills while acquiring knowledge of the curriculum's content. Starting from a concrete problem, instead of the traditional theoretical and abstract model, sees notable improvements in students' ability to retain knowledge and the opportunity to develop complex competencies such as critical thinking, communication, collaboration, or problem-solving.

Cooperative Learning

“Stronger together .”In a simple way, cooperative learning is a methodology teachers use to group students and, thus, positively impact learning.

The proponents of this model theorize that working in a group improves students' attention, involvement, and acquisition of knowledge.

The final goal is always group-oriented and will be achieved if members successfully perform their tasks.

The main characteristic is that it is structured based on forming groups of 3-6 people, each member having a specific role. To reach the objectives, it is necessary to interact and work in a coordinated manner.

In a cooperative learning context, the final goal is always shared and will be achieved if members successfully perform their tasks. On the other hand, individual learning has students focusing on achieving their objectives without depending on the rest of their classmates.

Collaborative Learning

When students were asked to revise the topic or syllabus during an examination or on regular

days, they used to fix it in isolation or at home. This practice was widespread in traditional teaching methods. Schools are coming up with collaborative learning to deal with this issue or provide a more useful platform for students. In this modern teaching method, teachers form a group of students where they can solve their problems, debate on topics, and clear their queries. This helps develop social skills and allows students to understand the subject faster.

In this modern teaching method, every student is a part of the success of a group as they help each other to reach the desired result and learn to communicate with each other. Learners learn to tolerate others, develop skills to listen to others, and work in a team. They will be able to meet different personalities and get a genuine review of their work.

Students present their ideas and expect a response in group learning. It allows them to exchange their creativity and gain more knowledge. In return, it helps them to learn to face healthy criticism and cross-questions. So, school management should choose a collaborative teaching method to teach their students. They need to make a few changes to the classroom layout and replace desks with whiteboard surfaces. So, the groups can work together with ease.

Gamification

It is a well-known fact that children love games, whether it is online games or playing games on the field. Teaching through games is one of the essential modern teaching methods that have been in use in contemporary teaching ways. The significance of gamification in teaching has been chiefly seen in the elementary and preschool systems. Learning through playing games won't even be realized by students, and it motivated students as well and proved effective not only for preschool students and any age.

The responsibility of teaching through

gamification is on teachers as they should plan or design projects that will be suitable for the students of their respective ages. They should incorporate attractive measures to connect the students for a longer time and keep their interest alive. Teachers can also take the help of the online platform under gamification, and teachers can organize online quizzes, puzzles, or brain games. This modern teaching method is a fun learning method to teach.

The integration of game mechanics and dynamics in non-ludic environments, or gamification, has been practiced for a long time. The phenomenon has gathered unprecedented dimensions in the past few years, particularly with the evolution of video games. It is one of the most discussed current and future EdTech industry trends.

Since, in the '80s, games with an international vocation such as the "Carmen Sandiego" series or "Reader Rabbit" have gained worldwide popularity, the development of educational titles has increased consistently. Not only those aimed at the general public but, more often, those specifically designed for students and particular courses.

Engagement is an essential element of learning. There is no better way than to teach through games, enticing characters, and intriguing situations where the students want to stick around till the end of the story without overshadowing the concept or pedagogy.

Problem-Based Learning

Problem-Based Learning (PBL) is a cyclic learning process composed of many different stages, starting with asking questions and acquiring knowledge that, in turn, leads to more questions in a growing complexity cycle.

Putting this methodology into practice does not only mean the exercise of inquiry by students but converts it into valuable data and information. According to several educators, the four significant advantages observed with

the use of this methodology are:

- The development of critical thinking and creative skills
- The improvement of problem-solving abilities
- Increased student motivation
- Better knowledge sharing in challenging situations

Project-Based Learning

- With the advent of new information and communication technologies in schools, new teaching methods for digital teaching and new editions of existing plans have been revised and updated. Project-based learning (PBL) is the most widely used class today.
- At its core, PBL allows students to gain essential knowledge and skills by developing projects that respond to real-life problems. Staying on top of tasks is the best advisory certification for effectively developing critical skills and gaining knowledge of the content of the curriculum.
- When starting with a composite problem instead of the traditional theoretical and abstract model, there is a significant improvement in student's ability to retain knowledge and the opportunity to develop complex skills such as critical thinking, communication, collaboration, and problem-solving.

Design Thinking

Education has always been a prolific space for innovation. Teachers worldwide are constantly developing new ideas and methodologies to introduce in the classroom, making the best of the tools at their disposal.

Design Thinking (DT) applied stems from industrial designers and their unique method of solving problems and satisfying the needs of their clients. Applied to education, this model makes it possible to identify with greater

accuracy the individual issues of each student and generate in their educational experience the creation and innovation towards the satisfaction of others, which then becomes symbiotic.

Thinking-Based Learning

Beyond the debate around the effectiveness of learning by memorizing facts and data when discussing education, one of the most talked about aspects is the need to show students how to work with the information they receive at school. Teach them to contextualize, analyze, relate, and argue. In short, it converts information into knowledge.

This is the goal of Thinking-Based Learning (TBL), developing thinking skills beyond memorization and, in doing so, developing practical thinking on the part of the students.

Beyond the debate over the effectiveness of learning by memorizing facts and data when discussing education, one of the most talked about issues is the need to show students how to work with the information they receive at school. Teach them to contextualize, analyze, connect, and reason. Briefly translate information into knowledge.

The goal is to develop thought-based learning (TBL), developing thinking skills beyond memorization and, in doing so, practical thinking on the part of students.

Spaced Learning

'Spaced learning is a comparatively new method introduced in the teaching-learning process. Here, the teachers repeat the same lesson repeatedly but at spaced intervals.

The gap is intended to rejuvenate the mind by playing physical activities or mindfulness methods, which prepares them for the upcoming session of the same lesson. This method gives the students intervals to inherit the knowledge and create connections between repetitive sessions before moving forward to another chapter. This method is best used to prepare the

students with basic concepts.

Spaced learning is one of the modern teaching methods which teachers are following. In this method, teachers repeat a lesson multiple times until the students understand. However, the teacher repeats the course with two 10-minute spaces (breaks) in between the classes.

The gap is meant to refresh the mind by playing physical activities or mindfulness techniques which prepares them for the next session of the same lesson. This method allows the students to inherit the knowledge and create connections between learnings. Before moving forward to another chapter, this method prepares the students with the basics.

It truly defines a proverb that a healthy mind is in a healthy body. So, the physical state of students should be sufficient for the growth of their mental state, which is crucial to gain knowledge. Spaced learning also can reduce obesity in school-going children, which can be seen more nowadays, and it improves a student's mental and physical health.

Crossover Learning

Crossover learning uses both informal and formal education and teaching environments. This method involves using a traditional classroom setting to teach content and provide study materials to add knowledge and then using the informal atmosphere of teaching in museums, seminars, and after-school places to generate curiosity and interest through questioning.

The not-so-common modern teaching method is Crossover learning which uses both formal and informal teaching and learning environments. It is one of the perfect ways to give the best education to learners, and crossover learning effectively engages learners and provides authentic yet innovative results.

A formal setting is a traditional setting, i.e., a classroom, to provide education. At the

same time, the informal teaching environment is museums, seminars, and after-school places. Schools and colleges teach with content, study material, and everyday experiences to add knowledge.

Teachers should introduce new queries or questions in the formal setting and answers for which students should try to find in informal settings, such as by exploring that question during their museum visit. The learners can take notes or collect pictures as their data and produce them as the information once they are back in the classroom, and they can share collected information with classmates and discuss it for better results.

Competency-Based Learning

By definition, all learning methodologies have the acquisition of knowledge, the development of skills, and the establishment of work habits as their primary goals. Competency-Based Learning (CBL) represents a set of strategies to achieve this.

Through assessment tools such as rubrics, teachers can go through the academic curriculum without significant deviations but focus it differently, putting into practice real examples and, thus, transmitting to their students a more tangible dimension of the lessons.

Self-learning

Curiosity pushes the learner to learn new and more consistently. It drives the learners to learn and memorize large text spaces that they will either miss gratefully or forget immediately. Through their curiosity, students get motivated to explore the subjects they are interested in. Teaching students to operate the internet and find results themselves helps them to be self-dependent and gives them a deep understanding of the content.

A teacher should allow the students to bring new ideas and work on them to develop their brain and ability to work alone. This modern

teaching method plays a significant role in learners' education periods.

Teaching students to navigate the internet or research information in libraries and find results themselves helps them to be self-dependent and gives them a deep understanding of the content. Through their curiosity, students get motivated to explore the subjects of their interest.

VAK Teaching

VAK is a modern teaching method whose effects can be seen clearly. We divide learner into three categories: Visual, Audio, and kinesthetic (movement). One needs to recognize to which type they belong, or the teacher must know which category her students relate to.

In VAK, V is visual means seeing the data, A is Audio means gathering information by hearing the data, and K is kinesthetic means feeling the data. A teacher should keep the category of students in kind while teaching because some students catch the information by seeing, hearing, or feeling. So, they should present the same material in different ways.

The VAK teaching method was introduced in the 1920s to help children with dyslexia. However, its impact is more effective in the modern era. In the time of the internet, watching and learning through videos has become a popular new medium of teaching. Students grasp fast when they see, hear or feel instead of reading the material. And also, a learner is not limited to any one of the media as they can use all three mediums of instruction.

Having its roots in the Multiple Intelligence theory, VAK is a modern teaching method.

Learners are categorized into three divisions: Visual (learning by seeing the data), Audio (gathering information by hearing the data), and Kinesthetic (learning by movement or by feeling the data). The teacher needs to recognize the kind of learner and present the same material differently.

Being in the 21st century, there is an urgent need for educators to figure out the best ways for learners. The lack of the hour is to introduce technological, economic, and cultural forces in the education system at all levels and change the core of the traditional educational system to promote experiential learning. At Birla Brainiacs, we have adopted most of these innovative pedagogies to develop self-learning habits and help them to become lifelong learners.

Conclusion

The overarching caveat, of course, is that technology in the 21st century has permeated most aspects of education and culture and has changed everything. How we, as educators, use technology with our students is now the key to unlocking those 21st-century global skill sets so that our students can lead and compete in a world where geography has become, in many ways, superfluous.

Weblinks

1. <https://www.researchgate.net/>
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