

‘BEST PRACTICES AND INNOVATION IN EDUCATION’

“If we teach today’s students as we taught yesterday’s, we rob them of tomorrow.”

John Dewey

The need of best practices in present era has increased as the competition to be the best and equipped to combat the challenges, is the need of the hour. The adaptive and flexible teaching methodologies with required skills along with the best environment provided to a child will help to develop social, emotional and academic excellence.

Our curriculum as well as teaching styles are transforming from conventional to newly evolved pedagogical techniques. These are now getting equipped with Digital Aids and supported by a well-designed syllabus under the guidance of National Education Policy 2020. This outlines the vision of new Education System for meeting the needs of our Digital natives (students). We are now evolving faster with a teaching that prepares learners for better understanding of curriculum empowered by skills and developing innovative minds and sustainable consciousness with a problem-solving approach.

I remember my first day as a teacher, brimming with energy, to bring out the best from my students. As I entered the class, I saw number of sparkling eyes with a hope that their science class would be taught in an interesting and joyful manner. Hardly did I know that Teaching profession is not only being a teacher but also one has to grow as a Motivator, Counsellor, Guide and Facilitator. I had to understand the diverse nature of the class along with the emotional instability of my students. Their energies needs to be channelized constantly and correctly, resulting in an effective learning process.

Years passed by, with shuffling of variety of teaching learning pedagogies for different topics and various classes which gave a good result and satisfaction at both ends. Time came when things changed drastically and so did the teaching pattern.

Lesser did anybody know that tough times were in, which gave a paradigm shift to the Education system. This was the **pandemic time**, a time of confusion and hit and trial method as there was no set format of pedagogy to run the ongoing virtual classes for an effective teaching and learning process. This gave a challenge to every educator to **educate minds in tough times. It was tougher** to deal with a new role to be in and equip oneself quickly with new digital tools and aids that could provide a sense of contentment in teaching and learning outcomes.

“Start where you are. Use what you have. Do what you can.” – Arthur Ashe

As the quote says, I would attend an in-service training programme and feel charged with new strategy adopted and new Digital tool for better results. I conducted my virtual class and implemented whatever I learnt, but found that not just the strategy that can do wonders but the digital tools can bring magic to leaps and bounds. Now whether it is online, hybrid mode or offline pedagogy, the class room techniques demand a change and so is the pedagogical style. Hence, I understood that it is a skill of a teacher to choose and apply the right strategy to help children learn in the most effective way. Experiencing now that we are going to teach the digital natives (born in this age), I as a teacher had to rethink, unlearn and relearn to innovate and apply correct strategies with digital aids.

Teachers equipped with evolved adaptive skills to teach the students/young learners are the biggest assets to schools, further to society and Nation; as Nation rests on the shoulder of our young generation nurtured and shaped by the Educators. Implementation of Objectives of **NEP 2020** in curriculum in educational institutions/schools is definitely trying to lift the best learning required with evolving best practices.

The change in the teaching learning style is involving a planned transfer of responsibility from teacher to students in knowing what is learned, how it is learned, how learning is applied, and what is assessed and evaluated.

I learnt that upgradation of pedagogy is must from time to time. The new trend of teaching pattern where the class requires new norms is challenging. It has to be more engaging and more informative to improve the attention span of a child, which was a herculean task but it is the new normal for learning process now. We now have to recondition their minds for new classroom set up. The challenge lies again for a diverse class 'no one size fits all' hence pedagogies with changing times needs innovation. It also needs a permutation and combination of pedagogical style to empower children of different abilities and learning styles.

My learning is that never a single strategy/pedagogy works 100% at a given time to enhance the learning of students at its best. In this tec -savvy era, my pedagogy involves an integration of digital tools with E-Content (Diksha Portal) like Digital Novels, Comic Strips etc. Using digital tools like Jam board, Chem Lab App, with strategies like Gamification, Storytelling, inquisitive learning style and concept mapping which are some of the best strategies that I apply to bring in holistic learning in a child.

Being a science teacher the pedagogical strategy that I practice often using a **Metacognition process** is **visualization of concept**, supported by visuals (A 'WOW' factor). I practice a strategy which is a combination of **real life connect with visual treats (through digital aids e.g., Smart Boards or Live examples)** in the class. Displaying a **real-life image** on Smart Board leads to interaction. It provides a platform for **curiosity driven thinking**. This further includes by an ice breaking session through storytelling to generate the hunger for knowledge on the topic. This helps me to lessen the gap between me, a teacher and my students, the learners. It also fosters a deep thinking and further learning too, leading to engaging brains. It connects them to real life. Now self-learning unfolds and precipitates. For example, while teaching the physical and chemical changes I captured the pictures of cutting vegetables and cooking of food in my kitchen. Real-life visual aids too help a child to feel, touch and experience the thrill of learning instantly with no efforts. This surely creates a **life** in the class. I always plan my class teaching in such a way that it is not 'too much' but definitely 'adequate' for the diverse group of children in a class to learn.



Class VII students learning the concept of heat by sustainable model of 'Eco geyser and Eco cooler'.



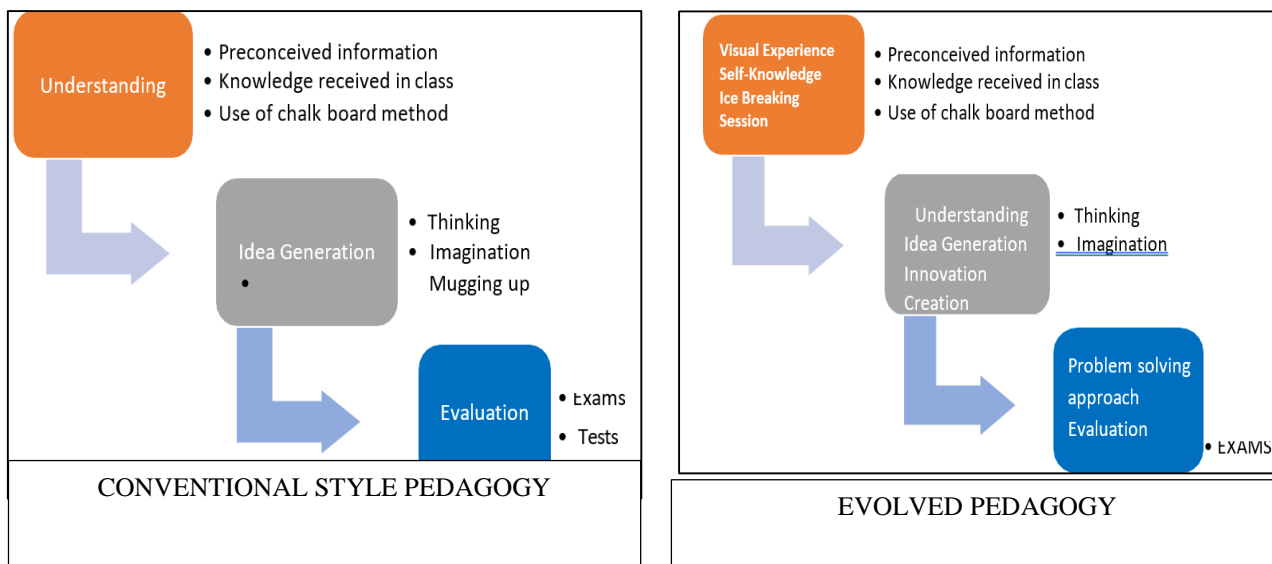
Class VII Students learning the concept by the help of real-life example and smart class digital tool. (New Evolved Pedagogy)

“Tell me and I forget, teach me and I may remember, involve me and I learn.”

Benjamin Franklin

I practice empowering my class by relating the curriculum topics to sustainable education to solve real-world sustainability problems with a spirit of enquiry and critical thinking. This is achieved by **‘learning through doing it’**.

I practice inquiry-based learning strategy to know the learning levels of the class. Applying this strategy in class VII helped to collect Data and arrive to a conclusion. By dividing the class into two, A and B, I decided to teach class B of Class VII was with my evolved adaptive pedagogy that I practice and the other part A was provided with a conventional style of pedagogy with chalk & blackboard style teaching. Class VI-VIII learnt ‘Heat’ with help of this method and the results turned amazing, obvious and easily identifiable.



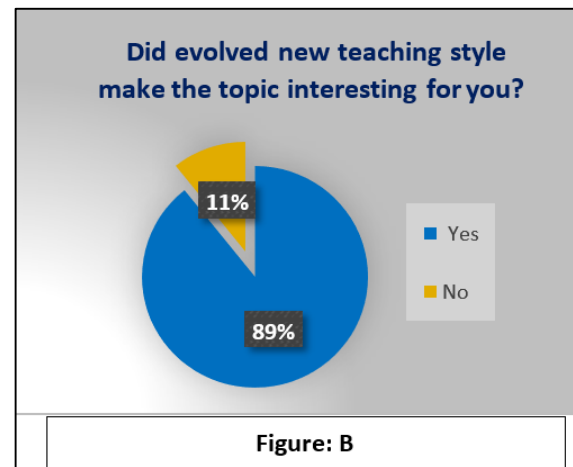
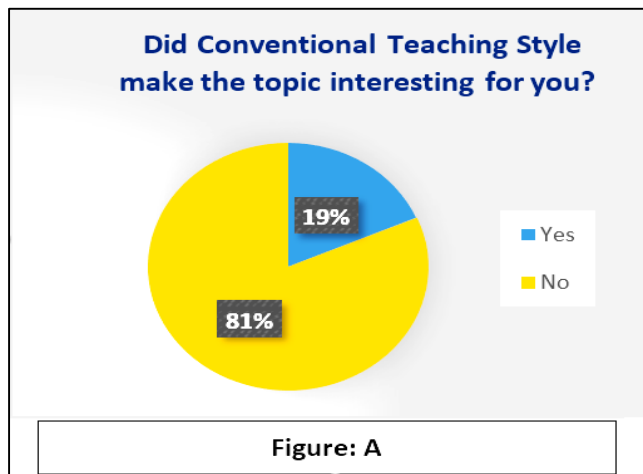
The findings were obtained in following areas through teacher’s Assessment Sheet:

- Were there any differences in student’s curiosity level between a conventional one and evolved pedagogy?
- Did the student’s interest in the topic dip in the classes in both conventional and evolved pedagogy?
- Was the student interested to discuss his/her doubts the next day?
- Was there any interaction amongst the students in between or after the class in both the methods of teaching?
- What was the progress in understanding when students with special needs were taught by this evolved way teaching after conventional way?

The students who were taught by conventional method showed: Medium to low curiosity level & **Low** interest in topic, low impact of teaching pattern on students, not enthusiastic to ask new questions, were less interested to discuss their ideas/understanding on the topic with their classmates.

The students who were taught by evolved pedagogy method showed: Medium to High curiosity level and High interest in topic, had **high** impact of the concept, had brought in everyday solutions for the problem discussed. The students were so excited to learn new concepts relatable to their own surroundings that they discussed about it with other classmates after the class and shared their views. Below average students and students with special needs were found less stressed, not confused at all, satisfied, confident and much more alert in the class.

Results were drawn out through a survey worksheet and oral interactions gave a clear indication that students who were exposed to new pedagogy showing real life example supported by digital aids and also a demonstration with the concept creating object were found to be much ahead in the levels of understanding and their learning outcomes. They were receptive during question answer sessions in order reiterate their learning levels. I would like to state that results of my pedagogical style gave clear indications of increased learning outcomes in students.



As students (our digital natives) are already equipped with excess of information on multimedia, they need to focus knowledge with illustrations and definitely need a connect with the teacher. This would help them to understand faster as now the class gets equipped with a human ware (teacher), a hardware (Smart class) and a software (content for visualisation). Once this platform is constructed, the objective of making a class engaging becomes fulfilled.

I as a teacher feel that each class that we teach, every period that we take should end in a thoughtful and meaningful manner. It should let the student experience an energy that empowers him/her with appreciation and an **AHA factor** which helps that child to reconnect with same enthusiasm again with the teacher. When every child waits to attend the class by a teacher teaching then our objective is achieved as the hunger to know is risen and the wings of freedom are provided to learn, create, innovate and generate.

Schools have a vital role in promoting high standard learning of sustainable development, importance of good environment and solutions to a better life. Schools are the pivot point which can bring a change in a child by reorienting the content in curriculum and also bringing a change in teaching style making adaptive as per the needs of a child.

I believe teachers and schools are the game changers for the present education system and are in process of reorienting the needs of students by having an adaptive, flexible pedagogy which can be the best suited to the needs of digital natives.

If one is not willing to learn no one can help, but if one is determined to learn, no one can stop. Let us be responsible and conscious educators for building our Nation makers.

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