

INNOVATION IN LEARNING ENVIRONMENT: A NEW PERSPECTIVE OF LEARNING IN DIGITAL ERA

Mona Malhotra¹, Ph. D. & Taruna Malhotra², Ph. D.

¹Assistant professor, Gaur Brahman College of Education, Rohtak

²Assistant professor-III, Vaish College of Education, Rohtak

“Technology will not replace great teachers but technology in the hands of great teachers can be transformational”

- George Couros

Abstract

Today in this competitive world everyone is struggling and working hard to create a new learning environment. Recently, significant resources have been invested by many countries in order to have change in their educational systems. Use of technology, major teacher programmes and change in curriculum at wider level are the efforts for radical changes. The main aim of this transformation is to provide students with the cognitive and meta-cognitive knowledge and the skills to be competitive in the 21st Century. Teaching the text books and making the students understand is not the purpose of education rather the task is to create innovative thinking environment. No doubt both teachers as well as students have to face many problems and challenges in creating such an environment and the major challenge faced by any teacher is to capture the student's attention and presenting their matter in such a way to have everlasting impact. For this to happen, innovative ideas that make teaching learning methods more effective should be implemented. According to Gertner & Manzi, (2012), “Innovation is the application of an idea or invention, adapted or refined for specific uses or in its particular contexts.” The purpose behind using these innovative methods is to empower people, to make governance stronger and to motivate the attempt to achieve the human development goal for the country. “Innovative teaching involves using innovative methods and teaching learning materials for the benefit of students.” (Mandula, Meda, & Jain, 2012). The purpose of the paper is to suggest useful innovative teaching methods which could easily impart knowledge to the students.

Keywords: Innovation, Technology, Innovative Teaching Strategies



Scholarly Research Journal's is licensed Based on a work at www.srjis.com

Introduction

Brewer & Tierney (2012) elaborated, “Innovation is generally understood as the successful introduction of a new thing or method.”

According to Rogers (1983, 2003), “The newness of an innovation does not just involve new knowledge, but also new ways to approach the problem.”

Introduction of something novel and new is termed as innovation. There will be no progress if there is no innovation. To stay relevant in this competitive world, every organization has to make progress. Innovation always moves one step further as compared to invention as invention requires the creation of new ideas, processes or products, innovation requires implementation of the inventive act. A value system is also implied by the innovation, which seeks to derive a positive outcome from the inventive act. Positive effective change is observed when the actions which are required to generate new ideas or products are implemented. The innovation becomes the new standard when it replaces the standard product, program, practice, or process with something better.

Innovation in Education

The main purpose of innovation in education which will directly benefit a classroom, school, district, university, or even an organization's training and learning practices is to make positive and constructive changes. It encourages not only teachers but students also to explore, search and research and to use all the tools to uncover something new. There is a different way of looking at the problems and a totally different way to solve the problems. Students' creativity and problem solving skills are enhanced by this thinking process.

We, the inhabitants of the information age at once turn our eyes to technology when anyone talks about innovations. No one can ignore that our lives has been completely changed by the technology. No doubt technology plays a significant role in the present scenario but when one talks about innovation, it is a different and better way of doing something. In education, an innovation is a deviation from the standard practice that achieves greater learning outcomes for students than the standard practice given equal (or lesser) amounts of time and resources. "Today's education systems are required to be both effective and efficient, or in other words, to reach the goals set for them while making the best use of available resources" (Cornali, 2012, p. 255).

There are three major steps that are involved in innovation

- ✚ An idea
- ✚ Its implementation
- ✚ The outcome that results from the execution of the idea and produces a change.

When implementation of methodological approaches, teaching techniques, learning processes and instructional tools leads to better student learning and produces a significant change in teaching and learning that is termed as innovation in education. To improve quality learning

is the main purpose of innovation in education which would definitely raise productivity and efficiency of learning.

Innovation in education means the emerging of the new ways of ensuring behavioral change in individuals when the existing one including learning theory, learning task, teaching method, learning approach, etc. is not working effectively. The novel terms of innovation and self-regulation has replaced the two older terms of teaching and learning. The logic behind this change may be that in the present world of transformation, old teaching methodologies, beliefs and way have no place as well as they have no practical use also. In the words of Shavinina (2013), “Innovation is interference in educational activities of students for raising them as innovative adults.”

Importance of Innovation in education

In education sector, innovation plays a very important and vital role. Keeping in mind the significance of innovation in education which considers that the young minds molded by the present education system today will be those who will lead the charge for innovation tomorrow. Practices, processes and approaches that prepare students to function in the future introduced by the defining schools and universities across the country needs up gradation. For this changes are required in curricula and hands-on exposure to the expansive digital tools being used across industries today.

To make this process a success, variety of both large –and –small scale approaches are taken by the Educators and administrators. For instance, innovation in education might include:

✚ An educator:

An educator who will recognize the need for ideas to be better shared among other teachers in their district and will develop processes that will easily facilitate the idea of ideas.

✚ A professor:

A Professor, who will identify a gap in understanding among the students in their classroom and will use brainstorming technique new and will invent or create ways to approach that topic.

✚ An administrator:

An administrator who will identify the need for better communication between teachers and parents and will work to create an online system that allows for more transparency into their child’s progress.

Each form mentioned above is different from the other and also involves an educator who will follow the innovation process in an effort to improve the ways in which the educational system functions.

Innovative Teaching Strategies

According to Anderson and Neri (2012), “Innovative teaching can involve virtual labs: learning activities based on real-life problems; learning environments with equipment, furnishings, materials, and audiovisual resources; and learning guides for students and the teacher.”

It requires the combination of essential skills and hard work on the part of teachers to find innovative methods of teaching. It has been proved by many researchers that certain methods and approaches can truly enhance the learning skills. Learning through innovative methods has shown remarkable progress in child’s intensity to learn. It has also raised his curiosity level and concentration power. Students learn more and retain in a better way when they are being taught the lesson in innovative manner. Students remain active and show tremendous improvement while performing their activities. So, it is very much required on the part of teachers to make their classes interesting by reinventing their teaching methods.

Some innovative teaching strategies which every teacher can embrace and make their teaching more interesting are:

Smart Boards

An effective way to bring the classroom to life and making it more lively and interesting is possible through the use of smart boards. A deeper level of engagement and understanding is experienced by the students through the use of smart boards. This is done by making the course content interactive and visual. For making teaching a visual and engaging experience, the teachers use dynamic multimedia content which is quite helpful in conveying the subject matter effectively to the students. The main advantage of using these smart boards by teachers is that students with different learning styles can learn from each other. Transformation of teaching experience into an interactive and collaborative experience is possible only through the use of smart boards.

Flipped Classrooms

An effectual teaching method which is gaining popularity day by day is Flipped classroom. Flipped classroom is a “pedagogical approach in which direct instruction moves from the group learning space to the individual learning space, and the resulting group space is transformed into a dynamic, interactive learning environment where the educator guides students as they apply concepts and engage creatively in the subject matter” (The Flipped Learning Network, 2014).

In this technique the students play an active role. When students themselves are given the responsibility of their own learning, they engross themselves deeply in the subject by taking complete interest to learn better. Moreover this method of teaching is one of the best ways to lay the foundation in independent learning. As there is easy access to resources for self paced learning so students are satisfied with this approach specifically with the usefulness of the online modules. Students are motivated to fill in the information gaps, to construct knowledge and to make generalizations on their own when required.

Teaching through Collaboration

One of the most versatile and effective instructional strategies and an innovative method of teaching which involve student collaboration is Cooperative learning. Today we are living in an era of modernization and a versatile skill which is required almost in every field is collaboration. Conclusion has been drawn by many researchers that when students work collaboratively, they are more willing to take on difficult tasks, listen to other students' ideas, and celebrate a peer's success and growth.

Collaboration is a wonderful teaching tool. Keeping in view the individual differences, the teachers pass on information to a large number of students by the use of this teaching. In this teaching, teachers need to bring their best strengths and practices to the team while remaining flexible to adapt to new methodologies that can benefit student learning. Teachers can help foster this skill in the classroom by allowing students to study, learn study and work in groups. In present scenario, this form of teaching is gaining acceptance as a powerful teaching tool where once again the responsibility is on the group of students. In this teaching the educators play the role of guides, mentors, supervisors for the students. It also teaches students empathy, negotiation skills, teamwork, and problem-solving.

Mind Mapping

A tool which helps students to organize ideas and to conduct research as a part of studying is mind mapping which uses a simple interface to create graphical representations of linked information. It also helps students to encourage their ideas through association and motivates students to give way to their creativity. Mind mapping also introduces an engaging, visual, and memorable approach to learning. Mind mapping is quite helpful in engaging students as well as encouraging creativity. Its value has been recognized by the teachers. Students' thought process regarding a specific topic is deeply studied by the teachers. To know about the student's previous knowledge and to assess the students about the subject matter being taught, the teachers ask students to create mind maps demonstrating their comprehension of a concept. Students' understanding can be effectively evaluated through this method. Mind mapping can do spectacles in brainstorming ideas, concepts, and also in discussions. Beyond brainstorming and discussions, teachers can use this versatile format for all kinds of games, quizzes, and questionnaires.

Virtual Reality

This Virtual Reality technology plays a vital role in involving students to learn through interactions with a 3D world as this technology offers students a valuable opportunity to learn in an immersive manner that creates a lasting impression on their minds. It also makes learning interesting and fun loving and helps the students retain the material for a longer time. Studying process results in excitement and effectiveness by the use of virtual reality in education. The reason behind using this teaching method is that the brain tends to remember 10% of what it reads, 20% of what it hears, and 90% of what it does or simulates. A deep understanding of the subject matter is provided to the students by the Virtual reality simulations so that they can apply their knowledge in real practical life situations. For instance, if a teacher wants to give lecture on how to explore ancient civilizations, it would be boring for students to attend lecture on this topic so teachers can use 3D technology to teach this topic instead of taking the students through an uninteresting class of history. Virtual reality makes the classic studying process a really fascinating experience. This type of education inspires students to discover for themselves as students have an opportunity to learn by doing rather than passively reading.

Teaching through Cloud Computing

The usage of technology into the classroom allows educators to experiment with innovative methods of teaching. One such method where teachers can save vital classroom resources such as lesson plans, notes, audio lessons, videos, and assignments details on the classroom cloud is the use of cloud computing. Opportunities for change for all users are promoted through cloud computing. Students are connected to multiple programs and applications by teachers. Students are allowed to be innovative in their presentation of mastery of standards.

Through cloud computing teachers can also harness new and innovative classroom structures. Cloud Computing streamlined the innovative classroom formats such as blended or flipped classrooms. Both models allow for more face-to-face time with students at the school while they utilize the cloud to access lessons and assignments from home. The cloud is completely helpful in creating truly modern, innovative classrooms. Collaboration is also streamlined for educators. Teachers and administrators can easily share lesson plans and can work on them together at any place or time with the help of cloud computing. The need for carrying around the heavy textbooks is also eliminated by cloud computing and it also allows students to learn at a time, place and pace at their own.

Conclusion

The core objective of teaching is passing on the information or knowledge to the minds of the students. Various teaching methods and strategies are used to make teaching effective and productive. Technology is helpful in engaging the students in the classroom with different kinds of stimuli and creates an environment of activity-based learning. It makes the content of the classroom more interesting and makes learning fun. Technology offers an endless set of resources to teachers that they can tap into depending on the need of the students. The focus of this paper was on innovative teaching methods used by the teacher in the class room by giving the students a new way to train their skills. By incorporating new methods students are motivated to pay more attention and retain the information better. Teaching depends upon successful mode of communication. Innovative teachers and faculty developers need each other. Instructional consultants in teaching improvement centres are the cheer leaders and reinforces of those who bring inventiveness into their teaching. Innovative teachers are advocates and models of effective teaching. Modern teaching methods are best suited to develop decision-making skills, problem-solving skills, and critical thinking ability. The new ways of teaching make students more productive and encourage

them to collaborate. That's why innovative methods must be incorporated by the institutions so that they can impart and disseminate knowledge in a productive manner.

References

- Anderson, R. T., Neri, L. (2012). *Reliability-centered maintenance: management and engineering methods: Springer Science & Business Media.*
- Brewer, D. and Tierney, W. (2012), "Barriers to innovation in the US education", in Wildavsky, B., Kelly, A. and Carey, K. (Eds), *Reinventing Higher Education: The Promise of Innovation*, Harvard Education Press, Cambridge, MA, pp. 11-40.
- Cornali, F. (2012), "Effectiveness and efficiency of educational measures", *Evaluation Practices, Indicators and Rhetoric*, Vol. 2 No. 3, pp. 255-260
- Flipped Learning Network. (2014). *What is Flipped learning?*
- Gertner, J. (2012). *The idea factory: Bell Labs and the golden age of American innovation.* New York, NY: The Penguin Press.
- L. Shavinina. *How to develop innovators? Innovation education for the gifted*, *Gifted Education International*, Vol.29, 54-68, 2013.
- Mandula, K., Meda, S. R., & Jain, D. K. (2012). *Research and implementation of a mobile video streaming application for ubiquitous learning.* In *2012 IEEE international conference on technology enhanced education (ICTEE)* (pp. 1-6). IEEE
- Manzi, J. (2012). *Uncontrolled: The surprising payoff of trial-and-error for business, politics, and society.* New York, NY: Basic Books.
- Rogers, E. (1983), *Diffusion of Innovations*, (3rd ed.) New York: The Free Press. Rogers, E. (2003), *Diffusion of Innovations*, (5th ed.) New York: The Free Press.

WEBLIOGRAPHY

- <http://dx.doi.org/10.1787/9789264215696-en>
- <http://flippedlearning.org/definition-of-flipped-learning/>
- <https://doi.org/10.1177/2158244017734022>
- <https://www.legit.ng/1143440-types-teaching-methods-advantages-disadvantages.html>
- [www.oecd.org/edu/school/TalisCeri%202012%20\(tppi\)-Ebook.pdf](http://www.oecd.org/edu/school/TalisCeri%202012%20(tppi)-Ebook.pdf)
- www.SciRP.org/journal/sm