

**INNOVATIVE APPROACHES TO PROMOTE EDUCATION FOR ALL****Prof. Santosh Jagannath Shinde**

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Abstract

Inclusive education is a relatively controversial topic for many parents and educators. The idea behind inclusive education is that students with special needs will be placed in the same classroom environment as other students their age who do not have special needs. Within inclusive education, there are two main branches of thinking: mainstreaming and full inclusion. Mainstreaming is a process that allows children with special needs to enter certain standard classrooms after they show the ability to keep up with the rest of their peers. Full inclusion puts students with special needs in standard classroom environments without testing or demonstration of skills. Individuals that support full inclusion believe that all children belong in the same classroom environment no matter what.

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• Innovative Approaches to Teaching & Learning:-

In the Innovative Teaching and Learning Research 2011 Findings and Implications report from Microsoft's Partners in learning initiative, "Innovative teaching practices are more likely to flourish when particular supportive conditions are in place. These conditions include

- Teacher collaboration that focuses on peer support and the sharing of teaching practices,
- Professional development that involves the active and direct engagement of teachers, particularly in practicing and researching new teaching methods, and
- A school culture that offers a common vision of innovation as well as consistent support that encourages new types of teaching."

The Innovative Approaches to Teaching and Learning priority seeks to identify and scale up innovative approaches to teaching and learning that significantly improve student outcomes.

● **New Approaches to Teaching and Learning:-**

1. Project Based Learning (PBL)

Project-based learning is an approach to teaching that focuses primarily on having students engage in explorations of real-world problems and challenges. Through these explorations, they develop their content knowledge, but also develop solutions to problems. This approach to teaching functions to engage students that may be disinterested in traditional content because it allows them to identify problems in their community or the world at large that they want to solve. It also provides teachers and students with opportunities to be creative. In schools that commit to project based learning, students can engage in a project, and learn all subjects as they complete their project. In this process, the teacher looks for ways to connect the subject to the project. In turn, students look to the teacher for content knowledge so they can complete their project.

2. Flipped Classroom

One of the most popular new approaches to teaching is the flipped classroom. This approach involves a process where the typical lecture that happens in the classroom occurs at home. Students watch lectures on video, and then return to school to engage in the exercises they would traditionally have for homework, and to ask questions based on the lecture they watched on their own at home. When students watch videos at home, they can stop and go and at their own pace, and take notes at their leisure. When they return to school, they can work in groups to discuss what they watched, and/or have their questions answered by the teacher. In this process, students create, collaborate and learn at their own pace, and apply what they have learned at home in the classroom.

3. Reality Pedagogy

Reality Pedagogy is an approach to teaching and learning that focuses on teachers gaining an understanding of student realities, and then using this information as the starting point for instruction. It begins with the fundamental premise that students are the experts on how to teach, and students are the experts on content. Reality pedagogues/teachers believe that, for teaching and learning to happen, there has to be an exchange of expertise between students and teacher. For this exchange to happen, teachers need a set of tools called the “5 C’s” to gain insight into student realities, and allow students to express their true selves in the classroom. These tools are:

1. Co generative dialogues: Where teachers and students discuss the classroom and both suggest ways to improve it.
2. Co teaching: Where students get opportunities to learn content and then teach the class.

3. Cosmopolitanism: Where students have a role in how the class operates and in what is taught.
4. Context: Where the neighborhood and community of the school is seen as part of the classroom.
5. Content: Where the teacher has to acknowledge the limitations of his/her content knowledge and work to build his/her content expertise with students

● **Innovative Learning Strategies for Modern Pedagogy:-**

1. Crossover Learning

Learning in informal settings, such as museums and after-school clubs, can link educational content with issues that matter to learners in their lives. These connections work in both directions. Learning in schools and colleges can be enriched by experiences from everyday life; informal learning can be deepened by adding questions and knowledge from the classroom. These connected experiences spark further interest and motivation to learn.

An effective method is for a teacher to propose and discuss a question in the classroom, then for learners to explore that question on a museum visit or field trip, collecting photos or notes as evidence, then share their findings back in the class to produce individual or group answers. These crossover learning experiences exploit the strengths of both environments and provide learners with authentic and engaging opportunities for learning. Since learning occurs over a lifetime, drawing on experiences across multiple settings, the wider opportunity is to support learners in recording, linking, recalling and sharing their diverse learning events.

2. Learning through Argumentation

Students can advance their understanding of science and mathematics by arguing in ways similar to professional scientists and mathematicians. Argumentation helps students attend to contrasting ideas, which can deepen their learning. It makes technical reasoning public, for all to learn. It also allows students to refine ideas with others, so they learn how scientists work together to establish or refute claims.

Teachers can spark meaningful discussion in classrooms by encouraging students to ask open-ended questions, re-state remarks in more scientific language, and develop and use models to construct explanations. When students argue in scientific ways, they learn how to take turns, listen actively, and 4 Innovating Pedagogy 2015 respond constructively to others. Professional development can help teachers to learn these strategies and overcome challenges, such as how to share their intellectual expertise with students appropriately.

3. Incidental Learning

Incidental learning is unplanned or unintentional learning. It may occur while carrying out an activity that is seemingly unrelated to what is learned. Early research on this topic dealt with how people learn in their daily routines at their workplaces. For many people, mobile devices have been integrated into their daily lives, providing many opportunities for technology-supported incidental learning. Unlike formal education, incidental learning is not led by a teacher, nor does it follow a structured curriculum, or result in formal certification. However, it may trigger self-reflection and this could be used to encourage learners to reconceive what could otherwise be isolated learning fragments as part of more coherent and longer term learning journeys.

4. Context-Based Learning

Context enables us to learn from experience. By interpreting new information in the context of where and when it occurs and relating it to what we already know, we come to understand its relevance and meaning. In a classroom or lecture theater, the context is typically confined to a fixed space and limited time. Beyond the classroom, learning can come from an enriched context such as visiting a heritage site or museum, or being immersed in a good book.

We have opportunities to create context, by interacting with our surroundings, holding conversations, making notes, and modifying nearby objects. We can also come to understand context by exploring the world around us, supported by guides and measuring instruments.

5. Computational Thinking

Computational thinking is a powerful approach to thinking and problem solving. It involves breaking large problems down into smaller ones (decomposition), recognizing how these relate to problems that have been solved in the past (pattern recognition), setting aside unimportant details (abstraction), identifying and developing the steps that will be necessary to reach a solution (algorithms) and refining these steps (debugging). Such computational thinking skills can be valuable in many aspects of life, ranging from writing a recipe to share a favorite dish with friends, through planning a holiday or expedition, to deploying a scientific team to tackle a difficult challenge like an outbreak of disease.

The aim is to teach children to structure problems so they can be solved. Computational thinking can be taught as part of mathematics, science and art or in other settings. The aim is not just to encourage children to be computer coders, but also to master an art of thinking that will enable them to tackle complex challenges in all aspects of their lives.

6. Learning By Doing Science

Engaging with authentic scientific tools and practices such as controlling remote laboratory experiments or telescopes can build science inquiry skills, improve conceptual understanding, and increase motivation. Remote access to specialized equipment, first developed for scientists and university students, is now expanding to trainee teachers and school students. A remote lab typically consists of apparatus or equipment, robotic arms to operate it, and cameras that provide views of the experiments as they unfold.

Remote lab systems can reduce barriers to participation by providing user-friendly Web interfaces, curriculum materials, and professional development for teachers. With appropriate support, access to remote labs can deepen understanding for teachers and students by offering hands-on investigations and opportunities for direct observation that complement textbook learning.

7. Embodied Learning

Embodied learning involves self-awareness of the body interacting with a real or simulated world to support the learning process. When learning a new sport, Executive summary 5 physical movement is an obvious part of the learning process. In embodied learning, the aim is that mind and body work together so that physical feedback and actions reinforce the learning process.

Technology to aid this includes wearable sensors that gather personal physical and biological data, visual systems that track movement, and mobile devices that respond to actions such as tilting and motion. This approach can be applied to the exploration of aspects of physical sciences such as friction, acceleration, and force, or to investigate simulated situations such as the structure of molecules.

8. Adaptive Teaching

All learners are different. However, most educational presentations and materials are the same for all. This creates a learning problem, by putting a burden on the learner to figure out how to engage with the content. It means that some learners will be bored, others will be lost, and very few are likely to discover paths through the content that result in optimal learning. Adaptive teaching offers a solution to this problem. It uses data about a learner's previous and current learning to create a personalized path through educational content.

Adaptive teaching systems recommend the best places to start new content and when to review old content. They also provide various tools for monitoring one's progress. They build on longstanding learning practices, such as textbook reading, and add a layer of computer-

guided support. Data such as time spent reading and self-assessment scores can form a basis for guiding each learner through educational materials.

9. Analytics of Emotions

Typical cognitive aspects of learning include whether students have answered a question and how they explain their knowledge. Non-cognitive aspects include whether a student is frustrated, confused, or distracted.

More generally, students have mindsets (such as seeing their brain as fixed or malleable), strategies (such as reflecting on learning, seeking help and planning how to learn), and qualities of engagement (such as tenacity) which deeply affect how they learn. For classroom teaching, a promising approach is to combine computer-based systems for cognitive tutoring with the expertise of human teachers in responding to students' emotions and dispositions, so that teaching can become more responsive to the whole learner.

10. Stealth Assessment

The automatic data collection that goes on in the background when students work with rich digital environments can be applied to unobtrusive, 'stealth', assessment of their learning processes. Stealth assessment borrows techniques from online role-playing games such as World of War craft, in which the system continually collects data about players' actions, making inferences about their goals and strategies in order to present appropriate new challenges. This idea of embedding assessment into a simulated learning environment is now being extended to schools, in topics such as science and history, as well as to adult education. The claim is that stealth assessment can test hard-to-measure aspects of learning such as perseverance, creativity, and strategic thinking. It can also collect information about students' learning states and processes without asking them to stop and take an examination. In principle, stealth assessment techniques could provide teachers with continual data on how each learner is progressing.

Conclusion

This evaluation identifies the need for schools to be more innovative to meet the needs of all their students. It signals that the future success for secondary school students is dependent on schools identifying and responding to the aspirations, strengths, culture and needs of their students. The most responsive schools put considerable effort into ensuring teachers understood the goals for each student and designed programmes that encouraged students to increase their own self awareness and self management to monitor progress towards achieving their goals. The question that remains is – how can such leadership and self

managing skills be developed in all schools, to help students find out about their future opportunities and what they need to do to achieve them?

The innovation required in secondary schools should be supported by robust self review that can determine whether new approaches are making the intended improvements for students. Many of the schools ERO identified as responsive to the individual pathways and strengths of students are relentless in the development of their curricula, careers and pastoral systems. When new approaches are developed they are examined in terms of how they support individual students, and changes are made to ensure that they can respond as necessary.

References:

- Kettunen, J., Kairisto-Mertanen, L. & Penttilä, T. (2013). Innovation pedagogy and desired learning outcomes in higher education*
- Lehto Anttoni- Kairisto-Mertanen Liisa – Penttilä Taru (edit.) (2011): Towards Innovation Pedagogy – A New Approach to Teaching and Learning For Universities Of Applied Sciences.*
- Penttilä Taru – Putkonen Ari (2013). Knowledge In The Context Of Innovation Pedagogy In Higher Education.*

Websites-

www.google.com

www.inclusiveeducation.com