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Innovation in Present Education System

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ABSTRACT

Education is the foundation of our economy. What (and how) we learn in school determines who we become as individuals and our success throughout our lives. It informs how we solve problems, how we work with others, and how we look at the world around us. In today's innovation economy, education becomes even more important for developing the next generation of innovators and creative thinkers. However, there is a significant gap between the potential of modern education and what many students are actually learning. The adoption and exploration of innovative ideas in education is often slow. Instead, many educators still cling to old and increasingly ineffective methods of teaching. Using innovative teaching methods to better serve students and to teach them about the benefits of innovative thinking, does so much more than just "fill the pail." It ignites a passion for learning and provides students with the tools they need to succeed in the innovation economy.

1. Introduction

An **innovation** is a new thing or a new method of doing something. Innovation in education encourages teachers and students to explore, research and use all the tools to uncover something new. It involves a different way of looking at problems and solving them.

Innovation improves education because it compels students to use a higher level of thinking to solve problems. There's quite a bit of evidence that technology, when used in the right way, helps students learn. One study, for example, showed that a medical school class with iPads scored 23% higher on exams than classes without this device. Technology, such as tablets, isn't only useful for absorbing knowledge; it helps with communication as well. Teachers and administrators use such devices to send materials and information to students and parents. Students hand in homework and term papers online and can access educational applications and programs to further assist with learning.

Here are some of the clear benefits of using technology in the classroom:

- It makes learning interesting and engaging, especially for younger generations raised on the latest technology.
- It allows for faster and more efficient delivery of lessons, both in the classroom and at home.
- It reduces the need for textbooks and other printed material, lowering long-term costs incurred by schools and students.
- It makes collaboration easier. Students, teachers, and parents can communicate and collaborate more effectively.
- It helps to build technology-based skills, allowing students to learn, early on, to embrace and take advantage of the tools technology offers.

2. Innovative Applications of Technology

While technology, in and of itself, does not always spur innovation in the classroom, there are countless innovative ways to use technology to better teach and engage students. Here are some examples:

- **Robots in the Classroom** – South Korean schools have experimented with robot teachers. This makes lessons more interesting and entertaining for kids and enables teachers from anywhere in the world to be "present" in the classroom.
- **Mobile Technology –** Smartphones and other mobile devices are increasingly used in education. Mobile apps let teachers conduct digital polls, enhance verbal and presentation skills, and incorporate technological skills with core competency lessons.
- **3D Learning** – Kids enjoy 3D games and movies, so why not use this technology to help them learn? GEMS Modern Academy in Dubai does just this, providing students with a 3D lab that offers interactive multimedia presentations.
- **Assisting Special Needs Students –** Assistive technology is especially useful for students with learning disabilities. For example, phonetic spelling software helps dyslexic students and others with reading problems to convert words to the correct spelling.

3. Innovations in Teaching Methods

When we think of innovation nowadays, we usually think of technology. However, in a field such as education, it's just as important to focus on innovations in areas such as child psychology, learning theories, and teaching methods. This is particularly true at a time when many educators believe that the U.S. education system is failing. There are quite a few areas where innovations in education will help improve the system for everyone.

- Focus on STEM **–** It's important for educators to prepare students for the future by empowering them with the foundational skills they need to succeed later in life. This includes focusing on STEM (science,

technology, engineering, and math), where the United States is currently ranked 31st in the world.

- Addressing the Needs of Individual Students – Another longstanding problem in education is the one-size-fits-all approach. It's well known that everyone has different styles of learning. Some students are visual learners, while others are verbal or auditory learners. Technology allows teachers to individualize lesson plans to different students and their unique styles of learning.
- Practical Education and Soft Skills – One criticism of education is that it's impractical and doesn't prepare students for living in the real world. When it comes to actually teaching students how to become innovative thinkers, they need to learn leadership skills, to be encouraged to think creatively, and to be taught independent thinking and learning. Innovative classrooms are beginning to place more emphasis on the soft skills needed to thrive in today's world.

4. Analytics in Education

Big data and analytics now dominate the world of business, but analytics can also have a major impact on education. Data can help educators better understand their students' needs and more easily identify areas for improvement. Just as businesses use analytics to assess the results of marketing campaigns or to obtain information about their audience, educators can use data to determine the effectiveness of teaching methods and get a more granular view of who their students are and what they need to be successful. Data helps to take the guesswork out of educational innovation. Learning analytics can also help schools measure the effectiveness and performance of teachers.

5. The Future of Education

Technology and other changes in society demand innovation in education. While many schools face challenges such as underfunding, unengaged students, and outdated curriculums, innovation offers a path forward.Innovation isn't just important for businesses. In many ways, education stands to benefit the most from both utilizing and teaching innovation in the classroom. By exploring new and better ways to educate students and also teaching the skills students need to become innovators themselves, today's educators can have a tremendous impact on the future of our world. If you are an educator looking to jumpstart innovation in your school, check out how I and my team can help.

Giving people an image of what learning could be like is a really important part of improving education. Students, teachers, administrators, parents, policy makers, and community members have remarkably similar views of what education looks like, and those views have not changed much since we were school.

Despite the fact that the indominant image is in conflict with much of what we know about how children and adolescents learn best, it is deeply ingrained in our culture. It is so ingrained that approaches to education that differ from this model are typically met with resistance by participants and stakeholders.If you want to make students and teachers uncomfortable, ask them to work in a configuration that goes against convention. Ask most American high school students to sit in a circle or to share their work with others in small groups, and they will squirm with discomfort. Ask most American principals to evaluate the quality of teaching and learning in a classroom in which students are moving around the classroom, talking and arguing, and making messes, and they will conclude that the teacher is unable to control the students and that learning is being undermined by the disorder. And yet, these are precisely the kinds of conditions that have been shown to maximize learning.

Along with traditional views about the conditions that lead to learning, most of us carry around traditional views about what constitutes learning. Most of us were educated in a system that focused very heavily on learning facts, and we still tend to associate the state of being well-educated with knowing a lot of facts. Even as we say that 21st-century citizens and workers need to be able to think critically, solve complex problems, and work in teams, we assess the progress of students in terms of what they know.

If we are serious about educating a generation of geo-literate citizens, it is important that we break down our own out-of-date views about learning and replace them with new images of how we should educate young people and what kind of knowledge and skills we should be aiming for. Here's an example:-

Consider the following two descriptions of how teachers might teach the first day of a unit on climate for eighth graders. In one classroom, the teacher projects several maps displaying global distribution of temperatures at different times of year and asks her students to identify and discuss interesting patterns.In another classroom, the teacher gives each of her students six crayons and a map of the world displaying continent outlines. He asks them to draw their best guess of what the distribution of temperatures is like all around the world in the month of July. The day before, when the second teacher told the first one about this activity, the latter warned him he was making a big mistake. The first teacher toldthe second one that his eighth graders will get frustrated because they won't know enough to colour the map in. Worse, he argued, the students are likely to draw things that are incorrect, and it's dangerous to have students do things like that if you won't be able to correct them. At the beginning of his lesson, the second teacher grew concerned that the first one had been right. Even though they were excited about getting crayons, his students were slow to start drawing, and the second teacher saw them looking nervously at each other's papers. After a few minutes, though, they became very engaged in the temperature-drawing activity. In fact, he only wanted them to spend 5 minutes drawing their temperature maps so he could begin discussing them, but his students insisted on taking 10 minutes. When he asked them what they drew and why, two-thirds of the students' hands shot up. Over the course of the discussion, several students shouted questions out of turn about what the "real" temperatures were and why temperatures are different from place to place. At the end of the discussion, in which students voiced many thoughts—some right and some wrong—about the factors that influence temperature, they practically begged him to show them a map of global temperature distributions.

In the first class, on the other hand, the lesson was very different. After he put him global temperature maps on the

projector, he had to ask three different prompting questions about what they saw in the map and wait a full 30 seconds—an eternity in front of a classroom—until one student reluctantly raised her hand and said, “It looks like it’s warmer closer to the equator.” After a few more minutes of discussion, in which a handful of students each identified a pattern, he instructed them to take out their books and start reading about the causes of temperature variation.

Second teachers approach made the first one uncomfortable. He didn’t like the unfamiliar practice of asking students to do a task before they’d been taught to do it. It even made the students uncomfortable at first. They aren’t used to speculating, and the second one had to reassure them that they wouldn’t be graded on their maps or even asked to hand them in.

However, in the end, the activity of second teacher was much more engaging to students, and it achieved its goal more effectively than the first one’s. Both activities were intended to get students to notice patterns in global temperature and develop interest in the sources of those patterns. The first teacher assumed that students would be naturally motivated to notice differences and be curious about them. The second one recognized that they wouldn’t be, and it engaged them in an activity in which they had to draw on what they knew in a way that made them curious about what they didn’t know. The lesson of second class is also based on research that says that if you ask students to articulate their current understanding of a phenomenon before you teach them something new about it, they learn the new material more effectively because they can connect it to their existing understanding. The teacher of first class was afraid that the map-drawing activity might reinforce a student’s misconception, but in fact, the reverse is true. By eliciting students’ misconceptions, a teacher increases the likelihood that they will replace the old in their memories with the new.

References

1. Amabile, T. M. 1996. Creativity in Context. Westview.
2. Baron, J. 1988. Thinking and Deciding. Cambridge University Press.
3. Christensen, C. M. 1997. The Innovator’s Dilemma. Harvard Business School Press.
4. Cohen, W. M., A. Goto, A. Nagata, R. R. Nelson, and J. P. Walsh. 2002. “R&D Spillovers, Patents and the Incentives to Innovate in Japan and the United States.” Research Policy 31 (8–9): 1349–1367.
5. Everett M. Rogers, *Diffusion of Innovations* (Free Press of Glencoe, 1962) http://tentyp.es/T6MMjx
6. Roger L. Martin, *The Opposable Mind* (Harvard Business School Press, 2007) http://tentyp.es/TG9BJj
7. Steven B. Johnson, *Where Good Ideas Come From* (Riverhead, 2010) http://tentyp.es/OG7MNj
8. Thomas S. Kuhn, *The Structure of Scientific Revolutions* (University of Chicago Press, 1962) http://tentyp.es/PZHbre

