



# Innovation In Education: Traditional To Modern

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## Abstract

The world needs people who can use their critical and creative thinking abilities to work as a team to address problems both now and in the future. Technology has totally changed and modified the ways in which knowledge is created, acquired, and shared. The question of whether education can produce critical and creative thinkers who can meet the demands of the social and economic world of now and tomorrow arises when it comes to education. On the other side, because they undermine instructors' authority in the classroom and alter how people view them, computers and smart gadgets are endangering the accuracy of data and knowledge. Consequently, the phrases "teacher" and "guide," "facilitator," and "coach" have started to sound alike (Ilhan, 2015). It's common knowledge that children receive their training in schools. It's unclear how much of the content is backed by information and communication technologies, though, and what percentage of it students actually learn. In a time when individuals are constantly surrounded by technology at work, in the classroom, and elsewhere, smart devices and technical tools have developed too quickly. The advancement of pedagogical techniques that integrate educational technologies and educational research have not kept pace with the rapid advancements in electronic gadgets utilized on a daily basis. Given this, ensuring innovation in educational activities can be achieved by comprehending the benefits of integrating technology into the classroom. The purpose of this study is to demonstrate the need for thoughtful handling of innovation in education. To achieve this, this study examines earlier research on innovation as a requirement for unique learning environments and updates tactics for effectively integrating technology into education, resulting in the creation of creative learning environments. Last but not least, innovation plays a critical role in changing and rebuilding training settings in addition to curricula, teacher roles, and teacher preparation.

**Keywords:** Education, Information and Communication Technology, Innovative

## Introduction

Now-a-days, people in the society have acquired complete control over the knowledge. Voogt (2010) suggested the rationale why the global society has transformed into knowledge society is ICTs. What is odd about living within the times is that the individual cannot deny the changes within the world; he must readily adapt to the changing environment and conditions, which may be a quality of technology-driven societies. This reality puts a pressure on educational systems to adapt all individuals to knowledge society and knowledge economy. As for a blend of combination of knowledge society and global economy, the foundation of today's society is based on building knowledge. Curricula must be revamped in a way that they will boost critical and creative thinkers that will focus on contributing to knowledge society. Knowledge building, problem-solving and innovation, skilled communication, collaboration, self-regulation and the use of technology for learning are the learning result of the 21st Century, among which self-regulation that puts the student at the centre of educational processes. Ilhan (2015) emphasized that the students take active part in the learning process, which will pave the way for the students to become knowledge builders. "Innovation in education, it means allowing imagination to flourish and not be afraid to try new things. In order words, innovation in education will transform the students from 'knowledge consumers' into 'knowledge manufacturers' by placing them at the center of innovative educational settings.

Given the state of the world, the global economy, and education, some potential strategies for incorporating educational systems into the knowledge economy include reframing what knowledge is, defining innovation precisely, and enhancing human capital through higher educational attainment rates. Blouin (2009) draws attention to the fact that students are ready for the change, but the teachers may not be as ready and suggest that this transformation requires extreme caution.

Alci and Karatas (2015) emphasized that individuals should take active part in adopting technology as it is not feasible to include every newly released instructional technology or ICTs in curricula, which are barely designed on annual basis and to which it is not traditional to make any upgrades during the year. Kampylis and Punie (2012) connects innovation and modernization of educational activities with creative and critical learners, who can take control of their own learning and monitor their own progress themselves. Salamapasis (2013) makes a strong distinction between innovation and creativity by putting forward that innovation happens as a result of creative processes. On the other hand, innovation does not necessarily mean cutting-edge technology adoption because innovation and technology adoption may sometimes be puzzling as the two terms sometimes happen to be used interchangeably.

### **Purpose of the Study**

Innovation in education encourages teachers and students to explore, research and use all the tools to discover something new. It involves a unique way of looking at problems and solving them. The thinking process will help students develop their creativity and their problem-solving skills. In the light of the theoretical framework, the researcher is trying to seek the importance of innovation in education and how it can be implemented in education.

### **Significance of Innovation in Education**

Our economy is built on the foundation of education. Our success in life is largely determined by the knowledge and skills we acquire in school. It sheds light on our problem-solving processes, interpersonal relationships, and worldview. Education is even more crucial in today's innovation economy for producing the next wave of creative thinkers and innovators. The promise of contemporary education, however, is far from what many students are really learning. In education, new concepts are frequently adopted and explored slowly. Rather, a lot of teachers continue to use antiquated and more inefficient teaching strategies.

Using the gadgets and tools that appear most useful at first look has grown popular with the introduction of new technology. According to Vincent (2013), there are three types of skills: technical skills, thinking and creativity skills, and behavioral and social skills. Technical skills are those that can be learned or improved via learning, and they typically provide an individual the ability to create. Accordingly, education is in charge of providing pupils with the necessary skills for the modern workforce. The modern educational system requires creative thinkers, yet the conventional educational system produces more people who are focused on finding jobs instead of those who are creative thinkers.

One may argue that the notion of innovation is mostly related to future societies.

**Education should not be the filling of a pail, but the lighting of a fire**

**- William Butler Yeats**

The literature above clearly suggests that innovation features a significant role within the systems of education today, though the definitions on the way to start and manage it haven't been thoroughly made. The role of the utilization of technology in education and therefore the way it relates to the content that must be conveyed to the scholars and the role of the knowledge that's a part of that content got to be handled carefully while designing the curricula and the educational environments and handling the outcomes of the instructional processes in terms of the way to evaluate the worth of workforce which will enter the market and consecutively their use for the economy and the services they're going to offer. This takes the character of this relationship back to the objectives of the education which will shape the character of the educational processes.

Boekholt (2007) laid forward that education for innovation involves learning and teaching approaches which incorporates activity based learning and hands-on experience, which is also a curricular and instructional design-related theory rather than mere adoption of technological tools. Merisotis and Phipps (1999) stated that most of the research on technology eventually focuses on an activity that directly relates

to the art of teaching by concluding that technology adoption is not as significant as other elements such as motivation, teacher, learner characteristics, learning tasks, etc. As a result, it can be said that innovation is more related to curricula than it is thought to technology.

## Innovation in Education

The introduction and use of novel concepts, procedures, tools, and techniques to raise student achievement and enrich the educational process is referred to as innovation in education. It entails taking a proactive stance when it comes to meeting the changing demands of educators, learners, and educational institutions. These are some important facets of educational innovation.

- a. **Integration of Technology:** Adoption of educational applications, online resources, and digital technologies to provide individualized and interactive learning. Employing immersive technologies like as augmented reality, virtual reality, and others to improve participation.
- b. **Tailored Education:** Adjusting educational experiences to meet the requirements, interests, and learning preferences of each individual student. Platforms for adaptive learning that modify the pace and material in response to students' success.
- c. **Project-Based Education:** Switching to project-based learning methods that prioritize practical, cooperative, and real-world problem-solving exercises in place of conventional lecture-based training. Promoting creativity, critical thinking, and cooperative abilities.
- d. **Flipped Classrooms:** Reversing the conventional classroom model by utilizing class time for interactive, application-based activities and distributing educational information online after hours. Encouraging active engagement and learning that is focused on the learner.
- e. **Creative Pedagogies:** Investigation of alternative teaching strategies, including game-based learning, experiential learning, and inquiry-based learning. Emphasis on developing 21st-century skills and a development mentality.
- f. **Acquiring Knowledge in Analytics:** Analytics and data are used to monitor student development, spot learning trends, and offer prompt interventions. Decision-making for educators and administrators based on data.
- g. **Professional Development for Teachers:** Opportunities for educators to improve their pedagogical abilities and adjust to new technology include ongoing training and development. Promoting among teachers a culture of lifelong learning.
- h. **Adaptable Classroom Environments:** Rethinking both real and virtual learning settings to encourage flexibility, creativity, and teamwork. Technological centres, adjustable furniture, and areas for both alone and group work are all included.
- i. **Cross-cultural and Global Education:** Curriculum integration of cross-cultural awareness and global viewpoints. Cooperation on global initiatives and virtual interactions with educational institutions and students from around the globe.
- j. **Practices in Inclusive Education:** Putting solutions into practice to meet kids' varied learning requirements, including those with impairments. Encouraging diversity, fairness, and accessibility in learning environments.
- k. **Changes in Institutions and Policies:** Institutional structures and supportive policies that promote innovation and experimentation. Leadership that encourages educational institutions to adopt a risk-taking and innovative culture.
- l. **Social-emotional learning (SEL):** Including curricula that emphasize helping students gain social and emotional competencies, such as resilience, empathy, and self-awareness. Acknowledging the value of academics and holistic development

Technology may be a significant driver behind change, and sometimes plays a crucial role in innovations in educational design and delivery. There are immense possibilities for greater and wider-spread change with the use of present-day technological advancements, as well as with the implementation of innovative educational programs.

The challenge is to make sure that innovation plays a constructive role in improving educational opportunities for billions of individuals who remain under-served during a rapidly developing world. Technologies that are now available in most Commonwealth countries increase the potential to support learners and educators and may help remove the barriers of your time and distance. Information and communications technologies do not replace all previous ones, nor do they replace great educational

design and delivery. However, appropriate technologies can provide additional possibilities for learner support, interactivity, and access to education.

Kampylis, Bocconi and Punie (2012) classifies the interrelated nature of innovation, technology and curriculum by stating that the role of Information and communications technologies must be disruptive which is to result in the transformation of teachers' and students' roles and innovation in pedagogical aspect which can eventually be ensured through a transformation in values, practices and infrastructure. Moreover, innovative strategies serve as a replacement to the traditional strategies which may be outmoded or do not attract the students' attention any longer.

A complementary function of Information and Communication Technologies in a way to implement innovative educational concepts to the classrooms. The focus must be on achieving education and development objectives, not on commercializing technical gadgets. However, learners have demonstrated the ability to gain technical proficiency in a variety of software, hardware, and other information and communications technologies.

A broad range of instruments and resources intended to improve teaching methods, expedite administrative duties, and raise educational efficiency are included in innovative technology for educators.

Today, educators have the challenge of monitoring changes in technologies, determining if they apply to learners living in 'the real world,' and seeking ways to use technologies to complement and support instructional methodologies and practices. Given the challenges of insufficient numbers of teachers being trained, teachers leaving the profession, and too few classrooms in developing countries. Taking education to an innovative level of practice requires teachers stopping the old routines and changing their old or traditional beliefs for the untraditional students and learning environments and social life at hand today. An encouraging way of innovation in education would be the teachers searching for creative and innovative solutions to existing problems and carrying out research into instruction and education.

## Conclusion

Innovation has been used interchangeably with technology adoption in education. This being the case, as the type of society is knowledge society and knowledge economy today, everything is based on producing knowledge and managing it globally. This puts a pressure on education that individuals must be equipped with skills to compete in the knowledge era. The outcomes of the education system must be targeted to ensure that the outcomes are newly produced knowledge. Sahlberg (2009) claims that knowledge and innovation are the elements that will make today's society transform into the future's. In this respect, for education must prepare the individuals to the innovation economy, education itself must transform and innovative practices must be nurtured. The educational systems change the people and their societies and vice versa, the societies always transform and with themselves, they transform the inner dynamics of the country they belong to. Generally speaking, using ICTs is only a way of supporting the content of the curriculum. Teaching professionals must discriminate between innovation and using technology in education, both of which have attributions to different concepts. In conclusion, it can be said that using technology in education can be a part of using innovative practices and innovation in education. Innovation itself fits better to the practices where curriculum-related levels of instruction are enhanced through technology or technologically enhanced materials, techniques and equipment. In other words, technology facilitates the conveying of the content to the students.

## References

- Avvisati F., Jacotin G. & Vincent-Lancrin S.(2013). Educating higher education students for innovative economies: What international data tell us, *Tuning Journal for Higher Education*, Vol.1, No.1, 223-240.
- Blouin R. A., Riffée W. H., Robinson E.T., Beck D. E., Green C., Joyner P. U. & Pollack G. M. (2009). Roles of innovation in education delivery, *American Journal of Pharmaceutical Education*, Vol.73, No.8, 1-12.
- Bocconi S., Kampylis P. G. & Punie Y.(2012). Innovating learning: Key elements for developing creative classrooms in Europe, Spain, European Commission, Joint Research Centre, Institute for Prospective Technological Studies Retrieved from [https://www.researchgate.net/publication/235965828\\_Innovating\\_Learning\\_Key\\_Elements\\_for\\_Developing\\_Creative\\_Classrooms\\_in\\_Europe](https://www.researchgate.net/publication/235965828_Innovating_Learning_Key_Elements_for_Developing_Creative_Classrooms_in_Europe)
- Findikoglu F., Alci B. & Karatas H.(2015). The correlation between pre-service teachers' attitudes towards technology and achievement in material design, *Anthropologist*, Vol.20, No.3, 744-753.
- Ilhan D. & Karatas H. (2015). An analysis on motivational beliefs and attitudes of undergraduates regarding learning English, *The International Journal of Educational Researchers*, Vol.6, No.2.
- Kampylis P. G., Bocconi S. & Punie Y.(2012). Towards a mapping framework of ICT enabled innovation for learning, Spain, Joint Research Center, Institute for Prospective Technological Studies, Retrieved from [https://www.researchgate.net/publication/235965833\\_Towards\\_a\\_mapping\\_framework\\_of\\_ICT-enabled\\_innovation\\_for\\_Learning](https://www.researchgate.net/publication/235965833_Towards_a_mapping_framework_of_ICT-enabled_innovation_for_Learning)
- Merisotis J. & Phipps R.(2009). What's difference?: Outcomes of distance vs. traditional classroom based learning. *Change*, Vol.31, No.3, 12-17.
- OECD (2010). Inspired by technology, driven by pedagogy: A systemic approach to technology-based school innovations, Paris, OECD Retrieved from <http://www.oecd.org/education/cei/inspiredbytechnologydrivenbypedagogyasystemicapproachtotechnology-basedschoolinnovations.htm>.
- Salampasis D.G.(2013). Enhancing creativity and innovation including entrepreneurship at all levels of education and training, Brussels, ECET Retrieved from <https://issuu.com/confindustriavenetosiaiv/docs/clear-report3-en>
- Shapiro H., Haahr J., Bayer I. & Boekholt P.(2007). Background paper on education, Danish technological Institute and Technopolis for the European Commission, DG Education and Culture in the context of a planned Green Paper on innovation Retrieved from [https://www.researchgate.net/publication/267955018\\_Background\\_Paper\\_on\\_Innovation\\_and\\_Education](https://www.researchgate.net/publication/267955018_Background_Paper_on_Innovation_and_Education)
- Sahlberg P.(2009). Creativity and innovation through lifelong learning, *Journal of Lifelong Learning in Europe*, Vol.14, No.1, 53-60.
- Voogt J. (2010). Teacher factors associated with innovative curriculum goals and pedagogical practices: differences between extensive and non-extensive ICT using science teachers, *Journal of Computer Assisted Learning*, Vol.26, 453-464.
- \_\_\_\_\_ (2020). Research and Innovation for ICT in Education Retrieved from <https://ec.europa.eu/digital-single-market/en/research-and-innovation-ict-education>  
<https://digitallearning.eletsonline.com/2020/10/teaching-and-learning-with-ict-tools-issues-and-challenges/>