

# Alternative Learning Platforms in the Educational Innovation Processes



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#### Introduction

The world perceives innovations primarily of a technological nature, for example, machines, equipment, or various other aids which people see and perceive. However, innovations occur in multiple types of areas, such as health, transport, and management. It is not only products but also processes, systems, or services that are innovated. Innovation and its development is a long-term matter, it has been around for centuries. Some innovations are known by everyone, and others are noticed by only a very few people. Nevertheless, innovation also occurs in the education system.

The educational process is the process of transferring information and knowledge from generation to generation. The information gathered is being constantly updated with new knowledge and is developed alongside with the outside world. This results in a constant flow of knowledge. Some information evolves continuously; some on the contrary becomes outdated and disappear due to new findings and discoveries. Therefore, the entire educational process must

always be as up-to-date as possible. Information and knowledge exchange is one of the benefits of globalization and technological progress. The Internet enables fast worldwide information transfer from one location to another. This exchange meant a worldwide shift in educational processes.

Continual technical development, progress, trends, and application of technical equipment in men's everyday life awake the interest in education. The aim and purpose of modern didactic technique is to support students' learning, to develop their creativity and imagination, to awake activity, and to interest in education as a whole.

The educational system is undergoing a reform, the main aim of which is to transform traditional (encyclopedic) memorization and directive (nonlife) education into creative education - humane education and knowledge-based education, where the emphasis is on activity and freedom of personality. Pursuing an educational change from a traditional higher education culture is challenging for teachers (Kunnari and Ilomäki 2016). The modernization of the educational process is based on the requirement to correspond to the latest pedagogical, psychological, and methodological knowledge. Education innovation must be clearly understood as a complex of interconnected and overlapping areas. Innovation of the educational process can be understood as modernization of goals, methods, forms, content, but also tools that contribute to the functionality and attractiveness of the whole educational

system. The use of technology in the existing learning environment contributes to building a positive relationship and helps to build the attractiveness and interest of learners in learning. University teaching has found a fundamental need to incorporate student-centered teaching methodologies in educational practice (López 2017). The current educational process is therefore focused on students' activity, their work, independence, flexibility, adaptability, and so on. We have been working on this kind of functioning educational system for almost two decades, and yet there are still many areas in which it cannot be implemented.

#### **Educational Innovation**

Depending on the type of innovation, we are coming across with product innovations (new fields of study), market innovations (third age universities, short retraining courses), work organization innovations (virtual universities), but also process innovation (e-learning). None of them have existed some time ago and arose over time based on the needs of society.

It is the responsibility of universities to work with their students and staff to create an environment that fosters innovation-based social and economic development (Saiz-Santos et al. 2017). The base stone of innovation in the educational process is the alternative school, which is the "sibling" of the traditional school. It is more a modern form of education, focused primarily on the development of each student's personality and preparation for real life. Alternative schools require higher-quality teachers. In addition to the traditional materials available in textbooks, they must incorporate practical knowledge into the learning process and demonstrate it to students in an engaging and excited way (mostly involving students through the entire process). One of these approaches is project-based learning. It is an innovative way of teaching. Students learn and acquire new skills and knowledge by working on the project. They solve real problems and use the knowledge and information gained from other subjects. Business simulators are also used for this purpose. They are based on real (historical) data. Based on statistical analysis of market development, these kinds of simulators can determine the consequences of decisions taken. There are several such simulators available on the market. Students can try to manage their virtual business. By setting a business strategy, correctly allocating their resources, implementing marketing tools, and placing their products on the market, they learn the impact of individual decisions on the overall economic strength and position of their business. Mentioned simulators also allow students to compete with each other, creating a naturally competitive environment. These simulators are an ideal complement to the traditional economic subjects and take the entire educational process to the next millennium.

## Impact of COVID-19 to Education

These days the world is plagued by the COVID-19 pandemic. Governments around the world are taking radical measures and are introducing quarantines for their residents. Education was the first sector that closed its doors. In an effort to prevent the rapid spread of the virus in a large number of populations, governments have decided to close schools and universities first. However, this measure did not mean stopping the educational process. Universities had to change from full-time day-to-day education to distance learning. It is an open principle approach where teachers are separated from their students. As in the other sectors, also in the educational sector, this extraordinary situation is the greatest driver for the development and implementation of innovation.

E-learning, as we knew it before the arrival of COVID-19, used to serve only as a learning aid. Students could find all necessary study materials for particular subjects in one place, and teachers could centrally contact all of their students online – using one place on the network. The entire elearning was just a form of digitization of education. We used to divide it to offline – where students were given CDs or they copied particular study materials to another portable storage device and online – when they needed an Internet

connection or a university intranet where the study materials were distributed via online tools of communication. The online form can be divided into asynchronous and synchronous forms. The most frequently used form before COVID-19 was the asynchronous form, where communication between the student and the tutor was carried out via e-mails, messages, or university educational servers. However, the closure of schools and the transition to distance learning have led to an increase in the use of the very synchronous form of online learning. In this form of education, students and lecturers are connected simultaneously through a selected platform and communicate on the basis of instant feedback. The lecturer can also give lectures remotely through videoconferencing. Nonetheless, this form of education is very demanding for the technical knowledge of the teachers themselves and for the students too.

## **Economic Education**

Distance learning is not equally suitable for all fields of study. One of the fields for which distance education is suitable is economic education. In economic education, it is most important to understand all the laws and theories. In addition to university students, such study is also sought by business managers and employees who do not have the space for full-time study. Increased interest in economic education also implies a higher need for innovation in the form of education. These days, all teachers are forced to carry out distance learning. Some universities were more or less prepared for this type of education. The aim of such teaching is to create a virtual environment. With a podcast, teachers can directly navigate students at their work and show them key points in the assignment. In addition to the classic videoconferences during which the lecturer comments on the ongoing presentation, he has a large number of innovative online tools available. They can use a large number of platforms for their live stream to monitor online stock market developments, model the economic consequences of the measures taken to combat COVID-19, and

predict the evolution of the world economy using a variety of statistical models. The advantage of this kind of studies is that each student can adapt the study process to their own pace. This, in contrast to the full-time education, is provided through broadcast records. Students can repeatedly return to the sections that are causing them problems without having to wait for the whole working group or needing to adapt in other way. Similarly, the follow-up questions to the lectures, which are asked after the online transmission, are more relevant and allow addressing the issue more in depth, rather than explaining it from the information presented. The lecturer also has the possibility to send to students' materials more devoted to the issue in the form of web pages links. Then it is up to individual students on how and if they decide to proceed to further self-education using alternative educational platforms.

## **Alternative Educational Platforms**

E-learning plays an important, very informationintensive role today. Thanks to the Internet, we seem to be able to get information on any subject and on a relatively large scale in a short time. In case it is necessary to obtain information for school or work in order to educate or develop projects or surveys; trustworthy resources should be visited. For this purpose, it is essential to find relevant websites with a good reputation in the online environment. There are several such platforms. Considering the limitation of presenting these platforms which could be seen as their advertising, we will only describe the functionality of the most interesting platforms in the online world.

Not only for students of economics, there is a portal that is well-known in these fields. Many young people struggle with economic expressions in business and finance even after graduating from economic universities or working in the fields of economics. This platform explains most of the most commonly used words and helps to understand the financial market. It contains many articles, tutorials, and videos in English to help keep up with the ever-changing world of finance and economy.

The most amazing thing on the Internet is that it is possible to enroll in various college subjects that in the past were allowed only to people who had a huge amount of money and could afford to attend elite schools. You can also learn online at these schools through another portal. It offers around 400 courses from introduction into financial markets to complicated neural networks and their application. Courses tend to include videos as well as various quizzes that students have to master on time and are monitored by professors from prestigious universities. To keep yourself informed about the courses that are just opening, you can choose the area of your interest, and in this way, you can obtain maximum information.

Another platform is home to more than 3000 videos broken down by subject and category including economics. The course details are divided into smaller sections of text and videos for ease of learning and alignment with the curriculum. It's a nonprofit project and all videos are added by people. Learning levels can be controlled by individual progress through video levels. It is even possible to ask questions and leave comments if anything in the lesson is unclear. Within this project, tutors can track the progress of their students. Someone can consider inclusion of other people in education as motivation to get better results or to proceed faster. This portal now can be found at the Czech address, and currently there is an ongoing work on the Slovak version, which is therefore not yet running.

Another effort is to make materials for college and high school students available worldwide through the Internet and for free. On this portal it is possible to search for a specific topic according to interest, to choose courses based on the languages you speak (20 languages currently available) or as per the provider of the course. The portal contains more than 5000 categories in English only, covering everything from statistical thermodynamics to complex stock exchange operations. They explain the basic procedures and conditions of investments to more complicated instruments of financial derivatives.

Another platform is a global resource of courses in English, French, and German, which covers everything for preparation of the basic work skills development. There are all kinds of lessons from study skills to American copyright law, general accounting, or house purchase negotiation. The main areas include Business and Business Skills, Financial and Economic Skills, Languages, Digital and IT Skills, Personnel Development, School Curriculum, and Diploma Courses. The completion of the course is guaranteed by a certificate or diploma.

The Massachusetts Institute of Technology (MIT) opens its training courses through their Internet portal. On this portal you can choose from a variety of free courses from the comfort of your home and at a time that suits you. There is a plenty of materials on the MIT website that can be recommended to your own students. These materials provide more professional and detailed view not only on economic education.

Like MIT, Carnegie Mellon University has decided to provide its selected courses in online lectures. It also enabled access to useful educational materials, which allows learning at its own pace from the same materials that would be used in classrooms. Their offer is limited, but you will find many useful economic lectures and courses.

Among the various portals on the Internet, we can find a large number of free portals collecting interesting data. The best known one is the portal, offering even broader variation of information than MIT itself. It is a unique project of a free portal with a huge database of courses from more than 50 universities around the world. Courses are categorized by the institutions, but also per subject of the course. The big advantage is an alphabetical overview of topics including the economic crisis, currency banks, economic growth, and international trade. Some courses are also done in an entertaining way to make even more complicated topics easier for students to remember.

A very useful portal for both students and lecturers is a well-designed site that contains more than 10,000 courses from universities around the world. It allows searching by topic, showing all courses dealing with particular issue, their occupancy, availability of study materials, and video presentations. This allows the user to choose the type of study that suits the best. The portal provides as well valuable information about the

universities, which can be used in the offline world too should you decide to earn a degree or just continue your studies in a more formal way.

The innovation trend in education maintained by one of the world's greatest innovators. The mobile phone manufacturer has not lagged behind and has provided a large number of courses that are available with the free apps. You can download it to your phone, tablet, or computer. The company states that it contains about 500,000 different courses with materials ranging from elementary schools to universities. You can also find materials from respected institutions such as the New York Public Library and the MoMA (Museum of Modern Art in New York). It contains videos, too, can be shared with friends as well as e-book materials. It is an ideal app for anyone who wants to make the most of their time and keep progressing. This indirectly leads young people's society to innovation.

The most famous free library boasts a collection of over 21 million articles and books. Here you can access newspapers, magazines, and articles from 1984 to the present. It is an excellent opportunity to obtain background information for university projects and academic research or just to search for more information on a selected topic. You can search by keyword, topic, author, or just randomly browse through various articles.

Lastly, two anti-polar portals are worth mentioning. The first is an Internet portal that does not take much of its design but places great emphasis on its content. It contains more than 7000 English courses, which are also available for download. There are courses that offer certificates upon completion of the course, as well as various auditing and accounting courses. The portal contains many useful educational materials suitable for university students as well as managers. The second portal is the world's most famous video content portal. It covers more than 6000 professional channels on science and education. This portal is used by people all over the planet for both entertainment and education. It is one of the largest consumers not only of leisure. A multitude of video tutorials will explain almost everything a person will ever need. The content of this portal is

made up by people, and its daily traffic is over one billion visitors.

Education is the basis for the growth of society. Each country should therefore pay increased attention to the field of education. It is a necessary strategic area which is needed in order to ensure the improvement of living standards and progress in all fields. Without a quality educational system, countries cannot make economic progress. Educational innovations are therefore important. Not only from the state standpoint but also from the position of everyone involved in the educational process. The improvement of higher education requires more than the development of new teaching strategies; it requires systemic, cultural change (Corbo et al. 2016). Only by the complex interest of everyone is it possible to ensure the continuous improvement and streamlining of the entire education system.

#### **Cross-References**

- ▶ Blended Learning
- ► Creativity, a Prerequisite for Sustainable and Innovative Education
- ► Educational Processes at Universities, Challenges and Innovations
- ► Human-computer Interaction Visualisation in Mixed Reality
- ▶ Play and Playful Learning in Higher Education
- ► Smart Education

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