

## Technology as a Tool to Inspire Student Learning

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**Abstract:** The present article focuses on analyses of the modern distance education that promotes effective learning and gives an overview of the impact of e-learning on teaching practice. It suggests that the impact of ICT systems and services has and will continue to transform teaching practice at all levels of education. This study leads to some important data-driven suggestions for and about distance education. It also offers that the teaching of on-campus learning lies in the right combination of digital and traditional tools”.

**Key words:** Modernization of education • Loss for equality of education • Online class • Postal services

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### INTRODUCTION

“Keywords: high-quality education, distance learning, digital tools, traditional tools, interactivity of students and teachers, online classes, modernization of education, loss for quality of education, blended learning”.

In Europe in the late 19<sup>th</sup> century with the advent of affordable regular postal service arose corresponding training. Pupils received educational materials by mail, corresponded with their teachers and passed the exams to trustees or wrote a scientific work. In Russia this method appeared in the late 19<sup>th</sup> century.

According to Bizhan Nasseh “Throughout the history of human communication, advances in technology have powered paradigmatic shifts in education (Frick, 1991). Moore (1990) sees the success of distance education to be based on the content of the dialog between teacher and student and the effectiveness of the communication system in an educational process” [1].

Early 20<sup>th</sup> century is characterized by rapid technological growth, the presence of telegraph and telephone.

The emergence of radio and television made changes in distance learning methods. The audience learning rose hundreds of times. However, radio and television was a significant disadvantage, students didn’t have an opportunity to get feedback.

In the 20<sup>th</sup> century the availability of computers and the Internet made the distribution of distance learning (training) easier and faster. The Internet became a huge breakthrough, much better than radio and television [2]. Teachers could communicate and receive feedback from any student wherever he was. Spreading of “fast Internet” enabled to use on-line seminars for training. For example, the rise of massive open online courses (MOOCs) was digital tools to deliver an innovative project of top-tier education to young people, especially to those living in remote places [3].

In 1969 in Great Britain was opened the first University of Distance Education – The Open University UK and it was so named to show its availability due to low prices and no need to often attend classroom training. There are other well-known universities with distance learning programs abroad: University of South Africa (1946), Fern University of Hagen (Germany, 1974), National Technological University (USA), Spanish National University of Distance Learning, INTEC- college of Cape Town (South Africa), University of Southern Queensland (USQ) etc.

In Australia today USQ, on recognition of Australian National Distance Learning Center, is a leader in providing distance learning. It has a wide network of distance learning centers in many countries (Singapore, Malaysia, Sweden and others), in which the students by contacting the office of the center, easily enter a university for distance learning.

In Russia a decade ago, distance education was innovation, which was treated with suspicion. The official date of distance learning can be considered May 30, 1997 when Russian Ministry of Education issued order # 1050, allowing to carry out an experiment in distance learning education [4]. Today Distance learning in Russia is developing successfully.

For example, Project “Intuit, National Open University” (<http://www.intuit.ru/>), one of the first sites created specifically as a means of distance education and having no reference to the actually existing university. Portal allows both enhancing their skills and getting a full degree in information technology, IT-technologies, some of the humanities (history, English).

Moscow Center for Distance Education (<http://bakalavr-magistr.ru>) allows you to get educated in the best universities of the country. Training is conducted in areas management, production management, finance and economics, law.

Students of Modern Humanitarian University ([www.muh.ru](http://www.muh.ru)) may receive secondary and higher education, additional and post-graduate education in such fields as law, management, economics, linguistics, psychology, philosophy, sociology, political science and computer science. Using the original educational technology allows you to get a high quality university education.

Distance Learning (DL) is a set of technologies that provide trainees with the bulk of the material under study; it is an interactivity of students and teachers during the learning process and the possibility for them of independent work at the studied material inside and outside the classroom. Distance education system amazes by the number of students, number of educational institutions. Almost every university has the opportunity to provide training to students who, for one reason or another cannot attend lectures. Distance learning involves studying in the same course, the same subjects and materials, as in the full-time tuition to get after school an equivalent certificate of Higher education or improvement of professional skills [5].

For conveying educational information different techniques can be used for distance learning. The most modern computer technology (radio, television, audio / video stream, audio / video conferencing, E-Learning / Learning online, internet conference, internet broadcast has replaced the traditional several generations used technology [6]. These are the new ways of teaching aimed at expanding access to high-quality education through

online classes while also transforming and learning on the respective campuses. Today students watch lectures online and come to class prepared to tackle assignments and collaborate with teachers and peers. They interact with computer programs that allow them to work at their own pace, regardless of what the rest of the class is doing. Start-ups and nonprofits make high-quality courses available online to anyone with an Internet connection [7]. This new digital age in education is a good solution because schools and universities at present (nowadays) are under pressure than ever before-governments and institutions are raising standards for what students should know at every stage of school. So the rapid evolution of digital resources challenges teachers to reimagining what they can and should do when face-to-face with their students.

The basis of distance training is the training method that was called Natural Learning Manner. Distance learning is a simple and free democratic system of education. It is actively used by Europeans to obtain additional education.

Distance training is carried out by means of computer telecommunications, it has the following forms: chat-sessions, web-training, teleconferences, telepresence.

A student consistently carries out practical tasks, acquires stable automatic skills. Theoretical knowledge is absorbed without additional effort, organically woven into training exercises. The formation of theoretical and practical skills is achieved during the process of systematic study of materials, listening and repeating audio and video media exercises.

Distance learning takes an increasingly important role in the modernization of education as it allows to reduce the costs of training (costs for rental of premises, education travel, etc.), to train more people, to improve the quality of education through the use of modern tools, huge e-book libraries, to create a single electronic environment [8].

There are different views on computerized learning. According to Yong Zhao, Jing Lei, Bo Yan, Chun Lai and Sophia Tan the results of the research of the effectiveness on distance education “show that although the aggregated data of available studies show no significant difference in outcomes between distance education and face-to-face education as previous research reviews suggest, there is remarkable difference across the studies” [9]. Of course, technology is transforming modern education, but the question is if it is for good or/and for ill.

Proponents of adaptive learning say that technology has finally made it possible to deliver individualized instruction to every student at an affordable cost.

High-education administrators find adaptive learning and testing technologies promising and see it as an opportunity to apply empirical study and cognitive science to education in a way that have never been done.

Critics say that it is data-driven learning, not traditional learning that threatens to turn schools into factories. They see this increasing digitization as yet another unnecessary sellout to for-profit companies that push their products on teachers and students in the name of “reform”. Instructional technology now is a multibillion-dollar industry. Entrepreneurs see it as a way to standardize teaching, to replace teachers, to make money and to market new products.

The supposedly advanced tasks that computers can now barely pull off – diagnosing a student’s strengths and weaknesses and adjusting materials and approaches to suit individual learners – are things human teachers have been doing well for hundreds of years. Instead of delegating these tasks to computers, opponents say, we should be spending more on training, hiring and retaining good teachers.

Another dubious use of technology is to grade essays. Software is used to score written test answers. Machines can grade faster than teachers, but they cannot evaluate factual statements. Students will learn to write according to formula that the machines like, at the expense of accuracy, creativity and imagination. Worse, the teacher will abandon the important job of reading what the students write and will be less informed about how they think. This is the loss for quality of education. Frankly it is a problem with online assessment in general, as the job of testing is shifted from the teacher to a distant corporation.

So, teachers see technology as a tool to inspire student learning, they deflect the idea that computers could ever replace teachers, they think that taking teachers out of the learning business is not an improvement. They agree that Internet helps students to engage in science projects, learn about history by seeing the events for themselves and clear up their own ideas. Thousands of Internet-savvy teachers regularly exchange ideas about animating classrooms to increase students’ switching on in learning. They think they have an opportunity to blend the virtual with the physical and reimagining education entirely. This formal learning in which a student learns at least in part through online

delivery of content and instruction with some element of student control over time, place, path or pace is called differently: blended learning (is used with more regularity), blending learning, hybrid learning, flipping learning, technology-mediated instruction, web-enhance instruction, mix-mode instruction. Whatever it is called, it is a learning system that combines the use of Internet and digital media with classroom forms of teacher-students interaction [10].

By coupling rich physical experience with online tools, content creators and professors can finally have granular, up-to-date efficacy of the experiences they create. In this “blending learning” reality, the professor’s role is moved up the value chain. Rather than spending the bulk of their time lecturing, writing exams and - the most important skill of all of their own learning. Of course, for a motivated student in an impoverished part of the world, these virtual tools may facilitate most of their learning. In the developed world the best experience will be to leverage the online tools so that the physical time can be less passive and more human [11].

Online classes are not just about sharing educational materials via the Internet. They are also about developing new ways of teaching based on those materials for both on-campus and online audience. The teaching of on-campus learning lies in the right combination of digital and traditional tools.

Online learning is a tool, just as the textbook is a tool. The way the teacher and the student use the tool is what really counts.

## **CONCLUSION**

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