

## TECHNOLOGY IN DISTANCE LEARNING

Nino Bochorishvili<sup>1</sup> Nino Lomsadze<sup>2</sup> Irakli Bochorishvili<sup>3</sup>

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### Abstract

Since there are no scheduled classes to attend and all necessary information is available online, distance education has replaced synchronous learning for many students and teachers during the pandemic. However, we are still unsure of the long-term effects of distance learning and whether it provides the same value as learning in a classroom face-to-face.

This article discusses important challenges that colleges must take into account, such as how to help students without dependable internet access or technology participate in digital learning, as well as some specific issues related to the management of remote learning.

**Keywords:** Distance education, digital learning, technology

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<sup>1</sup> Ph.D., Associate Professor Georgian Technical University

<sup>2</sup> Ph.D., Associate Professor Georgian Technical University

<sup>3</sup> Ph.D., Associate Professor Georgian Technical University

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## Introduction

Technology today is a natural component of our surroundings. Every time it makes sense, technology is employed to aid in learning, the development of fundamental informational and technological literacy abilities, and the acquisition of subject-specific fluency by students. The education industry has seen a lot of changes recently, developments that in earlier decades would have been unthinkable. Nobody could have predicted the innovations this industry would see. It is crucial to consider the future of the industry and what the next generation of online learning environments might include as higher education institutions continue to embrace and discuss online learning. A glimpse of the pedagogical and technological possibilities is given by recent investigations. Online teaching and learning are about to enter a novel and exciting phase<sup>4</sup>. The potential to materialize a person's vision of ongoing education or a need for knowledge is a particularly alluring element of remote education. The incorporation of remote learning in this system considerably improves the quality of student training, as shown by the analysis of domestic and international experience, and this may be attributed to a variety of factors. Since the Internet offers unique opportunities in the form of services and information educational resources for various types of educational institutions, as well as for individual users, distance learning is becoming more and more self-assured, which is quite understandable. As a result, we must acknowledge that university students have a strong motivation to work independently, which is important in distance learning<sup>5</sup>.

Distance education technology allows realizing the individual nature of teacher-student communication and distance educational technologies make it possible to expand the University's influence in geographically remote regions and thus increase the flow of entrants<sup>6</sup>. In the rapidly evolving world of internet technologies, distance education has become a valuable alternative to traditional education in many countries around the world<sup>7</sup>.

Consequently, the use of modern educational technologies reveals a number of grave issues. 2018; Leontyeva, p. The quality of the current educational system is threatened by educational institutions' inflexibility, and we must remember that Georgia's new consumers and market demand the creation of quality standards. The challenge of integrating new information technologies and the potential they present call for a comprehensive reevaluation of the strategy utilized to approach the particular educational system. Students may access and use the network's vast information potential to develop their own independent critical thinking, but there is also a risk associated with technology system education.

By promoting the positive aspects of technology, the online teacher can present a quality educational learning experience. Effective online pedagogy indicates student-centered learning and

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<sup>4</sup> Soldatov & Soldatova., 2021, p.5.

<sup>5</sup> Melissa Roy, 2020.

<sup>6</sup> Learner & Luo, 2014.

<sup>7</sup> Considering the covid 19 situation around the world.

applies active learning exercises. “Interactivity, faculty, and student presence are basic in an efficient online learning environment” The use of a delivery device, such as the Internet or Blackboard “should not determine the pedagogical practice.” The technology should provide “the mechanism through which the online teacher introduces the best pedagogy for that course or topic”<sup>8</sup>.

The use of a delivery mechanism, such as the Internet or Blackboard “should not define the pedagogical practice.” The technology should provide “the mechanism through which the online teacher implements the best pedagogy for that course or topic”<sup>9</sup>.

Although using multimedia in education is not new, the internet poses concerns about the quality, accessibility, and appropriateness of the sources that students and educators choose and incorporate. Issues of course ownership and measurable learning outcomes arise when combining the usage of multimedia and free online resources with instructor-delivered content.

Classes can be accessed online whenever and anywhere you choose. Because of the flexible timetable, each student can design a unique study strategy that meets their needs. Due to a lack of time, nothing needs to be abandoned. The student is required to be present in the classroom for each lesson in traditional schooling. So they must commute, which takes time and money, from one location to another. These costs are eliminated with online education, therefore there is no need to spend money<sup>10</sup>.

The training of staff, particularly teachers who can conduct remote learning, and the use of information technology in the delivery of any form of education are essential issues. Universities all over the world are developing specialized training programs for teachers of distant learning who can use Internet resources and services in any type of educational system to deal with this problem. The use of digital resources is another issue, which is one of the reasons why the vast majority of distance learning courses are accessible online. However, the key issue is the development of leading remote learning programs in a wide range of subjects and their ongoing update to account for the ever-expanding capabilities of digital technology. It is possible to employ multimedia more frequently as information delivery speeds up, and it’s crucial to use reflective teaching methodologies. Different interaction models for information exchange over networks are mentioned by experts: targeted users; When information is spread from a particular source to numerous recipients, it is conducted one at a time, one to many, or many to many<sup>11</sup>.

In addition to changing the course’s content, multimedia also helps make a variety of information available. It also provides students with the opportunity to independently write and edit texts, illustrate tasks with the full range of visualization tools, and start engaging in more cognitive activity than they would with traditional methods. By using web technology to design distance learning courses, you can build unlimited wide branches, such as those found in dictionaries, reference books, etc. creating new

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<sup>8</sup> Lung-Yu Li & Long-Yuan Lee, p.153 2016.

<sup>9</sup> McVay et al., p. 6.

<sup>10</sup> Burns, p.10, 2011..

<sup>11</sup> Mohammed Alhih et al., 2017.

conditions for clarifying particular concepts or entire sections, expanding the student's intellectual activity, and deeper insight.

Teachers now pay particular attention to this sort of knowledge control, like assessments, which are now widely used in education, including distant learning, owing to the advancement of information technology. Tests are defined by the notion that they evaluate knowledge of the subject matter, practical abilities, and the level of critical thinking required for higher education (depth, flexibility, consistency, realism, analytical thinking; stability, concentration, concentration, and attention span; semantic memory, that is, understanding, and not Remember). The test assignments' content forces pupils to think deeply and not guess <sup>12</sup>

### CONCLUSION

Due to the pandemic, distance learning is currently the primary way of instruction, but its caliber ought to be higher<sup>13</sup>. Since distant learning is still generally thought of from a technical standpoint at this level of development, tertiary education should run into certain special issues related to the didactic and course delivery<sup>1415</sup>. Since high-quality learning is impossible without relying on the principles of pedagogy, we must acknowledge that the responsibility of the teacher in today's distance learning is paradoxical and is still not apparent. <sup>16</sup>Understanding the significance of the subject matter being studied in distant learning also aids in keeping control over student understanding.

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<sup>12</sup> Parmley, 2021

<sup>13</sup> Andrew Miller, 2020.

<sup>14</sup> Leontyeva, 2018

<sup>15</sup> Helping Teachers Feel More Confident About Distance Learning

<sup>16</sup> Remote teaching and learning in Office 365 Education

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