Youth Attitudes towards Distance Learning: Challenges and Opportunities for Sustainable Education - Case of Georgia

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Abstract: The article analyzes the theoretical and practical aspects of distance learning, explores different approaches and challenges to this type of learning. It is argued that the Covid-19 made crucial the distance learning in higher education. The paper highlights the problems in the field of distance learning in Georgian Higher Education Institutions. The need for research on the challenges of distance learning for youth for the sustainable development of the education system is justified. Desk research evaluates the opinions and expectations of researchers on distance education. SWOT analysis of distance learning is developed based on the assessment of strengths, weaknesses, opportunities and threats of distance learning. The article reveals that the demand for distance education is growing and this process is a particular challenge for developing countries. Therefore, it is very important to study the attitudes of youth towards distance learning. A Population-based approach is used to determine students' satisfaction with distance learning. The results of the research are processed by SPSS program. Meetings with focus groups were conducted through introductory, transitional and summary questions. Based on quantitative research and discussion with focus groups, conclusions have been made on distance learning challenges and sustainable education issues, therefore, recommendations have been developed.

1 INTRODUCTION

Distance learning has a long history. However, different countries in the world have different experiences in this field and are at different stages of development. Theoretical and practical aspects of distance learning for Georgia are less proven.

Due to the Covid-19 pandemic, distance learning in Higher Education Institutions has become crucial, hence, special challenges and opportunities have been identified in the distance learning system.

There has been an attempt to introduce and regulate distance learning in Georgia for years,[3] however, the development of distance education systems has accelerated significantly due to the needs created by the COVID-19 pandemic in 2020. At this time it became especially important to study the types, opportunities and limitations of distance education, pedagogical approaches and opportunities to regulate education systems (Bakradze, 2020).

Due to the Covid-19 pandemic, various forms of distance learning have been used in Georgian Higher Education Institutions for the last two years. Accordingly, some studies have been conducted on the problems and challenges in the field of distance education, however, these studies are mainly related to the terminology and the legal framework clarification for teaching in this form. Two years of experience in distance learning have revealed the obvious advantages of such type learning. Nevertheless, a number of problems have arisen in the field in Georgian Higher Education Institutions, and

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[3] "Distance Learning Management". Practical guide. Tbilisi, 2021. https://www.mes.gov.ge/uploads/covid/distanciuri-swavleba%20-%2008%2002%202021.pdf (last viewed 16.11.2021)

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in order to overcome these problems, it is important to study the attitudes of young people as the main involved party in distance learning process, towards distance education. Problem research will enable us to identify ways of adapting distance learning to real-world conditions, selecting optimal forms of distance learning through empirical observations and specific studies, and developing recommendations for sustainable education based on the challenges identified by studying youth attitudes.

2 RESEARCH OBJECTIVE

The main aim of the research is to identify the core challenges based on the study of youth attitudes towards distance learning and to develop recommendations on the opportunities for achieving sustainable education.

3 RESEARCH METHODOLOGY

Various research methods are used in the paper, including: desk research, bibliographic research. A SWOT analysis of distance learning is developed based on the assessment of strengths and weaknesses, opportunities and threats of distance learning. A Population-based / Census-based approach is used to determine students' satisfaction with distance learning. The results of the study were processed by SPSS program.

Quantitative research was conducted to clarify some of the issues of young people's attitudes towards distance learning and identify areas for sustainable development of education. About three hundred young people were interviewed. As a result, hypotheses are formulated. Semi-structured interviews with industry focus groups were conducted through introductory, transitional, and summary questions. Also, a focus group interview was conducted with students (Bachelors, Masters and Doctoral students) and 2018-2021 graduates of Ivane Javakhishvili Tbilisi State University, Faculty of Economics and Business. Twenty interviews were conducted in total. The duration of the interviews with each focus group was one hour.

4 LITERATURE REVIEW

Distance learning has been around for over a century, however, over the years its forms and technologies have changed, as well as definitions of distance learning. Learning in the format of distance learning has become a standard for universities to deliver lectures in the form of video recordings (Moore and Lockee, 1998), and the Internet has created a new opportunity for real-time distance learning development, which has significantly increased the demand for it.

By evaluating researchers' different interpretations of distance learning, it is advisable to reconcile an definition that perfectly reflects modern technological advances and all components of distance learning. Many definitions are presented in modern literature (Greenberg, 1998). Greenberg G. defines modern distance learning as "a planned teaching / learning experience that uses a wide range of technologies for distance learning and encouraging students." According to some researchers (Teaster and Blieszner, 1999), the term distance learning is used in teaching when the lecturer and the student are separated in space and possibly in time. Distance education is the result of the technological separation of teacher and student. The student is exempt from a fixed place of study (Keegan, 1995). From these explanations it can be outlined that the lecturer and the student are separated by space, however, the teaching is delivered in real time. When studying the history of distance education, three different stages are distinguished in terms of the use of technology (Bozkurt, 2019). In the first stage, the leading method was to disseminate information in print. In the second stage, the use of electronic and multimedia technologies developed for distance coverage acquired great importance. In the third stage, distance education is already dominated by Internet technology. Based on the analysis and reconciliation of the above definitions, it can be concluded that distance learning is the process of delivering education in separate time and real space using modern technologies, using appropriate teaching methods and assessment systems.

Many universities around the world have started offering appropriate programs for distance education. In this way they were able to strike a balance betweenincreasing student enrollment and lack of physical building space (Bollag and Overland, 2001).

A number of studies have been conducted in the field of distance learning, including special emphasis on the problems of distance education in general (Fitzpatrick, 1982), as well as definitions of distance, online and hybrid education systems (OECD, 2020); On the use of digital materials and technologies to support teaching process (Carlsen et al., 2016); On the effects of student and lecturer communication and

feedback in space and time (Hodges, et al., 2020); On the advantages and disadvantages of distance learning (Lobanova, 2021); On the problems of student assessment in the distance learning process (Chaudhary and Dey, 2013); On the importance of using Web resources and technology in distance learning (Bozkurt, 2019); On the distance and hybrid learning forms (Simonson and Schlosser, 2014); On the integration of synchronous and asynchronous learning (Doering, 2006); On combining distance and face-to-face learning formats (Burns, 2011); On the similarities and differences between the forms and methods of assessment of students' knowledge in the distance learning process (Menabde et al., 2016), etc.

Traditional universities have not been able to meet the demand for enrollment for years, so some countries have begun to move from "elite to mass education", for example, China has been able to use a modern technology system for 1.5 million students, two-thirds of whom were studying for a master's degree (Bollag and Overland, 2001).

In the second half of the twentieth century, the practice of introducing one of the first distance learning processes in the world based on the Austrian model "School in the Air" is especially noteworthy.[4] Organizing the distance learning process in this way was important for children who lived far away from settlements and schools. The development and mass dissemination of the Internet has changed not only the scope of distance education but also the goals and methodology. Pre-existing online course platforms have been expanded and goals have been scaled up. Similar platforms are Coursera, Udemy, Udacity, Khanacademy. These courses in the university field have made great changes (Janashia, 2021).

5 DISTANCE LEARNING EXPECTATIONS

There are some expectations about distance learning in universities, most of them are financial in nature. Universities believe that distance learning is a good way to save financial resources. The essence of the theoretical concept is that the number of students in the lecture flows increases, while the overhead costs remain the same.

Distance learning was widely used as far back as the end of the 20th century in Australia, Britain, Norway, the USA and other countries. Several websites in these countries are interconnected (Keegan, 1995). Thus, distance learning can effectively deliver the courses to a geographically and culturally diverse population, hence the need to provide appropriate programs for distance education as well.

According to the American Council on Education (ACE)[5], the number of distance learning students doubled from 1995 to 1998 to 1.6 million (Dervarics, 2001). Another market forecast at the time was that by 2002, 2.2 million students would be enrolled in the distance education program, representing 15% of U.S. college students. Many American universities felt pressured to control their spending, improve the quality of teaching, and focus on customer needs. Distance learning technologies have had and have the potential to help universities solve similar problems. In 1994, Bassom and Sherritt surveyed the views of higher education administrators and government politicians to find out what they thought would be America's major problems (Basom and Sherritt, 1992).

As a bibliographic study has shown, in order to form a sustainable education system in the next millennium and provide distance education, it will be necessary to meet the increased demands on education in the face of limited resources (Horgan, 1998). Also, it is important to increase access to modern technologies. Scholars suggest that the use of appropriate distance learning methods and assessment systems, as well as the formation of resources needed for e-learning, will significantly contribute to the achievement of sustainable education. Such complex approaches achieve the economic efficiency of higher education, otherwise distance learning programs can quickly become secondary (Dibiase, 2000).

In the case of distance learning, the primary issue is the quality of teaching, which should be revealed by examining the level of satisfaction of online courses. No less important is identifying problems with the types of course evaluation forms and identifying future opportunities.

It should be noted that between the two types of distance learning (synchronous and asynchronous), naturally, asynchronous distance learning is older than its synchronous analogue, as the latter became possible only as a result of a new wave of communication technology development. Both methods are relevant today and the selection of the appropriate teaching method depends on the knowledge that the student wants to acquire. In some

[4] "School in the Air", https://www.australian-children.com/school-of-the-air (last viewed 16.11.2021)

[5] American Council on Education https://www.acenet.edu/Pages/default.aspx (Last view 16.11.2021)

cases, a hybrid method obtained using a mixture of synchronous and asynchronous training is used. However, in recent times the method of synchronous teaching has become increasingly a priority. Modern distance education uses the computer as a delivery mechanism and the Internet as a synchronous mode of information delivery. As a result, at least 80% of the core content of the course is delivered online, in synchronous mode (Pregowska et al., 2021).

To analyze the strengths and weaknesses, opportunities and threats of distance learning, we developed a SWOT analysis. Key strengths include flexibility in time and space, continuing education, developing independent learning skills, diversifying teaching methods, expanding access to online databases such as Elsevier, Scopus, Sciencedirect, EBSCO, Econlit England Journal, JSTOR, BioOne; ECD-Library, Cambridge Journals Online, HINARI Health and more[6]. In addition, the main weaknesses that present challenges in the distance learning process are highlighted. In particular, there are the following main problems: the difficulties of introducing modern technologies, uneven level of internet coverage across regions across the country, time required for computerization process, unequal access to equipment among students, challenges of distance learning materials and process modifications, lack of modern academic and administrative staffing. The main opportunities offered by distance learning are the emergence of new capabilities of modern technologies, development of competencies of academic and administrative staff in terms of mastering online management systems, computerization and Internet coverage, innovative infrastructure development of the country, development of new learning systems, development of international training programs. As for the main threats, in this regard, the indirect consequences of the particularly accelerated processes of the recent period of transition to distance learning can be highlighted, in particular, the psychological factors that manifest themselves in students based on social isolation and lack of mastery of new forms of self-expression. In addition, cyber threats that will cause online learning systems to crash are noteworthy (see Table 1).

Table 1: SWOT Analysis of Distance Learning.

Strengths	Weaknesses
▪ Flexibility in time and space ▪ Ensuring continuity of education; ▪ Develop independent learning skills; ▪ Diversification of teaching-learning methods; ▪ Expanding access to electronic databases; ▪ Integration into the international education system.	▪ Unequal level of internet coverage; ▪ Long time required for the computerization process; ▪ Unequal access to modern equipment; ▪ Challenges of learning materials and process modification; ▪ Lack of competence of academic and administrative staff.
Opportunities	**Threats**
▪ Discovering new opportunities of modern technologies; ▪ Development of competencies of academic and administrative staff; ▪ Innovative infrastructural development of the country; ▪ Development of new learning systems; ▪ Accelerate the process of harmonization with international curricula.	▪ Psychological factors accompanying the accelerated transition to a new form of teaching; ▪ Social isolation of students; ▪ Lack of mastery of new forms of self-expression; ▪ Cyber threats to online education systems; ▪ Online learning systems malfunction.

6 RESEARCH RESULTS - DISCUSSION

Due to the pandemic, the demand for distance education has increased even more in the last two years. Social distancing measures were introduced

[6] The above list of electronic databases is made on the basis of the electronic library of Ivane Javakhishvili Tbilisi State University (last viewed 16.11.2021)

indifferent countries and jurisdictions, followed by national lockdowns in many places. Schools, universities and other educational organizations were forced to close worldwide (Johnson et al., 2022). This process has become a particular challenge for developing countries due to a number of factors. Therefore, it is very important to study the attitude of the main stakeholder in the distance learning process - young people in relation to distance learning.

The study, conducted in the spring semester of 2021, used a population-based (Census-based) approach to determine students' satisfaction with distance learning. An online questionnaire was sent to the students. Completion of the questionnaire was voluntary. The survey lasted for two weeks. The results were processed by SPSS program.

The survey revealed several findings which highlited different aspects of the topic. In particular, a survey of young people depending on the format of distance learning showed that 53% of respondents are very satisfied with distance learning and 8% are very dissatisfied (See Figure 1).

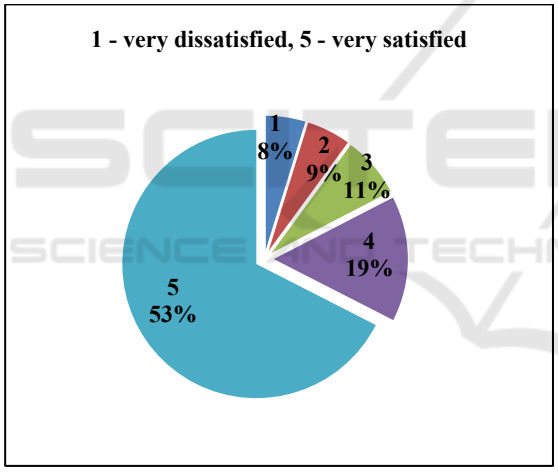

Figure 1: Level of youth satisfaction with distance learning, %.

When asked what the quality of distance education is compared to auditory education, 43% of respondents think that such education is high quality, 25% more or less quality, and 8% think that distance education is very low quality compared to auditory education (See Figure 2).

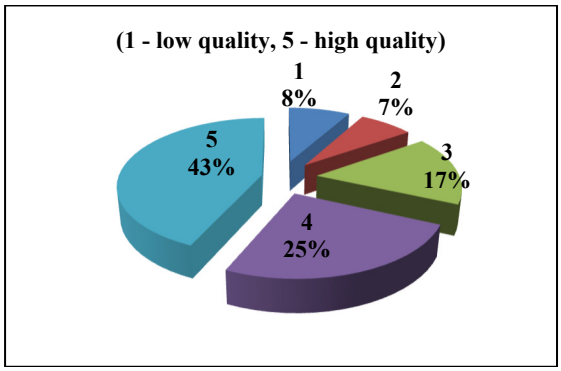

Figure 2: The quality of education received through distance learning compared to auditory education, %.

We interviewed the attitudes of young people on the perception and understanding of study materials through distance learning. It was found that 42% of young people are very satisfied with the distance learning format and 8% are very dissatisfied (See Figure 3).

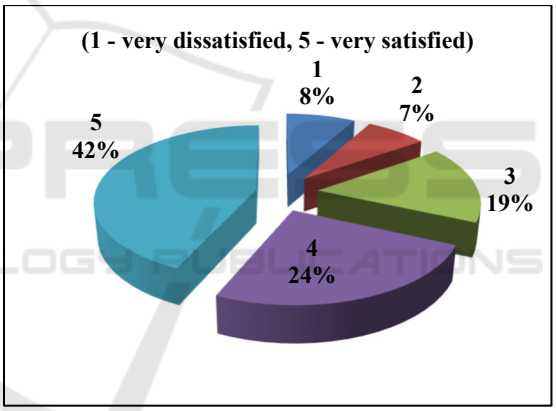

Figure 3: Satisfaction level with the perception and understanding of study materials through distance learning, %.

Regarding one of the most problematic issues regarding access to e-learning materials, only 1% of respondents do not have access to e-learning materials, while for 26% access to materials is not associated with any delays. It is noteworthy that for 61% of respondents the quality of access to e-learning materials is more or less high (See Figure 4).

When asked how actively modern technologies are used in the distance learning process, the answers were distributed as follows: More than 8% (8.3%) of respondents fully agree with the opinion that modern technologies are actively used. Up to 20% (19.9%) agree with this view.

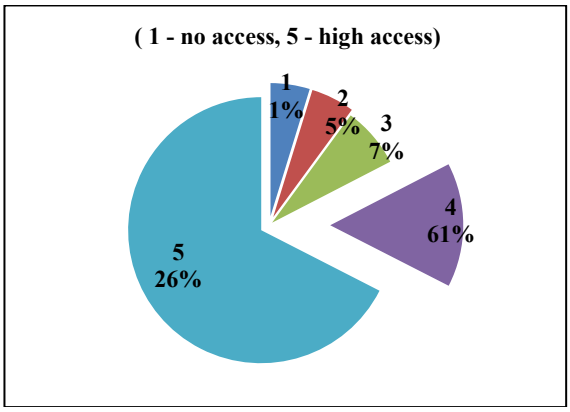

Figure 4: Youth access to e-learning materials, %.

More or less agree with 32% of respondents (31.9%), strongly disagree plus disagree in total more than 36% of the total number of respondents (36.1%) (See Figure 5).

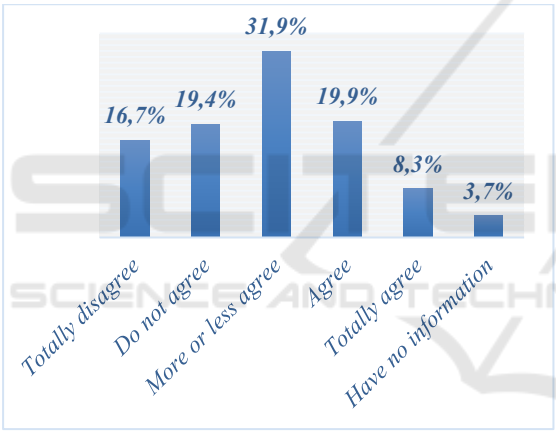

Figure 5: Application of modern technologies in distance learning process, %.

Respondents' opinion on the compatibility of teaching methods and assessment system with the distance learning format was divided as follows: more than 64% (64.4%) totally agree or agree that the teaching methods and assessment system is fully in line with the distance learning format, while completely disagree - 7% (6.5%). It should be noted that about 4% (4.2%) have no information on this issue (See Figure 6).

It should be noted that in order to study the level of student satisfaction and expectations, a similar survey was conducted at the University of Katowice in Poland in the Fall Semester of 2020. First-year students were involved in the study. Therefore, they had their first contact with the online learning process.

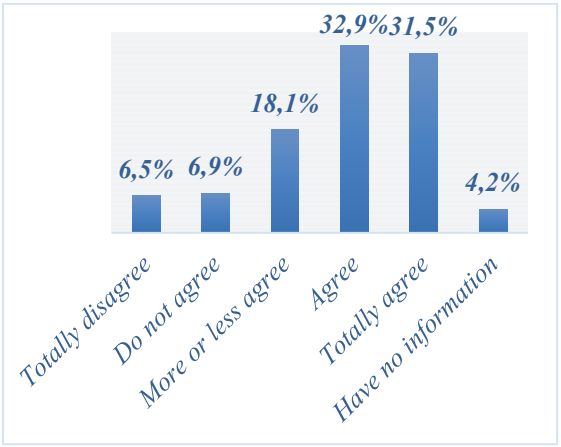

Figure 6: Compatibility of teaching methods and assessment system with the format of distance learning, %.

The level of student satisfaction is directly correlated with the perceived usefulness. It was found that on the example of the mentioned university, the expectations for distance learning are mostly positive, which is due to their access to modern technologies and high skills in mastering these technologies. As a result, the idea of introducing distance learning on their part was largely welcomed (Cicha et al., 2021).

One of the main goals of education should not be overlooked - to promote the professional employment of young people after graduation. Even within the traditional teaching method, the problem of employment of graduates with relevant specialties is acute in Georgia (Kharaishvili et al., 2017). It should be noted that the area of the survey in our study was economics and business. In this regard, in terms of raising the level of employment, it is important to thoroughly study the entrepreneurial attitude of young people, which in the future will help to plan the relevant learning process, taking into account their entrepreneurial aspirations and potential (Kharaishvili and Natsvlishvili, 2019). A similar approach will reduce the reasons that drive educational migration and the so-called "Brain drain", which will ultimately affect the economic development of the country (Kharaishvili et al., 2018). Therefore, in the distance learning process, special attention should be paid to the current demands of the labor market and the learning process should be planned accordingly.

It should be noted that in January 2021, the Ministry of Education, Science, Culture and Sports of Georgia signed a Memorandum of Understanding

with three mobile operators operating in Georgia - JSC "Silknet", "MagtiCom" LLC and "Vion Georgia" LLC to ensure access to distance learning in the conditions of a pandemic. Pupils and teachers of public and private schools will benefit from a preferential mobile internet package until the end of the 2020-2021 school year, after passing the relevant procedures. Preferential tariff for mobile internet package was also supported by the Georgian Communications Commission.[7] The purpose of the memorandum is to provide public and private school teachers and students with the most accessible and high quality mobile internet connection. In line with the challenges and technical needs of distance learning, ISPs offered students and teachers a 20GB mobile internet package for 10 GEL, which is 2.5 times less than the standard cost. According to industry experts, 20GB is enough for one month to attend online lessons and search online resources. In addition, it is desirable to extend supportive policies to the university education process and to ensure equal access to online student education for students from any region of the country.

7 CONCLUSIONS AND RECOMMENDATIONS

Based on quantitative research and focus group discussions, the following key conclusions were drawn based on the identified needs of young people in distance learning and sustainable education:

- It is necessary to teach basic profiling subjects with appropriate software and high-tech equipped audiences;
- It is important to involve more academic and visiting staff in university electronic management systems than in social networks;
- Qualitative strengthening of the practical part of the training courses is needed, especially with software (to do graphic and other analyses independently by visiting websites); However, it is important to enhance hands-on training with software. Enhance data processing knowledge with practical applications (SPSS, Stata, Excel);
- Teaching technologies need to be improved;
- It is necessary to provide staff training for the effective use of electronic databases (e.g, most still request the exchange and transmission of information by e-mail);
- It is important to ensure equal access to technical resources across the country;
- It is necessary to increase the level of internet coverage in a separate region of the country.

Based on the research, the following recommendations for sustainable development of distance learning and education were developed:

- It is necessary to start preparing educational programs adapted to distance learning. The goals and objectives of the administration should be taken into account when developing a distance education program;
- It is advisable to adapt new online educational platforms and improve existing practices on the basis of such platforms as: Google classroom, Microsoft teams, Zoom, Skype;
- It is necessary to adapt teaching methods to the format of distance learning;
- It is important to develop and enhance the competencies of human resources through their retraining in accordance with the digitization of the teaching process;
- It is advisable to support stakeholders, decision makers on state framework conditions, academic and administrative staff of the University, and most importantly, coordinated involvement of young people in the development of distance learning;
- It is important to take into account the advice and recommendations of psychologists in the process of distance learning in order to overcome the problem of social isolation of young people and increase their motivation to learn;
- A survey of education administrators found that for some reason, higher education administrators and politicians understand the need for technology. But due to the lack of distance education, they are unable to support the process with adequate staff, simple supplies and a reasonable operating budget. Amendments to distance education legislation should be made so that administrations and politicians can support technology and related programs;
- It is necessary to develop effective educational systems to use new technologies in the new millennium;
- The weaknesses and threats identified in the SWOT analysis showed that the main challenge is largely the problems arising from people's subjective attitudes. As a result, raising awareness about the strengths of distance learning is very important in order to effectively implement distance learning and ensure sustainable education. With such an approach,

[7] Internet package "Distance Learning", 01.12.2021. https://emis.ge/newss/2030/ (last viewed 16.11.2021)

weaknesses will be overcome in themselves, and threats will be transformed into opportunities.

- The innovative way of promoting online learning is to integrate the Artificial Intelligence (AL) Systems in the learning process. This involves creating automated learning instructors to meet personalized requirements.
- The comprehensive and legally regulated process of distance education needs to be reflected in the existing education system, which will ultimately create the educational model of the future through evolutionary development. Improving distance learning will undoubtedly contribute to the formation of a sustainable education system.

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