Challenges and Outcomes of Distance Learning in Teaching Languages

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ABSTRACT

The purpose of our study is to describe how the Covid-Pandemic has changed and what impact it has had on the learning environment in Georgia. The article deals with the analysis of the problems based on a case study and observation methods, which are remarkable because elements of distance learning had not been introduced in our learning space before.

The pandemic has given an incredible impetus to the introduction of distance learning in education and our daily lives in general, which has obviously posed new challenges. Distance learning has brought to the fore the issue of time management, interactive teaching methods (collaborative, dynamic, entertaining, encouraging, teamwork, etc.), technology and application integration, material visualization and design issues and finally - studies in the field of neuroeducation: Knowledge of cognitive mechanisms have increasingly changed didactic thinking and enriched teaching practices. The technological advances of the last decade offer unprecedented opportunities to process/master the vocabulary of a second language (L2). A memory-based model is presented to help language learners understand the nature of teaching L2 vocabulary. The study presents how all of this was introduced and implemented in the virtual classroom.

Keywords: distance learning; methods; pandemic; problems; results;

1. Introduction

The purpose of our study is to describe how the Covid-Pandemic has changed and what impact it has had on the learning environment in our Georgia. The problems, achievements and consequences caused by the crisis will be analyzed in the paper. The pandemic has given an incredible impetus to the introduction of distance learning in education and in our daily lives in general, which has obviously posed new challenges. Distance learning has brought to the fore the following issues: time management, interactive teaching methods (collaborative, dynamic, entertaining, encouraging, teamwork, etc.), technology and application integration, material visualization and design matters, and finally studies in the field of Neuroeducation: Knowledge of cognitive mechanisms has increasingly changed didactic thinking and enriched teaching practices. Like the rest of the world, our country has had to face the challenges of the Covid Pandemic, adopt appropriate constraints, make changes and, moreover, transformations with maximum results in the shortest possible time. All turned out to be quite challenging. The difficulties were related to the administrative processes, as well as the readiness of teachers or lecturers, students and pupils, technical shortcomings, mastery of digital technologies, time management, gaining new competencies and learning new values.
The ministry instantly introduced distance learning, offering schools a variety of distance learning platforms, including: Microsoft Teams and Feedc Edu. Higher education institutions mainly use ZOOM. Student oriented model – formative assessment was commenced. In cooperation with television and media, in particular with the First Channel, the educational project "Teleskola" (School on TV) was launched and a new TV channel - "First Channel Education" was created. “Teleskola” covered I-XII class school program. TV lessons were available to everyone. The project also provided entrant hours for national exams. Lessons for students with hearing problems were adapted to sign language. The interests of students with special educational needs were considered, subjects for ethnic minorities were taught in Armenian and Azerbaijani languages, "English lessons" both general and business English, were held for viewers of different interests, "Sign language lessons" were introduced. Legislative changes were made in June 2020, and the Law on General Education recognized distance learning as a form of education. The distance learning rule was approved before the beginning of the academic year, which ensured the distance learning process from September. Hybrid teaching was introduced. The curriculum and assessment system has been modified according to the e-learning format.

The study was mainly conducted using case analysis and observation methods. By collecting primary[1] (throughout Adjara region) and secondary data.

[1] https://idfi.ge/en/covid_19_and_the_georgian_eductation_sector

2. **How were these changes implemented and how effectively were they implemented in Georgia? Was it enough to just make a decision? How did the school and higher education institutions cope with this shift? How prepared were the pupils, students, lecturers-teachers for this unexpected reform? How secure was the technical side and the issue of internet access?**

Before we touch on the main problem, let's clarify the terms that have been established in our reality. The UNESCO-sponsored publication [2] defines distance, online and mixed education as follows:

"Distance education is a general term for a form of education where the student and the teacher are separated in time and space. It includes online education (≥80% of content is delivered online / internet) and blended education (30-79% of content is delivered online), as well as the form of education that uses mail to send print materials and / or other tools to overcome distance.

"Online education - the transfer of all or most of the content (≥80%) is done only through the Internet. "Online education is not synonymous with distance education, although in many developed countries it is the most widespread form of distance education in terms of widespread Internet access."

"Blended education - a course unit or program that combines online and face-to-face teaching. A significant part of the content (30-79%) is transmitted online. "

Georgia's education system has shifted mainly to full-time distance learning, with access to the Internet and technology being the most painful issue for students. According the UNICEF study despite the relatively good internet coverage (88%) in Georgia, during the pandemic about 90,000 students, that is about 15% of Georgian school- age kids did not have access to the internet. Those with the internet many had problems with stable connection. The situation is even worse for the most vulnerable children. Low-income and poor families, of course, have fewer devices to access online lessons and find it difficult to pay online bills. Complicating the situation is the fact that for families trying to make ends meet through the meager social assistance available in Georgia, having a computer or similar device means a lower rating score and, consequently, a loss of social assistance. Families living in remote villages or high mountains are in a digitally unequal position due to poor digital infrastructure and poor internet connection. Such problems were further complicated by the lack of skills required for teachers to conduct online lessons. In highly isolated settlements, where older and socially vulnerable teachers abound, this problem is particularly acute. According to one of the teachers of Mestia Municipality,

"There are subjects left where lessons were not taught during the pandemic, some did not have the equipment, some did not have the skills; Both teachers and students. Fifteen to nine students in the class did not have these resources and could not engage in online teaching at all. It had a very negative effect on the students." Even in families with internet access, siblings had to share resources with each other. Many families with more than one child did not have enough equipment to enable each child to attend an online lesson. Consequently, they had to give preference to the education of one of the children.[3] The distance learning process is more complex in villages and regions compared to large cities. The share of households in rural areas that did not have computers and internet was 68% and 26%, respectively.

Distance learning has never been used in the Georgian education system before the pandemic, and the country has faced a new challenge unprepared, But we can admit that Georgia occurred to cope despite any advanced preparation and most schools and universities managed to adopt to this way of teaching/learning process. [4]

Our knowledge of what we teach, how we teach - is based on centuries of traditionally accumulated experience that does not involve sudden, spontaneous transformations. For education to be successful, both students and teachers must be prepared for change. Gradually develop new skills and acquire new competencies.

The biggest challenge facing the world education system is the malfunction of the technological infrastructure, which is vital for the effective conduct of distance learning.

2.1 The Impact of Neuro Education on Distance Learning

How should we maintain an effective learning process in a virtual environment? Advances in neuroscience and new, neurodegenerative concepts have played a major role in solving the problem. Zoom-lectures, which, along with many other benefits, include time-limiting and visual presentation / presentation of learning materials, are effectively guided by neurodeidactics research.

Today, neuroscience provides valuable information about how the brain functions in the learning process. We already know that learning requires the creation of solid structural patterns between neurons. The more parts of the brain are stimulated during learning, the stronger the structural patterns, and the more structural patterns are created, the easier it is to memorize information.

"The brain can be compared to the forest: If we cross the same path several times, a trail will slowly be created. In the brain, communication pathways are created between neurons. These

[2] A. Carlsen, C. Holmberg, C. Neghina, A. Owusu-Boampong (2016) Closing the Gap. Opportunities for distance education to benefit adult learners in higher education Opportunities for distance education to benefit adult learners in higher education. UNESCO Institute for Lifelong Learning. p.105. https://unesdoc.unesco.org/ark:/48223/pf0000243264

[3] https://civil.ge/ka/archives/423870

[4] https://idfi.ge/ge/covid_19_and_the_georgian_eductation_sector

pathways (neural connections) become more and more active and lead to the automation of processes related to certain tasks. But if we do not walk on these paths for a long time, they will be erased. (neuroscientist Steve MASSON - Professor at the Faculty of Educational Sciences at the University of Quebec in Montreal and Director of the Neuroeducation Research Laboratory (LRN).[5]

To start with brief overview: Objectives for Teaching a Second Language From explicit knowledge of morphosyntactic forms of language, new concepts have moved into the practice of using language effectively in communication situations. With this change, the traditional L2 learning paradigm became obsolete as a theoretical basis for classroom practice and the traditional paradigm was changed to meet the new reality of language learning. Cognitive psychology, which studies mental processes as a prerequisite for the acquisition and application of knowledge, seems to have provided the best explanation for how L2 could be learned in a school setting. Despite the notion that the ability to speak L2 requires the development of implicit language skills (unconscious or automatic use of language forms), it was generally believed that explicit knowledge of L2 (vocabulary, grammar rules) was a prerequisite for learning spontaneous communication. Thus, the generally accepted model for the study of L2 was based on the views of Anderson (1990)[6] and DeKeyser (1998)[7], according to which the study is carried out in three stages: First, the acquisition of some knowledge in a foreign language (vocabulary, rules and verb conjugation), then the consolidation of this knowledge through exercises, and finally the transfer of this knowledge into communication activities. According to this paradigm, explicit knowledge of language is formed in the brain through exercises and activities, so that this knowledge can eventually be used automatically / unconsciously for spontaneous communication; In other words, knowledge is transformed into skills or habits through exercises. According to cognitive psychology, the learning formula for L2 looks like this: Explicit knowledge + Exercises = Implicit competence (Netten, J. & Germain, C. 2012)[8]

A new concept in neurolinguistics lies in the development of implicit competence. Since implicit competence and explicit knowledge are two essential elements for communication, the

[5] Netten, J. & Germain, C. (2012) Un nouveau paradigme pour l'apprentissage d'une langue seconde ou étrangère : l'approche neurolinguistique 1(1), 85-114.

[6] Anderson, J. R. (1990). Cognitive psychology and its implications. (3e éd.). New York, NY: W.H.Freeman.

[7] DeKeyser, R. (1998). Beyond focus on form: Cognitive perspectives on learning and practicingsecond language grammar. In C. Doughty et J. Williams (Réd.),Focus on form in classroom second language acquisition (pp. 42-63). Cambridge, United Kingdom: Cambridge University Press.

[8] Netten, J. & Germain, C. (2012) Un nouveau paradigme pour l'apprentissage d'une langue seconde ou étrangère : l'approche neurolinguistique 1(1), 85-114.

question arises as to how each of these components can be developed. Explicit knowledge is not problematic because teaching is mainly focused on declared knowledge, however, implicit / implicit competence creates a problem. According to Paradis (2004)[9], frequent use of verbal / spoken language is required: "The frequency with which specific language instructions are used is important for the development of implicit competence" (Paradis, 2009, p. 80).[10]

In addition, Paradis notes that the implicit competence of the student implies the use of language vocabulary and structures in an authentic communication situation without realizing it, automatically. This ability consists of a network of various neural connections that develop using language to convey messages or meanings. These networks develop unconsciously for language learners, independently of their particular attention, naturally; They are only the result / product of the frequent use of language structure, specific constructions. Thus, due to the unconscious nature of implicit competence, it can develop when the learner focuses on the message, its content and not the linguistic forms, and this takes place without conscious effort on the part of the learner. The language learner at this time is neither aware of the development of implicit competence nor of the fact that it is used to construct a sentence in L2. It should also be noted that the use of language is a fundamental element in the development of communication skills, that this process is more effective when the number of linguistic structures used and reused is limited (N. Ellis 2011).[11] language form, language meaning and use of language come together to form a strong induction through frequent use of a limited number of language structures (N. Ellis 2011).[12]

Finally, another achievement of neuroscience lies in the principle of relevant / adequate transfer (TAP - Transfer relevant processing). Studies in cognitive neuroscience have shown that the brain stores data along with their context. It is easier to identify data in the brain if the context in which it is used is similar to the context in which it is taught (Segalowitz, 2010)[13]. Language should be taught in context from the perspective of N. Ellis.

[9] Paradis, M. (2004). A neurolinguistic theory of bilingualism. Amsterdam, Netherlands/Philadelphia, PA: John Benjamins.

[10] Paradis, M. (2009). Declarative and procedural determinants of second languages. Amsterdam,Netherlands/Philadelphia, PA: John Benjamins.

[11] Ellis, N. (Janvier, 2011).Language acquisition just Zipf's right along.Conférence, Université duQuébec à Montréal.

[12] ibid

[13] Segalowitz, N. (2010). Cognitive bases of second language fluency . New York, NY/Oxon, UnitedKingdom : Routledge/Abingdon

3. Conclusion

The main challenge of the pandemic was to completely change the traditional methods of teaching in the field of education and, in response to the sudden demand, to go completely online. This meant that we had to be able, with great effort and almost unprepared, to lead the learning process in new digital classrooms / classrooms, with new types of collaborative methods, to create this new way of teaching.

Despite the timely decisions made in the field of education, this new era of teaching caused by the pandemic requires refinement and development. Deficiencies manifested in staff training, technical delays, introduction of interactive, modern methods.

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