

PERAET 2021

International Scientific Conference «PERISHABLE AND ETERNAL: Mythologies and Social Technologies of Digital Civilization-2021»

**TEACHING LATIN FOR MEDICAL STUDENTS IN CONTEXT OF
DIGITAL TRANSFORMATION OF EDUCATION**

Svetlana V. Stanevich (a)*, Irina G. Nazarova (b), Nataljya G. Medvedeva (c)

*Corresponding author

(a) Yaroslav-the-Wise Novgorod State University (NovSU), Veliky Novgorod, Russian Federation,
svetl.semyonova2013@yandex.ru,

(b) Yaroslav-the-Wise Novgorod State University (NovSU), Veliky Novgorod, Russian Federation,
vanaroza@mail.ru,

(c) Yaroslav-the-Wise Novgorod State University (NovSU), Veliky Novgorod, Russian Federation,
natgal75@mail.ru

Abstract

The article is devoted to the problem of using IT technologies in teaching a humanitarian discipline at a medical university. The impact of the new learning format on the teaching of humanities is radical, and sometimes dramatic. The authors assess the current situation of accelerated and massive digitalization in the field of teaching humanities in general, analyze the term digital humanities. The pros and cons of robotization in humanitarian sphere are considered, comparison of traditional teaching methods with the latest high-tech methods of online education is carried out. Latin medical terminology, one of the most traditional disciplines in the medical education system, must now fit into the new format of education, acquiring fundamentally new qualities, while preserving everything valuable from traditional education. The authors present their own experience of teaching Latin in the new conditions for medical students at a humanitarian university. In particular, the technological tools used to create your own online course are described. The advantages of online teaching and learning, as well as its costs and risks, are named. The authors support a mixed learning format (blended learning) in teaching a humanitarian discipline at a medical university. This approach will contribute to success and responsibility in the professional sphere.

2357-1330 © 2021 Published by European Publisher.

Keywords: Blended learning, digitalization, Latin language, medical students, online course



1. Introduction

Digitalization is becoming an integral part of the development of all spheres of society, including the education system. However, the use of technical means in teaching is not something completely new in history. Such attempts have been made since the 1940 last century (press, telegraph, radio, cinema, television) (Hunter, 2019, p.188). The situation today seems to us new and even dramatic due to categorical and sharp pressure on the academic community from society as a whole and university administrations, we can say, "forced" digitalization. There is no doubt that such increased pressure was triggered by the coronavirus pandemic. One thing is clear, digitalization will continue its triumphant development, regardless of whether humanities want it or not. Therefore, all that remains for us is to fit into the new trend of social development with the least losses and, possibly, with acquisitions. What digital technologies offer today to a university can be summarized as many times faster and easier ways of transmitting, consuming, analyzing and preserving knowledge (transmission, consumption, analysis and storage of knowledge) (Hunter, 2019, p. 189). The term *digital humanities* (DH) is becoming widespread, replacing the earlier term humanities computing (Fitzpatrick, 2012; Greenspan, 2019; Hunter, 2019; Risam, 2019; Svensson, 2016), marking a new stage in the development of humanities knowledge and teaching. At the same time, the content of the term has not yet been determined and is controversial. For example, one of the key points of contention is a different understanding of the term by humanitarian theorists and humanitarian practitioners. The form of the term also does not seem unambiguous: why digital humanities, and not digitized humanities? In our opinion, preference should be given to the first of them, since it more accurately describes the integration of two areas of knowledge, traditional humanitarian and advanced information. As a result of this integration, new meanings are born that enrich both areas (Fitzpatrick, 2012). The second term, digitized humanities, emphasizes the applied role of digitalization, the means of which are intended to accompany traditional knowledge with information in a new format. In domestic literature, the combination of digitalization and humanitarian knowledge is sometimes called digital humanism (Goichman, 2018).

2. Problem Statement

Teaching Latin medical terminology is one of the key points of the educational process at a medical university in the 1st year. This is a practical linguistic discipline, the peculiarity of which is that, in addition to solving the purely utilitarian task of mastering the language of a specialty, it sets itself the ambitious goal of being an outpost of humanitarian knowledge at a medical university thanks to the ancient foundation of medical terminology, the oldest in the world.

Latin is one of the few humanities in a medical university directly related to medicine. In this regard, great responsibility falls on teachers, who must include the humanistic component of their subject in the new digital context. Many underwater currents and risks stand in the way, which are obvious to researchers engaged in practical teaching work (Pedersen et al., 2018). One of the problems, for example, is digital inequality arising from the difference in skills and experience with gadgets (for a variety of reasons). The problem of possible risk of mental and physical impairment of educators is pointed out by domestic researchers (Milushkina et al., 2021). In our opinion, one of the most obvious risks is that of

losing the breadth and depth in teaching a subject that has many intercultural and interdisciplinary ties. Another problem is that the digital algorithm cannot completely replace the human factor. In the process of live communication in the classroom, the teacher has the opportunity to draw the attention of students to many aspects and nuances of a cultural humanitarian nature that arise spontaneously, as he/she focuses on the direct reaction of students, thereby fulfilling his/her humanitarian educational mission in a highly specialized non-humanitarian university (no matter how pathos it sounds).

The latest technologies in education should not make the teaching of humanitarian discipline superficial, deprive it facets, nuances, associations. Pedersen et al. (2018) suggest an approach they call "basic equality of opportunity" (p. 226). At the forefront of this approach is the understanding that all people are different and cannot be assessed on the same scale. The individual approach to each student is what the teacher easily applies in practice, but the artificial algorithm is not even able to understand this. The goal of liberal arts education, which also includes teaching the Latin language at a medical university, is the comprehensive development of the individual, and not alignment with a single standard. The next possible danger of digitalization is that a person is atomized, divorced from the shared experience of the educational process in the classroom, deprived of a sense of belonging and solidarity, and is confined in a cramped space in front of the monitor. The commercialization of the educational process in the spirit of neoliberalism (subordination of education to economic expediency) is also a significant danger (Greenspan, 2019). The dependence of teachers and students on increasingly cool gadgets is becoming a kind of "digital slavery". Where there used to be enough books, pens and notebooks, now a sophisticated technological complex is required.

In particular, with regard to us, some of our digital projects remain unrealized to the end or interrupted due to our financial inability to continue them. Speaking about the effectiveness of digital education, one should not nevertheless forget that non-digital education can be no less effective. Sometimes there is a fear whether we will "drop Pushkin from the ship of our time". In the field of working with human souls (no matter how pathos it sounds, such is the work of humanities), extreme caution and care must be exercised. Do not harm - this is the motto of not only doctors. Domestic researchers draw attention to the danger of "underestimating the humanitarian component of digitalization" (Goichman, 2018, p. 194). The interaction of the teacher and the student cannot be replaced by a given algorithm. Robotization, understood as the digitalization of education, can even suppress intelligence of both sides (teacher and student). The ethical aspect, as well as increasing the level of the general erudition of the medical student, should be purposefully introduced into digital teaching in the humanities subject. That is why a mixed or hybrid training format is the most acceptable for this discipline.

Hybridity is not understood here as mechanical mixing, but as assimilation of new elements into established traditional learning patterns, their mutual influence (Pedersen et al., 2018, p. 228). The term "hybrid learning" is suitable to describe the current situation with the teaching of Latin for medical students in the context of the digital transformation of learning, accelerated by the pandemic of coronavirus. There is a flexible combination of online learning and traditional face-to-face. The term *blended learning* is also used to describe this training format. Due to the contact of seemingly alien spheres - traditional analog training and the latest digital technologies - new meanings can be born. In

some cases, both conflict and antagonism are inevitable. One of the advantages of online learning is the ability to integrate the taught discipline into the global context, leaving the university walls to the wider world. This possibility is mentioned by many researchers (Glutz, 2002; Pedersen et al., 2018). Lifelong learning is another opportunity that digital online learning provides the means to achieve. The main element of such training is the results of training (Glutz, 2002). The latter should transparently describe the skills and competencies of students they received at the end of the university's educational process. According to Glutz (2002), students must think and work using a scientific approach and critical thinking skills to enter areas of professional activity that are characterized by an open international structure and a wide range of tasks.

3. Research Questions

- 3.1. Is massive digitalization of humanitarian knowledge and training justified? Is symbiosis of IT technologies and the humanities possible?
- 3.2. What can digitalization give humanitarian knowledge? And what can humanitarian knowledge give digitalization?
- 3.3. What problems do universities and university teachers face in connection with the widespread digitalization of education and, in particular, the humanities?

4. Purpose of the Study

The purpose of this study is to analyze new trends in the educational development and prospects of digitalization in a modern higher educational institution when teaching a humanities subject. In this article, the authors summarize and comprehend the experience they acquired as teachers of practical classes in linguistic discipline during the accelerated transition to a new training format.

5. Research Methods

A theoretical method of scientific literature analysis. An empirical method of studying and summarizing pedagogical activities.

6. Findings

In this part of the article, we will discuss our practical experience in teaching Latin using elements of online learning. New training tasks require new tools.

Many domestic authors, teachers of foreign languages, emphasize the opportunities provided by the Moodle (Modular Object-Oriented Dynamic Learning Environment) learning management system (Gafarova, 2019). Its advantages are availability and ease of use, a combination of information and communication capabilities. But there are other platforms that we use. The course becomes more demonstrative and exciting thanks to the tools presented by such platforms as H5P, CourseLab, MindMeinster, etc. These services are designed to create a variety of interactive content: presentations, videos, interactive posters, exercises, surveys, games, mind maps, etc. With the help of the MindMeinster

resource, we create mental maps of a methodological orientation ("goal tree") that help students formulate learning objectives and priorities. You can also invite students to independently create their own "goal tree" for themselves, taking into account their own interests, and independently determine the sequence of educational tasks, focusing on their own preferences.

While reviewing and systematizing the course using the Moodle platform, we were able to optimize the lecture material by rearranging the emphasis in training, introducing dynamism and using built-in test elements. As for vocabulary, it entered the glossary. This form of material supply is similar to the traditional one, the glossary itself is very like the dictionary. However, a glossary can become interactive if you collaborate with students to develop it and choose vocabulary appropriate for this glossary. The game moment, when learning new terms, is achieved using flash cards accompanied by a picture and sound. In particular, in our course for students of the Pharmaceutical Department, we use the H5P platform to create flash cards to work with the names of medicinal plants. Flash cards play an important role in working with lexical minimums, which are many in the Latin language for doctors. They allow you to use not only abstract logical memory, but also visual and auditory. Traditionally, humanitarian knowledge was based on a thoughtful analytical study of texts. The textual aspect does not seem to need digital help. How to make students not just read the text on the screen, but have the opportunity to dive more fully into it, so that reading the digitized text motivates the scientific search? To interest students in reading, we create an interactive book on ancient linguistic culture as part of our linguistic course. Cultural texts of medical and linguistic orientation are accompanied by a series of interactive elements (test tasks of various types, quests, video and audio materials, links to external resources). In addition, students can track their progress, receiving points. This reading with elements of game interaction allows you to motivate students. In our course, we use the H5P platform to create interactive books. Attracting external resources to the online course page makes it possible to integrate into the "outside" world. In particular, in our online course we use video lectures provided by the YouTube service. The choice of such materials and their appropriate location on the course page makes learning more dynamic, facilitates the absorption of complex material, as it allows students to see new faces, hear new voices. Group forms of work in our online course are supported by elements offered by the Moodle platform, such as a seminar. Thanks to this element, students are in interaction, evaluating each other's work. Feedback is maintained not only through the Moodle (forum, chat, commenting), but also thanks to external resources, such as social networks VKontakte, WhatsApp, etc. The game moment is very important in maintaining students' interest. The game gives joy, therefore, increases motivation. Here, such forms of work as crosswords, games on an external resource, the issuance of symbolic insignia, when reaching a certain level, are possible. However, it is important to comply with the measure and not turn the training of adults into a complete attraction. Education of responsibility and discipline in the performance of learning tasks is the problem of not only a secondary school, but also a university. The use of digital forms of training entails excessive visualization. It is important that students, immersed in the contemplation of changing pictures, do not forget how to perceive the text and perform logical operations with it, so as not to lose the skill of analytical reading. But do we want to turn academic space into a cyberquest? Is our goal to entertain the clientele? Our goal as humanities is to develop critical thinking. This idea, in particular, emphasizes by Svensson (2016). That is why we insist on preserving

traditional forms of work, one of which is the study of academic texts (thoughtful "reading" into the text). But now a traditional text can and should be accompanied by a hypertext.

In general, when studying domestic literature on teaching humanities in a new digital environment, it can be noted that authors who are both teachers of practical language classes agree that "electronic resources should be used only in conjunction with traditional sources of information" (Guseva, 2019, p. 45). The combination of traditional learning methods with innovative ones is supported by foreign authors investigating ways of effective teaching at universities (Al-Hunaiyyan et al., 2021) and, in particular, a medical university (Abdelaziz et al., 2021; Mahanta et al., 2021; Sarkar et al., 2021).

7. Conclusion

The authors conclude that the university, according to the modern needs of education, is undergoing the process of digitalization of higher humanitarian education using those educational resources that are currently available. Extreme visualization of educational material is new in teaching, which must be considered and applied for good. It is important that digital learning tools contribute to the development of critical scientific thinking, and not just be another form of reporting. Such a fruitful "symbiosis" is called digital humanities, and we agree that this is exactly the ideal that should be sought. It is not enough to simply use digital materials in your work. Their mechanical inclusion does not mean digital humanities. It is necessary to think through new forms of work in which the figure and tradition will form a single organism. Humanitarian knowledge should preserve the best of its tradition, while acquiring new unexpected development opportunities thanks to digitalization. In turn, the latest information technologies will be able to master new approaches thanks to traditional values, become more "human". Linguistic discipline in the digital format and with digital capabilities can become a sort of a linguistic laboratory, in which each participant designs their own form of speech communication, guided by the general tasks and purpose of the course.

References

- Abdelaziz, A., Mansour, T., Alkhadragey, R., Abdel Nasser, A., & Hasnain, M. (2021). Challenges to Interprofessional Education: will e-Learning be the Magical Stick? *Advances in Medical Education and Practice*, 12, 329-336. <https://doi.org/10.2147/AMEP.S273033>
- Al-Hunaiyyan, A., Al-Sharhan, S., Alhajri, R., & Bimba, A. (2021). An integrated implementation framework for an efficient transformation to online education *International Journal of Advanced Computer Science and Applications*, 12(4). <https://thesai.org/Publications/IJACSA>
- Fitzpatrick, K. (2012). The Humanities, Done Digitally. In Gold M. (Ed.), *Debates in the Digital Humanities* (pp. 12-15). University of Minnesota Press. Retrieved from <http://www.jstor.org/stable/10.5749/j.ctttv8hq.5>
- Gafarova, A. S. (2019). K voprosu primeneniya IKT pri obuchenii inostrannomu yazyku. *Sovremennoe yazykovoe obrazovanie: innovatsii, problemy, resheniya*. [On the issue of using ICT in teaching a foreign language. *Modern language education: innovations, problems, solutions*], 2, 30-40. <https://e.lanbook.com/book/143492>
- Glutz, P. (2002). Der Wandel der Universitäten in der digitalen Ökonomie. [The transformation of universities in the digital economy] *Die Unternehmung*, 56(2), 115-118. Retrieved from <http://www.jstor.org/stable/24185028>

- Goichman, O. Ya. (2018). Gumanitarnye aspekty tsifrovizatsii. *Chelovecheskij kapital v formate tsifrovoj ekonomiki*. [Humanitarian aspects of digitalization. In *Human capital in the format of the digital economy*] (pp.189-195). Rossijskij novyj universitet. <https://e.lanbook.com/book/162183>
- Greenspan, B. (2019). The Scandal of Digital Humanities. In M. Gold & L. Klein (Eds.), *Debates in the Digital Humanities* (pp. 92-95). University of Minnesota Press. <https://doi.org/10.5749/j.ctvg251hk.12>
- Guseva, A. H. (2019). Obrazovatel'nye tekhnologii ovladeniya sredstvami kommunikatsii sovremennogo perevodchika. *Sovremennoe yazykovoe obrazovanie: innovatsii, problemy, resheniya*. [Educational technologies of mastering the means of communication of a modern translator. *Modern language education: innovations, problems, solutions*], 2, 40-46. <https://e.lanbook.com/book/143492>
- Hunter, J. (2019). The Digital Humanities and “Critical Theory”: An Institutional Cautionary Tale. In M. Gold & L. Klein (Eds.), *Debates in the Digital Humanities* (pp. 188-194). University of Minnesota Press. <https://doi.org/10.5749/j.ctvg251hk.19>
- Mahanta, P., Kalita, D., Phukon, C., Konwar, R., Das, K., Ullah, M. K, Singh Yadav, D., & Deka, S. (2021). Indian Medical Undergraduates’ Perceptions of Effective Teaching Methods: A Cross-Sectional Study. *Advances in Medical Education and Practice*, 12, 473-479. <https://doi.org/10.2147/AMEP.S306598>
- Milushkina, O. Yu., Zhukov, O. F., Lukanova, O. V., Markelova, S. V., & Skoblina, N. A. (2021). Rasprostranennost' faktorov riska narusheniya zdorov'ya i emotsional'nogo blagopoluchiya uchiteley v usloviyakh distantsionnogo obucheniya [Prevalence of risk factors for health and emotional well-being of teachers in the context of distance learning]. *Bulletin of Russian State Medical University*, 2, 69-73. <https://doi.org/10.5749/j.ctvg251hk.1910.24075/brsmu.2021.019>
- Pedersen, A., Nørgaard, R., & Köppe, C. (2018). Patterns of Inclusion: Fostering Digital Citizenship through Hybrid Education. *Journal of Educational Technology & Society*, 21(1), 225-236. Retrieved April 19, 2021, from <http://www.jstor.org/stable/26273882>
- Risam, R. (2019). Rethinking the Human in Digital Humanities. In *New Digital Worlds: Postcolonial Digital Humanities in Theory, Praxis, and Pedagogy* (pp. 115-138). Northwestern University Press. <https://doi.org/10.2307/j.ctv7tq4hg.9>
- Sarkar, S., Sharma, S., & Raheja, S. (2021). Implementation of Blended Learning Approach for Improving Anatomy Lectures of Phase I MBBS Students – Learner Satisfaction Survey. *Advances in Medical Education and Practice*, 12, 413-420 <https://doi.org/10.2147/AMEP.S301634>
- Svensson, P. (2016). Introducing the Digital Humanities. In *Big Digital Humanities: Imagining a Meeting Place for the Humanities and the Digital* (pp. 1-35). University of Michigan Press. <https://doi.org/10.2307/j.ctv65sx0t.5>