

Гуманитарлық ғылымдар мен өнер
Гуманитарные науки и искусство
Humanities and Arts

MPHTI: 16.21.25

<https://doi.org/10.65247/3105-3432-2024-4.12>

PROFESSIONALLY-ORIENTED TEACHING OF A FOREIGN LANGUAGE TO HIGH SCHOOL STUDENTS USING SMART TECHNOLOGY IN SPECIAL SCHOOLS

*¹K.Zh.TULENOVA^{id}, ¹B.T.RAHIMBAEVA^{id}

¹academician E.A.Buketov Karaganda University
(Karaganda, Kazakhstan)

*zhasul0180@gmail.com, bayan.rakhimbaeva@mail.ru

Abstract

This article discusses the issue of teaching foreigners the language of students at a non-linguistic university using smart technologies and the introduction of computer technologies for the formation of professional and communicative competencies. As an example of learning using cloud services, the authors use professional TED Talks lectures to provide a series of tasks aimed at developing listening, writing, reading, and speaking skills. In pedagogical methodology, the interaction of written and oral communication between students is considered a key factor in increasing motivation and improving the teaching and learning process. The experiments conducted on the organization of independent work by students using smart technologies confirm the need for effective integration into the learning process of a foreign language.

Keywords: language didactics, theory of educative learning, empirical research, second foreign language, multilingual society.

Introduction

The reform of modern education imposes new requirements on the teaching staff. A teacher who thinks freely and actively, predicts the results of his activities, and, accordingly, models the educational process, is the guarantee of solving the tasks set. Today, there is an increased demand for a highly qualified, creatively working, socially active, and competitive personality in a teacher who can raise a socialized personality in a rapidly changing world. The results of the socio-economic and spiritual development of society directly depend on the level of professionalism of teachers and their ability to provide continuous education.

The quality of the teaching staff is the most important component of the educational system because the implementation of all other components directly depends on the human resources that a particular educational system is provided with. It is the teachers who are entrusted with the function of implementing educational programs for a new generation based on advanced pedagogical technologies.

To a certain extent, we can say that at the beginning of the XXI century, the stage of acquaintance with information and communication technologies (ICT) ends with mastering them in the conditions of a real educational process, creating a modern information infrastructure, and releasing fundamentally new multimedia educational products. Natural questions arise: how to evaluate the experience gained and what to do next? Something is already indisputably clear. For example, the traditional understanding of the educational process is difficult to reconcile with the use of ICT, and these difficulties are by no means overcome but are constantly increasing, sometimes acquiring exotic forms, such as the creation of completely informal educational communities in the world computer network or the displacement of "real" educational institutions by "virtual" ones.

Smart education is a concept that involves a comprehensive modernization of all educational processes as well as the methods and technologies used in these processes. The concept of "smart" in the educational context entails the emergence of technologies such as smart boards, smart screens,

and Internet access from anywhere. Each of these technologies allows you to build the content development, delivery, and updating processes in a new way. At the present stage of ICT development, there are increasing needs that cannot be met by classical educational technologies or e-learning technologies.

Main body

"Smart" systems, "smart" environments, and "smart" productions are post-industrial society trends that arose as a result of technological advancements that enable solving problems of organizing and managing production and technological processes at a new, higher intellectual level. This is directly related to such characteristics as digitalization, autonomy, interactivity, remote control, solving complex problems, and so on.

A "smart" (intelligent) environment is defined as a physical infrastructure that allows the surrounding intelligence to function [Smart-tekhnologii v vysshem obrazovanii, 2017].

Smart environments will not be able to function without the development of "smart" or "smart" technologies, which become the basic component (basic technologies) for the development of any environment and production and penetrate all spheres of activity, including education. The discussion of SMART in education has been going on for the last 8–10 years in Russian publications and even longer in foreign studies, and it allows us to reflect on new grounds for the transformation of educational systems based on the use of new (information, electronic, smart technologies, and resources).

In the study of N.V.Dneprovskaya, E.A.Yankovskaya, and I.V.Shevtsova, a fairly broad concept of SMART is given, which allows it to be fixed in the methodological apparatus of education. "Smartness is a property of a system or process that manifests itself in interaction with the environment and gives the system and/or process the ability to:

- a quick reaction to changes in the external environment;
- adaptation to transforming conditions;
- independent development and self-control;
- effective achievement of the result.

This interpretation makes the terminology of "smart technologies," "smart education," "smart learning," "smart schools," and "smart educational environments" quite acceptable for use in pedagogical research and practice [Top ed-tech trends, 2014].

This terminology makes it possible to reflect the changes that are taking place today in society and education at the level of concepts of post-industrialism, knowledge and competence society, informatization and digitalization, and/or the subsequent stage of social or technological development. Interestingly, there are several logical chains of such changes underlying the rationale for the use of new smart technologies:

1. Changing technological patterns (from the fourth to the fifth and sixth, where smart education using artificial intelligence will become predominant).
2. Changing technologies from Web 2.0 to Web 3.0 and cloud technologies related to e-learning and distance learning in research.
3. The change of generations "X-YY-ZZ", the last of which (generation Z) is characterized by a natural attitude toward the use of smart technologies and electronic media as a means of communication, life support, and learning. (Principles of instructed second language acquisition, 2008).

A.A.Aletdinova and A.A.Melnichenko analyzed approaches to the interpretation of the concept of smart education, highlighting the following areas:

- SMART as an educational, intellectual environment;
- SMART is a set of educational institutions and teaching staff (which is difficult to agree with; rather, it should be considered as a kind of educational infrastructure, in this case in a university);

- SMART is a new type of education, a new approach that allows you to achieve higher or more effective results.
- SMART is the development of a person's personality in the context of the formation of new smart competencies.

The concept of SMART in education arose after the penetration into our lives of various smart devices that facilitate the process of professional activity and personal life (smartphone, smart home, smart car-an intelligent car-smartboard-an interactive intelligent electronic board-SMART-a computer hard disk self-diagnosis system).

SMART implies an increase in the level of intelligence of devices that form the environment for a particular type of activity. The transfer of this concept to education is in its initial stages; the terms and basic concepts are being formed. The rate of emergence of new technologies has increased significantly in the last decade, and every year manufacturers offer new devices for professional activities and communications. New intelligent SMART technologies require changing the platforms used for knowledge transfer and the widespread use of SMART devices. Vocational education should become one of the most rapidly updated industries, both in terms of content and in terms of technologies and teaching methods. The speed at which knowledge and technology are updated should be considered a criterion for the quality of the education system.

It is already becoming the norm to conduct training sessions using multimedia presentations made in software packages such as Microsoft PowerPoint and Macromedia Flash. However, along with the usual presentation technologies (Microsoft PowerPoint and Adobe Flash), new, so-called interactive technologies are penetrating the field of education, which allow you to get away from presentations in the form of slide shows. The new form of presentation of the material using interactive equipment (interactive SMART Boards, interactive displays of the symposium) is a presentation created by the speaker during his speech-a presentation created here and now. On interactive SMART Boards, you can write with a special marker, demonstrate educational material, and make written comments on top of the image on the screen. At the same time, everything written on the SMART Board interactive whiteboard is transmitted to students, stored on magnetic media, printed out, and sent by e-mail to students absent from the class. The educational material created during the lecture on the SMART Board interactive whiteboard is recorded by the built-in video recorder and can be repeatedly reproduced. Several technologies allow

There are several technologies that allow you to make the board interactive. One technology is sensor resistive; the other technology from SMART Technologies. It uses special digital video cameras located at the corners of the screen. In addition, with the help of a special nozzle, you can turn any plasma panel into an interactive whiteboard.

Of course, special software (SMART Notebook, Bridgit, and SynhronEyes) has been created to maximize the implementation of all the properties of SMART Board interactive whiteboards. Each of these programs has its own characteristics. SMART Notebook allows you to work with text and objects, save information, and turn written text into printed text. The Bridgit program allows you to easily and quickly make presentations to partners around the world and get feedback on your document. Once you highlight the key positions of your speech on the common desktop, the program immediately displays all your notes on the screens of the other participants in the conference in real-time. With the help of the SynhronEyes software package, the teacher can monitor what students are doing, display all student work monitors on the blackboard, block student monitors, and send educational material from the interactive whiteboard. While working on interactive whiteboards, students' concentration improves, and learning material is absorbed faster. The introduction of new technologies in the field of education leads to a transition from the old scheme of reproductive knowledge transfer to a new, creative form of education. One of the main tasks of modern education is the creation of sustainable motivation for students to acquire knowledge; the other is the search for

new forms and tools for mastering this knowledge with the help of creative solutions. (Principles of instructed second language acquisition, 2008).

Currently, high-quality education is a factor contributing to the successful socialization of children and youth, meeting the needs of the economy for highly qualified personnel, economic growth, and improving the well-being of every citizen.

The main goal of the development of the education system is to ensure the availability of high-quality educational services for citizens, regardless of their place of residence, health status, or socio-economic status, which will allow them to adequately realize themselves.

The most important requirement for the educational process in a modern school is "to teach and learn in the environment of the XXI century." Today, in the changing technosphere, a new information environment for human habitation is rapidly taking shape. Computer communications form a new field of information culture. Networks constitute a new social organization of human communities, and the spread of "network" logic increasingly affects people's daily lives. Digital devices and network services are increasingly involving people in a new collaborative environment, forming a network model of human interaction [Razvitie mezhkul'turnoj kommunikacii, 2016].

There are conditions for the organization of the educational process, which focuses on the use of new methods and organizational forms, including:

- individual and group work with digital educational resources (including self-monitoring and skills development);
- systematic work in small groups by students, as well as mutual evaluation of each other's work;
- training in specialized network communities (Internet training, network projects, etc.);
- using online social services for communication, working together on texts (in the broadest sense of the word), and maintaining joint archives;
- creating and maintaining personal educational achievement portfolios.

In order for every student to fully realize this potential and ensure the achievement of new educational results, it is necessary to switch to a new model of schoolwork in which a smart, intelligent educational environment has been created. Designing a "smart" or "smart environment" is considered by me not an end in itself but a means, a mechanism, for solving the main task of a mass school: creating conditions for equal access of various groups of participants in the educational process to a wide range of educational services, improving the management mechanism, and, as a result, improving the quality of education [Ispol'zovanie tekhnologii eb2.0, 2014).

Literary review

The very concept of "smart" provides for a faster response to the requirements of global development. It is necessary to massively train students with high intellectual and practical skills, which will allow them to find, analyze, evaluate, and apply knowledge accordingly. The learning process, which cannot be fully automated as it depends on the high quality of interaction between experts in a certain field of knowledge and students, requires a new constructive approach [Bates T., 2016]. Of course, the requirements of young people for the process of acquiring knowledge have changed. According to Docebo, a company that specializes in corporate online education services, the volume of the online education market increased by 25% in 2016 to reach \$50 billion, up from \$40 billion in 2015 [Watters A., 2014]. 30% of graduates of foreign universities took an electronic educational course at least once. As a result, computer technologies contribute to the reform of the education system at all levels. At the same time, educational platforms mainly provide high-quality services and access to specialty courses developed by leading universities in the world, in English.

Teaching foreign languages does not lag behind in using innovative computer technologies (ICT). Only in recent years have there been scientific studies on the use of mixed-learning methods. O.V.Lvov and S.S.Khromov raised questions about the need for the formation of professional, communication, and other competencies in students in the changing type of socialization of youth.

Important arguments are given by S Navasardyan and T.R.Shapovalova on the organization of the educational process through the use of mixed-learning methods. O.V.Lvov and S.S.Khromov raised questions about the need for the formation of professional, communication, and other competencies in students in the changing type of socialization of youth. In the generalization of education, important arguments are given by S.Navasardyan and T.R.Shapovalova on the organization of the educational process. M.S.Kogan and V.V.Shubin continue to work on the creation of textbooks for the "new generation" and the modernization of existing textbooks in a foreign language with the help of electronic resources. The research focuses on the issues of increasing students' motivation with the help of ICT (A.V.Galiguzova) as well as the possibility of using an information system to improve the quality of assessment in higher education (A.A.Korenev). An analysis of recent studies and publications has shown that the use of smart technologies in education is a new approach that is just beginning its formation, while this problem has been dealt with abroad for many years [Ellis R., 4]. However, research into the use of smart technologies in not only teaching a professionally oriented foreign language but also solving applied problems in professional activity has only recently begun to be put into practice.

Results

When planning the experiment, our goal was to find out the advantages of using smart technologies in teaching a foreign language for special purposes aimed not only at the formation of speech competence but also the extra-subject skills and abilities necessary for future professional activity.

Our experiment showed that when using smart technologies, it is necessary to combine group work and interaction among students both online and in direct communication. Teachers should see the strategy and adapt the curriculum in such a way that the use of smart technology corresponds to the goals and objectives set. An important role in the development of communication skills in a foreign language and in the theoretically grounded and methodically developed organization of independent work is played by a well-thought-out system of criteria for evaluating students' work, which involves further research and improvement.

Discussion

Given the rapid pace of innovation in software development and the capabilities of Internet resources, practical research is needed that will help us use smart technologies in such a way that it helps students model search and analytical professional activities and acquire effective foreign language communication skills, both when individually completing tasks and when working in a team.

Conclusion

Indeed, a lot can be done in the format of mobile learning, but for mobile learning to be truly successful, educational content must either be specially created for this format or carefully adapted. In the process of making decisions on the use of computers, tablets, or other technical means of teaching, it is necessary to be guided by the rule that "it is not the device that teaches, but the teacher." The gadget only helps and makes the learning process more effective and interesting. Their main potential is their simple adaptation to the curriculum and the possibility of their use by the teacher in the classroom.

The use of smart technologies in teaching schoolchildren is ambiguous. There are many problems associated with the lack of a unified approach, concept, technical support, availability of paid content, etc. But the time is such that the attitude toward smart technologies as something fantastic should be replaced by serious work and practical steps to use useful network resources for educational purposes.

References

Smart-tekhnologii v vysshem obrazovanii (2017) *Library of Financial University under the Government of Russian Federation*, March, 22-24 [Electronic resource]: URL: <http://www.library.fa.ru/exhib.asp?id=199> (data of access: 12.01.2023).

- Bates T. (2016) Thirty Years Later: Reflection on Computer Assisted Learning or Communications for Instructional Technology in Distance Education. *International Journal of E-Learning & Distance Education*, Ryerson University, Toronto, Canada, 32, 2, 186-188 [Electronic resource]: URL: <https://www.ijede.ca/index.php/jde/article/view/996> (data of access: 14.01.2023).
- Watters A. Top ed-tech trends of 2014 [Elektronnyj resurs]: URL: <https://2014trends.hackeducation.com/> (data of access: 16.01.2023).
- Ellis R. (2008) *Principles of instructed second language acquisition*. Washington, DC: Center for Applied Linguistics [Electronic resource]: URL: https://www.cal.org/resources/digest/digest_pdfs/Instructed2ndLangFinalWeb (data of access: 13.01.2023).
- Gerasimenko T.L., Zhidkova O.N., Romanova S.A., Grubin I.V., Gulaya T.M. (2013) Razvitie yazykovoj kompetencii u studentov neyazykovogo vuza s pomoshch'yu smart tekhnologij. *Statistika i ekonomika*, 2013, 1, 3-6.
- Gulaya T.M., Gulaya T.M., Gerasimenko T.L. (2014) Opyt ispol'zovaniya tekhnologii «Razvitie kriticheskogo myshleniya» v processe obucheniya professional'no-orientirovannomu delovomu anglijskomu yazyku. *Pedagogika i psihologiya obrazovaniya*, 1, 54-62 (data of access: 02.02.2023).
- Sergeenkova Yu. *Ispol'zovanie tekhnologii eb2.0 v obuchenii anglijskomu yazyku* [Elektronnyj resurs]: URL: <https://iyazyki.prosv.ru/2014/05/technologyweb-studyenglish/> (data of access: 28.01.2023).
- Mischuk E. (2014) "Klassnyi" sinergeticheskij effect ili chemu uchat reklamschikov v Yuzhnom Taivane? [Synergetic effect in the classroom or what advertisers learn in South Taiwan] [Electronic resource]: URL: <https://lingvister.ru/blog/klassnyi-sinergeticheskij-effekt-ili-chemu-uchat-reklamschikov-v-yuzhnom-tayvane> (data of access: 22.01.2023).
- Belovodskaya A.A. (2015) Obuchenie v sotrudnichestve v kontekste Weborientirovannoj modeli obrazovaniya: opyt organizacii kursa «Russkij yazyk delovogo obshcheniya». *Pedagogika i psihologiya obrazovaniya*, 13, 432-434.
- Zelikovskaya E.A., Stepanenko E.I. (2016) Razvitie mezhkul'turnoj kommunikacii, ispol'zovanie oblachnyh tekhnologij kak innovacionnye komponenty metodiki prepodavaniya inostrannyh yazykov. *Poednannyya innovacijnih i tradicijnih tekhnologij navchannyya ukraïnskoi ta inozemnih mov yak chinnik zabezpechennyya dievosti znan'*: Materiali III Vseukraïnskoi naukovopraktichnoi konferencii. X.: RVV HTEI KNTEU, 181-184 (data of access: 05.02.2023).
- Volkova E.A. (2015) Metodicheskie podhody k ispol'zovaniyu interaktivnyh sredstv v processe obucheniya studentov nepedagogicheskikh special'nostej. *Obrazovatel'nye tekhnologii i obshchestvo*, 18, 3 [Electronic resource]: URL: <http://www.library.fa.ru/files/Volkova2.pdf> (data of access: 21.01.2023).
- Tihomirova N.V. Global'naya strategiya razvitiya smart-obshchestva. *MESI na puti k Smart-universitetu* [Electronic resource]: URL: <http://smartmesi.blogspot.com/2012/03/smart-smart.html> (data of access: 25.01.2023).
- Lu R. (2007) A Comparison of Anonymous Versus Identifiable e-Peer Review on College Student Writing Performance and the Extent of Critical Feedback, R. Lu, L. Bol. *Journal of Interactive Online Learning*, 6, 2, Summer. 100-115 [Electronic resource]: URL: <https://www.ncolr.org/jiol/issues/pdf/6.2.2.pdf> (data of access: 21.01.2023).
- Trach A.S., Bondarev M.G. (2014) K voprosu o koncepcii smart-uchebnika po anglijskomu yazyku dlya special'nyh celej. *Informacionno-kommunikacionnye tekhnologii v lingvistike, lingvodidaktike i mezhkul'turnoj kommunikacii*, 6. M.: Centr distancionnogo obrazovaniya: Fakul'tet inostrannyh yazykov i regionovedeniya MGU im. M.V.Lomonosova, 263-273 (data of access: 01.02.2023).
- Gol'din A.M. (2010) Obrazovanie 2.0: modnyj termin ili novoe sodержanie? *Voprosy obrazovaniya*, 2, 224-23.

Арнайы мектептерде зияткерлік технологияларды пайдалана отырып жоғары сынып оқушыларына шет тілін кәсіби бағдарланған оқыту

*¹К.Ж.Туленова, ¹Б.Т.Рахимбаева

¹академик Е.А.Букетов атындағы Қарағанды университеті (Қарағанда, Қазақстан)

Аңдатпа

Бұл мақалада лингвистикалық емес университетте смарт технологияларды пайдалана отырып, шетелдіктерге студенттердің тілін оқыту және кәсіби-коммуникативтік құзыреттіліктерді қалыптастыру үшін компьютерлік технологияларды енгізу мәселесі қарастырылған. Бұлттық қызметтерді пайдалана отырып оқытудың мысалы ретінде авторлар тыңдау, жазу, оқу және сөйлеу дағдыларын дамытуға бағытталған бірқатар тапсырмаларды қамтамасыз ету үшін кәсіби TED Talks лекцияларын пайдаланады. Педагогикалық әдістемені студенттердің жазбаша және ауызша қарым-қатынасының өзара әрекеті ынтық артырудың және оқыту мен оқу процесін жетілдірудің негізгі факторы ретінде қарастырылады. Смарт технологияларды қолдану арқылы студенттердің өздік жұмысын ұйымдастыру бойынша жүргізілген тәжірибелер шет тілін оқыту үдерісіне тиімді ықпалдасу қажеттілігін растайды.

Түйін сөздер: тілдік дидактика, тәрбиелік оқыту теориясы, эмпирикалық зерттеулер, екінші шет тілі, көптілді қоғам.

Профессионально ориентированное преподавание иностранного языка старшекласникам с использованием интеллектуальных технологий в специальных школах

*¹К.Ж.Туленова, ¹Б.Т.Рахимбаева

¹Қарағандық университетінің академика Е.А.Букетовтың атындағы (Қарағанда, Қазақстан)

Аннотация

В данной статье рассматривается вопрос обучения иностранцев языку студентов неязыкового вуза с использованием умных технологий и внедрения компьютерных технологий для формирования профессионально-коммуникативных компетенций. В качестве примера обучения с использованием облачных сервисов авторы используют профессиональные лекции TED Talks для предоставления серии заданий, направленных на развитие навыков аудирования, письма, чтения и разговорной речи. В педагогической методике взаимодействие письменного и устного общения студентов считается ключевым фактором повышения мотивации и совершенствования учебно-воспитательного процесса. Проведенные эксперименты по организации самостоятельной работы студентов с использованием смарт-технологий подтверждают необходимость эффективной интеграции в процесс обучения иностранному языку.

Ключевые слова: языковая дидактика, теория педагогического обучения, эмпирические исследования, второй иностранный язык, многоязычное общество.

Поступила в редакцию: 20.02.2023

Одобрена: 10.03.2023

Первая публикация на сайте: 25.07.2023

MPHTI: 14.35.07

<https://doi.org/10.65247/3105-3432-2024-4.13>

MBTI PROFILES OF FOREIGN LANGUAGE SPECIALISTS: THE CASE OF TECHNICAL TRANSLATIONS AND INTERPRETERS IN KAZAKHSTAN

*¹T.V.EM^{id}, ¹A.N.KALIZHANOVA^{id}

¹academician A.E.Buketov Karaganda University
(Karaganda, Kazakhstan)

*ehm_tanya@mail.ru, anna.kalizhanova2017@gmail.com