DIGITAL EDUCATIONAL TECHNOLOGIES AS A MEANS OF INDIVIDUALIZING FOREIGN LANGUAGE LEARNING FOR STUDENTS AT UNIVERSITIES

2.1. Digital educational technologies as a means of individualizing foreign language learning

Digital technologies have become an increasingly important aspect of education in recent years. They offer a range of possibilities for teachers and students in choosing the means and forms of foreign language learning. The development of digital technologies, mobile technologies, computers, and Web 2.0 network services has led to growing attention to the problem of individualized learning and language learning. Digital technologies provide students with not only much wider access to resources but also accessibility for autonomous learning (Reinders and White, 2011). The rapid increase in internet resources, network services, and educational software together activates the search and desire of students to learn new things and self-improve (Godwin-Jones, 2007).

The integration of digital technologies into education has become a subject of many educational studies. It is related to the rapid development of the requirements of modern information society for university graduates. The process of integrating digital technologies has become more relevant as modern students are born into a digital age and are comfortable using digital technologies.

However, for effective learning using digital technologies and maximizing their pedagogical potential, teaching is necessary. It is not entertainment and games that students learn on their own. Learning strategies for working with technologies differ from those used in the classroom, so teachers also need to increase their level of digital competence. The feasibility and effectiveness of integrating digital technologies and individualized learning into education are related to the rapid development of the requirements of modern information society for university graduates (Hauck & Hampel, 2008). The process of integrating digital technologies has become the subject of many educational studies. Shetzer and Warschauer (Shetzer, & Warschauer, 2000, p.176) suggest that autonomous students with high levels of digital competence are

---

[2]**Authors:** *Lavrysh Yuliana*
65292 printed signs - 1.6 author's sheets

capable of taking responsibility for their own learning, working on individual and joint projects that are available to both local and global audiences. However, this was proposed even before the era of Web 2.0, when Internet users gained access to editing and managing websites and platforms. Modern students are born into a digital age and are comfortable using digital technologies, which makes the integration of these technologies into education even more relevant.

One of the most important skills that students need to develop is the ability to distinguish relevant and irrelevant information critically. To achieve this, the instructor must carefully plan and design the strategy to inform students about various ways they can choose to learn and determine how to use high-quality digital content from the first day of class.

Two main aspects of integrating technology are identified for mastering foreign language skills: basic and intermediate. The basic aspect involves using the internet as an asynchronous source of additional materials to provide students with reading or listening texts. The intermediate aspect involves organizing and creating online educational materials by instructors and giving students access to them. Under these conditions, instructors retain some control over the material that students have access to, while students still have a wide range of options to choose from regarding specific texts or materials they want to work with, as they can choose from the categories proposed by the instructor.

Recent studies (Sockett, 2013; Sundqvist, Sylvén, 2016; Lee, 2019) demonstrate that language learning occurs autonomously when students find multimedia resources that match their abilities and interests. These types of activities may initially be unrelated to learning, but rather to leisure or socialization. Nevertheless, even under such conditions, students gradually realize that learning can take place through online activities. This, in turn, requires more targeted attention to the development of language competence, which occurs along with transformations in primary motivation, oriented towards leisure, to constant, internal motivation oriented towards learning.

This type of learning is defined as "self-directed natural learning"(Benson, Chik, 2010, p. 74) and questions the traditional approach based on sequential learning programs, the study of grammatical rules, and the development of discrete skills, instead aligning with a language based on the use of patterns and clichés (i.e. multi-word units of vocabulary and grammar) that are considered as the foundation for language acquisition.

One of the advantages of technology-based language learning is the ability to

present the authenticity of the language in various contextual variations, from which students learn how the language is used idiomatically and how it changes depending on the context, registers, or speech acts (Sockett, 2013, p.55). In fact, repeated listening to songs, watching several TV series episodes, or repeating game scenarios help learn patterns through "high-frequency and contextual exposure to vivid examples" (Sockett, Toffoli, 2012, p.148). In the process of repeated listening and viewing, students go through a series of cognitive processes, including "forming categories, identifying patterns and novelty, as well as imitation" (Sockett, 2013, p.51). This process is likely effective not for all users but only for intermediate and advanced language learners (Lai, Hu, Lyu, 2017).

A number of modern studies focus on the integration of mobile devices (Chik, Ho, 2017). The widespread use of mobile devices, especially smartphones, is one of the main factors in the growth of informal language learning on the Internet (Godwin-Jones, 2018). Streaming services such as Netflix are available for mobile devices, as are virtually all online services today, typically through specialized applications. Smartphones allow for extensive customization, leading to highly individualized program configurations, context, and settings. Since these devices have become constant companions of people, they are always accessible. Smartphones are used to bridge the gap between local and global, as well as between leisure and work or study. They provide learning that can connect real-life experiences with global communities on the Internet. This contextualized learning experience promotes an ecological model of learning that encompasses the student, peer networks, friends and family, educational or professional contexts, and global communities. Mobile devices provide a high degree of on-demand access and freedom of choice, often associated with student autonomy (Murray, Lamb, 2018).

During the implementation of digital technology integration, Jiménez and Pérez (2001) propose adhering to the following conditions:

-taking into account the existing quantity of technical resources available to educational institutions and teachers, including the availability of technical staff to solve a range of mechanical, software, and technical problems.

-taking into account the number of technological tools available to students, both at home and in educational institutions.

-the actual level of digital literacy of students and teachers.

-motivation to use technology and the readiness to effectively use these tools by both students and teachers.

-the appropriateness and methodological justification for the use of digital educational technologies.

Based on the opinions of students regarding autonomous learning using digital technologies, researchers have found that the role of teachers changes, and students perceive them as consultants who provide assistance in managing the learning process, advising them on learning strategies, creating an atmosphere that encourages and supports autonomous learning, recommending resources, and encouraging active use of these resources (Fang & Zhang, 2012). According to Wang (2007), technology integration in language classrooms not only saves time but also inspires creativity and provides new opportunities for students. Wang (2007) argues that among the different roles of teachers, students are more interested in the role of consultant for providing resources and learning strategies rather than the role of teachers providing assistance in planning, monitoring, and evaluation processes.

Scientists attribute the cause of such a change to the lack of confidence in their abilities among students to participate in extracurricular activities, or the lack of information about possible educational resources and opportunities, or the lack of skills to effectively use resources (Gamble et al., 2012). This conclusion is supported by the results of Alajmi's research (Alajmi, 2011), in which students indicated in questionnaire responses that they lack understanding of the educational potential of technological resources, orientation in the diversity of technological resources, and experience in effectively using technological resources for learning. Therefore, from the perspective of students, the support that teachers can provide in promoting independent use of teaching technologies should focus on exchanging information about resources, encouraging active use of technological resources, and helping to develop the ability to effectively use resources for participation in self-directed individualized learning.

Research also confirms that students use the technological resources that their teachers use in class. For example, the experience of using blogs in class helped to transform their use from entertainment tools into learning tools. Moreover, the guidance of instructors on the use of technological resources for learning is crucial in helping students make the transition from using technologies as entertainment tools to using them as learning tools. Teachers support students by encouraging and guiding them on how to use technological resources for learning. Carson and Mynard (Carson, Mynard, 2012) identified various ways in which teachers can promote self-directed learning, including providing students with conceptual information that increases their

awareness of the language learning process and metalinguistic and metacognitive concepts; providing methodological information about resources, strategies, and engaging students in experiments to determine what works for them and what doesn't; and providing psychological support for affective management.

The research results allow us to state that it is important not only to focus on what teachers can do with technology in the classroom, but also to investigate how to maximize the potential of technology for learning by increasing the quantity and quality of independent use of learning technologies by students outside the classroom. An example of such research is the work of Lai (2015). The researcher found that teachers influenced students' independent use of language learning technologies outside the classroom through encouragement, recommendations on resources, and support for independent behavior. The use of technology by teachers in the classroom affects student behavior outside the classroom, but this is only one effective factor. Other supporting means include online assignments for out-of-class work that involve the use of technological resources and instructions on using technological resources for learning, web quests, creating presentations, and working with online trainers. The study's conclusions emphasize the importance of increasing teachers' awareness of the significant support they should provide to students to improve their independent use of learning technologies outside the classroom (Lai, 2015). The study also calls for more attention to be paid to studying the essence of the teacher's influence on the use of technologies aimed at independent learning, as well as studying effective ways in which teachers can exert their influence to promote independent use of technology for more effective learning.

Different forms of support have varying functions in promoting the independent use of technology for language learning. Encouragement alone is insufficient, as teachers need to play an advisory role in guiding students on the selection and effective use of technology for learning. This calls for professional development initiatives aimed at equipping teachers with the knowledge and skills required to provide consultations to meet the individual learning needs of students. Several research studies have explored the effectiveness of remote learning, and they reveal that students use the same metacognitive strategies, including self-direction and affective strategies, as classroom learners.

In their study, Koban-Koç and Koç (2016) explored cognitive, metacognitive, and social strategies used by students in individual self-directed online learning. The results showed that while students monitored the results of their learning, they used fewer

cognitive and social strategies. Only a few students set learning goals, and less than half planned how to study English online. Similarly, students rarely translated unfamiliar words, instead using language guessing strategies based on context when reading. The study suggests that classrooms can be transformed into resource centers with computer-assisted language learning and multimedia devices to provide students with different ways of using learning strategies effectively.

VELA software, developed by the Hong Kong University of Science and Technology, is an interactive online system that provides advice to students on learning English and offers opportunities to solve language learning problems using metacognitive strategies. Another effective way of developing individual self-learning through the use of learning strategies on the internet is eTandem, a distance learning system and language learning program that promotes student autonomy and understanding of socio-cultural peculiarities. The effectiveness of this form of autonomous learning was studied by Stickler and Lewis (2008), who concluded that the partnership between the language native speaker student and the language learner student fostered interdependence and support, enabling students to manage their learning and make decisions about what, how, and when to learn.

In electronic tandem, students behave autonomously, making important decisions in the learning process, thus developing metacognitive skills as they compare speech structures of their native language with the foreign language for a deeper understanding of the principles of construction. The University of Oviedo in Spain and the University of Sheffield in the UK have successfully integrated the eTandem technology into their curriculum. Little (2003) argues that in tandem, individualization is envisaged as the very form of learning from the very beginning, as the students themselves must behave autonomously.

A study (Joshi,2011), was conducted to examine how mobile devices contribute to personalized learning, the skills they develop, and whether smartphones satisfy all educational needs of students. Results showed that smartphones help students acquire skills in personalized learning, critical thinking, creative thinking, communication, and collaboration. Students who use smartphones are aware of how to set personal goals, and smartphones help them seek help and correct their mistakes. While students still rely on teacher support to set learning goals and evaluate their effectiveness, the study emphasizes the importance of teacher support and practice in the process of mastering personalized learning skills. Access to information via smartphones encourages meaningful communication between teachers and students, enabling the creation of

high-quality work. The use of smartphones increases students' level of critical and creative thinking, develops their communication and collaboration skills. However, a smartphone can never replace a teacher, and students still rely on achieving their learning goals.

A group of scientists led by Fang (Fang et al., 2012) proposed a model for integrating web resources into the self-learning process. According to the model, the web environment offers students an unlimited number of resources and informational messages. Students must analyze their own technical means, make the right choice of resources, work mode, and choose the type of interaction. However, learning through web technologies still remains a problem for students. The use of internet sources is mandatory for blended learning contexts. The level of readiness to accept and use web resources depends on students' level of digital competence. Individual self-learning through web resources positively affects motivation to learn. Therefore, it is important to integrate and optimize online and offline course design to reduce barriers to students' acquisition of learning technologies, thereby increasing motivation to learn.

Autonomous language learning is a complex process that involves cognitive, social, physical, pedagogical, and socio-political contexts. Through technology, the teacher sees the student in complete interdependence of individual and social contexts. Autonomous learning encourages critical reflection, creativity, and personal initiative. The development of individual characteristics is achieved through shared, democratic, and decentralized learning, which is of great importance in the development of student autonomy. The study concludes that smartphones and web resources contribute to personalized learning, but teacher support and practice are crucial for the development of personalized learning skills.

2.2. Educational and organizational approaches to integrating digital educational technologies into the process of teaching foreign languages

The use of digital technologies is one of the directions of informatization of education and, at the same time, contributes to the formation of information culture as a component of a professional culture of a specialist, the development of such professionally significant qualities as professional and language competence, mobility, adaptability, autonomy.

Foreign language teachers realize the obvious fact that language cannot be learned

only in the conditions of formal education. Educational technologies contribute to expanding opportunities beyond the university and provide free access to authentic resources. The use of technologies has become a powerful and dynamic means of developing students' autonomy (Benson, 2004, O'Rourke & Schwienhorst, 2003), and for this purpose, various types of technologies are used, such as Massive Open Online Courses (MOOCs) (Schwienhorst, 2003), blogs (Lee, 2011), virtual learning platforms (Collentine, 2011) and digital narratives (Halfner, Miller, 2011).

The most widespread and multifunctional digital resource that combines individual independent learning and foreign language learning, we consider open online courses developed by leading scientists and educational practitioners. Let's consider the structure and possibilities of this resource.

Massive Open Online Courses (MOOCs) are a massive digital course hosted in a virtual environment designed to attract a wide audience to independent personalized learning. As a special type of digital education, MOOCs can be viewed as a combination of education elements (teaching/learning) and elements of social intervention (propaganda/publicity). There are four popular MOOC platforms: Coursera, Edx, Canvas, FutureLearn; Udacity. In Ukraine, the popular platform is "Prometheus." Coursera is a platform created by an American venture investment developer in collaboration with well-known American universities, offering a large number of courses in computer science, humanities and social sciences, economics, medical sciences, engineering and construction, and more.

Teachers who collaborate with the course have the opportunity to evaluate students. Based on the results of the final test, students receive a diploma. Edx is an open access MOOC platform jointly developed in collaboration between the Massachusetts Institute of Technology and Harvard University. The platform offers free and paid courses in computer science, chemistry, electronics, and humanities and social sciences. Udacity is another platform developed by a professor at Stanford University and a venture capitalist. This platform offers online courses in computer science, natural sciences, mathematics, and programming. Udacity not only issues students with a corresponding certificate upon completion of the course, but also allows students to transfer the course credit to the appropriate academic credit through agreements with universities.

A typical course aims to teach and has a clearly structured content, developed lessons for teaching and consolidating material, instructions for practical tasks, interactive forms of control or assessment. Depending on the technical capabilities of

the platform, interactivity can take the form of structured discussions, tests and questions, quizzes, or exercises with subsequent peer assessment. Many projects proposed on online platforms have informational and methodological support from leading universities and scientists. A typical course development team includes several different groups: an academic team (teachers, tutors), a digital learning team (project managers, digital education experts), and a media production team (videographers, producers/editors). Information messages are presented in a multimodal mode, that is, using different types of media: video and audio formats, animation, presentations, etc.

An online course has a weekly structure, and the amount of material to be learned is calculated in hours per week. Each week introduces a new topic or section. The structure, content, and forms of course organization depend on the discipline, the developers' vision, and technical capabilities. Typically, a course includes several units, each of which includes a series of topics or lessons, followed by a quiz or task to assess understanding of the material. In addition, the course may include more complex practical assignments, such as group projects or research papers.

The system of individual independent learning activity during work with the course is similar to the formal learning system and consists of the following stages: familiarization with the educational material, diagnosis of abilities and needs, assessment of prior preparation, planning, development of organizational strategies, and self-assessment. The feature of distance learning is that the educational material is created by experts and the information messages are relevant and of high academic quality, the forms of material presentation are determined, educational strategies are chosen, and there is help from tutors and the community that takes the course simultaneously with the learner.

The analysis of open distance courses allows us to conclude that online learning is an effective tool for developing students' abilities to communicate, exchange information, cooperate, and use foreign languages. This method of learning is a real opportunity to rethink what is essential in the teaching and learning processes, to analyze personal strategies for creating, exchanging, and assimilating knowledge.

Among the digital technologies that combine foreign language learning and the formation of individualized autonomous learning, we propose using digital narratives and open access distance courses. Let's consider the essence and didactic potential of digital narratives. According to L. Tymchuk (2016), a digital narrative is a dynamic means of conveying information messages expressed in a common digital code. Digital narratives include texts, presentations, stories, video messages, blogs, descriptions, and

professional information messages. Digital narratives are applied at all stages of continuous formal and informal education, underscoring their boundless didactic potential. Foreign language narratives can serve as a self-made learning product for summative assessment. Students choose the topic, format, structure of the narrative, language genre, and register, and select the appropriate vocabulary and grammatical structures. In studies on narratives, Tymchuk notes that digital stories are effectively used for the development of personal reflection, a key skill of individualized autonomous learning. Narratives have the function of transforming views of the world around and personal experience, freeing up hidden accumulated negativity (Tymchuk, 2016, p.91). By creating narratives, students reveal new ways of their development and self-discovery, perceive their experience in a new way, and transform their personal vision of life situations to overcome difficulties and further self-development. Based on the above observations, we can assert that digital narratives are a powerful universal digital tool for language learning and developing critical thinking and creativity.

The use of technological means is divided into six main educational categories: resources for literacy learning, web tools, digital information resources, social media sites, learning management systems, and cloud services:

1. Resources for literacy learning, such as e-books, blogs, and discussion forums, promote learning through demonstrating examples of well-written ideas and texts. This is especially important in foreign language learning, as authentic texts demonstrate living and standardized language.

2. Web tools, such as podcasts, wikis, and media editors, provide opportunities for students to demonstrate their learning in various ways. Using these tools helps students not only develop digital competency skills but also enables them to share information and receive support from an authentic audience.

3. Digital information resources provide students with timely feedback. Instant access to encyclopedia sites, podcasts, expert websites and blogs, as well as media sites, allows students to interact effectively with content and experts. Web research is the most common use of technology. Although students require knowledge and skills to critically evaluate the quality and validity of information they find on the Internet, it is clear that useful and previously inaccessible resources can help students research practically any topic, and the freedom to choose resources promotes the development of individualized learning skills.

4. Social media facilitates social interaction, although some instructors consider their educational potential to be low. Students create interest and research topic

communities, exchange information, communicate with experts if necessary, and interact with instructors. Social media can connect resources and systems, provide recommendations for further reading and information search based on the latest queries and previous research by students, and provide access to current knowledge and expertise.

5.   Learning management systems (LMS) help teachers manage and organize learning content, track student progress, and provide feedback. LMS includes a range of tools, such as course materials, calendars, discussion forums, and assessments, that facilitate teaching and learning processes.

6.   Cloud services are resources for storing and managing data on remote servers located on the Internet, rather than on a local server or personal computer. Cloud services are not only a resource for accessing information from anywhere and at any time, but also a tool that shapes the essence of personalized learning, demonstrating new ways of recording and reproducing information in any form. Many useful resources such as Google Apps, Gmail, Microsoft 365, LinkedIn, and YouTube are located on cloud services.

In our time, issues of developing open digital educational resources, filling and working with educational cloud services, including the creation of distance learning resource centers, remain relevant. The process of implementing the latest technologies in the educational process requires addressing such current issues as setting up and maintaining hardware and software, improving the digital competence skills of teachers, and complying with sanitary and hygiene standards during continuous equipment operation.

An important prerequisite for the effective use of digital resources is the issue of evaluating the quality of resources and teaching students how to do this for further independent work. Developing an effective tool is challenging as it needs to combine the evaluation of pedagogical components and graphic design. We propose using a tool for assessing digital resources developed by El Mhouti (El Mhouti, Abderrahim & Nasseh, 2013) as a basis. This tool combines four key components of digital learning resources: academic content, pedagogical, didactic, and technological components. In the context of developing skills for personalized autonomous learning, this tool has been adapted and three components have been added to some of the components: interactivity, or quality feedback (to the pedagogical component), orientation towards developing self-learning skills (to the didactic component), and structural-functional interdisciplinary coherence of educational material (to the academic component). In

our opinion, such classification can significantly improve the quality assessment of digital educational resources. Let's look more closely at the content of these components.

The quality aspect of academic content involves evaluating the quality of information presented in the digital learning resource. The following criteria are known for determining the quality of academic content:

-the criterion of reliability, accuracy, reliability, and safety of information messages;

-the criterion of relevance, usefulness, and compliance with the interests, age, and needs of the user;

-structural-functional interdisciplinary coherence of educational material, which contributes to the unification of knowledge and correlates with the principle of authenticity, as students in real life have to solve interdisciplinary problems that are not limited to communication issues.

The process of harmonious interpenetration of educational components expands the scope of general and professional competencies. Training in solving interdisciplinary tasks activates scientific and cognitive activity, promotes further scientific activity, which ensures continuity and sustainability of the results of individualized learning.

The assessment of the pedagogical component is of paramount importance. To promote individual independent learning and the possibility for students to construct their own knowledge, digital resources should take into account the principles of differentiation, systematicness, activity, and continuity. Evaluating the educational resource involves studying its purpose, tasks, teaching strategies, and assessment provisions. The main criteria are:

-the quality of text formulation or tasks, which determines the degree of understanding of the content by students. The degree of understanding is influenced by simplification or adaptation of content or language level, explanations of abbreviations, the presence of a dictionary, a brief description of the resource, the use of visual information representation (graphs, diagrams, drawings), as images, layouts, presentations, pace, topics, proposed fonts, and design contribute to students' interest in the content of the resource;

-the quality of the resource structure: whether the structure of the digital educational resource corresponds to the expediency of its use in the pedagogical context due to the presence of such characteristics as organizational logic, simplicity

of orientation (for example, a summary, site plan), ease of navigation (back - forward, back to the homepage), and readability of pages;

-the quality of teaching strategies and forms of organization of learning, based on techniques, methods, approaches, and various educational models for differentiating learning styles. Teaching strategies should be based on active learning approaches (constructivism, socio-constructivism) for building meaningful and motivating situations to actively engage in learning.

The main subordinate criteria for evaluating pedagogical strategies are as follows: clearly defined learning objectives and resource goals; degree of differentiation of strategies and tasks according to learning styles, flexible in application (for example, encouraging teacher intervention, providing opportunities for cooperative, problem-based learning, etc.), materials and proposed tasks encourage the use of diverse learning styles and strategies (such as oral, written, multisensory opportunities for accessing additional information or material); the resource promotes active student engagement through the option of polling, which should encourage reflection; the resource encourages student creativity through the development of unique interpretations or solutions; the resource may encourage group interaction; the resource promotes the development of critical thinking, research skills, problem-solving, group decision-making, etc.

The next criterion is the didactic aspect of quality, which focuses on evaluating the role of educational activity, content, and epistemology. The following key criteria are identified for evaluating the quality of the didactic aspect:

- authenticity of educational activity: tasks should reflect real-life or professional problems that a student may face outside the classroom;

- content of the learning instrument: consideration of the reality, relevance, and accuracy of the learning resource, correspondence of the content to the digital learning resource, the goal and the target audience;

-focus on developing self-learning skills, which involves tasks with elements of planning, developing evaluation criteria, and analyzing previous mistakes.

The last criterion determines the technical quality of the digital learning resource. Indeed, it is unacceptable for the user to be unable to achieve learning results due to technical issues. As in the case of learning criteria, compliance with technical requirements and recommendations regarding the field of use and target audience is important. Technical quality is assessed according to the following criteria:

-    the design and organization of the visual product should promote proper use

of colors, interactivity, graphic quality, and pleasant aesthetics for selected images and illustrations. The visual sequence and sounds presented in digital learning resources, particularly those related to information design, affect the aesthetic and pedagogical impact of the resource. When designing presentations, developers should consider the principles and theories of cognitive load, multimedia learning, and information visualization;

- a clear interface to simplify navigation. When manipulating the resource, the user should be able to find a plan, index, or detailed table of contents, and the proposed options should be clear and sequential;

- technological innovation. Multimedia methods are aimed at combining and using the possibilities of new technologies in education to improve the quality of knowledge transfer and assimilation.

If teachers make all decisions regarding the conditions of use of a specific digital resource, students do not have the opportunity to become independent. However, having too much freedom of choice, students become distracted and cannot focus on one goal and choose the most useful resource. Providing options is one way to help them learn how to navigate and evaluate resources. In addition, variability ensures individualization of learning. Students mainly use resources that teachers demonstrated in the classroom. We propose the following steps:

1. Demonstrate the digital tool and practice its use during classroom sessions. Offer support and provide suggestions to help students get used to using digital resources in the language learning process;

2. Hold discussions and discussions on digital educational technologies, during which students are provided with answers to typical questions:

- is the digital tool free to use?
- do I need to register and provide an email address?
- is the material I create saved in open access?
- can the tool be used on a computer / Android device / iOS device?
- how will it help me improve my English?

3. Offer students to find information about how to use the resource on the Internet themselves. The teacher can suggest where to look for information or check it, but the search process should be carried out independently by the students;

4. Conduct reflective discussions on the experience of working with resources, during which students exchange thoughts, links, and experiences, analyze advantages and limitations.

Available internet tools such as bubbl.us, Mindmeister, Mind42, and Popplet allow for structuring one's ideas, while social bookmarking sites like del.ico.us and Symbaloo are used for saving and managing online resources. The use of these tools allows for easy archiving, searching for ideas and resources, and building strategies for further learning and searching. Such an approach not only promotes individualization and independence but also develops students' creative abilities. It also corresponds to the psychological and personal characteristics of students: introverts prefer creating animated figures, while extroverts will create videos.

If instructors strive to play an active role in supporting student self-management and monitoring, the use of web tools becomes more critical. Howland et al. (2012) emphasize that digital resources serve as cognitive tools that can help students articulate and demonstrate their internal cognitive processes. Digital technologies better support learning when students are given opportunities to learn through tools as a means, rather than perceive the tool as a source of information. To keep an online journal, we recommend resources such as Penzu, Journalate or Diaro. They allow you to sort entries into folders, mark them with keywords, search and synchronize content on mobile devices and the internet. Since most of us use smartphones with built-in audio and video recording capabilities, making a short recording or video can be just as quick as typing. Most of these resources allow you to add photos, and some allow you to attach files. We find blogging platforms like WordPress, LiveJournal and Blogger interesting for work, where you can also add images, audio or video to your blog. These tools offer ready-made templates for students to create their own internet space or publications. Another feature of blogs is that they archive posts chronologically and facilitate the assignment of tags to blogs. By using blogs, students can review their reflections on learning over a period of time and organize their placement under different tags for analysis of various categories of publications. Blogs contribute to the social construction of knowledge in the community by allowing teachers and students to post comments on each blog post. Another feature of blogs is that they allow students to articulate their knowledge in different media formats, such as drawings, graphs, tables, text, and audio. In recent years, audio blogs (such as PodBean) have allowed users to use voice recordings as an expression medium instead of text. Teachers engage students in reflection by analyzing their blog posts and comments to determine what they have learned and how it can be related to their

Creating electronic portfolios is another means that students can use for reflective thinking. In the context of individualized self-directed learning, e-portfolios are used

for storing and organizing the results and evidence of one's learning in digital format. Electronic portfolios can be used to demonstrate students' knowledge on specific topics or completed projects. To create an electronic portfolio, students need to collect relevant evidence and organize them in a way that reflects their learning process. Developing a reliable e-portfolio requires skills in reflection and synthesis of knowledge and skills. This goes beyond simply writing a resume about learning experiences. Digital platform tools such as ePortfolio.org provide students with opportunities to create e-portfolios.

Reflective practice in higher education is not a new idea, as most professional fields encourage reflective sessions and it should become a necessary skill for students to develop within their digital capabilities. In order to reflect on learning outcomes, we propose using resources such as Kahoot, Socrative or Anketa Everywhere for questionnaires. This is important as not all students may be able to adequately evaluate the quality of their work. The teacher proposes questions for answers, and students respond using the specified resources.

In addition to surveys, we recommend using collaboration platforms such as Padlet or Todays Meet to share thoughts on activity results, experience with resources, and provide advice to other students.

Online surveys and quizzes can help students identify gaps in their learning and plan further actions. G-Suite tools such as Google Drive and Google Classroom allow for creating shared documents with peer review, where students can track feedback history and corrections. These features can be used to help students identify changes within iterations, understand their personal learning gaps, and set goals for improvement. Digital tools such as Microsoft Project provide students with a simple interface for planning, and Gantt charts, which can be created in Microsoft Excel or Google Sheets, are another tool for tracking project progress and monitoring or improving plans. An additional advantage is the chat, which simplifies social interaction between teachers, students, and their peers, which can also be used as a means of self-management and monitoring student progress. Social learning networks such as Edmodo or Schoology can be used to support these processes, as these systems allow teachers to create individual and shared spaces. Teachers can use individual spaces for students to post their work, comment or use synchronous chat for discussions.

2.3. Recommendations for implementing the process of individualized autonomous foreign language learning with the support of digital educational technologies

The key characteristics of modern civilization transformations are innovation, dynamic changes, and an expanded communicative environment. New times require a correlation of the system of values with the existing conditions of existence in the information society and the real needs of modern youth. Acquired knowledge and skills quickly lose their relevance, and there is a need to master new knowledge. Therefore, the goal of modern higher education institutions is to develop students' lifelong learning skills in order to always be competitive. In order to form a self-sufficient personality capable of navigating the diversity of communications, it is necessary to change the way students are involved in the learning process, creating new motivating incentives and equal relationships between the subjects of the educational process, which is possible by implementing the principles of individualized learning. Thus, educators contribute to the development of humanistic and tolerant pedagogy, which is needed not only for the democratization of the educational space but also for society as a whole.

It is appropriate to formulate practical recommendations for teachers on the implementation of autonomous individualization of foreign language learning for students of engineering specialties and to provide explanations of the algorithm for assessing the competence of individualized foreign language improvement. We propose six steps for the effective and logical implementation of the aforementioned process.

Step 1 - The process begins with identifying the students' previous language learning experiences and their beliefs regarding individualized language learning. Students are asked to briefly describe their understanding of individualized language learning and their experience, analyzing their successes, mistakes, advantages, and disadvantages. Students reflect on positive and effective learning situations or tasks and/or strategies they have used.

Step 2 - Conducting a diagnostic test to determine the level of language proficiency and the problems that hinder successful task performance. The diagnostic test is based on the Common European Framework of Reference for Languages (CEFR) for determining levels of proficiency in a foreign language. It consists of four parts to determine proficiency levels in speaking, reading, listening, and writing. The

number and level of tasks gradually become more challenging with the completion of each subsequent task. We recommend creating a "My Plans and Desires" action plan in which students develop their own learning trajectory and set goals. In the context of formal professional education, it is desirable for the goals to meet the requirements of professional educational standards.

Step 3: To effectively analyze the previous experience, the next step we suggest is to conduct a skills audit, which will identify the skills that students already have and those that may be needed to complete the task. Reflecting on their previous learning, its effectiveness, strengths and weaknesses, students practice the skill of critical reflection. The skills audit is conducted by students marking one of three responses according to the skill: "I can", "I want to learn this" or "it's not important to me." The questionnaire consists of two blocks, "personal autonomy" and "educational autonomy." After analyzing the results of the diagnostic test, students choose one or two priorities to work on, and this is how the decision-making process takes place, and they create an action plan based on the teaching materials provided by the teacher for individualized learning. Students can discuss the results of the audit with the teacher, and the teacher can use the results of the audit as a basis for classroom learning activities. Also, at this stage, it is appropriate to determine the individual cognitive style for effective selection of strategies and tools.

Step 4: Developing criteria and descriptors for self-assessment of results. According to their priorities, needs, goals, or interests, students choose skills to improve or problems to solve. Then, together with the teacher, they discuss the criteria for assessing task performance. General criteria for assessing language skills are provided in descriptors for language levels developed by the European Language Commission. In addition, if students work with a learning resource or distance course on an online platform, the criteria for successful completion are already included in the online system. The teacher only explains the specifics of the criteria and what to pay special attention to. This work algorithm is effective at the initial stages of individual learning. At more advanced levels and in cases where the task involves a project, the teacher, together with the students, creates rubrics for evaluation.

Step 5. Individualized training of skills during direct contact with the teacher and individual self-study of students on previously identified problems. Some individualized self-study skills can be trained in the classroom: finding information, critically analyzing the quality of information and its sources, analyzing digital educational resources according to the needs and abilities of students, information

processing, creating a plan for completing tasks, developing peer assessment skills. These skills can be trained during group project research (completing a web quest, creating a presentation or interactive poster, recording audio or video messages, creating digital narratives, etc.). During this stage, students fill out a "reflective journal" in which they note the initial problems and the teacher's advice regarding their solution, list and evaluate the effectiveness of initial strategies and useful digital educational resources used by students during individual work.

Step 6. Filling out a self-assessment sheet (reflective map) after completing a certain task. Self-assessment is later discussed with the teacher. This discussion is a pedagogical dialogue that allows both the teacher and the student to compare their points of view regarding the level of language competencies and the learning process. This dialogue should be conducted in accordance with the basic rules of counseling: the teacher actively listens to the student, asks questions for clarification, asks for details, reformulates statements, summarizes, helps focus on priorities, and asks about next steps. This form of work is the most important element of assessment, as self-assessment, as a process of learning as a whole and the quality of language competencies, is a very complex cognitive process. Students often try to determine the criteria for evaluating their competencies, but without proper training, they are inclined to either overestimate or underestimate themselves, which leads to demotivation. Previously developed criteria indicate the direction of assessment and provide the opportunity to compare one's internal perspective with the external perspective. Students typically value the fact that they can engage in self-reflection and be involved in the assessment process. This way, they gain new insights into their competencies, learning principles, and make informed decisions about their future learning.

Summarizing the above conceptual ideas, we have come to a theoretically justified conclusion that improving the quality of professional education requires further improvement of the organization of autonomous individualized learning processes based on personality-oriented and digital humanistic pedagogy, and involves the use of digital educational technologies, interactive teaching methods, multimedia tools, and the implementation of electronic learning tools. Blended learning forms, complementing traditional ones, contribute to the realization of individual creative potential and professional self-realization.

Conclusions

Digital educational technologies are a field of research that studies the processes of analysis, design, development, implementation, and evaluation of learning environments and educational materials with the aim of improving teaching and learning. It is important to remember that the goal of educational technologies is to enhance education.

In the higher education system, teachers must make informed decisions regarding the choice of digital educational technologies and resources for transforming the learning process. When making decisions, it is necessary to take into account the needs and abilities of all subjects of educational activity, as well as the didactic potential of the resource and its multifunctionality. This is a difficult task, but factors such as the digital curriculum and content of the resource, evaluation requirements, controllability parameters, security functions, and technology functionality are key to choosing the right educational technology. First, it is necessary to determine the goals and needs, and then use all our knowledge, including technologies, to create the most effective learning environment for students. Educational technologies also stimulate the process of solving problems related to motivation to learn, the development of skills for individualized autonomous learning, critical and creative thinking. During the process of integrating digital educational technologies, teachers should be aware of three available types of technological convergence: additive, integrated, and independent. It is important to understand which type is best to use, why, and how to implement this method of integration.

Through research, we have concluded that the digital educational environment represents a complex set of conditions and opportunities for autonomous, individualized learning. The sense of change in the organization of the educational process in the context of digitalization lies in increasing the didactic effectiveness of integrating digital technologies into the learning process. This can be achieved through the implementation of individualized learning - transforming a unified and general educational process for all into a set of individual educational paths created taking into account students' personal educational needs and their individual psychological and pedagogical characteristics.