1.2. BENEFITS AND CHALLENGES OF DIGITAL TECHNOLOGIES APPLIED FOR TEACHING TARGET LANGUAGES IN UKRAINIAN AGRARIAN HEIs (2019-2022)

**Introduction.** In order to remain in demand in the age of artificial intelligence, young people settle into lifelong learning, acquiring new skills and being flexible in changing their activities. Hence, students of Ukrainian agricultural universities are learning the discipline “Target language of the professional use”, that is vital for their participation in academic mobility programs, necessity to be informed about the latest achievements and inventions in their professional field from foreign language sources, satisfaction of their cognitive interests in contemporary international politics, law, ethics, culture study, psychology, etc. Yet, the teaching methods nowadays require serious revision.

Modern students’ psychological peculiarities cause educators to refuse from frontal teaching methods and memorization of vast amounts of knowledge. Wide use of digital technologies, among them: online educational platforms, video conferencing, mobile phones and other devices, influences the tendency of students’ inclination to gain new knowledge and process information in small portions by doing it at any free minute or intermingling with another activity (Bilotserkovets et al., 2021a).

In the pandemic and post-pandemic society, ICT and various digital devices have become an integral part of life of every individual and modern generation of youth, who belong to the generation of centennials, as no one else reflects the trends of the times. The state of emergency required an instant transition of the academic process to the virtual environment, but the demand for efficiency of teaching and quality of students’ knowledge made academia carry through crucial changes in higher education, such as the transition towards student-centred learning activities, implementation of digital educational platforms and blended classroom system, sorting out important knowledge according to its emergence factor and the principle of performativity.
During the period of online studies, a number of digital teaching technologies were applied in practice by the educators of Sumy National Agrarian University (SNAU), Ukraine.

The paper is targeted to collect, generalize, sum up and evaluate the outcomes of various digital technologies for target language learning, as they were perceived by the students of SNAU in order to improve teaching modes and styles of educators.

**Literature review.** Modern academicians defined a notion of a “target language” as a language that is not native for a student who is acquiring it in the process of studying (Bilotserkovets & Gubina, 2019). Ukrainian students at SNAU, Ukraine, learn the English, French and German languages as target languages, while international students learn also the Ukrainian language as a target one (SNAU, 2022). Target language acquisition is performed through a number of disciplines, among them “English as a Foreign Language (EFL)”, “English for Special Purposes (ESP)”, “Target language of professional use”, “Business Foreign Language”, “English for Scientists”, etc. These disciplines are targeted to prepare students who master agrarian professions for modern socio-economic relations, as according to the current labour market demands, a competitive professional is able to maintain international contacts, achieve ambitious goals, orientate in society’s social norms and intercultural communication; find a self-regulation basis of emotional, stressful experiences of a personality (Bilotserkovets & Berestok, 2019). Taking into account the generation of centennials students’ peculiarities, such as clip thinking that presupposes their perceiving information fragmentarily; multitasking as a cognitive ability to perform various algorithms simultaneously; prevailing involuntary attention; hyperactivity; lack of concentration, the faculty of SNAU actively engaged ICT technologies even before the pandemic period, when it became unavoidable (Bilotserkovets et al., 2021a).

Indeed, more than 100 e-courses were created in the educational environment Moodle as the methodological supply for target language disciplines. The Moodle platform is validated in SNAU as it has been proved to gain significant advantages,
namely, accessibility of education for various social groups; availability of studying in a convenient time and place; modularity of forming an individual training program, that comprises a set of module courses; possibility for students of learning simultaneously without interrupting from professional activity; fund saving of material and human resources through the application of open education technologies.

The implementation of Moodle-based e-courses for teaching target languages at SNAU provided the efficient organization of the educational process in the period of the SARS-19 pandemic and the beginning of Russian aggression against Ukraine by supplying the means of training, the tools for monitoring and assessing students’ learning activities providing positive feedback and fostering learning independence of students (Bilotserkovets & Gubina, 2019).

When the entire academic process in SNAU was transferred online because of, primarily, the period of the SARS-19 pandemic and, consequently, the beginning of Russian aggression against Ukraine, both situations being classified as a state of emergency, Zoom was chosen as a digital platform for the distance teaching of target languages in SNAU. Its application enabled synchronous online communication between faculty and students in a remote format. A large number of participants by using a camera and a microphone simultaneously connected to the video conference for a common discussion of topics.

These online classes reminded face-to-face classes because they provided communication, the frontal work of a lecturer with students and their work in pairs and small groups in real-time. Various forms of oral and written communication between all participants of the academic process took part in Zoom conferences and chat rooms, providing either prepared or spontaneous interaction with the integrated use of ICT through the exchange of written, audio and video information; inviting guests (experts, foreign specialists, etc.), conducting students’ surveys, interviews and their online broadcast.

SNAU faculty revealed that e-learning through online platforms, which had been caused by the situation of the state of emergency, complicated but did not
impede the improvement of the quality of the educational process. However, the application of Zoom in online target language teaching should include the following key points: detailed planning of a virtual lesson; the choice of the necessary educational content for the best presentation of the material; faculty and students’ digital competence for using the program; the style of pedagogical and didactic technologies of online interaction; students’ abilities for self-organization and their motivation for acquiring knowledge (Bilotserkovets et al., 2022).

Educators of SNAU frequently used the potential of social networks in the field of teaching foreign languages that provided an opportunity for learners to communicate with representatives of different countries; be supplied with the effective means of fostering students’ writing, speaking and listening comprehension skills; reveal an issue of diverse psycholinguistic features of interlocutors, necessary for understanding peoples in a particular social or professional field, their cultural associations, background knowledge, linguistic and psychological peculiarities in the intercultural dialogue. Learners’ participation in social media groups enabled their exchanging opinions and ideas in the process of learning a target language, discovering traditions, speech etiquette and social norms of other nations, fostering their speaking and writing skills in a target language, building informal cooperation, developing tolerance to culturally diverse fellow students, overcoming self-doubt in the process of intercultural communication (Fomenko et al., 2021).

The widespread use of interactive learning tools and the gradual introduction of applications for mobile phones had not omitted SNAU, especially in the conditions of the state of emergency. Mobile learning or m-learning, is based on the use of mobile and portable IT devices in teaching and learning.

M-learning tools provide learners with effective knowledge and skills by facilitating their access to quality training materials; individualize the studying process in accordance with their needs and abilities; they are time and resource-consuming; enable constant feedback and control over the quality of the gained knowledge.
The experiment on the application of m-learning tools for the formation of grammatical skills in productive speech revealed their effectiveness. Acquaintance with new grammatical material for productive assimilation was mainly carried out in educational and speech situations, which were presented orally or in the process of reading under the guidance of a teacher. However, familiarization and initial consolidation of new grammar material, its training and application were performed through the implementation of mobile applications and gained students’ efforts, diligence and hard work, as it corresponded to psychological and pedagogical peculiarities of their learning styles (Bilotserkovets & Fomenko, 2022).

Still, it was essential to generalize and systematize the outcomes of the recent investigations in the field of emergent distant education through the perspectives of students’ perceptions.

**Methods.** The research was carried out in SNAU, Ukraine, by lecturers watching students’ progress during virtual target language classes. A sample of 80 second- and third-year students majoring in different agrarian professions was determined for the survey. The participants were voluntarily involved in this study. Pedagogical observation and expert evaluation methods were applied by the authors to study modern students’ cognitive and behavioural modes.

A set of questionnaires and interviews was conducted to discover students’ positions and thoughts about distant learning tools implemented into the process of target language teaching in the period from September 2019 to November 2022, that was marked by the SARS-19 lockdown and war actions on the territory of Sumy region. Theoretical analysis, synthesis and generalization of scientific sources were used to prepare the conditions and the materials for several surveys conducted in the mentioned period. Qualitative methods were applied to assess the outcomes of the survey. Comparative analysis was used to single out and compare the essential characteristics of digital technologies engaged in the research and students’ views towards them.

**Results.** Most students, who had participated in the research, reported about their positive attitude towards e-learning technologies. 93% of students recognized
that the application of the latest technological achievements was very practical and appealing, and they liked implementing digital gadgets (laptops, smartphones, computers) into learning. Talking about the advantages of the electronic language course on the Moodle platform, most respondents singled out the following points: consideration of students’ previous cognitive experience for the choice of audiovisual, multimedia and other linguistic content; training materials related to their future professional activity (89%); a chat with a teacher that enabled avoiding possible lexical and grammar mistakes in each separate block of the course (83%).

In spite of that, some students reported on the negative attitude to the work with an e-course because they lacked academic skills to analyze, compare and annotate, necessary for independent fulfilment of learning activities (73%), as well as peer-reviewing their groupmates’ assignments (54%). So, they revealed the need to develop skills for self-study and independent activity (Bilotserkovets & Gubina, 2019).

The pedagogical observation over the activities of students in the course of their target language learning on the basis of the Zoom platform and interviews with them stated that virtual lessons for the more significant amounts of them (78% of respondents) were psychologically comfortable and contributed to the fostering of their oral communication and intercultural skills. They provided students’ acquaintance with online speech etiquette, developed the ability to hear and understand the ideas of interlocuters (98% of respondents); fostered persuasion skills, the argumentation of one’s point of view, adequate response, predicting the response of interlocutors (84%), that was especially valuable in the period of isolation, caused by the state of emergency.

At the same time, respondents complained on certain difficulties, mostly related to external factors, namely: technical problems with electricity, internet connection and video broadcasting; lack of experience with the software; the need to provide access to each conference through a password or personal teacher ID; the embarrassment of students to speak on camera, ask questions in chat, emotional
complications associated with going online from their places (Bilotserkovets et al., 2022).

The majority of respondents admitted that social networking, applied in the process of target language learning, contributed to the formation of productive types of speech activity, writing skills in particular (96% of respondents). It was important for them because the need for writing skills was constantly growing due to the spread of various social networks and messengers.

Students appreciated the possibility of learning in practice speech behaviour strategies of culturally diverse people, the most significant grammatical and syntactic phenomena inherent for the target language (87% of respondents). Although, they realized that communication in the social media community posed higher demands not only for the level of proficiency in the target language but also for the message content, as well as increased the degree of awareness and personal responsibility of the author of the message (Fomenko et al., 2021).

While exploring students’ attitudes towards m-learning, most respondents (92.4%) revealed the following positive points: the efficacy and simplicity of the performance of the assigned tasks as well as teachers’ feedback via mobile communication; increased motivation due to combining learning with using digital gadgets and authentic training resources available anytime and anywhere. Concurrently, many respondents (81.2%) confessed that they were often distracted by mobile applications of an entertaining nature, played games, communicated in social networks and chat applications, and watched videos unrelated to the topic of the task.

Many students complained on the inconvenience of working on cell phones because of their small sizes and screen resolution, as well as the deficit of professionally-oriented educational mobile applications and programs (65%). Nevertheless, almost 100% of participants wanted to continue such practice permanently (Bilotserkovets & Fomenko, 2022).

Summing up the outcomes of the questionnaires, observations and interviews, the authors revealed that the research work on digital technologies implementation
into the process of the target learning in agrarian higher educational institutions was auspicious but challenging because it is not only up to students but also to educators to see the benefits of such innovations and to adapt own teaching style to them.

The data of the study are presented in Table 1.

Table 1. Students’ opinions about digital technologies in teaching target languages

<table>
<thead>
<tr>
<th>№</th>
<th>Digital technology</th>
<th>Features</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>E-courses on the Moodle platforms</td>
<td>benefits - consideration of students’ previous cognitive experience for the choice of audiovisual, multimedia and other linguistic content; - professionally-oriented training materials; - a chat with a teacher</td>
</tr>
<tr>
<td></td>
<td></td>
<td>challenges - lack of skills to analyze, compare, annotate, peer-review, fulfill different kinds of independent learning activities</td>
</tr>
<tr>
<td>2</td>
<td>ZOOM-based lessons</td>
<td>benefits - psychologically comfortable and contributed to the fostering of their oral communication and intercultural skills; - students’ acquaintance with online speech etiquette, - fostering students’ ability to hear and understand ideas of interlocutors; persuasion skills, the argumentation of one’s point of view, adequate response, predicting the response of interlocutors</td>
</tr>
<tr>
<td></td>
<td></td>
<td>challenges - technical problems with electricity, internet connection and video broadcasting; - lack of experience with the software; - the need to provide access to each conference through a password or personal teacher ID</td>
</tr>
<tr>
<td>3</td>
<td>M-learning tools</td>
<td>benefits - efficacy and simplicity of the performance of tasks; - teachers’ feedback via mobile communication; - increased students’ motivation for learning due to combining learning with using digital gadgets and authentic training resources available anytime and anywhere</td>
</tr>
<tr>
<td></td>
<td></td>
<td>challenges - distraction from learning by mobile applications of an entertaining nature; - inconvenience of working on cell phones because of their small sizes and screen resolution; - deficit of professionally-oriented educational mobile applications and programs</td>
</tr>
<tr>
<td>4</td>
<td>Social networking</td>
<td>benefits - contribute to the formation of productive types of speech activity, writing skills in particular, due to the spread of various social networks and messengers; - possibility to learn in practice speech behaviour strategies of culturally diverse people, their significant grammatical and syntactic phenomena</td>
</tr>
</tbody>
</table>
|    |                             | challenges - higher demands for the level of proficiency in a target language, message content and personal responsibility for the author of the message
Discussion. Analysis of the results of the study showed that the use of digital technologies (e-courses on the educational platform Moodle, virtual Zoom-based classes, m-learning tools, social networking) in target language knowledge formation gained, in general, positive perception of students of agricultural universities, because they were provided with the access to quality training materials; the learning process was individualized and facilitated for students by applying psychological and pedagogical innovations; constant feedback was supplied from the faculty and control under the students’ progress in the conditions of the state of emergency when only distant education was possible.

Though, there were apparent difficulties with digital technologies implementation, which authors pointed out, among them, the lack of proper methodological training for educators and the insufficiency of professionally-oriented didactic material, the lack of ‘live’ communication and emotional exchange, which complicated the new knowledge formation and reduces the degree of its assimilation, entertaining nature of some software tools, that distracted learners from the educational activities amid working hours (doom-scrolling, playing games, communicating in messengers and chat applications, watching the video and listening to audio resources that were not related to the topic of the task); evident harm for eyesight because of spending a long time online.

Moreover, the introduction of distant education demanded updated teaching approaches from educators: they needed to master the roles of facilitators, mentors or tutors, provide individual pedagogical support and coordination of the learning process, group or personal consultations, management of educational projects, etc. Teachers had to adopt various modes for learning process organization, such as “blended learning”, “flipped classroom”, or “flexible learning”. Nevertheless, educators complained that the quality of education deteriorated, as belonging to earlier generations, they were adherent to operate within the traditional classroom education system. Though, taking into consideration the socio-psychological characteristics of modern students, as representatives of the generation of centennials, it was proved that the linearity of presentation, frontal learning as a strategy
for obtaining information, own passivity in perception, the lack of a quick practical result are not characteristic for the centennials. In the period of the state of emergency, academicians witnessed a gradual transition from the passive-declarative style of teaching towards active instructing, which stimulates students’ research instead of memorizing, challenges students’ debating over learning issues or passing interactive tests instead of teachers’ direct control (Bilotserkovets et al., 2021b).

Indeed, nowadays, the quality of education is a matter of learners’ inclination to strengthen their ability of thoughtful studying; gain knowledge independently throughout life, omit time and distance restrictions by using enormous capabilities of the Internet, instead of the traditional classroom system, by implying not obedience, but self-organization (Kobzhev et al., 2020).

It was revealed that an important role had been played by the possibility of contact with a teacher and fellow students by means of various technical tools and groups in messengers. It happened because the digital community performed a function of a supporting group vectored to overcome students’ self-doubt and difficulties in learning and motivate them to achieve progress. Communication between students and faculty amid chats in Moodle, groups in Viber, Telegram, social networks, etc. was characterized by a high level of tolerance to participants and their willingness to eliminate linguistic and psychological barriers that had complicated their target language learning via digital tools (Fomenko et al., 2021).

Results of the study proved that the actual benefits of digital technologies in the field of teaching foreign languages were more crucial than their drawbacks; the work in the virtual educational environment was convenient, understandable and, undoubtedly, contributed to the increase in students’ target language proficiency, their intercultural competence, transversal skills, necessary for young professionals, who wanted to be competitive in the information-based society.

**Conclusion.** The findings of the survey that had been conducted in SNAU during the period of the states of emergency (2019-2022) revealed that the digital modes contributed to the foreign language training of students.
Therefore, the educational process can be transferred into digital space where it is possible to support new knowledge comprehension with e-courses based on learning platforms, websites, podcasts, simulations, interactive tutorials and links to reliable sources on the Internet. Video conferencing platforms, such as Zoom, have the technical ability to create a virtual environment for promoting students’ genuine language practice and their level of communication skills. The diagnostics and control of mastered knowledge can be efficiently performed with multilevel verification training and attestation tests by means of mobile applications. Social networking increases the motivation of students and provides students with intercultural communication skills fostering knowledge on innovations in a specific field of future professional activity. However, it was concluded that the quality of target language proficiency gained by means of digital technologies depended greatly on the cognitive styles of students, as well as the teaching and diagnostic approaches of lecturers, that needed to be adapted to the peculiarities of online learning.

References:


