The Use of E-Learning Tools for Teaching English in High School

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Abstract: The study was devoted to the analysis of impact of using e-learning tools for teaching English in high school. The special attention was paid towards the implementation of e-learning at the Ukrainian institutions of secondary education. The purpose was to explain the peculiarities of using e-learning tools for teaching English in high school and to evaluate their efficiency in different classroom conditions. The study had to solve the following tasks: (1) explain the usage of e-learning tools in Ukrainian high school and to evaluate their efficiency; (2) assess the level of foreign language competence among high school pupils; (3) describe learners’ perceptions towards using e-learning tools; (4) outline the key challenges when e-learning tools are integrated into the curriculum. Both quantitative and qualitative approaches were applied to answer the research questions. The purposive sample involved 78 high school pupils representing one institution of secondary education of universal profile where English is an obligatory subject and is taught 3 hours per week. The findings showed that a number of e-learning tools are used in the process of teaching English, particularly Learning Management Systems, virtual classrooms, interactive whiteboards, games and simulations, online libraries, communication tools, language learning application. It was found that Zoom, Moodle, Google classroom, SMART board, Kahoot!, and Quizlet are the most preferable by pupils when they study English. According to the respondents, pupils appreciate the possibility to access course materials at any time, using interactive elements, improved assessment activities, better engagement, increased motivation, enhancement of learning experience. But the survey showed
that Ukrainian high school pupils face technical issues, time management problems, home distractions, limited interaction, lack of motivation and unclear assessment procedures. The findings will be useful for learners, educators, parents, school administrators, curriculum developers, and technology providers to make the appropriate improvements within the educational process.

**Keywords:** communication tools, educational process, gamification, language learning applications, pupils, virtual classroom.

**Introduction**

Currently, over 1.5 billion people are learning English globally, with many of these learners being high school students. In the European Union, approximately 97.3% of students in upper secondary education study English as a foreign language, making it the most popular choice. The similar trends exist globally, with a high prevalence of English language learning in Asia, Africa, and Latin America. For instance, in China, over 300 million people are learning English, which includes a large number of high school students. In Japan, approximately 98.8% of upper secondary school students study English as a foreign language. In addition to Europe and Asia, the dominance of English as a foreign language extends to other continents. In Latin America, countries such as Brazil and Mexico have millions of students enrolled in English courses. According to the English Proficiency Index (EPI), these regions show increasing proficiency due to the emphasis on English education in schools. Africa also sees a high number of English learners, with countries like Nigeria and South Africa leading in the number of students learning English. In Ukraine, English is the most popular foreign language studied in high schools. According to the Ministry of Education and Science of Ukraine, approximately 80% of high school students study English as their primary foreign language. This high percentage reflects the country’s emphasis on integrating into the global community and improving educational standards to align with the European standards (Shevchenko et al., 2021). As Ukraine continues to seek closer integration with the European Union, providing students with high level of English language skills becomes increasingly important. A strong foundation in English not only facilitates academic and professional mobility within Europe but also ensures that future professionals are well-prepared to meet the demands of a globalized job market, engage in cross-cultural collaborations, and contribute to the country's socio-economic development.

The growing emphasis on English language proficiency in high schools requires a significant improvement in teaching methodologies (Murray et al., 2023). Definitely, traditional approaches, often focused on words memorization and grammar drills, fail to engage pupils and do not increase their motivation to learning. Instead, innovative pedagogical strategies that incorporate interactive and communicative techniques have proven to be more effective. The recent research show that learners exposed to innovative teaching practices, including the use of digital tools and collaborative projects, demonstrate higher levels of language proficiency and retention compared to those taught through conventional methods (Lebid et al., 2023). Moreover, the increasing demand for English language skills stresses the need for high schools to adopt teaching methodologies that prepare students for real-world applications. An improved curriculum that integrates cultural context, practical communication skills, and interdisciplinary learning can make English language instruction more relevant and engaging (Rahman et al.,
Teachers must be trained in these advanced methodologies to create dynamic classroom environments where students are motivated to participate and practice (Shevchenko et al., 2021).

The COVID-19 pandemic has significantly accelerated the adoption of e-learning in English language education, transforming how pupils access and engage with language learning resources (Mospan & Sysoieva, 2022). This necessitated the development and implementation of online teaching methodologies as well as introduction of effective e-learning tools that could enhance the language learning experience under new conditions. Further, the global crisis acted as a catalyst for the integration of technology in education, making e-learning not just a temporary solution but a long-term one (Zamani et al., 2022). In Ukraine, e-learning has emerged as an optimal technology to organize teaching English in high school during war, providing continuity and stability in education despite the disruptions caused by the conflict (Nikolenko et al., 2023).

The adaptability of e-learning to various situations has made it an appropriate technology for maintaining the educational standards and supporting students’ academic progress during the challenging times. Moreover, the adoption of e-learning for English instruction in Ukrainian high school has facilitated a more personalized and interactive learning experience (Paziura et al., 2021). Digital tools often include features such as real-time feedback, gamified learning activities, and access to multimedia content, which can enhance students’ participation (Lebid et al., 2023).

**Research Problem**

The educational environment affected by COVID-19 and ongoing war in Ukraine, has become increasingly complex and challenging (Marynchenko et al., 2022; Opanasenko & Novikova, 2022). Many educational institutions have integrated hybrid learning models, combining in-person and online instruction to ensure continuity and flexibility of the educational process. However, these advancements are often hindered by the disruptions caused by war and it requires the extensive use of e-learning to create effective and safe conditions for both learners and educators (Matviichuk et al., 2022). Generally, e-learning refers to the use of electronic media and information and communication technologies (ICT) in education. It encompasses a wide range of applications and processes, including web-based learning, computer-based learning, virtual classrooms, and digital collaboration (Kulikowski et al., 2022). From a technological perspective e-learning is an educational approach that delivers content and instruction via electronic devices (Nikou & Maslov, 2021). At the same time, from an educational perspective, e-learning is a form of distance education where the teaching and learning processes are carried out through digital platforms (Bøe et al., 2020). It emphasizes flexibility, accessibility, and the ability to use diverse learning styles as well as digital tools and resources to enhance the educational process.

A number of scholars studied the problem of using e-learning tools in foreign language teaching. For instance, Ja’ashan (2020) explained the challenges and prospects using e-learning for teaching English as a foreign language (EFL). The author insisted that the e-learning system can adapt to the aims of improving communication and enriching learners’ learning experiences. Binmahboob (2022) described EFL learners’ perspectives of e-learning during the COVID-19 pandemic and proved that this technology makes learning easier, especially to build positive instructor-learner interaction and facilitates using various teaching styles and assessment methods. The recent findings show that using e-learning for EFL teaching presents several unique characteristics, particularly integration of multimedia resources, introduction of personalized learning in the English language classroom, providing immediate feedback (Shadiev & Wang,
2022). Besides, e-learning provides a number of opportunities for EFL learners to practice their language skills in a social context, simulating real-life conversations and interactions (Chang et al., 2020). E-learning supports self-paced learning and offers digital tools for tracking progress (Nikolenko et al., 2023). This data-driven approach can inform about the selection of the most appropriate teaching strategies and enhance learning outcomes.

According to the scientific literature, the use of e-learning tools for teaching English in Ukrainian high school has several unique peculiarities (Nikolenko et al., 2023; Paziura et al., 2021). Mainly, the Ukrainian education system has specific curriculum requirements for English language learning. Kostikova and Miasoiedova (2022) investigated the process of adaptation of these curricula to an e-learning format while maintaining educational standards and outcomes through careful planning and resource development. Many Ukrainian teachers may need additional training to effectively use e-learning platforms and tools. Shevchenko et al. (2021) stated that providing professional development opportunities is essential to form digital competence among teachers so that it will help to transit to the digital teaching environment. It was found that learners’ engagement and motivation is very important aspect to implement e-learning in high school (Lemeshchenko-Lagoda & Kryvonos, 2020). As a result, e-learning platforms need to incorporate interactive and multimedia elements to maintain pupils’ interest and motivation. Kiashko and Yashkina (2021), Volynets (2021) indicate gamification, virtual reality, and interactive exercises as important strategies on e-learning when English is taught in high school. Also, Nikolenko et al. (2023) describe the use of e-learning platforms for assessing learners’ progress. Therefore, since e-learning may offer many advantages for teaching English in Ukrainian high school, it is an important topic of scientific and pedagogical discourse that aims to reveal its peculiarities, effectiveness of e-learning tools, and learners’ perceptions towards digital educational environment.

**Research Focus**

The theoretical framework of the peculiarities of using e-learning for teaching English in high school shows that the problem is significantly important for formation of foreign language competence among secondary pupils. Currently, high school is undergoing considerable modernization to integrate advanced technologies, update curricula, and adopt innovative teaching methods. In Ukraine, the institutions of secondary education are increasingly using digital platforms and tools to facilitate interactive and engaging learning experiences. English teaching is facing substantial improvements as well. The traditional approaches are being replaced with more dynamic and communicative methods. E-learning platforms provide rich multimedia content, such as videos, podcasts, and interactive exercises, which enhance language acquisition by exposing learners to authentic language use in diverse contexts. Virtual classrooms offer children a number of opportunities to practice speaking and listening skills with peers and native speakers, fostering greater language proficiency. Furthermore, the use of data analytics in e-learning systems allows educators to track student progress in real-time, providing timely feedback and address learners’ individual learning gaps. This modernization in English teaching is oriented towards the creation of a more engaging, effective, and comprehensive language learning environment in high school. Obviously, there is a need to explain the use of various e-learning tools for teaching English in the context of high school and to evaluate their efficiency for formation of foreign language competence among secondary pupils. The outcomes will help

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Research Aim and Research Questions

The purpose is to explain the peculiarities of using e-learning tools for teaching English in high school and to evaluate their efficiency in different classroom conditions.

This study seeks to answer the following research questions:

1) What e-learning tools are used for teaching English in Ukrainian high school? What tools are the most efficient ones?
2) What is the level of foreign language competence among high school pupils before and after intervention?
3) What are learners’ perceptions towards using e-learning tools when they study English?
4) What are the key challenges faced by Ukrainian high school pupils when e-learning tools are integrated into their English language curriculum, and how can these challenges be addressed?

Literature Review

In contemporary high education, e-learning is characterized by accessibility (Buragohain et al., 2023), interactivity (Al Khotaba, 2022), and personalization (Paziura et al., 2021). It uses advanced digital tools to provide learners with a flexible and engaging learning experience, adjusting the educational process to diverse schedules and learning preferences (Mushtaha et al., 2022). Interactive multimedia elements, such as videos, simulations, and gamified activities, enhance learner engagement and motivation by making the content more dynamic and motivating (Agarwal, 2023; Kiiashko & Yashkina, 2021). The findings show that e-learning enables collaboration among learners through features like discussion forums, group projects, and online meetings as well (Prasetya et al., 2022). These features collectively contribute to an educational paradigm that prioritizes learner-centered approaches (Al Khotaba, 2022) and continuous improvement through technological innovation (Rae et al., 2019) resulted in formation of foreign language competence among high school pupils.

The analysis of scientific and pedagogical literature shows that there are a lot of e-learning tools for teaching English (Nikolenko et al., 2023; Sari & Putri, 2022; Suherman & Wathoni, 2022). Many of them are applicable for high school environment (Atmojo & Nugroho, 2020; Aryani et al., 2022). To analyze e-learning tools for teaching English in high school, it is necessary to describe the requirements they should meet to effectively support online education. Firstly, they should offer a user-friendly interface that is intuitive and easy to navigate, ensuring that both learners and educators can use the tools without extensive training (Layali & Al-Shlowiy, 2020). Compatibility is also crucial, as e-learning tools should be accessible on a variety of devices and operating systems to accommodate learners’ individual preferences and technological capabilities (Buragohain et al., 2023). These tools should support a range of multimedia formats, including videos, audio recordings, and interactive simulations, to create engaging and dynamic learning environment. Secondly, according to some findings, e-learning tools should provide interactive features that enable communication and collaboration among learners and educators (Mushtaha et al., 2022). And importantly, these tools should offer relevant mechanisms for assessment and feedback within the educational process (Shadiev & Wang, 2022). Security and
privacy are also paramount, with e-learning tools needing to adhere to strict standards to protect sensitive learners’ information and ensure the integrity of the learning environment of high school (Feng et al., 2021).

Based on the requirements to e-learning tools for teaching English, it is possible to differentiate them into six groups: Learning Management Systems (LMS), virtual classrooms, interactive whiteboards, educational games and simulations, online libraries, and communication tools (Atmojo & Nugroho, 2020; Sternad Zabukovšek et al., 2022; Yazid et al., 2021). Some authors describe language learning applications that provide interactive language lessons using mobile devices (Türel & Davudova, 2022; Yumnam, 2021). Figure 1 shows the examples of e-learning tools for each group.

Further, it is necessary to study these tools in details. For instance, LMS are comprehensive platforms designed to support and enhance the teaching and learning practices (Sternad Zabukovšek et al., 2022). For teaching English, LMS can provide a centralized storage for course materials as well as a platform for communication, collaboration, and assessment. LMS allows educators to organize and manage course materials, support collaborative learning, such as group projects, peer review assignments, and collaborative document editing (Prasetya, 2021). Virtual classroom is an online learning environment that allows for live interaction between the participants of the educational process (Klunder et al., 2022). Virtual classrooms are equipped with interactive features such as chat, polls, and virtual whiteboards, which enhance learners’ engagement and participation. Also, virtual classrooms provide access to a wide range of resources and enable teachers to provide real-time feedback to learners. Such tools can facilitate collaborative learning through group activities, discussions, and projects that is very important for formation of foreign language competence.

Some works are devoted to interactive whiteboards that are used to interact with digital content, such as websites, videos, and educational software, making lessons more engaging and interactive for learners (Wahid et al., 2021). In the context of teaching English, educational games and simulations relate to interactive tools designed to engage learners in the virtual classrooms (Kiiashko & Yashkina, 2021; Nguyen et al., 2021; Tran, 2023). These games and simulations cover a wide range of language areas, including vocabulary, grammar, reading, writing, and listening. Also, these interactive tools provide learners with the opportunity to practice and apply their language skills in an interesting way. Another group of e-learning tools, online libraries, are digital repositories of resources that provide educators and learners with access to a wide range of materials to support English language learning (Vorotnykova, 2019). Most often they are used to supplement traditional teaching materials, offering additional reading materials, listening practice, and grammar resources.
The special attention is paid towards communication tools (Atmojo & Nugroho, 2020). They are identified as digital platforms and applications facilitating interaction between educators and learners, as well as among peers. These tools include video conferencing software, interactive lessons, messaging apps, discussion forums, and social media. Communication tools help create a dynamic and interactive educational environment, contributing to collaborative learning and increased learners’ participation during distance learning (Sternad Zabukovšek et al., 2022; Yazid et al., 2021). And language learning applications offer a range of interactive features, including gamified lessons, vocabulary drills, grammar exercises, pronunciation practice, and real-life conversation simulations (Türel & Davudova, 2022; Yumnam, 2021). Some apps use adaptive learning techniques to tailor lessons to learners’ individual levels of foreign language competence (Khan et al., 2022; Yumnam, 2021). Definitely, these e-learning tools offer diverse ways to enhance the teaching and learning of English in high schools, providing opportunities for interactive and engaging language practice both inside and outside the classroom.
A number of pedagogical investigations reveal learners’ perceptions towards e-learning experience, particularly when studying English (Layali & Al-Shlowiy, 2020; Pratolo & Lofti, 2021). Many pupils appreciate the flexibility and convenience of being able to access lessons and complete assignments from home (Getie & Popescu, 2020). They often have positive attitudes towards using various multimedia resources, such as videos and interactive activities. Some authors indicate that e-learning tools contribute to overcoming of classroom communication barriers (Bratchuk & Smith, 2023). However, learners also frequently mention the difficulties of staying motivated and managing their time effectively without the structure of a traditional classroom (Ali & Bin-Hady, 2019). Some young people miss the face-to-face interaction with teachers and peers, which can make it harder to ask questions and collaborate on group projects (Alhamami, 2022; Baa & Minj, 2023). Especially, it is important in the Ukrainian context when children have to study in the conditions of uncertainty (Lavrysh et al., 2022; Opanasenko & Novikova, 2022). As a result, educators consider the psychological state of children and adjust educational materials to support them and to reduce the stress level. After all, high school learners confirm e-learning reflect a balance of positive and negative aspects, depending on individual preferences and circumstances. Moreover, e-learning is described as positive phenomenon of modern education system but it necessitates the implementation of efficient tools oriented towards improvement of basic language competences (Nguyen et al., 2021).

This proves that implementation of e-learning in Ukrainian high school is an objective reality to ensure educational continuity amid the ongoing conflict and post-pandemic recovery. It was found that many e-learning tools provide flexible, uninterrupted access to high-quality educational resources, regardless of physical disruptions. They enable the development of critical skills among pupils, such as digital literacy and self-directed learning, essential for their future success. Additionally, e-learning fosters inclusivity by reaching students in remote or conflict-affected areas, ensuring equal education opportunities. By integrating e-learning, Ukrainian schools can enhance learning outcomes, better prepare students for a digitalized world, and mitigate the adverse effects of current challenges on education. To achieve this, it is necessary to investigate different e-learning tools used for teaching English and select those that appropriate in the Ukrainian context.

**Materials and Methods**

When planning the educational research, it is important to mention that the study must be characterized by the interdisciplinary approach, the integration of advanced technologies, and a strong emphasis on evidence-based practices (Bhinder, 2023; Rethlefsen et al., 2022). Therefore, the study devoted to the analysis of the impact of e-learning tools upon teaching English in high school was realized through educational, technological and psychological dimensions to provide the holistic understanding of the problem. The educational dimension was aimed at the analysis of the educational process itself and the change of teaching methodology under the impact of e-learning tools when English is taught in high school. At the technological dimension the requirements to e-learning tools such as accessibility, flexibility, reliability, and interactivity as well as user-friendly interface were evaluated that contributed to selection of the most efficient instruments. And the psychological dimension was oriented towards learners’ perceptions towards the use of e-learning tools for teaching English. It considered their psychological state, stress management, motivation, interest to learning, communication styles. Considering these three dimensions while studying the impact of e-learning tools upon teaching English in high
school facilitates the development of relevant approaches to formation of foreign language competence among pupils and prepares them to orientation through various digital tools in real world.

To study the impact of e-learning tools upon teaching English in high school the survey was conducted under the principles of systemic inquiry, practicality, relevance, transparence and openness, validity, and orientation towards continuous improvement. Both quantitative and qualitative approaches were applied to answer the research questions. The main function of using qualitative methods in educational research was to provide a deep understanding of complex educational phenomena. They helped to study the context of the scientific problem, understand the perspective through interviews, focus groups, and observations. Also, qualitative methods being flexible and adaptable helped to identify recurring themes and patterns within the data revealed. This outlined the trends of using e-learning tools for teaching English in Ukrainian institutions of secondary education and drew the connections between traditional and innovative technology-enhanced educational environment. Quantitative methods provided objective and measurable data that was used to describe trends of using e-learning tools for teaching English and draw conclusions about the educational phenomena in Ukrainian high school. Additionally, the use of standardized quantitative instruments enhanced the objectivity and reliability of the research.

The quantitative component involves a quasi-experimental design with pre-tests and post-tests administered to the group before and after educational intervention which means using e-learning tools. This data will measure changes in basic languages competences over time. The survey with Likert scale questions were developed to analyze learners’ perceptions towards e-learning. Statistical analysis was used to compare the proficiency levels and survey responses between the participants, providing empirical evidence on the efficiency of e-learning tool for teaching English in high school. The qualitative component includes semi-structured questionnaire and focus groups with pupils to explore their experiences and challenges with e-learning tools. Questionnaires allowed to outline the detailed individual experiences, while focus groups facilitated interactive discussions to reveal collective views and dynamics of the educational environment. Thematic analysis of the qualitative data helped to identify common patterns, such as technological challenges, engagement levels, and pedagogical differences.

**Sample and Participants**

The sample involved a diverse group of 78 high school pupils where 42 individuals studied in the 10th grade and 36 - in the 11th grade. All the participants represented one institution of secondary education with the Ukrainian language of instruction (universal profile) where English is an obligatory subject and is taught 3 hours per week. Table 1 shows the demographic data of the survey participants. When conducting the research, several critical ethical considerations were addressed to ensure the safety, rights, and well-being of the participants. Since the participants were juvenile, the informed consent from the parents or legal guardians were obtained, ensuring they are fully aware of the study’s purpose, procedures, risks, and benefits. In addition to parental consent, researchers obtained the agreement from the children themselves. This means that the study’s details were explained in an age-appropriate manner and ensured that the children voluntarily agreed to participate. The researchers ensured that all data collected from the participants is kept confidential and stored, any personal identifiers were removed to protect the anonymity of the pupils.
Table 1
Demographic Data of Participants

<table>
<thead>
<tr>
<th>Category</th>
<th>Details</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15 years</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>16 years</td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>17 years</td>
<td></td>
<td>32</td>
</tr>
<tr>
<td>18 years</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td><strong>Gender</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td>29</td>
</tr>
<tr>
<td>Female</td>
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<td>49</td>
</tr>
<tr>
<td><strong>Grade</strong></td>
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</tr>
<tr>
<td>10A</td>
<td></td>
<td>20</td>
</tr>
<tr>
<td>10B</td>
<td></td>
<td>22</td>
</tr>
<tr>
<td>11A</td>
<td></td>
<td>19</td>
</tr>
<tr>
<td>11B</td>
<td></td>
<td>19</td>
</tr>
<tr>
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</tr>
<tr>
<td>English Language</td>
<td></td>
<td>13</td>
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<tr>
<td>Mathematics</td>
<td></td>
<td>7</td>
</tr>
<tr>
<td>Physics</td>
<td></td>
<td>4</td>
</tr>
<tr>
<td>Chemistry</td>
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</tr>
<tr>
<td>History</td>
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<tr>
<td>Geography</td>
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<td>Computer Science</td>
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<tr>
<td><strong>Desire to undergo higher philological education</strong></td>
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<tr>
<td></td>
<td>No</td>
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<tr>
<td><strong>Extracurricular involvement</strong></td>
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<td>63</td>
</tr>
<tr>
<td></td>
<td>No</td>
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<tr>
<td><strong>Attendance rate</strong></td>
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<td></td>
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<td></td>
<td>79-65%</td>
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<td></td>
<td>less than 50%</td>
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<tr>
<td><strong>Learning progress (average)</strong></td>
<td>Excellent</td>
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</tr>
<tr>
<td></td>
<td>Good</td>
<td>45</td>
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<td></td>
<td>Satisfactory</td>
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<tr>
<td></td>
<td>Unsatisfactory</td>
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<tr>
<td><strong>The level of foreign language competence (formal assessment)</strong></td>
<td>High</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>Good</td>
<td>36</td>
</tr>
<tr>
<td></td>
<td>Sufficient</td>
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</tr>
<tr>
<td></td>
<td>High</td>
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The level of foreign language competence (self-assessment)

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<tr>
<td>Sufficient</td>
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<tr>
<td>Low</td>
<td>-</td>
</tr>
<tr>
<td>Insufficient</td>
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</table>

Special educational needs

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<td>Yes</td>
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</tr>
<tr>
<td>No</td>
<td>75</td>
</tr>
</tbody>
</table>

Source: Author’s development.

**Instruments and Procedures**

To study what e-learning tools are used for teaching English in Ukrainian high school, classroom observations and curriculum analysis were introduced. To evaluate the level of foreign language competence before intervention formal assessments were applied as well as self-assessment. The survey with Likert scale questions was implemented to study the pupils’ perceptions towards e-learning. Also, the questionnaire contributed to the investigation of the efficiency of various e-learning tools used for teaching English in high school. A Likert scale questionnaire included 2 blocks. The fist block related to the use of different e-learning tools and the pupils indicated their efficiency as “Very effective”, “Effective”, “Neutral”, “Not effective”, “Useless”. The second block included 15 statements or questions to which respondents indicated their level of agreement or disagreement on a scale. The scale typically ranged from “Strongly Disagree” to “Strongly Agree,” with a neutral option such as “Neutral”. This scale allowed to collect the quantitative data that was further analyzed to determine the overall attitudes and opinions of high school pupils on e-learning. Table 2 shows Likert scale questionnaire among high school pupils.

**Table 2**

**Likert Scale Questionnaire Among High School Pupils**

**Choose the best option:**

**BLOCK 1. The Efficiency of e-learning tools for teaching English**

1.1. Moodle
- a) Very effective
- b) Effective
- c) Neutral
- d) Not effective
- e) Useless

1.2 Google classroom
- a) Very effective
- b) Effective
- c) Neutral
- d) Not effective
- e) Useless

1.3. Zoom
- a) Very effective
- b) Effective
- c) Neutral
- d) Not effective
- e) Useless

1.4. Google Meet
- a) Very effective
- b) Effective
- c) Neutral
- d) Not effective
- e) Useless

1.5. SMART board
- a) Very effective
- b) Effective
- c) Neutral
- d) Not effective
- e) Useless

1.6. Kahoot!
- a) Very effective
- b) Effective
- c) Neutral
- d) Not effective
- e) Useless

1.7. Quizlet
- a) Very effective
- b) Effective
- c) Neutral
- d) Not effective
- e) Useless

1.8. ESL Lab
<table>
<thead>
<tr>
<th>Block</th>
<th>Perceptions towards e-learning</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>The e-learning platform is easy to navigate.</td>
</tr>
<tr>
<td>2.2</td>
<td>I feel more engaged in my lessons when using e-learning tools.</td>
</tr>
<tr>
<td>2.3</td>
<td>Interactive elements (videos, quizzes) help me stay focused.</td>
</tr>
<tr>
<td>2.4</td>
<td>I find e-learning to be more motivating than traditional classroom learning.</td>
</tr>
<tr>
<td>2.5</td>
<td>I can communicate easily with my teachers through the e-learning platform.</td>
</tr>
<tr>
<td>2.6</td>
<td>Discussion forums and chat functions enhance my learning experience.</td>
</tr>
</tbody>
</table>
2.7. I feel comfortable asking questions online.

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

2.8. I can access course materials at any time.

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

2.9. E-learning has improved my understanding of course content.

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

2.10. I feel that I learn more effectively through e-learning than traditional methods.

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

2.11. The assessments in e-learning accurately reflect my knowledge.

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

2.12. I enjoy using e-learning tools for my studies.

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

2.13. E-learning has increased my interest in the subject.

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

2.14. I am motivated to complete my assignments on the e-learning platform.

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

2.15. The grading system in e-learning is clear and transparent.

- a) Strongly agree
- b) Agree
- c) Neutral
- d) Disagree
- e) Strongly disagree

Source: Author’s development.

The procedure involved several steps. Firstly, the questionnaire was designed with clear and concise statements that are relevant to the research objectives and age-appropriate for high school pupils. Before administering the questionnaire, it was pilot-tested with a small group of children to ensure clarity and understanding. Then, the questionnaire was distributed to the target group of high school pupils in paper or electronic format. Instructions were provided on how to complete the questionnaire, emphasizing the importance of honest and thoughtful responses. After the pupils have completed the questionnaire, the data was collected and analyzed using statistical methods to draw conclusions about the attitudes and opinions of the pupils towards e-learning.

Data Analysis

To summarize and interpret Likert scale questionnaire data descriptive statistics was applied. These statistics included measures such as frequency distribution, which counted how often each response option was selected, and percentages, which calculated the proportion of respondents choosing each option. Central tendency measures provided the information on the average or middle response, respectively. Additionally, descriptive statistics enabled to measure the range of deviation and indicated the spread of responses. Using these descriptive statistics the researchers studied the general peculiarities of using e-learning for teaching English in
Ukrainian high school and revealed the impact of e-learning tools on formation of foreign language competence among high school pupils.

**Results**

*RQ1: What E-Learning Tools are Used for Teaching English in Ukrainian High School? What Tools are the Most Efficient Ones?*

The results showed that a number of e-learning tools are used in the process of teaching English in Ukrainian high school. The classroom observations and the analysis of curriculum demonstrated that educators apply seven groups of e-learning tools. They are the following: LMS, virtual classrooms, interactive whiteboards, games and simulations, online libraries, communication tools, language learning application.

**Figure 2**

*Using of E-Learning Tools in the English Language Classroom*

![Graph showing the usage of e-learning tools in the English language classroom.]

*Source: Author’s development.*

The frequency of this usage was measured as follows: 100-80 points means a tool is used very often, 79-60 points - often, 59-40 points - sometimes, and less than 39 points show that a tool is applied rarely within the educational process. Importantly, the difference between frequency indicated in the curriculum and identified during the classroom observation was measured. The main difference is that the curriculum indicates less frequency of using e-learning tools but educators apply a number of them within the educational process. Therefore, it was found that games and simulations, interactive whiteboards, virtual classroom are used the most frequently. Figure 2 shows using of e-learning tools in the English language classroom based on observation and curriculum analysis.
At the same time, learners were asked about the efficiency of e-learning tools for teaching English. It was found that Zoom, Moodle, Google classroom, SMART board, Kahoot!, and Quizlet are the most preferrable by pupils when they study English. At the same time British Council library, Blog, Memrise are considered to be less efficient since they do not have user-friendly interface and are developed for pupils with high level of foreign language competence. Table 3 shows that pupils’ attitudes towards effectiveness of e-learning tools for teaching English.

Table 3

Effectiveness of E-Learning Tools for Teaching English

<table>
<thead>
<tr>
<th>E-learning tool</th>
<th>Very effective</th>
<th>Effective</th>
<th>Neutral</th>
<th>Not effective</th>
<th>Useless</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1. Moodle</td>
<td>5</td>
<td>28</td>
<td>31</td>
<td>13</td>
<td>1</td>
</tr>
<tr>
<td>1.2. Google classroom</td>
<td>8</td>
<td>29</td>
<td>28</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>1.3. Zoom</td>
<td>10</td>
<td>40</td>
<td>15</td>
<td>5</td>
<td>0</td>
</tr>
<tr>
<td>1.4. Google Meet</td>
<td>4</td>
<td>25</td>
<td>37</td>
<td>11</td>
<td>1</td>
</tr>
<tr>
<td>1.5. SMART board</td>
<td>9</td>
<td>34</td>
<td>22</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>1.6. Kahoot</td>
<td>11</td>
<td>31</td>
<td>27</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>1.7. Quizlet</td>
<td>7</td>
<td>24</td>
<td>33</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>1.8. ESL Lab</td>
<td>2</td>
<td>18</td>
<td>30</td>
<td>21</td>
<td>7</td>
</tr>
<tr>
<td>1.9. Grammar Ninja</td>
<td>6</td>
<td>20</td>
<td>25</td>
<td>22</td>
<td>5</td>
</tr>
<tr>
<td>1.10. British Council Library</td>
<td>1</td>
<td>12</td>
<td>33</td>
<td>28</td>
<td>4</td>
</tr>
<tr>
<td>1.11. Google books</td>
<td>3</td>
<td>16</td>
<td>28</td>
<td>26</td>
<td>5</td>
</tr>
<tr>
<td>1.12. e-mail</td>
<td>8</td>
<td>28</td>
<td>24</td>
<td>16</td>
<td>2</td>
</tr>
<tr>
<td>1.13. Blackboard</td>
<td>4</td>
<td>17</td>
<td>36</td>
<td>17</td>
<td>4</td>
</tr>
<tr>
<td>1.15. Viber</td>
<td>9</td>
<td>27</td>
<td>25</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>1.16. Duolingo</td>
<td>12</td>
<td>28</td>
<td>23</td>
<td>15</td>
<td>0</td>
</tr>
<tr>
<td>1.17. Memrise</td>
<td>6</td>
<td>19</td>
<td>40</td>
<td>10</td>
<td>3</td>
</tr>
<tr>
<td>1.18. ESL Flashcards</td>
<td>5</td>
<td>24</td>
<td>28</td>
<td>16</td>
<td>5</td>
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<td>1.19. FluentU</td>
<td>11</td>
<td>22</td>
<td>30</td>
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<td>4</td>
</tr>
<tr>
<td>1.20. Bamboozle</td>
<td>9</td>
<td>21</td>
<td>27</td>
<td>17</td>
<td>4</td>
</tr>
</tbody>
</table>

Source: Author’s development.

RQ2: What is the Level of Foreign Language Competence Among High School Pupils Before and After Intervention?

The important aspect of the impact of e-learning tools is the level of foreign language competence among high school pupils before and after educational intervention. Pre-research data was collected on the basis of formal assessment results indicated in registers. Self-assessment was applied when children carry out online tests. When the elements of e-learning were implemented in the process of teaching English, it was found that the level of their foreign language competence slightly increased. The biggest results were demonstrated for the pupils with good level of foreign language competence. For example, there were 36 children with good
level before intervention. Afterwards the number increased up to 44 pupils. This proves the efficiency of e-learning technology and suggests using appropriate e-learning tools for teaching English to increase pupils’ motivation to learning and to achieve good learning outcomes within the educational process regardless the situation. Figure 3 analyzes the levels of foreign language competence among high school pupils before and after using e-learning tools.

**Figure 3**

*Levels of Foreign Language Competence Among High School Pupils*

![Figure 3](image)

Source: Author’s development.

**RQ3: What are Learners’ Perceptions Towards Using E-Learning Tools when They Study English?**

Studying learners’ perceptions towards using e-learning tools, it was found that in most cases (31 pupils) agreed that they can access course materials at any time and e-learning is very comfortable technology. 27 individuals appreciated the fact of using interactive elements such as videos or quizzes that help learners stay focused and motivated. 23 pupils indicated that the e-learning platform is easy to navigate. At the same time, 26 children feel comfortable asking questions online. And they consider it is easier than being in the traditional classroom. This resulted in formation of higher level of speaking and listening comprehension skills among high school pupils. 28 pupils prefer perform tests and other assessment activities online since such tasks accurately reflect their knowledge and make assessment procedures transparent. Other perceptions include: better engagement, increased motivation to learning and future professional activity, enhancement of learning experience, and improved understanding of the course content. This proves that generally pupils have positive attitudes towards e-learning and consider digitalization of the educational process as a necessary quality. Table 4 presents learners’ perceptions toward using e-learning tools in high school.

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Table 4
Learners’ Perceptions Towards Using E-Learning Tools

<table>
<thead>
<tr>
<th>Perceptions</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly disagree</th>
</tr>
</thead>
<tbody>
<tr>
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<td>12</td>
<td>18</td>
<td>20</td>
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<tr>
<td>2.2</td>
<td>7</td>
<td>18</td>
<td>18</td>
<td>14</td>
<td>21</td>
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<tr>
<td>2.3</td>
<td>12</td>
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<td>21</td>
<td>9</td>
<td>8</td>
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<td>2.4</td>
<td>9</td>
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<td>25</td>
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<td>2.5</td>
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<td>17</td>
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<td>2.6</td>
<td>7</td>
<td>20</td>
<td>31</td>
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<td>2.7</td>
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<tr>
<td>2.8</td>
<td>18</td>
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<td>16</td>
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<td>3</td>
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<tr>
<td>2.9</td>
<td>5</td>
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<td>30</td>
<td>18</td>
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</tr>
<tr>
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<td>7</td>
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<tr>
<td>2.11</td>
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<td>28</td>
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<td>2.12</td>
<td>19</td>
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<td>2.13</td>
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<tr>
<td>2.14</td>
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<td>24</td>
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</tr>
<tr>
<td>2.15</td>
<td>5</td>
<td>18</td>
<td>27</td>
<td>23</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Author’s development.

RQ4: What are the Key Challenges Faced by Ukrainian High School Pupils when E-Learning Tools are Integrated into Their English Language Curriculum, and how can These Challenges be Addressed?

Figure 4
Challenges Faced by Ukrainian High School Pupils when Using E-Learning Tools
The special attention was paid towards the challenges faced by Ukrainian high school pupils when e-learning tools are integrated in the process of teaching English. The results showed that most pupils (18) often face technical issues, such as software glitches, hardware malfunctions, and connectivity problems. 16 pupils often encounter with time management problems and home distractions such as household chores, family members, and entertainment options. Access to technology is a frequent problem for 14 pupils and this hinders their ability to participate in online learning. 12 pupils often face limited interaction with educators and peers that makes it difficult to stay engaged and feel connected within the educational process. At the same time, it was proved that often children suffer from lack of motivation and lack immediate support from educators that impact their learning outcomes significantly. Moreover, 15 pupils often do not understand the assessment procedures and cannot perform the tasks correctly. Also, it leads to the concerns about the fairness and accuracy of evaluations resulted in refusal to engage in the educational process. Figure 4 demonstrates the analysis of challenges faced by Ukrainian high school pupils when using e-learning tools.

Source: Author’s development.
Further, possible solutions were described by the participants during semi-structured interviews. The answers related to development of detailed and transparent grading system, creation of effective online discussion forums, using additional tools and apps to arrange their daily routine, development of personalized learning paths and proving learners with immediate technical support. The detailed analysis of possible solutions according to pupils’ responses is given in below (Table 5).

Table 5

<table>
<thead>
<tr>
<th>Challenges</th>
<th>Solutions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unclear assessment</td>
<td>Development of detailed and transparent grading rubrics for assignments and exams. Providing timely and constructive feedback on learner’s work. Using a variety of assessment methods. Proving practice tests to familiarize pupils with the format of actual exams.</td>
</tr>
<tr>
<td>Lack of support</td>
<td>Creation of online discussion forums or chat groups where learners can collaborate, share ideas, and support each other. Establishment of peer mentorship. Ensuring that learners receive constructive feedback on assignments and assessments. Using LMS to organize course materials, track learners’ progress, and provide resources.</td>
</tr>
<tr>
<td>Time management</td>
<td>Encouragement of learners to develop a daily or weekly schedule. Setting clear, achievable goals for the e-learning activities. Using time management tools and apps, such as Trello, Asana, or Todoist.</td>
</tr>
<tr>
<td>Distractions</td>
<td>Development of a strict daily routine.</td>
</tr>
<tr>
<td>Limited interaction</td>
<td>Conducting regular live classes or video conferencing sessions. Creation of online discussion forums or message boards. Assignment of group projects or collaborative activities.</td>
</tr>
<tr>
<td>Lack of motivation</td>
<td>Development of personalized learning paths. Conducting regular virtual check-ins. Connecting the educational material to real-life situations. Involvement of parents in the learning process.</td>
</tr>
<tr>
<td>Technical issues</td>
<td>Providing learners with access to technical support services. Using clear communication about the technical requirements for the course. Performing pre-course technical checks. Establishment of alternative communication channels.</td>
</tr>
<tr>
<td>Access to technology</td>
<td>Development of e-learning content that is accessible on a wide range of devices. Providing offline access to course materials and resources. Implementation of a BYOD (Bring Your Own Device) policy.</td>
</tr>
</tbody>
</table>

Source: Author’s development.

The research outcomes show that using e-learning tools for teaching English is important despite certain challenges the participants of educational process may face. E-learning tools offer
numerous benefits, such as increased access to education, flexibility in learning schedules, and the ability to adjust the educational materials to diverse learning styles of pupils. These tools also provide opportunities for interactive and engaging learning experiences, which enhances pupils’ motivation and retention of information. Despite challenges such as access to technology or technical issues, the benefits of e-learning tools outweigh these obstacles. With proper planning, support, and implementation of relevant teaching strategies, e-learning tools enhance the quality and effectiveness of English language teaching significantly.

Discussion

The theoretical analysis of the problem of using e-learning tools for teaching English in high school demonstrated that many educational institutions have integrated hybrid learning models, combining in-person and online instruction to ensure continuity and flexibility of the educational process affected by the COVID-19 pandemic and ongoing war in Ukraine. Since e-learning refers to the use of electronic media and ICT (Kulikowski et al., 2022), it requires the introduction of technology-based methodology to organize e-learning in the institution of secondary education effectively. The implementation of relevant teaching methods within the framework of e-learning may contribute to transformation of the educational process into flexible, and accessible for all the participants, particularly under uncertain conditions (Bøe et al., 2020).

According to the scientific findings a lot of e-learning tools are applied in the process of teaching English (Nikolenko et al., 2023; Sari & Putri, 2022; Suherman & Wathoni, 2022). Atmojo and Nugroho (2020) indicated that most of them are applicable for high school. At the same time, the authors paid the special attention towards the requirement to e-learning tools used for teaching English. These requirements refer to user-friendly interface (Layali & Al-Shlowiy, 2020), compatibility (Buragohain et al., 2023), and the possibility to integrate multimedia information (Suherman & Wathoni, 2022). Other requirements refer to interactivity (Mushtaha et al., 2022), security and privacy (Feng et al., 2021). Accordingly, all e-learning tools were classified into LMS, virtual classrooms, interactive whiteboards, educational games and simulations, online libraries, communication tools, and language learning applications (Atmojo & Nugroho, 2020; Sternad Zabukovšek et al., 2022; Türel & Davudova, 2022).

In the Ukrainian context, the following e-learning tools are used for teaching English in high schools: Zoom, Skype, Microsoft Teams, Pear Deck, Discord, and Google classroom (Nikolenko et al., 2023); Zoom (Nastenko et al., 2021); forum, e-mail, textual or voice chat, live video stream, virtual classroom (videoconference/ webinar), whiteboard, and gamification tools (Zhenchenko et al., 2022). The survey showed that games and simulations, interactive whiteboards, virtual classroom are used the most frequently. And the pupils consider Zoom, Moodle, Google classroom, SMART board, Kahoot!, and Quizlet are the most efficient when they study English. In comparison, British Council library, Blog, Memrise are considered to be less efficient since they do not have user-friendly interface and require higher level of foreign language competence among pupils. It means that only limited number of children may use open resources from libraries like Google books or British Council library to enhance their knowledge of English. The rest of the pupils prefer to work under educators’ supervision when they perform their learning activities.

In the scientific literature, foreign language competence among pupils encompasses several key components, concerning both linguistic proficiency and cultural understanding (Bilozir,
The Ukrainian scholars indicate that it includes the development of essential language skills: listening, speaking, reading, and writing (Kostikova et al., 2019). Additionally, it involves grammatical accuracy, vocabulary range, and the ability to comprehend and produce language (Odehova et al., 2022; Rudiuk, 2021). In the Ukrainian educational context, intercultural competence is closely connected with foreign language competence (Holubnych et al., 2019; Krotik & Morhun, 2021). According to Kostikova et al. (2019), it is considered to the components of integrated language readiness. The high level of foreign language competence among pupils if particularly important regarding the fact that Ukraine is increasing the integration with European educational standards and global communication networks (Shevchenko et al., 2021). Digital literacy is also an integral component of foreign language competence since ICT tools are frequently used to enhance language learning and provide access to diverse linguistic resources (Ovcharuk et al., 2022).

The research showed that the level of foreign language competence among high school pupils is closely related to the using e-learning tools within the educational process. Thus, pre-research data was mostly good and sufficient. When the elements of e-learning were implemented in the process of teaching English, it was found that the level of their foreign language competence slightly increased. The biggest results were demonstrated for the pupils with good level of foreign language competence. This proves the efficiency of e-learning technology and suggests using appropriate e-learning tools for teaching English to increase pupils’ motivation to learning and to achieve good learning outcomes within the educational process regardless the situation.

The analysis of pedagogical literature devoted to the analysis of learners’ perceptions towards e-learning experience showed that children appreciate the flexibility and convenience of e-learning (Getie & Popescu, 2020). Other positive attitudes relate to the possibility of using multimedia resources (Lebid et al., 2023), increase of interest to learning activities (Ali & Bin-Hady, 2019), and enhanced engagement on mutual projects (Lemeschenko-Lagoda & Kryvonos, 2020). According to the respondents, it was found that in most cases pupils appreciate the possibility to access course materials at any time, using interactive elements, improved assessment activities. some answers also related to better engagement, increased motivation to learning and future professional activity, enhancement of learning experience, and improved understanding of the course content. Considering the challenges of e-learning, the findings showed that most authors mentioned lack of face-to-face interaction as the main problem of implementation of e-learning into the educational process of high school (Alhamami, 2022; Baa & Minj, 2023). But the survey showed that Ukrainian high school pupils face technical issues, time management problems, home distractions, limited interaction, lack of motivation and lack immediate support from educators. Some pupils often do not understand the assessment procedures and cannot perform the tasks correctly.

A number of foreign and native researchers studied the problem of implementation of e-learning tools within the educational process (Lavrysh et al., 2022; Mospan & Sysioieva, 2022; Opanasenko & Novikova, 2022). The special attention was paid towards overcoming of possible challenges and development of e-learning methodology (Binmahboob, 2022; Ja’ashan, 2020). The challenges may be the following: adaptation to e-learning tools (Opanasenko & Novikova, 2022); individualization of educational process (Kolbina & Oleksenko, 2020); and improvement of the existing curricula (Krotik & Morhun, 2021). Also, the educational process may be
complicated due to difficulties in assessment of pupils’ outcomes (Zhenchenko et al., 2022) or low foreign language learning motivation among young people (Pylypenko & Kozub, 2021). Studying the possible solutions to overcome the challenges of e-learning in Ukrainian high school, it was concluded that it is necessary to provide a constructive feedback, develop of detailed and transparent grading system, create of effective online discussion forums, use additional tools and apps to arrange their daily routine, develop of personalized learning paths. Other solutions related to conducting regular live classes or video conferencing sessions, connecting the educational material to real-life situations, and involvement of parents in the learning process.

Conclusions and Implications

E-learning refers to the use of electronic media and ICT in education. Also, it encompasses a wide range of applications and processes, including web-based learning, computer-based learning, virtual classrooms, and digital collaboration. From a technological perspective e-learning is an educational approach that delivers content and instruction via electronic devices. But from an educational perspective, it is a form of distance education where the teaching and learning processes are carried out through digital platforms. In contemporary high education, e-learning is characterized by accessibility, interactivity, and personalization. It uses advanced digital tools to provide learners with a flexible and engaging learning experience, adjusting the educational process to diverse schedules and learning preferences. In modern high school there are a lot of e-learning tools for teaching English that are differentiated into seven groups: LMS, virtual classrooms, interactive whiteboards, educational games and simulations, online libraries, communication tools, and language learning applications.

It was found that these e-learning tools offer diverse ways to enhance the teaching and learning of English in high schools, providing opportunities for interactive and engaging language practice both inside and outside the classroom. The findings showed that many pupils appreciate the flexibility and convenience of e-learning. Digital instruments enable them to use various multimedia resources, such as videos and interactive activities, and contribute to increase of motivation to learning activities. However, some pupils lack the face-to-face interaction with educators and peers, and they are not able to collaborate on group projects when e-learning is integrated in the English language curriculum. At the same time, despite of some challenges, the study proves that implementation of e-learning in Ukrainian high school is an objective reality to ensure educational continuity amid the ongoing conflict and post-pandemic recovery. It was found that many e-learning tools provide flexible, uninterrupted access to high-quality educational resources, regardless of physical disruptions. They enable the development of soft skills among pupils and foster inclusivity by reaching students in remote or conflict-affected areas.

The research results have significant implications for both educators and pupils. Firstly, e-learning tools can enhance learners’ engagement and motivation, making learning more interactive and enjoyable. A number of e-learning tools described may contribute to the creation of gamified and personalized educational environment in high school that may enhance the formation of foreign language competence significantly. Additionally, e-learning tools can adjust to diverse learning styles of all the pupils, allowing them to learn at their own speed and revisit challenging concepts. As a result, the findings, may become the basis for the development of e-learning methodology in high school to increase the efficiency of the educational process during uncertainty and when the learning may be disrupted. Moreover, the successful integration of e-learning tools into English language teaching may contribute to the formation of soft skills,
particularly digital literacy, ICT competence, innovation readiness that are important for graduates. Further, the results may be implied when the integrated curriculum are developed to train competent and knowledgeable pupils at the Ukrainian institutions of secondary education. The increased level of digital literacy may help to build more engaging educational environment and, therefore, prepare learners to work in the digital setting.

Therefore, the findings will be useful, first of all, for learners since they need to know how e-learning impacts their learning outcomes, engagement, and overall educational experience. Parents also are interested in understanding how e-learning tools can support their children’s education, improve academic performance, and prepare them for future academic and career opportunities. Educators require the information on the effectiveness of e-learning tools in improving learners’ outcomes and engagement in high school. Moreover, the findings can be used by school administrators, curriculum developers, and technology providers to make the appropriate improvements within the educational process.

**Suggestions for Future Research**

Further research should focus on addressing the unique challenges of using e-learning for teaching English in the Ukrainian context. The most critical area for investigation is the impact of ongoing conflict and instability on the effectiveness of educational process and using e-learning tools in particularly. Researchers should examine how disruptions such as power outages, internet connectivity issues, and displacement affect learners’ performance. Studies can also investigate strategies to overcome these challenges and elaborate e-learning methodology applicable for the Ukrainian institution of secondary education. When planning the future research on the use of e-learning tools for teaching English in high school, it is important to use a larger sample size, since expanding the demographic range will enable to include participants from various geographic regions, socioeconomic backgrounds, and educational levels. The involvement of participants from different educational institutions will help to express a wide range of experiences based on the use of e-learning tools within the educational process. Besides, including both instructors and pupils’ perspectives in the research will help to understand how e-learning tools are integrated into teaching practices and how they are perceived by young people. Another important focus should be on the assessment of the current state of educators’ training in digital pedagogy and identifying the gaps can help in designing more effective professional development programs for high school instructors. Studies should also consider the psychological and emotional impacts of e-learning on learners, particularly in conflict-affected regions, and explore how e-learning can support not only academic achievement but also emotional resilience.

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