Distance English as a Second Language Teaching in Synchronous-Asynchronous Learning Environment

The paper covers the problem of distance learning of English as a Second Language (ESL) in higher agro-technical educational institutions in Ukraine. Integration of distance ESL learning into the educational process in higher agro-technical educational institutions has been considered from the perspective of its current inevitability due to the COVID-19 quarantine. The most effective ways of implementing online learning of ESL into the curricula have been discussed. Synchronous and asynchronous learning have been considered. Having analyzed the forms of online teaching as well as the requirements for their implementation, teaching the approved course materials online in multiple environment (combined synchronous and asynchronous learning) has been defined to be the most effective one. The authors' experiences in designing and teaching synchronous and asynchronous distance learning ESL classes for non-linguistic specialties in higher agro-technical educational institutions provide an insight into the characteristics, benefits, and limitations of these two modes of distance learning. Effective synchronous distance learning classes can be modeled according to the teaching style and course materials used in traditional classes through use of the Internet. Asynchronous distance learning classes require quite a different model built around provided course materials and short «lectures» delivered via streaming audio and graphics. However, lecturing cannot provide effective interaction, which is vital in ESL learning. Thus, the approach must be significantly redefined and multiple environment should be created for delivering effective distance learning ESL classes.

Key words: distance learning; distance teaching; ESL; synchronous learning; asynchronous learning; online teaching; higher education institutions.

У статті розглядається проблема інтегрування дистанційного вивчення англійської мови як іноземної у синхронно-асинхронному освітньому середовищі.

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Дистанційне викладання англійської мови як іноземної в умовах закриття агротехнічних засобів вищої освіти через карантин з COVID-19. Розглянуто найбільш ефективні способи імплементації онлайн вивчення англійської мови, а саме синхронне навчання, асинхронне навчання і їх поєднання для створення мультимедіаєфективного середовища, ефективнісмовні онлайн-платформи і адаптування освітніх матеріалів для онлайн-освіти. Обговорено досягнення використання і синхронного та асинхронного викладання курсу англійської мови як іноземної для студентів неполівних спеціальностей агротехнічних закладів вищої освіти з метою дослідження характеристик, переваг та недоліків синхронного та асинхронного вивчення іноземної мови, найбільш ефективних онлайн-платформ, вибору освітнього контенту і адаптування стилю викладання для ефективної дистанційної освіти. Відповідно, синхронна та асинхронна система мають свої переваги і недоліки. Синхронне вивчення англійської мови як іноземної слід організувати згідно розкладу установи на якісній платформі, наприклад Zoot, яка дає можливість використовувати затверджені освітні матеріали відповідно до програм і будувати заняття близько до традиційних. Асинхронна система на якісній платформі з технічною підтримкою від закладу для викладачів і студентів змінює бар’єри часу і простору, однак вимагає самодисципліни, високої мотивації і не має ресурсів для інтеракції і живого спілкування, що є надзвичайним у вивченні мови. Звідси, найефективнішим є поєднання цих
Introduction / Вступ. The COVID-19 has resulted in closing all the educational establishments in Ukraine and all across the world, including higher agro-technical educational establishments. Thus, Ukrainian authorities and educational institutions faced the problem of continuing the educational process under the condition of closed campuses and the requirement of social distancing and self-isolation. As a result, there has been the rise of e-learning, namely teaching has been performed remotely and on digital platforms.

The current state of distance English as a Second Language learning in Ukrainian higher agro-technical educational institutions requires the improvement of its efficiency. The paper does not consider the effectiveness of introducing Massive Open Online Courses (MOOCs) with such providers as Coursera, edX, Khan Academy, and Udacity to the institutional curricula with further certification from universities. It is assumed that the best is to opt for the approved course materials developed and applied by teachers in traditional classes, which is possible due to e-books, screen sharing, video and audio sharing, teacher’s IT tools etc. In this case, teachers and students are comfortable with the known structure, style, format etc.

Aim and Tasks / Мета та завдання. Thus, the aim of the paper is to consider the efficiency of teaching regular approved course materials online applying synchronous and asynchronous learning approach as well as its combination for creating a multiple learning environment based on personal experience of delivering distance learning ESL classes in higher agro-technical educational institutions in Ukraine. More specifically, the following questions are raised: the effectiveness of synchronous ESL learning performed via various telecommunication platforms; the effectiveness of asynchronous ESL learning performed via various online platforms; the ways to combine synchronous and asynchronous ESL learning; adaptation of course material and teaching styles to the needs of online learning.

The study is of significance as the impact of synchronous and asynchronous approaches on ESL learning achievements has been rarely explored by the researchers in Ukraine.

National Geographic Learning author A. Warren performed live opinion polling in Ukraine asking more than 2000 teachers about their experience in distance education. The following results were obtained: 42.6% (1122 teachers) have never taught online, 44.7% (1128 teachers) have just started teaching online due to closed educational institutions during the quarantine and only 12.5% (136 teachers) state to be experienced in online teaching (Warren A., 2020).

Thus, it is vital to investigate the most important ways to teach course materials online with the help of appropriate platforms and videoconferencing systems.

Methods/ Методи. In order to solve the set tasks, the following methods were applied during the research: theoretical (analysis and synthesis, analogy, comparison, generalization) and empirical (analysis of recent relevant researches, pedagogical observation, testing and evaluation).

First of all, the concept of distance learning in terms of teaching English as a Second Language has been defined by conducting the available research literature overview.

The ways of delivering distance education through synchronous and asynchronous online learning have been considered by investigating various platforms and videoconferencing systems applied in higher agro-technical educational institutions in Ukraine for teaching ESL courses today.

A two-month practical implementation of distance ESL teaching in higher agro-technical institutions have been analysed. The effective forms of online teaching, comfortable platform options, the characteristics, benefits and limitations of distance ESL learning classes have been obtained from teacher observation, polls, testing and questioning students and teachers. The participants were the ESL teachers (5 in total) and the students (year 1 through 4, non-linguistic specialties, 348 in total) of two agro-technical educational institutions in Ukraine: Separated Subdivision of the National University of Life and Environmental Sciences of Ukraine «Berezhany Agrotechnical Institute» and Separated Subdivision of the National University of Life and Environmental Sciences of Ukraine «Berezhany Agro-technical College».

Course materials were not changed and corresponded to the programme approved at the beginning of the academic year. Their e-book, pdf, Word etc. versions were applied. The level of participants’ language proficiency was established from course book placement tests and final credit testing performed at the end of the first semester.

As for synchronous classes, they were held according to the schedule on the institutional website via Viber/Skype/Zoom. Groups were transformed into online communities with the help of faculty managers. Institutional help and guidance was provided for the teaching staff and the students concerning the use of the chosen videoconferencing options and online learning platforms.
As for asynchronous classes, students were provided with course materials and teacher guidance via Moodle or Google Classroom. Final (post-) testing was conducted according to the institutional schedule in the form of credit or exam tasks taken by the students online.

**Results / Результати.** Distance learning — is a way of teacher-student interaction, which is remote learning without face-to-face contact. Distance learning (the student’s activity) and distance teaching (the teacher’s activity) together make up distance education (Polat E., 2004). Distant learning includes all the components of the traditional educational process (aims, content, methods, forms of organization, means of teaching), but it is implemented via the Internet and its interactive technologies (Polat E., 2006). Distance learning is also called distance education, e-learning, and online learning. Distance learning is carried out through institutions. However, there is accessibility and convenience, which is an important advantage of this mode of education. Interactive telecommunications connect individuals within a learning group and with a teacher providing instructional resources – i.e., the books, audio, podcasts, video, and graphic displays and other digital material and access to e-tutoring, e-mentoring, research assistance, discussion forums, chat rooms and test-taking options in virtual classrooms.

Distance learning can be broadly grouped into two categories: synchronous learning, which is online or distance education that happens in real time and asynchronous learning, which occurs through online channels without real-time interaction (Berg G., & Simonson M., 2016). The best way is to create a multiple learning environment and make the elements of asynchronous and synchronous online learning work together.

A study of asynchronous language instruction known as «Computer-Assisted Language Learning (CALL)» demonstrated not only that this method was sufficient for language learning, it also provided certain advantages to students, such as a decrease in student anxiety and fear of negative evaluation (Hrastinski S., 2008). In the 1980s synchronous forms of communication in distance education emerged with broadcast radio and television. In the 1980s video-conferencing and interactive television made it possible for students to ask questions and discuss concepts while seeing participants in a synchronous setting. Manifestations of interactive multimedia, the Internet, access to Web-based resources, to synchronous and asynchronous forms of computer mediated communication followed in the 1990s (Bernard R. et al., 2005; Berg G., & Simonson M., 2016).

Synchronous learning occurs when remote students enroll in a class that must be attended according to a specific schedule.

Here, an effective platform is needed. This platform must include a number of tools for its effective application: a camera for eye contact, screen sharing, a chat box, annotation tools, breakout rooms, polls, a whiteboard, video/audio share, sound recording etc.

There are a lot of videoconferencing options available: Skype, Zoom, Google Hangouts, Viber, Discord and many other. It is up to a teacher to choose an appropriate system, which is easy to use and comfortable. It is important to watch tutorials on how to use the chosen systems and get familiar with how it works by testing it before lesson planning. Then, classes are usually structured like a traditional class, supported by specially equipped online classroom tools, web-based distribution of materials, and additional teaching assistant support.

It is also country dependent, but generally speaking, the most comfortable options are Skype or Zoom.

The most important reason for using these options is the fact that they provide screen sharing, which is very convenient for sharing ebooks, which are accessible through a publisher with interactive activities and embedded audio and video needed. The most known publishers such as OUP, NatGeo, Express Publishing and other provide ebooks for almost every course book available. Moreover, a lot of ebooks are offered without any charge during the COVID-19 quarantine.

Another important Zoom tool is its annotations, which can be used as a pen / draw tool to give clear instructions, make the process interactive and much more. This tools are available through Zoom and do not depend on ebooks.

There is also a possibility to share video and audio, which is not embedded into ebooks through teacher’s players.

Zoom chat box can be used to write to all the students at the same time or write individual messages for one student in a group. The chat can be saved and shared, which is very convenient for further lesson planning and giving feedback. In addition, file sharing is possible for organizing additional student activities.

Breakout rooms available in Zoom give the possibility to organize effective pair and group work, which is vital in teaching ESL courses. These breakout rooms have got timers, recording options and all the functionality of the main Zoom menu.
Thus, if an effective platform is chosen for synchronous ESL teaching, there are no restrictions in teaching a course online.

As for asynchronous online teaching, it occurs when the teacher and the students interact in different places and during different times. Students enrolled in asynchronous courses are able to complete their work whenever they can, which makes them extremely flexible. It is important for students with complicated schedules. Various technologies such as email, e-courses, online forums, audio recordings and video recordings etc serve as a medium for asynchronous learning. The learner has enough time to reflect on the content and to formulate his communication, resulting in greater mental engagement with the learning content (Hrastinski S., 2008). Robert L. and Dennis A. also theorizes that asynchronous communication increases a person’s ability to process information as the receiver has more time to comprehend a message because an immediate answer is not expected (Robert L., & Dennis A., 2005).

However, asynchronous learning tends to work well for self-motivated learners who do not need direct guidance to complete their assignments. Another drawback is the fact that asynchronous e-learning makes students might feel isolated and not part of learning communities, which is essential for collaboration and learning (Haythornthwaite C., & Kazmer M., 2008).

The most popular platforms used in Ukrainian higher educational institutions are Google Classroom and Moodle. Teachers can provide course materials and instructions for students to learn. Moreover, chatting and testing students is possible via these platforms. As for the content, it is possible for teachers to provide pdf and Word files, presentations, tests, video content and other. However, there are a lot of difficulties using the platforms like Moodle. In most cases course designers are needed to ensure proper use of such platforms. In addition, students need instructions on how to access, download, submit, take tests etc. Here, it is obvious that significant institutional support is required to organize asynchronous learning process effectively. Moreover, learners must be significantly self-disciplined and highly motivated to do asynchronous learning.

Asynchronous ESL learning via such platforms as Moodle and Google Classroom proved to be effective to provide content for additional activities, homework, project work, video and audio input for flipped classrooms, where students prepare to participate in classroom activities and during the class they apply key concepts and receive feedback, which is followed by extended learning doing some homework and project work.

However, asynchronous learning cannot be used separately from synchronous ESL learning and a multiple environment should be created. Live online classes according to the schedule organized based on familiar course materials, which are approved for a certain specialty must be combined with asynchronous ESL learning to provide the best academic performance.

During the quarantine period, the ESL academic performance of the students of year 1 through 4, non-linguistic specialties, 348 in total, who studied English as a Second Language in two agro-technical educational institutions in Ukraine: SS NULES of Ukraine «Berezhany Agrotechnical Institute» and SS NULES of Ukraine «Berezhany Agro-technical College» was under study.

Those who were engaged in ESL learning in a multiple synchronous-asynchronous environment (307 in total) showed the same or better achievements according to the post-test results. According to the conducted polling (5 ESL teachers), the classes were close to a traditional one due to familiar schedule, community, course materials, effective online learning tools and teaching style.

There were 2 groups of students (18 in total) and 23 students from different groups that had been enrolled as individual learners, who worked online via Moodle program only, that is to say, learned ESL asynchronously. The learning process was more complicated for them judging from delays in submitting homework and project work and worse test results in comparison with placement / previous semester test results.

The descriptive analysis of the use of traditional, synchronous, asynchronous and multiple learning environments is presented in Table 1.

Discussion / Обговорення. According to the obtained experience, observation, and polling, if all other factors are equal, most students and teachers prefer live, in-person interaction as offered by traditional courses.

However, barriers of time, space and differences in learning styles can prevent students from attending traditional classes.

Synchronous distance learning removes some of the limitations of space, but students must still go to a properly equipped and connected classroom at a specified time.

Asynchronous distance learning effectively removes barriers of space and most barriers of time.

These findings correspond to the investigations previously conducted abroad by S. Hrastinski (Hrastinski, S. (2008), R. Bernard et al. (Bernard, R.M. et al. (2004), C. Haythornthwaite (Haythornthwaite, C. et al. (2008) and A. Lotfi et al. (Lotfi, A. et al (2019).
Effective use of either form of distance learning requires that a teacher provides proper course materials and applies efficient teaching methodology. A lot of what teachers do is transferable to the online classroom, and there are a lot of tools to aid distance teaching. However, it is challenging to teach a virtual learning community and proper support and preparation is needed to engage learners and keep lessons interactive.

Conclusions / Висновки. Distance ESL learning has been considered in terms of its synchronous, asynchronous and multiple environment implementation in higher agro-technical educational institutions in Ukraine. Advantages and disadvantaged of the systems have been investigated. The importance of creating multiple ESL learning environment by combining synchronous and asynchronous approaches has been substantiated. The overview of various online platforms and videoconferencing systems has been performed. The options for course materials adaptation from the perspective of distance learning have been discussed.

The findings are of benefit for language teachers to develop the most effective teaching approaches to improve language learner’s achievements and to teach effectively under the conditions of time and space barriers.

References:


Table 1

<table>
<thead>
<tr>
<th>Benefits</th>
<th>Traditional</th>
<th>Synchronous</th>
<th>Asynchronous</th>
<th>Multiple synchronous-asynchronous environment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benefits</td>
<td>Personal face-to-face interaction</td>
<td>Live interaction</td>
<td>No space barrier</td>
<td>No space barrier</td>
</tr>
<tr>
<td>Limitations</td>
<td>Space barrier</td>
<td>Time barrier</td>
<td>Diverse learning styles barrier</td>
<td>Highly motivated and self-disciplined students needed</td>
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</tbody>
</table>

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Дзюбата Зоряна – старший викладач кафедри гуманітарних дисциплін Відокремленого підрозділу Національного університету біоресурсів та природокористування України «Бережанський агротехнічний інститут», кандидат педагогічних наук

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