ICT-SUPPORTED STUDENTS' INDEPENDENT WORK IN THE ESP CONTEXT: THE NEW REALITY IN TERTIARY EDUCATION[8]

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The article aims at conducting empirical research of university students' readiness to handle independent work while studying the English for Specific Purposes (ESP) course, subject to the availability of Information and Communication Technologies (ICTs). In order to accomplish the objective of the article, a mixed methods research was applied. According to the research methodology, the questionnaires were conducted during the first semester of the academic year 2019/20 and then in the first semester of the academic year 2020/21 at the Kyiv National University of Trade and Economics. The investigation covered the period before the outset of the pandemic when a blended learning approach included instructor-led classroom training and e-learning elements; and then during the time of the COVID-19 pandemic in Ukraine when webucation was in line with the priorities of the training process. The participants of the study were first-year and second-year students of non-linguistic specialities. The scientific research reflected that teaching ESP was focused on enhancing foreign language learning in the particular field of study such as IT, law, trade, marketing, management or economics, to equip students with the oral and written comprehension and speaking skills that they would need to leverage partnerships with international interlocutors in the business community. The obtained results confirmed the high value of the resources available online for studying ESP as an academic discipline in university-level curricula. The analysis of data showed that during the pandemic almost equal percentages of the respondents faced the challenges that accompanied the process of learning English online. Students noted all four proposed options that characterised the disadvantages of completing the assignments independently, namely the communication vacuum, difficulties in choosing supplemental instructional materials, as well as a lack of self-discipline and control. The outcome confirmed the need to assist students' independent work. To meet that demand, the authors carried out a Strength, Weakness, Opportunity, and Threat (SWOT) Analysis related to the use of ICTs within the organising framework of students' independent work while teaching ESP during a pandemic. It has been concluded that the opportunities and threats, as well as the strengths and weaknesses, identified through the SWOT analysis, characterise the advantages, drawbacks and peculiarities that emerge in the process of providing guidance for students' independent work in the study of ESP, integrating them into a coherent whole.

Keywords: information and communication technology; webucation; English for Specific Purposes; independent work; tertiary education; the coronavirus pandemic.

Introduction

Traditionally students' independent work with the English for Specific Purposes (ESP) curriculum at the tertiary level is an integrated part of university studies. Today, in the midst of the coronavirus pandemic, the organisation of independent work (IW) is considered to be challenging for teachers, as their students face virtually insurmountable obstacles that need both the student's and the teacher's cooperation.

Nowadays, the significance of IW stems from the need to hold teaching of foreign languages at a practical level so that university students can study independently solely by way of distance tutoring and learning through online resources while enabling them to study the material at their own pace. This can only be achieved through close cooperation between the student and the teacher. One way to do this is to provide teacher-led coaching and mentoring at the time of online classroom performance in groups. During these online classes, the teacher gives instructions to learners in the subject ESP, concerning the use of English learning materials for IW. Based on the teacher' instructions, learners can do classwork or homework without the direct participation of the teacher by choosing their own educational trajectory. The factors that affect students' out-of-class study time should be taken into consideration as they can greatly help to explore opportunities for the possible development of self-learning training tools. Clearly defined objectives of the university ESP course and teacher-student interaction to comply with the requirements of the curriculum are significant factors. At the same time, it is important to emphasise that students' IW is an important training component. It is, therefore, necessary to point out the functions of IW within the tertiary education system. They are the following: the learning function, the developmental function, the educational function and the facilitative function (Prokopenko, 2020, p. 593). In practice, under the conditions of webucation, teachers using ICT resources carry out these functions. The current need to use ICT covers the major part of humanity who has access to the gadgets that are needed for partaking in webucation as IT-based online learning.

In the context of our research, the organisation of IW that needs support from lecturers is under consideration. It is the lecturer who conveys the curricula to students and evaluates progress. Our research

underlines the importance of IW, as it is the students' independent learning activity that is planned by the scientific and pedagogical specialists. It is important to mention that the student does IW without the direct involvement of the lecturer. The lecturer's job is to provide methodological guidance and control (Ortynskiy, 2009).

Incorporating ICT tools into the process of IW, in the context of meeting the requirements of the foreign language curricula, helps learners to acquire knowledge that is indispensable to developing linguistic skills. IW, as a compulsory part of the Bachelor's curriculum, may incorporate materials offered online for developing skills and meeting educational goals.

Therefore, there is a need in tertiary education to reduce the English teachers' obstacles in the midst of the COVID-19 pandemic associated with organising students' IW, however, it is possible to satisfy this need using the example from the Kyiv National University of Trade and Economics. Bachelor students of non-linguistic specialities can gain knowledge online in isolated working conditions by completing tasks independently and then the teacher provides control over the tasks; this is in the focus of the article. Barriers related to English language acquisition, within the framework of the ESP course during IW online in terms of the coronavirus pandemic, can be summarised into two categories conventionally referred to as '*weaknesses*' and '*threats*'. The strengths and opportunities offered by ICTs generalise indispensable resources for self-learning. Consequently, the development of the SWOT analysis for teachers and learners is urgent within IW in the ESP context during a pandemic.

Literature review

The research highlights the issues relating to ICT-supported learners' IW while studying ESP at the university. Particular mention should be made of the contributions of modern scholars towards addressing the methodological basis of these issues. According to Kryvonos (2018), the use of Internet resources and information technologies in learning foreign languages has undeniable advantages, such as training materials that are bright, interactive and contain game components (Kryvonos, 2018, p. 173). It is also indicated that modern students use information technologies much better than their teachers do and should be able to access any information within minutes. The author not only points out the importance of using Internet resources in the process of teaching English to students of technical specialities at non-linguistic higher education institutions (HEIs) for developing speech skills by listening but also considers the greatest difficulties in the process of listening to English. The scholar's approach to the issue of learning a foreign language seems quite generalised and logical. Moreover, the scholar provides examples of the use of Internet resources in class, within the practical training of the English language, and points out that self-learning of any foreign language can be independent and intensive, but a teacher should organise, direct and conduct this process (Kryvonos, 2018, p. 174).

The researchers Daneshdoust and Hagh (2012) investigated the advantages and disadvantages of Internet-based language learning in Iran through a questionnaire with the participation of teachers of English as a Foreign Language (EFL). Chaos in the learning process is listed as one of the disadvantages that exists in Internet-based language learning. In this context, the authors noted: "During the process of Internet-based learning, teachers cannot control learners completely. They may chat online, watch movies or do whatever they like. Learners cannot get feedback from teachers. . ." (Daneshdoust & Hagh, 2012, p. 610).

The findings of the study conducted by Richards (2015) offer the consideration of a number of issues. In particular, the author claimed that "the Internet, technology and the media and the use of English in face-to-face as well as virtual social networks provide greater opportunities for meaningful and authentic language use than are available in the classroom" (Richards, 2015, p. 2). Besides, the author points out that "language learning can occur in many contexts beyond the classroom" (Richards, 2015, p. 16). Nowadays, information technology continues to improve at a rapid pace. Internet resources are also used as a medium of instruction within out-of-class activities. In this connection, the author draws attention to the facts that represent the contemporary reality of the teacher's job. The scholar highlights that the "new reality is an important aspect of teacher education today" (Richards, 2015, p. 16) and "teachers may also need to acquire the skills needed to guide their learners in effective ways of using out-of-class learning to support their in-class learning" (Richards, 2015, p. 17).

Further, modern research provides a set of different activities and methods in learning EFL in-and-out of lessons (Cortina-Perez & Solano-Tenorio, 2013; Chan, 2016; Fukuda et al., 2019); scholars consider independent learning beyond the classroom (Richards, 2015; Benson, 2017); researchers also analyse students' out-of-class learning (Bailly, 2011; Lai et al., 2015). Pedagogical technologies in tertiary education are within the purview of modern science (Chernenko, 2020). Researchers (Al-Dlalah et al., 2021; Amani, 2021; Awatef, 2021; Khateeb et al., 2021; Oleksiienko et al., 2020) also consider challenges associated with

online education. Innovative methods and the wider use of information technologies in teaching foreign languages are further elaborated in the academic research papers published in respected scientific magazines (Maphalala & Adigun, 2021; Ovadiuk, 2015; Struhanets et al., 2021).

So, most of the existing studies are focused on determining the importance of using Internet resources by students in their individual work, while the scholars of different countries underscore the importance of support from teachers and indicate the key role of a teacher as a conductor or a controller of the self-directed learning. Generally, while educational resources are plentiful and growing, it is the teacher who inspires students as he/she provides guidance and one-on-one support for moving forward. However, it is important to note that a research paper about online independent learning within the ESP course, during the COVID-19 pandemic and before the outset of the pandemic, is a current priority.

In our paper, the focus of the research was shifted towards the students' preferences of materials offered online to meet educational goals of self-learning and to improve English during the ESP training. Particular emphasis is placed on the teacher's role in the ESP context that has changed significantly in terms of the coronavirus pandemic. Until recently, it was difficult to imagine long-term education outside of classrooms and universities, but the lockdown during the COVID-19 pandemic led to distance education all around the world. Both teachers and students found themselves in entirely new conditions within the pandemic. In today's world, teaching methods are always updated and new resources have quickly emerged to promote English language learning. Prolonged isolation during the pandemic requires a lot of time to explore new opportunities of remote learning.

The **aim** of this article is to make an attempt to determine students' willingness concerning the use of communication and information technologies within IW in the study of the ESP course and to draft the SWOT analysis for identifying the various aspects of learning English online for self-training within the conditions of the quarantine.

The **hypothesis** is that IW of students, while studying ESP in tertiary education during the coronavirus pandemic, becomes more productive because of the use of ICTs, with the assistance of university teachers, while bearing in mind opportunities, strengths, weaknesses and threats that arise in the course of completing the assignments. At the same time, the SWOT analysis gives an opportunity to all English teachers to reflect on, as far as possible, any difficulties and to make a greater contribution to educating students.

Methods

Research Design

To meet the study's stated objective we chose a mixed methods research that implied the procedures of collecting, analysing, and then "mixing" both qualitative and quantitative research methods in one study. The use of the quantitative data collection method afforded an opportunity to compare the responses (before the outset of the pandemic vs during the COVID-19 pandemic) and to provide a summary of the results of the survey questionnaires conducted to determine students' willingness regarding the use of ICTs within IW in the study of the ESP course. The application of the qualitative method for research purpose enabled to create a spreadsheet that provided the SWOT analysis of the various aspects of learning English online for self-training within the conditions of the quarantine.

Participants

The research study involved administration of questionnaires to 1st year and 2nd year students working towards a Bachelor's degree at the Kyiv National University of Trade and Economics in Ukraine. The main unifying factor gathering participants was the study of the ESP course in the Department of Modern European Languages (KNUTE) for the period 2019/2021. Respondents who majored in IT, law, trade, marketing, management or economics were not singled out. Anyone wishing to fill in the questionnaire(s) online could do it of his/her own free will. A total of 146 completed questionnaires were submitted during the first semester of the academic year 2019/20, and then the same number – in the first semester of the academic year 2020/21.

Procedure

The tools used during the research period were PCs with software and an Internet-based tool – Google Forms. The following tools provided the opportunity to create surveys online and enabled authors to conduct the automatic streamlining of the data collection process.

The study covered the period 2019-2021. During that period, students had been studying the course materials according to the ESP syllabi and it was at such times that they were proposed twice to fill in the Google Forms with questions related to IW while mastering ESP. The scope of the study included the analysis of using the Facebook platform and online dictionaries for improving vocabulary skills as well as

online content for self-dependent ESP learning. Related outcomes were based on the data of two completed questionnaires with overlapping content.

The primary purpose of conducting the surveys was to compare students' opinions as for IW activity before and in terms of the pandemic. That required the formulation of the hypothesis, according to which the increased efficiency in organising IW of students within studying ESP was possible provided that the use of ICTs with the assistance of university teachers, taking into account opportunities, strengths, weaknesses and threats that arose at runtime of the assignments.

Students were asked to fill out the first questionnaire online during the period from February 02 to March 07, 2020 (Appendix 1 / Table 1). It was the first semester of the 2019/20 academic year. During that period, the process of training was tailored to a blended learning combining online training with a face-to-face workshop, to make English classes relevant, efficient and effective. That questionnaire contained the questions requiring the respondents to elaborate on their vision of ICT-supported IW in the ESP context: 1. What innovative multimedia technologies do you use to learn English? 2. Do the new English words and expressions placed on the page of the Department of Modern European Languages on Facebook (@knute.ua) help you improve your vocabulary? 3. Do you use the new English words placed on the page of the Department of Modern European Languages on Facebook (@knute.ua) for the practical use? 4. Which online dictionary do you use? 5. Do you use the audio while working with the online dictionary? 6. Which of the following do you watch in English on social networks? 7. Do you prefer watching videos with subtitles? 8. Which of the following independent activities on the Internet do you prefer for self-education? 9. What are the disadvantages of self-learning English online? 10. What are the advantages of self-learning English online?

To identify the effectiveness of the use of ICTs for IW in the ESP context, students were offered to complete the second questionnaire sent out from October 17 to October 23, 2020 respectively for the pandemic period during the 2020/21 academic year (Appendix 1 / Table 2). We invited students to reply to the questions: 1. What innovative multimedia technologies do you use to learn English during the coronavirus COVID-19 pandemic? 2. Do the new English words and expressions placed on the page of the Department of Modern European Languages on Facebook (@knute.ua) help you improve your vocabulary during the coronavirus COVID-19 pandemic? 3. Do you use the new English words placed on the page of the Department of Modern European Languages on Facebook (@knute.ua) for the practical use during the coronavirus COVID-19 pandemic? 4. Which online dictionary do you use during the coronavirus COVID-19 pandemic? 5. Do you use the audio while working with the online dictionary during the coronavirus COVID-19 pandemic? 6. Which of the following do you watch in English on social networks during the coronavirus COVID-19 pandemic? 7. Do you prefer watching videos with subtitles during the coronavirus COVID-19 pandemic? 8. Which of the following independent activities on the Internet do you prefer for self-education during the coronavirus COVID-19 pandemic? 9. What are the disadvantages of self-learning English online during the coronavirus COVID-19 pandemic? 10. What are the advantages of self-learning English online during the coronavirus COVID-19 pandemic?

Results

ICT-supported students' independent work in the ESP context (before the onset of the pandemic; abbreviated as BP in this article): the empirical research results.

The analysis included a questionnaire with 10 questions regarding the feasibility of using *multimedia technologies* (MOOCs, Skype, online simulators, and video blogs), a Facebook page, online dictionaries, and the Web's educational video resources (i.e., movies, social media videos, TV shows, TED Talks) for self-learning in the ESP context. The questionnaire was conducted before the onset of the pandemic. The respondents were allowed to choose more than one response.

The results confirmed that video blogs were gaining in popularity among students (95 students or 65,1% of the respondents; the article further indicated the abridged versions, such as 95 students / 65,1%). MOOCs (Massive Open Online Courses), as more recent forms of online course development, were well-received (36 students / 24,7%). Speaking of which, in the first semester of the academic year 2019/20, future specialists of the trade and economic sphere were taught English through both class-based lessons and out-of-class activities, and "*simulations*" in the English language teaching (ELT) context were used. By the way, the use of "*simulations*" was quite a popular tactic for self-learning (43 students / 29,5%), however, a minority of respondents (4 students / 2,7%) chose Skype (Question 1).

The analysis revealed that the page available on the Facebook platform (facebook.com/knute.ua) was associated with vocabulary development (Question 2). Most respondents (57 students / 39%) noted the benefit of the following type of exposure as "*the word plus the drawing, the picture or the photo*". Students also highlighted that words and phrases on the Facebook page helped them to improve their professional

vocabulary (52 students / 35,6%). There were even students who memorised all the words on the Facebook page (32 students / 21,9%), although some students thought that it was valueless (11 students / 7,5 %).

A general finding (Question 3) was that the majority of students used the words on the Facebook page for practical use from time to time (74 students / 50,7%), and students (24 students / 16,4%) appreciated the opportunity to learn and subsequently use the words presented on the Facebook page in daily speech. Some students had a true motivation for self-learning and the words on the Facebook page encouraged them, in their view, to find additional information for the ESP course (27 students / 18,5%). Some students (22 students / 15,1%) interpreted it as a requirement of the ESP course and used them only in English classes.

The analysis of the questionnaire answers revealed that a large majority of the respondents (76 students / 52,1%) appreciated the quality of the online version of the Cambridge English Dictionary (Question 4) and it was frequently used (65 students / 44,5%). Students majoring in the disciplines related to computer science mainly used the Urban Online Dictionary (25 students / 17,1%). The Macmillan English Dictionary was not very popular in self-learning (12 students / 8,2%).

The study showed that online dictionaries with audio pronunciations were awesome self-learning tools (Question 5). That option was primarily used for pronouncing unknown words in English (65 students / 44,5%). However, many students (54 students / 37%) used that option from time to time, whereas some students regularly used the audio format (26 students / 17,8%).

The study revealed that more than half of the students (83 students / 56,8%) liked watching movies in English (Question 6). Close to half of the respondents (67 students / 45,9%) of the questionnaire indicated that they preferred to watch videos on social media websites.

The analysis identified the preferable way to involve students in understanding films and videos in English (Question 7). Notably, 48,6% (71 students) of the students interviewed chose both proposed variants of watching videos: with subtitles in English once in a while and with subtitles in Ukrainian sometimes. As the Ukrainian language is a state language and the native language for the respondents, 13% (19 students) of those interviewed watched videos with subtitles in Ukrainian. Those who watched videos with subtitles in English were 34,2% (50 students) while only 8,9% (13 people) of all students watched videos without subtitles. Thus, it became clear that most of the students had watched videos with subtitles, preferring English subtitles.

An in-depth study of the students' independent activities on the Internet within the ESP context defined the priority in selecting video content (Question 8). The vast majority of the respondents (105 students / 71,9%) preferred watching videos for self-education compared to other activities on the Internet. Additionally, 32,2% (47 students) preferred reading and 28,8% (42 students) of all respondents chose speaking. Only 19,9% (29 students) of all the students answered that they preferred listening as one of the skills that could improve their understanding of the English language, their pronunciation and their level of communication.

During the research, the advantages and disadvantages of self-learning English online were subjected to intensive analysis. Based on the survey results (Question 9) the main *disadvantages* were set out: most of the respondents (66 students / 45,2%) stated that "*a lack of self-discipline*" was the most significant hindrance and disadvantage of self-learning English online, while 26,7% (39 people) of all students specified the "*the communicative vacuum*". Nearly one-fourth of the students surveyed pointed out that they (35 people / 24%) had a number of "*difficulties in choosing effective resources*". Therefore, they noted that fact as the disadvantage of self-education, while only 22,6% (33 people) of all respondents indicated "*a lack of control*" as a drawback. Contrarily, the main *advantage* of self-learning English online (Question 10), according to the vast majority of the respondents, was that self-education was based on self-interest (92 students / 63%). Looking at the data of the questionnaire, when asked the question "*What were the advantages of self-learning English online?*", 31,5% (46 students) of all students indicated "*their own pace at which they work*", 29,5% (43 students) noted "*a large selection of educational resources*", and 11,6% (17 students) pointed out "*a lack of criticism*".

Consequently, the advantages of self-learning for non-linguistic students in the ESP context before the outset of the pandemic were generalised. Particular mention should be made of the role of the flexibility to choose content and tools that seemed more appropriate to differing interests, needs and skill levels because it was self-paced and self-directed. The disadvantages were analysed as well. It was revealed that a lack of self-discipline was one of the main issues, together with the communication vacuum, difficulties in choosing effective resources, and a lack of control.

ICT-supported students' independent work in the ESP context (in terms of the pandemic; abbreviated as TP in this article): the empirical research results.

The analysis included a questionnaire with 10 questions that were similar to those proposed and considered before the onset of the pandemic. Data and analysis showed trends in using multimedia technologies (MOOCs, Skype, online simulators, and video blogs), the Facebook page, online dictionaries, and the Web's educational video resources (i.e., movies, social media videos, TV shows, TED Talks) for IW in the ESP context during the COVID-19 quarantine. It was permitted to choose only one option.

The results of the questionnaire, conducted during the time of the quarantine period, demonstrated the students' beliefs. In particular, answering the question about the *innovative multimedia technologies* that were used to learn English during the coronavirus pandemic (Question 1), approximately half of the respondents (48,6%) expressed a preference for video blogs. In that context, it was worthy to note that video blogs were commonly used within the field of studying ESP, in particular in students' IW. It was also notable that before the outset of the pandemic more than half of the respondents chose video blogs (65,1%) confirming the unquestioned leadership of video blogs among other innovative multimedia technologies that had been examined in our study.

Broadly speaking, during the first semester of the academic year 2020/21 the future specialists in economic spheres were taught English mostly online, and in that period students used "*simulations*" as a language learning tactic within the context of ELT (19,9% of the respondents). The study found that before the outset of the pandemic "*simulations*" had been used more frequently (29,5% of respondents).

Minority respondents (6,8% of the respondents) chose Skype, in terms of the pandemic. By the way, before the outset of the pandemic that figure was also minimal (2,7%). However, in terms of online learning, Skype was more commonly used.

So, the students learn ESP and use innovative multimedia technologies in the process of their IW. It was found that video blogs occupied leading positions, MOOCs took second place, that "*simulations*" were used but not too often, and Skype was unpopular. A comparative analysis of the data did not show any considerable differences in the use of innovative multimedia technologies in students' IW within the ESP context before the outset of the pandemic and during the coronavirus (COVID-19) restrictions, while HEIs in Ukraine provided online educational services.

The words for expanding the students' English vocabulary were posted on *Facebook*. The analysis proved that the mentioned page on Facebook was associated with vocabulary development. The questionnaire results showed that the Facebook page with the information was preferably used for improving the student's professional English vocabulary (Question 2). A number of respondents (39%) expressed satisfaction with "*the professional English vocabulary*", while the option "*the word plus the drawing, the picture or the photo*" was accepted by 23,3% of all respondents. There were students who had memorised all the words on the Facebook page (28,8%). Some students did not remember explanations of many words and phrases (8,9%) that were available on the Facebook page.

A comparative review of the data in exploring the Facebook page revealed that in the period of online education when we were in the new pandemic era, the Facebook page was mostly needed for improving students' professional vocabulary (39% of all respondents). It was found that many students memorised all of the English words (28,8% of all respondents); they paid attention to the words that were illustrated by pre-packaged visual materials as well (23,3% of all respondents). The conducted analysis provided useful insights regarding the key elements of the effective awareness-raising of the words available on the Facebook page. Before the outset of the pandemic, students preferred words with illustrations/pictures (39% of all respondents), professional vocabulary drew attention in second place (35,6% of all respondents), and learning all English words obtained the third position in the analysis (21,9% of all respondents).

The renewed interest in the English words on the Facebook page because of their practical applications was noted (Question 3). In particular, it was revealed that students remembered the words and used them in daily speech (20,5% of all respondents TP analysis and 16,4% of all respondents BP; the article further indicated the abridged versions, such as 20,5% TP and 16,4% BP).

The students were highly motivated in finding additional information (24% TP and 15,1% BP). The number of students, who used the words on the Facebook page for practical use and those who thought that the words inspired them to find additional information, increased during the coronavirus (COVID-19) quarantine while HEIs in Ukraine moved to online. The analysis results showed that many students rarely used words on the Facebook page for practical needs (41,8% TP and 50,7% BP). The vast minority of the respondents applied their knowledge of words on the Facebook page while answering the questions in English class (13,7% of respondents) during the period of webucation, while before the outset of the pandemic that figure was higher (27%).

The analysis of the questionnaire answers showed that the most popular online dictionaries were the Cambridge (37,7% TP and 52,1% BP) and the Oxford (42,5% TP and 44,5% BP) dictionaries (Question 4).

Some students preferred the Urban dictionary (14,4% TP and 17,1% BP). According to data received, the Free Online English Dictionary from Macmillan Education was extremely rarely used (5,5% TP and 8,2% BP).

The study confirmed that online dictionaries with audio pronunciations were still the priority (Question 5). That possibility was mostly used to practice the unknown word's pronunciation (43,5% TP and 44,5% BP). Although many students (39% TP and 37% BP) seized that opportunity from time to time, while a number of students regularly used audio (14,4% TP and 17,8% BP). A minority of respondents (3,4% TP and 1,4% BP) never used online dictionaries.

As shown by the outcome of the research, watching movies in English (Question 6) was accepted by most of the respondents (38,4% TP and 56,8% BP). In the second place, students indicated social media videos (34,9% TP and 45,9% BP). Entertainment programmes (11,6% TP and 28,1% BP) and training content such as a TED Talk (15,1% TP and 34,9% BP) did not hold leading positions.

The study set out a high level of demand for subtitles to videos (Question 7). Online education, in terms of the pandemic, contributed to more frequent engagement of subtitles while watching videos (41,1% TP and 34,2% BP). The survey revealed that subtitles in English and Ukrainian were in great demand (36,3% TP and 48,6% BP). However, it should also be pointed out that Ukrainian subtitles were not often used (the same value, that is 13% of all respondents, TP analysis and BP). And, some students did not have the habit of using subtitles at all (9,6% TP and 8,9% BP).

Analysis of organising students' IW on the Internet within the study of ESP (Question 8) showed that *watching videos* had a compelling quantitative advantage (67,8% TP and 71,9% BP) compared with reading online, doing speaking practice online or listening exercises. Reading attracted the students' attention (19,2% TP and 32,2% BP). Speaking practice online was not a very popular activity (7,5% TP and 28,8% BP). Listening had the least number of answers on the questionnaires (5,5% TP and 19,9% BP). BP, it should be noted, every student chose more than one response, and TP – one response. Despite that, however, many of the numbers (in percentage terms) were higher BP than TP, which indicated that students might be overwhelmed by all the online activities required in TP, that they were shying away from online activity (Table 1).

Table 1. The comparison of data concerning students' IW on the Internet within the study of ESP

Skills Development	BP		TP	
	number of students	*%**	*number of students*	*%***
✓ Watching videos	105	71,9	99	67,8
✓ Reading	47	32,2	28	19,2
✓ Speaking	42	28,8	11	7,5
✓ Listening	29	19,9	8	5,5

Source: the authors' conclusions based on the comparison and analysis of data obtained from the responses to the questionnaires (Question 8: BP/TP) on the research topic (the study was carried out at the Kyiv National University of Trade and Economics; the research essentially covered the period from 2019 to 2021).
*out of possible 100% for every response;
** comprising a total of 100%.

The study also compared the results received from the questionnaires concerning the advantages and *disadvantages* of carrying out IW online while learning ESP (Questions 9 and 10). It was realised that learning English online during the COVID-19 pandemic created a number of obstacles that required support from the lecturers. Shortcomings, such as a lack of control (20,5%), the complexity of choosing effective resources (28,8%), a lack of self-discipline (28,1%), and the communicative vacuum (22,6%) caused difficulties in approximately equal parts. The study found that in the first semester of the academic year 2019/20 (before the outset of the pandemic) the main disadvantage in performing independent activity online, that was pointed out by non-linguistic specialities students, was a lack of self-discipline (it was noted by 45,2% of the respondents).

The key *advantage* of IW in the process of studying English online and offline, according to students' needs, was "*self-education is based on self-interest*". That was the position taken by the majority of the respondents (46,6% TP and 63% BP).

As a result of the analysis, bearing in mind the use of ICTs within the framework of carrying out IW, meaningful patterns were identified. It emerged that the Facebook platform helped students to learn new vocabulary, enhanced learning opportunities for students within the ESP course. The study confirmed the need to use online dictionaries to look up the definitions of unknown words. The research also found that movies in English were popular with students and that subtitled versions of films were noted as an appropriate form of training.

Discussion

The results, that emerged from our pedagogical research, proved the article's hypothesis that IW of university students led by the ESP mentors at the time of the coronavirus pandemic became more productive because of the use of ICTs while taking into account opportunities, strengths, weaknesses and threats that arose in the process of completing the assignments. The preliminary results that were compiled from empirical research indicated the need to create a summary table to address the challenges facing the teachers while carrying out their jobs within the COVID-19 circumstances when human contact was virtually eliminated and webucation became the priority in the training process. In this regard, Venter's (2019) idea, that digital communication tools become such an important way of communication, in particular among young people, is of special significance in the world in which we live in today. Living during the times of coronavirus, "the challenges encountered must inspire teachers to be reflective, open, creative, and adaptive to dynamic changes. It reminds teachers to keep exploring technology for enhancing foreign language learning" (Atmojo & Nugroho, 2020, p. 71). Moreover, living in an era, when university teachers and students possess a considerable reliance on ICTs to acquire ESP, considerable attention is devoted to the organisation of students' IW.

Based on the research findings and practical experience of the authors of the article, bearing in mind the responses of students, the conclusions were drawn and the SWOT analysis was completed in regard to the use of ICTs within students' IW in the ESP context in terms of the pandemic. The benefits, derived from the research, provided very useful insights and suggestions concerning research issues (Figure 1).

S	✓ Choosing the pace of the English language learning: grammar works, reading and/or listening, memorising vocabulary, etc. ✓ Watching movies, social media videos, TV shows and TED Talks in the original language (English). ✓ Watching videos with subtitles and audio to improve listening comprehension, reading comprehension and word recognition. ✓ Receiving constructive teacher's help and valuable advice online (the lack of destructive criticism and negative classroom comments as it can happen during the time when students work cooperatively). ✓ Learning English for specific purposes (ESP) in accordance with the student(s) own preferences and interests. ✓ Using supplemental instructional materials for students (that the ESP teacher recommended)		**Strengths**
W	✓ A lack of control. ✓ A lack of self-discipline. ✓ The communication vacuum. ✓ Facing difficulties in choosing supplemental instructional materials.		**Weaknesses**
O	✓ Free access to online dictionaries. ✓ Easy access to online training videos and supplemental instructional materials (available in English on the Internet). ✓ Carrying out online discussions, meetings and/or conferences on the Internet or the web platform(s) that are evolved very fast, constantly updated. ✓ Viewing online resources: educational, research, etc.		**Opportunities**
T	✓ The Internet connection fails in case of erratic Internet connectivity or network congestion. ✓ Learning through interacting with online learning contents (texts, images, videos, etc.) may be unreliable. ✓ Spending real time online, that is provided free of charge, is sometimes limited (e.g., Zoom – a software program).	*The SWOT Analysis*	**Threats**

Figure 1. The SWOT analysis relates to the use of Information and Communication Technologies (ICTs) within the organisation of students' independent work in the ESP context during a pandemic and webucation.

Source: authors' development based on the questionnaires conducted during the first semester of the academic year 2019/20 and in the first semester of the academic year 2020/21 at the Kyiv National University of Trade and Economics; practical experience of the authors of the article.

The SWOT analysis based on a detailed review of the research issues identified six key *strengths* of the use of ICTs in organising students' IW within the ESP course outline in terms of a pandemic. The data obtained in the analysis revealed the considerable significance of watching videos. Therefore, video content is an important source for IW while teaching the course ESP online within the system of university-level education. Moreover, students can get the teacher's support online if they need advice or want to make the right choice of online training materials. The important aspect is that "simulations are a good way of practising language targeted on the topic" (Dragomir & Niculescu, 2011). However, it should be noted that learners are willing to do assignments at their own pace.

Weaknesses do not contribute to making online ESP learning more effective because of a lack of control and self-discipline. Daneshdoust and Hagh's (2012) defined one of the disadvantages of Internet-based language learning. Inter alia, the authors allege that a lack of self-control accompanies the study of language on the Internet, resulting in the students finding webucation boring. Quite often "*learners do not have enough self-control: Internet-based learners are from different cultures, learning motivation, therefore these differences result in different learning objectives which in a traditional method are considered carefully but because these differences are not clearly defined in Internet-based learning some of the learners are bored and become away from learning*" (Daneshdoust & Hagh, 2012, p. 610). Besides, the communication vacuum is hard-to-fill. We can give proof of this with a quotation from Venter's article (2019). The author notes: "*if a person sits by himself or herself talking online, feelings of isolation and loneliness might be a result, taking an important aspect of being authentically human away from the person. Online communication often lacks warmth, social presence and feelings of belonging. . .*" (Venter, 2019, p. 5). It is imperative to recognise the university lecturer/teacher as the backbone, as even if the teacher encourages students to complete the tasks independently, the role of the teacher remains particularly important. In this regard, it is worth mentioning that the primary role of the teacher is to maintain discipline among students and to organise their learning activity. The university lecturers choose appropriate tutorial books; apply international best practices and student-centred teaching methods.

There are rather unique *opportunities* that the teacher simply cannot afford to squander, thus providing direction and support to university students' IW through the availability of free online dictionaries, easy access to online training videos and supplemental instructional materials. The opportunity to conduct online meetings (discussions and conferences) for university students is of major importance because a new system for online communication provides an opportunity to verify the results of IW as part of the study of English by students in accordance with the curriculum. Viewing online resources is an important opportunity for the students' knowledge improvement in the process of IW. Online educational resources offer a wealth of opportunities for the development of students' expressive language skills, highlight the magnitude and diverse forms of IW within the framework of the curriculum, and contain links to external web resources on the Internet. In the meantime, research resources available online provide assistance and contributions to publications. Using the online tools students can prepare academic articles for publication in journals.

We fully agree with the authors who claim that "*in contemporary educational contexts, technology, globalization, and mobility have brought about a blurring of the boundary between language learning and activation in and beyond the classroom*" (Choi & Nunan, 2018, p. 49). The results of our study confirm that the above-mentioned boundary has never been as clear as today. In contrast to the pre-globalised, pre-Internet world when the opportunities for learning EFL outside the classroom were either limited or non-existent (Benson & Reinders, 2011; Choi & Nunan, 2018). Today, scheduled consultations, seminars and conferences are completely carried out virtually almost everywhere, using the Internet. In this regard, the SWOT analysis provides the major characteristics of the process of online education.

Threats related to the use of ICTs within the organisation of students' IW in the ESP context during a pandemic have understandably raised many questions. They cover the major areas of serious concern about the use of ICTs in online education. The most frequently occurring threats: network congestion or an erratic Internet connection; learning materials with potentially unreliable content; and online time that is limited by the software programme, such as Zoom.

The characteristics presented in the SWOT analysis give an opportunity to all English teachers to reflect, as far as possible, difficulties and to make a greater contribution to educating students. It must be emphasised that the teacher plays a vital role in overcoming the weaknesses encountered by students in IW within the ESP context in terms of the pandemic. It is also important to note that approximately equal numbers of the respondents need support in overcoming the communicative vacuum and finding effective educational resources. It is assumed that under the supervision of the teacher there is no lack of control. This is primarily due to the fact that the tasks are checked by the teacher. Teachers can also help empower students to complete the tasks in the shortest possible time by means of encouraging them to improve self-

discipline. The authors thus do not disprove the fact that the implementation of ICT resources faces many threats due in part to the use of technical capacities provided by Internet-based services and applications.

Based on established research, the authors looked into practical ways to deal with issues associated with the use of ICT in the organisation of students' IW while learning a foreign language. Particular mention should be made of the role of the teacher in this process. In this context of our study, the view of Mascolo (2009) is taken into consideration. The author states, that "*students cannot simply construct disciplinary knowledge through their own action without being informed by more expert others. This is because disciplinary knowledge is mediated knowledge. Language is the living and evolving repository of cultural, social and scientific meaning; it is the vehicle through which shared knowledge is created, communicated and transformed*" (Mascolo, 2009, p. 10).

An important point is that the scholars (Hoi, 2017; Hsieh & Hsieh, 2019; Yabukoshi, 2020) in different countries actively explore ways of enhancing students' interest and knowledge by means of harnessing the potential of out-of-class learning resources. Endorsing the opinions of scholars, we try to investigate the new reality in tertiary education caused by the pandemic, which led to webucation worldwide in selected periods of the academic year 2019/20 and the academic year 2020/21. At the time, attention is geared to ICTs and their use within the organisation of students' IW, including the ESP context. The SWOT analysis, that is adapted to the realities of the contemporary world, provides information for English teachers to work effectively within the university system.

Limitations

It is appropriate to emphasise that an approach to evaluating the results of the study was limited as the only one institution was involved in the pedagogical experiment, as well as the fact that solely first-year students and second-year students of non-linguistic specialities completed the questionnaires.

Conclusions

Modern ICTs are relevant to every person in today's world. It is, for this reason, the process of organising ICT-supported students' IW in the ESP context is in the spotlight. Using the obtained results, the hypothesis, the main essence of which is that the teacher's support of the students plays an important role in compiling supplemental instructional materials for learners to organise ICT-supported learning activities within the ESP context, is reaffirmed. The research findings are important for streamlining IW in an efficient and effective manner. The empirical evidence given in this article supports the use of ICTs for organising IW of students of non-linguistic specialities while studying ESP.

References:
Al-Dlalah, M., Alkhaldi, H., Alkhutaba, M., Al-Momani, T. (2021). Building an Attitude Scale about E-learning among Isra University Students according to the Item Response Theory in Measurement. *International Journal of Higher Education, 10 (2), 18*8-200. https://doi.org/10.5430/ijhe.v10n2p188

Amani, A. A. (2021). Evaluating the User Experience of E-Learning in the Distance Education Program at Taibah University. *International Journal of Higher Education, 10 (4),* 151-160. https://doi.org/10.5430/ijhe.v10n4p151

Atmojo, A. E. P. & Nugroho, A. (2020). EFL Classes Must Go Online! Teaching Activities and Challenges during COVID-19 Pandemic in Indonesia. *Register Journal, 13 (1),* 49-76. https://doi.org/10.18326/rgt.v13i1.49-76

Awatef, A. B. R. (2021). A Case Study: Enhancing the Learning Process and the Quality of the Students' Work in Online Courses Using Multiple High Impact Practices and Civic Strategied. *International Journal of Higher Education, 10 (2),* 308-318. https://doi.org/10.5430/ijhe.v10n2p308

Bailly, S. (2011). Teenagers learning language out of school: What, why and how do they learn? How can school help them? In P. Benson, & H. Reinders (Eds.), *Beyond the language classroom* (pp.119-131). London, UK: Palgrave MacMillan. https://doi.org/10.1057/9780230306790_10

Benson, P. (2017). Language learning beyond the classroom: Access all areas. *Studies in Self-Access Learning Journal, 8 (2),* 135-146. https://doi.org/10.37237/080206

Benson, P. & Reinders H. (Eds.) (2011). Beyond the language classroom. London, UK: Palgrave MacMillan. https://doi.org/10.1057/9780230306790_1

Chan, H. W. (2016). Popular culture, English out-of-class activities, and learner autonomy among highly proficient secondary students in Hong Kong. *Universal Journal of Educational Research, 4*(8), 1918-1923. https://doi.org/10.13189/ujer.2016.040823

Chernenko O. (2020). Modern pedagogical technologies in higher education. *Pedagogy and Education Management Review, 2,* 52-59. https://doi.org/10.36690/2733-2039-2020-2-52

Choi, J., & Nunan, D. (2018). Language learning and activation in and beyond the classroom. *Australian Journal of Applied Linguistics*, *1*(2*)*, 49-63. https://doi.org/10.29140/ajal.v1n2.34

Cortina-Perez, B., Solano-Tenorio, L. M. (2013). The effect of using out-of-class contexts on EFL learners: an action research. *Calidoscopio, 11*(2), 167-177. https://doi.org/10.4013/cld.2013.112.06

Daneshdoust, B. & Hagh, M. A. K. (2012). The advantages and disadvantages of Internet-based language learning in Iran. *Procedia – Social and Behavioral Sciences, 31*, 607-611. https://doi.org/10.1016/j.sbspro.2011.12.113

Dragomir, I. A., & Niculescu, B. O. (2011). Using simulations in communicative English language teaching. *Land Forces Scientific Bulletin, 16 (1)*, 18-24. Retrieved 10 January 2021 from   https://www.armyacademy.ro/cercetare/bul1_2011.pdf

Fukuda, S. T., Sakata, H. & Pope, C. J. (2019). Developing self-coaching skills in university EFL classrooms to encourage out-of-class study time. *Innovation in language learning and teaching, 13*(2), 118-132. https://doi.org/10.1080/17501229.2017.1378659

Hoi, V. N. (2017). Learning English beyond the classroom: perception and practice in a Vietnamese context. *Journal of Asia TEFL, 14*(2), 364-372. https://doi.org/10.18823/asiatefl.2017.14.2.13.364

Hsieh, H. C., Hsieh, H. L. (2019). Undergraduates' out-of-class learning: exploring EFL students' autonomous learning behaviors and their usage of resources. *Education Sciences, 9*(3), 159. https://doi.org/10.3390/educsci9030159

Khateeb, L. A., Shdaifat, S. A. K., Dr. Nidal A. K. Shdaifa (2021). Effectiveness of Communication Techniques in Distance Education and its Impact on Learning Outcomes at Jordanian Universities (Northern Province). *International Journal of Higher Education, 10 (2),* 74-82. https://doi.org/10.5430/ijhe.v10n2p74

Kryvonos, I. (2018). Vykorystannia internet-resursiv u protsesi navchannia anhliiskoi movy na slukh studentiv t ekhnichnykh spetsialnostei nemovnoho VNZ [Use of Internet resources in the process of teaching English speech by listening to students of technical specialities at non-language HEIs]. *Naukovyi visnyk melitopolskoho derzhavnoho pedahohichnoho universytetu. Seriia: pedahohika, 1*(20)', 73-178. Retrieved 22 February 2021 from http://nbuv.gov.ua/UJRN/Nvmdpu_2018_1_28

Lai, C., Zhu, W. M. & Gong, G. (2015). Understanding the quality of out-of-class English learning. *TESOL Quarterly, 49*(2), 278-308. https://doi.org/10.1002/tesq.171

Maphalala, M. C. & Adigun, O. T. (2021). Academics' Esperience of Emplementing E-Learning in a South African Higher Education Institution. *International Journal of Higher Education, 10* (1), 1-13. https://doi.org/10.5430/ijhe.v10n1p1

Mascolo, M. (2009). Beyond Student-Centered and Teacher-Centered Pedagogy: Teaching and Learning as Guided Participation. *Pedagogy and the Human Sciences, 1*(1), 3-27. Retrieved 01 December 2020 from https://scholarworks.merrimack.edu/cgi/viewcontent.cgi?article=1005&context=phs

Ortynskyi, V. L. (2009). Pedahohika vyshchoi shkoly: navch. posib. [Pedagogy of higher education: teaching. manual]. Kyiv: Tsentr uchbovoi literatury.

Oleksiienko, L., Sheptytska, L., & Fonariuk, O. (2020). Online education: challenges and prospects. *Pedagogy and Education Management Review*, 2, 60-69. https://doi.org/10.36690/2733-2039-2020-2-60

Ovadiuk, O. (2015). Innovative methods as an important part of learning foreign languages. *Advanced Education, 4*, 45-50. https://doi.org/10.20535/2410-8286.56762

Prokopenko, N. V. (2020). Rol samostiinoi roboty studentiv u formuvanni profesiinoi kompetentsii [The role of students' independent work in the formation of professional competence]. In *Vector of Modern Pedagogical and Psychological Science in Ukraine and EU Countries* (pp.353-372). Riga, Latvia: Baltija Publishing. https://doi.org/10.30525/978-9934-588-37-2.2.12

Richards, J. C. (2015). The changing face of language learning: learning beyond the classroom. *RELC Journal, 46*(1), 5-22. https://doi.org/10.1177/0033688214561621

Struhanets, L., Luzhetska, O., Vykhrushch, A., Zalipska, I. & Verhun, L. (2021). Interactive Methods of the formation of English-language communicative competence for future international economics. *International Journal of Higher Education, 10* (3), 25-32. https://doi.org/10.5430/ijhe.v10n3p25

Venter, A. (2019). Challenges for meaningful interpersonal communication in a digital era. *HTS Theologiese Studies / Theological Studies*, *75*(1), 1-6. https://doi.org/10.4102/hts.v75i1.5339

Yabukoshi, T. (2020). Self-Regulated Learning Processes Outside the Classroom: Insights from a Case Study of Japanese EFL Students. *Journal of Asia TEFL, 17*(3), 758-777. http://dx.doi.org/10.18823/asiatefl.2020.17.3.1.758

Appendix 1.
Table 1. The questionnaire on ICT-supported IW in the ESP context that is offered before the onset of the pandemic in the first semester of the academic year 2019/20.

Question 1.	*What innovative multimedia technologies do you use to learn English?*
Response options:	✓ massive open online courses (MOOCs) ✓ English by Skype ✓ online simulators ✓ video blogs
Question 2.	*Do the new English words and expressions placed on the page of the Department of Modern European Languages on Facebook (@knute.ua) help you improve your vocabulary?*
Response options::	✓ yes, they help; I learn all English words ✓ yes, they help; I only learn the words that help me to improve my Professional English vocabulary ✓ they help if I see the drawings / the pictures / the photos ✓ no, they do not help
Question 3.	*Do you use the new English words placed on the page of the Department of Modern European Languages on Facebook (@knute.ua) for the practical use?*
Response options:	✓ yes, I use them for the practical use ✓ yes, they motivate me for finding the additional information ✓ yes, I only use them in the English classes for studying the English language for Specific Purposes course which is compulsory at the KNUTE ✓ sometimes I use them
Question 4.	*Which online dictionary do you use?*
Response options:	✓ MacMillan ✓ Cambridge ✓ Oxford ✓ Urban
Question 5.	*Do you use the audio while working with the online dictionary?*
Response options:	✓ always ✓ only for the unknown words ✓ sometimes ✓ never
Question 6.	*Which of the following do you watch in English on social networks?*
Response options:	✓ movies ✓ social media videos ✓ entertainment programmes (TV shows) ✓ the training content (TED Talk, etc.)
Question 7.	*Do you prefer watching videos with subtitles?*
Response options:	✓ yes, I prefer subtitles in English ✓ yes, I prefer subtitles in Ukrainian ✓ sometimes with subtitles in English, sometimes with subtitles in Ukrainian (50/50) ✓ no, I don't watch videos with subtitles
Question 8.	*Which of the following independent activities on the Internet do you prefer for self-education?*
Response options:	✓ watching video ✓ reading ✓ listening ✓ speaking
Question 9.	*What are the disadvantages of self-learning English online?*
Response options:	✓ a lack of control ✓ the complexity of choosing effective resources ✓ a lack of self-discipline ✓ the communicative vacuum
Question 10.	*What are the advantages of self-learning English online?*
Response options:	✓ your own pace at which you work ✓ a large selection of educational resources ✓ self-education is based on self-interest ✓ a lack of criticism (you are alone)

Table 2. The questionnaire on ICT-supported IW in the ESP context that is offered in terms of the pandemic in the first semester of the academic year 2020/21.

Question 1.	*What innovative multimedia technologies do you use to learn English during the coronavirus COVID-19 pandemic?*
Response options:	✓ massive open online courses (MOOCs) ✓ English by Skype ✓ online simulators ✓ video blogs
Question 2.	*Do the new English words and expressions placed on the page of the Department of Modern European Languages on Facebook (@knute.ua) help you improve your vocabulary during the coronavirus COVID-19 pandemic?*
Response options:	✓ yes, they help; I learn all English words ✓ yes, they help; I only learn the words that help me to improve my Professional English vocabulary ✓ they help if I see the drawings / the pictures / the photos ✓ no, they do not help
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Response options:	✓ yes, I use them for the practical use ✓ yes, they motivate me for finding the additional information ✓ yes, I only use them in the English classes for studying the English language for Specific Purposes course which is compulsory at the KNUTE ✓ sometimes I use them
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Response options:	✓ movies ✓ social media videos ✓ entertainment programmes (TV shows) ✓ the training content (TED Talk, etc.)
Question 7.	*Do you prefer watching videos with subtitles during the coronavirus COVID-19 pandemic?*
Response options:	✓ yes, I prefer subtitles in English ✓ yes, I prefer subtitles in Ukrainian ✓ sometimes with subtitles in English, sometimes with subtitles in Ukrainian (50/50) ✓ no, I don't watch videos with subtitles
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