Dragana B. Vuković Vojnović
University of Novi Sad
Faculty of Sciences
Department of Geography, Tourism and
Hotel Management
vukovic.vojnovic@gmail.com

Ljiljana J. Knežević
University of Novi Sad
Faculty of Sciences
Department of Biology and Ecology
ljiljana.knezevic@dbe.uns.ac.rs

INCLUSION OF VIRTUAL EXCHANGE IN ESP UNIVERSITY CLASSES – STUDENTS' PERCEPTIONS[1]

ABSTRACT: The practice of virtual exchange in which students from different countries participate in an online collaboration as part of their coursework and jointly complete tasks and activities is becoming more dominant in higher education. Virtual exchange seems particularly convenient for English for Specific Purposes (ESP) as it incorporates two major aspects of this area of English language learning: collaboration on a course-specific and field-specific task or project and communication in English. The paper presents the results of a survey into students' views and attitudes towards the inclusion of virtual exchange into ESP university courses. The overall findings point to a rather positive attitude of students towards this innovative pedagogy but at the same time reveal a number of factors that may jeopardize its successful implementation into ESP courses. The paper concludes with a number of pedagogical implications on how to prepare students for successful participation in virtual exchange activities.

Key words: virtual exchange, ESP, online collaboration, students' attitudes.

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UKLJUČIVANJE VIRTUELNE RAZMENE U UNIVERZITETSKU NASTAVU ENGLESKOG JEZIKA STRUKE – PERCEPCIJE STUDENATA

APSTRAKT: Primena virtuelne razmene, u kojoj studenti iz različitih zemalja učestvuju u onlajn saradnji u okviru nekog predmeta i zajednički obavljaju zadatke i aktivnosti, postaje sve dominantnija u visokom obrazovanju. Virtuelna razmena se čini posebno pogodnom za engleski jezik struke (EJS), jer uključuje dva glavna aspekta te oblasti učenja engleskog jezika: saradnju na nekom zadatku ili projektu specifičnom za kurs ili određenu naučnu oblast i komunikaciju na engleskom jeziku. U radu su prikazani rezultati ankete o stavovima studenata u vezi sa uključivanjem virtuelne razmene u univerzitetske kurseve EJS. Opšti pregled rezultata ukazuje na prilično pozitivan stav studenata prema ovoj inovativnoj pedagogiji, ali istovremeno otkriva i niz faktora koji mogu ugroziti njenu uspešnu implementaciju u EJS kurseve. U završnom delu predstavljene su neke pedagoške implikacije o tome kako pripremiti studente za uspešno učešće u aktivnostima virtuelne razmene.

Ključne reči: virtuelna razmena, engleski jezik struke, onlajn saradnja, stavovi studenata.

1. INTRODUCTION

The rapid development and constant improvements in information communication technology (ICT) have resulted in innovative ways of teaching and learning with more engaging, interactive teaching methods and learning materials than ever before. More specifically, it has led to the development of learning management systems (LMS) such as Moodle or Blackboard, among many others, enabling teachers to create educational content, use videoconferencing and monitor the progress of their students' online learning in asynchronous and synchronous modes. In recent years, the increased development of communication platforms such as ZOOM has opened up new opportunities for online meetings on a global scale. Thus, new virtual communication and learning environments have made it possible for students and teachers to engage in the educational process remotely, transcending physical distance, geographical boundaries and inevitable costs related to international mobility programmes.

In the past two decades several programmes have come into view, mostly in the United States, that successfully implement virtual exchange in higher education (HE) such as COIL[2] or EDGE[3], as well as Stevens Initiative[4] with a broader scope

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[2] http://coil.suny.edu/

[3] https://globaledgeucation.psu.edu/

[4] https://www.stevensinitiative.org/approach/

of implementation focusing on younger learners. The main idea behind these programmes is the practice of virtual exchange (VE) whose main aim is to connect international students under the supervision of their teachers so as to participate in an online intercultural collaboration as part of their coursework and jointly complete shared tasks and activities. More recently, in Europe, Erasmus+ Virtual Exchange Programme[5] has been established to support collaborative projects that promote intercultural dialogue and the development of soft skills. Virtual exchange programmes create a spectrum of different frameworks to connect students and teachers across the globe. For example, Empatico[6] is especially designed to connect primary school students as pen pals or through joint video class activities monitored by their teachers.

Since learning through online collaboration requires active participation within a special learning environment, the success of such activities depends on the student perceptions and willingness to participate. Some students might express resistance towards such projects (Capdèferro & Romero 2012) which can have an influence on their motivation and performance. This is why it is well-worth exploring their views and anticipating how to handle potential issues that could affect successful accomplishments of online collaboration projects.

In terms of the choice of language for international virtual exchange, communication is very often conducted in English, considering its role as a lingua franca in the 21st century. This usually means that students who collaborate often come from countries whose official language is not English so they will be involved in a multi-layered intercultural communication. On the other hand, there are situations where one group of students are native speakers of English who can also experience many benefits from this type of collaboration. In addition to the development of English language communication competence for non-native speakers of English, virtual exchange contributes to the integration of a whole range of other skills and competences that are highly valued academically as well as in professional contexts for both native and non-native speakers of English. This includes the integration of intercultural experiences, empathy and tolerance, global perspective, as well as the development of more specific competences such as the improvement of digital skills, collaboration and teamwork skills, interpersonal and intercultural communication and many more (O'Dowd 2021). All these aspects are equally true if VE is conducted in a language other than English, which is sometimes

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[5] https://erasmus-plus.ec.europa.eu/programme-guide/part-b/key-action-1/virtual-exchanges

[6] https://empatico.org/fr-FR

a preferred choice for the native English speakers who would like to improve their communication skills in another language, e.g. Spanish[7].

In the context of English for Specific Purposes (ESP) education at tertiary level in Serbia, VE seems a particularly convenient context for the implementation of task-based, problem-based or project-based learning that would use international online collaboration on a task or a small project that is course-specific and related to students' field of study. However, reports on the use of VE in ESP classes in Serbia in particular for the purpose of HE internationalization, to the best of our knowledge, are scarce, leading to a conclusion that this concept of learning is still unknown to our students. Bearing in mind that students are the main participants of the virtual exchange (Zečević & Trkulja Milekić 2022) and that successful learning depends on a number of individual learner factors, including positive attitudes and motivation (Ellis 1994), the present study aims at exploring students' views and attitudes towards VE and their willingness to engage in it as part of their ESP course activities at university. Investigating to what extent students are willing to engage in VE can be considered as one of the first steps in planning its implementation that could provide very useful information for ESP teachers and practitioners interested in incorporating this innovative approach in their classes. This interest may now be greater after the COVID-19 pandemic period, when most of the teachers and students became familiar with online educational technologies, so fewer constraints regarding the technological aspect of VE application should be expected.

2. THEORETICAL FRAMEWORK OF VIRTUAL EXCHANGE

Generally speaking, virtual exchange (VE) involves groups of students from different cultural backgrounds in an online interaction in order to collaborate on tasks related to their coursework while supervised by their teachers (O'Dowds 2021: 1). It may involve synchronous online activities such as lectures, group discussions, presentations or asynchronous online tasks, e.g. exchange of emails, co-creation of reports, essays, proposals, etc. It is also closely connected to the development of the 21st century skills (Partnership for 21st Century Skills 2009) necessary for students to be successful in their academic experience as well as in their future careers. Some of the proposed skills include creativity, collaboration, communication, information and technology skills.

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[7] https://www.unicollaboration.org/index.php/2013/01/30/combining-physical-&-virtual-mobility-/

Since VE practice is a relatively new endeavour in educational internationalisation, theoretical foundations have not been firmly established and research into the matter is expected to develop further in the years to come. Dovrat (2022: 194-195) gives a comprehensive critical review of available research articles predominantly dealing with virtual exchange practices and experiences which mainly focus "on the challenges of implementation, the benefits for students, and best design practices" and neglect the aspect of research design and theoretical underpinnings. In the European context, theoretical foundations of VE course development and research design have recently been established through prolific publications within large scale projects, namely UNIcollaboration[8], EVALUATE[9] and EVOLVE[10] (Dovrat 2022: 195).

Based on the findings of the project EVOLVE (2021), virtual exchange can be defined as

> "sustained, technology-enabled, people-to-people education programs or activities in which constructive communication and interaction takes place between individuals or groups who are geographically separated and/or from different cultural backgrounds, with the support of educators or facilitators" (Dovrat 2022: 194).

A great variety of terms used for this educational concept in literature reflects different epistemologies and contexts in which they emerged and are often used interchangeably (Dooly & Vinagre 2022). O'Dowd (2021: 1-2) explains that this type of practice as well as research in this field have firstly developed from the context of second language learning (e.g. telecollaboration and e-tandem) and then spread to a broader context (e.g. COIL) as a way to engage students and teaching staff in a 'low-cost' model of international exchange without the actual physical mobility. Belz (2002: 61) defines telecollaboration "as the application of global communication networks in foreign language education" which often happens in different "sociocultural contexts and institutional settings" so it has a strong socio-cultural dimension. Dooly and O'Dowd (2018: 12) remind us that telecollaboration as a form of distance learning and collaboration with distanced partners is not a new concept and has existed since the early 20th century, e.g. in the form of pen pal exchanges (Belz 2002: 62). The introduction of technology such as computers, learning apps and especially online learning platforms and application has broaden the horizons of these early examples of telecollaboration.

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[8] https://www.unicollaboration.org/
[9] https://sites.google.com/unileon.es/evaluate2019/
[10] https://evolve-erasmus.eu/

Certain authors (Dovrat 2022; Zečević & Trkulja Milekić 2022) take the term VE as the umbrella term for this educational practice claiming that different approaches to VE have recently developed from different contexts and different areas of education (O'Dowd 2018). In an attempt to summarize all the different terms grouped around the concept, O'Dowd (2018: 5) defines them as

> "the engagement of groups of learners in extended periods of online intercultural interaction and collaboration with partners from other cultural contexts or geographical locations as an integrated part of their educational programmes and under the guidance of educators and/or expert facilitators".

Following this line of thought and with the aim of avoiding terminology confusion, in the present paper we use the term VE and the area which the current research is mostly associated with is language learning.

The evidence found in the literature (Belz 2002; O'Dowd 2018; 2021; Dovrat 2022) shows that key research categories include several aspects. Firstly, pedagogical aspects of VE are based on approaches to learning and teaching, designing learning experiences and understanding of learning theory, and they also cover strategies and skills needed by the teachers to successfully implement VE with their students. This aspect is closely connected to psychological and socio-cultural foundations of VE model of learning as well as the development of students' and teachers' digital literacy. Finally, VE is seen as the best way to promote intercultural competences and global citizenship.

While the first significant publications appeared in the 1990s, the research in this field has exploded over the last decade, mirroring the rapid development of technologies that enhanced the ease of and access to communication across the globe (Zak 2021). According to Dooly and Vinagre (2022), some of the key features of VE are the following: it is a highly flexible way of teaching; it engages students into social interaction with participants whom they would hardly meet in regular, everyday learning environment; it stands as an alternative to physical mobility for students with disabilities and low financial support; it may include self-directed online language learning platforms.

Speaking of its connection with language learning, it must be stated that VE is often perceived as originating from the communicative approach that is central to modern language pedagogy (Dooly & O'Dowd 2018; Vinagre 2017). The claim is supported by the fact that many of the features of communicative language learning are recognized in VE: engagement in authentic tasks and activities that are accompanied by meaningful language use, the development of communicative competence, the exclusion of teacher-centred approach and development of

autonomous learners and the prevalence of fluency over language accuracy. In addition, most of the pedagogical designs that are frequently applied in VE are very similar to most common communicative approach designs, such as task-based or project-based teaching and learning. Regarding L2 learning and virtual exchange through telecollaboration, it usually involves pairing up partners from different educational and cultural contexts to exchange information, participating in discussions based on the shared articles, or parallel texts on the same topic and comparing their findings (O'Dowd 2021: 2).

Not only does VE contribute to some of the core postulates of modern language teaching and learning such as the promotion of multilingualism and multiculturalism, but it also facilitates the implementation of the EU criteria for the development of intercultural communicative competence (ICC) in the educational process. This is closely related to the concept of English as lingua franca which emerges in the interaction in English of people from different cultural and linguistic contexts and requires a great "intercultural sensitivity to a degree not normally experienced by mono- or even bilingual speaker in their native languages" (Mauranen 2005: 274). In the context of foreign language learning, ICC is recognized as one of the key goals (Byram 1997; Deardoff 2009; Lázár et al. 2007). Byram (1997: 22) strongly advocates for the importance of the interplay between language and culture in English Language Teaching (ELT) by saying that "teaching for linguistic competence cannot be separated from teaching for intercultural competence". According to Meyer (1991: 138), intercultural competence is "the ability of a person to behave adequately in a flexible manner when confronted with actions, attitudes and expectations of representatives of foreign cultures". It seems that language teaching is an ideal context for the development of both their social identities and individualities and can improve their linguistic competence, communicative competence and intercultural competence that comprises knowledge, skills and attitudes, complemented by the values one holds because of one's belonging to a number of social groups (Byram et al. 2002).

As already mentioned, VE can be employed within various areas of study and disciplines. Its twofold nature, reflected in fostering both students' subject knowledge and language proficiency, appears highly convenient for teaching languages for professional purposes, such as ESP, especially at tertiary level. Defined as a branch of English language teaching in which learners acquire a specific literacy competence together with the knowledge and skills of their professions so that subject knowledge becomes the context for learning language (Hyland 2022),

ESP does seem to share some major characteristics with VE practice, which is also widely spread in the context of higher education (Dooly & Vinagre 2022).

In an attempt to initiate VE in ESP classes at tertiary level, affective factors such as motivation and attitudes should not be neglected since it is well-documented that they play a significant role in the learning process, including language learning (Dörnyei 2001; Ellis 1994; Knell & Chi 2012; Oxford & Ehrman 1992). Attitudes represent the students' positive or negative inclinations and desires in regard to learning a second language (Knell & Chi 2012). Positive attitudes contribute to setting higher goals in learning, increase learning motivation and result in better academic performance. With this in mind, the current study was designed with the aim of exploring university students' attitudes towards participating in VE, as a new learning activity to them, within their ESP course. More precisely, the Faculty of Sciences, University of Novi Sad is planning to introduce virtual exchange collaboration with American students from the Pennsylvania State University that will last up to four weeks in the next academic year. The activities will be integrated synchronously and asynchronously into regular ESP classes and will cover mostly speaking skills (online meetings of students) with the final outcome of a mini conference. Writing skills will also be practiced in the form of a jointly written 500-word report. The VE activities will be offered to Serbian students as an optional activity meaning that the students will choose if they want to do a part of their ESP course via virtual exchange.

3. RESEARCH DESIGN

As stated above, the aim of the study was to explore university students' attitudes towards participating in VE, as a new learning activity to them, within their ESP course. Complying with this aim, the following research questions were set:

RQ1: What are the students' general attitudes towards VE and are they willing to participate in it as part of their ESP course?

RQ2: What reasons for and against the participation in VE do the students report?

For the purpose of this study and as an initial step in planning prospective VE activities at the Faculty of Sciences, University of Novi Sad, an online survey method was employed for data collection. A Google form questionnaire was generated and distributed via the institutional MS Teams platform to 165 students attending ESP courses in the spring semester of the academic year 2021/2022. As mentioned in Section 2, the initial reason for this survey was an opportunity to

connect our students with their peers from an American university. This is an important factor that might have contributed to their responses because they would be expected to collaborate with the students whose native language was English. The questions were given in Serbian so that the students would feel less pressure if they wanted to give longer answers to some of the questions. The first part of the questionnaire focused on socio-demographic information of the respondents, such as their study year, their field of study and self-assessment of their level of English. The second part included three Yes/No questions to establish their overall attitude towards VE in ESP classes, to determine if there is potential reservation or uneasiness towards this form of class engagement and to check whether they are willing to participate or not. The participants were also given two open-ended questions as an opportunity to elaborate more on their opinions. The first one was intended for noting down and explaining the reasons for (not)being willing to participate, while the next question was reserved for students' suggestions or additional remarks regarding the potential online collaboration and virtual exchange.

3.1 Socio-demographic data of participants

Based on the study year (Figure 1), the majority of respondents were first-year students (63%), followed by second-year students (25%), a small proportion of third-year students, and only three students of the fourth year (2%). These results are conditioned by the semester when the survey took place and the availability of ESP courses in that particular semester.
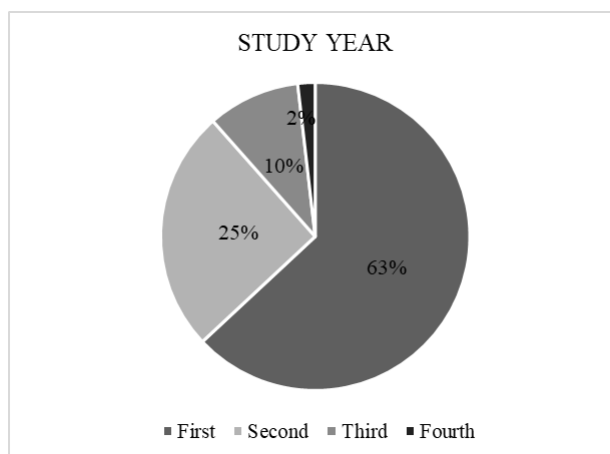

Figure 1. Respondents according to their year of study

When it comes to their major field of study (Figure 2), the majority of the students come from the Department of Biology and Ecology (DBE) with 36% and the Department of Mathematics and Computer Science (DMI) with 32%. This is followed by the students from the Department of Geography, Tourism and Hotel Management (DGTH) with 22% and then 14 students from the Department of Chemistry and Environmental Protection (DH) and only two students from the Department of Physics (DF), which make up 9% and 1% respectively.
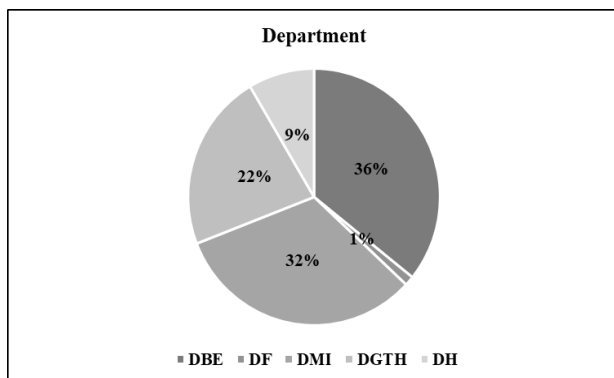
Figure 2. Respondents according to their field of study

Finally, the socio-demographic information included students' self-assessment of their level of English. As we can see in Figure 3, almost half of the students assess their English knowledge as very good (45%) and one third says their English is excellent. There is also a smaller but significant percentage of students who say that their level of English is average (19%) and only eight students (5%) who assess their English knowledge as poor.
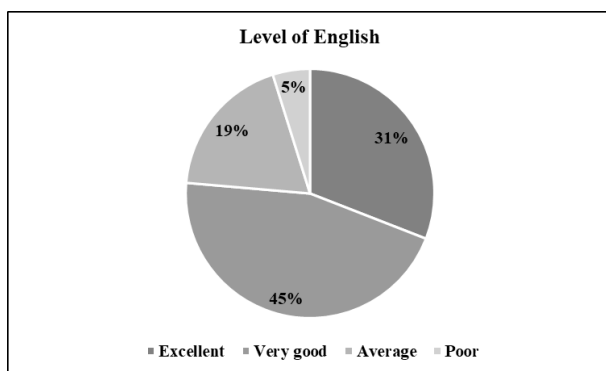
Figure 3. Respondents according to their level of English

4. RESULTS AND DISCUSSION

As already stated, in the second part of the questionnaire, students were asked to express their views regarding the introduction of VE into one part of their coursework within the ESP course at the Faculty of Sciences, University of Novi Sad. An overview of the results (Figure 4) tells us that almost all of the students (94.5%) think that VE would be a useful addition to ESP classes at the Faculty of Sciences and thus express a highly positive attitude towards this collaboration practice in general. As for their readiness to participate in this activity, the number of positive answers is lower but still significant. Namely, much more than half of the respondents stated that they would be willing to participate (68.5%). Regarding the affective side of their possible participation, three quarters of the students said that they would not feel uncomfortable to participate in the VE activities as part of their ESP programme. Overall, the presented results suggest that the majority of students have a positive attitude towards this innovative pedagogy, which can be interpreted as a positive signal for its initiation. However, although students' views can be described as positive and encouraging, we should not neglect that there were also 31.50% of students who would be reluctant to participate in VE and 24.50% of those who would feel uncomfortable to participate. These results suggest that it is worth exploring the reasons behind both positive and negative answers further.
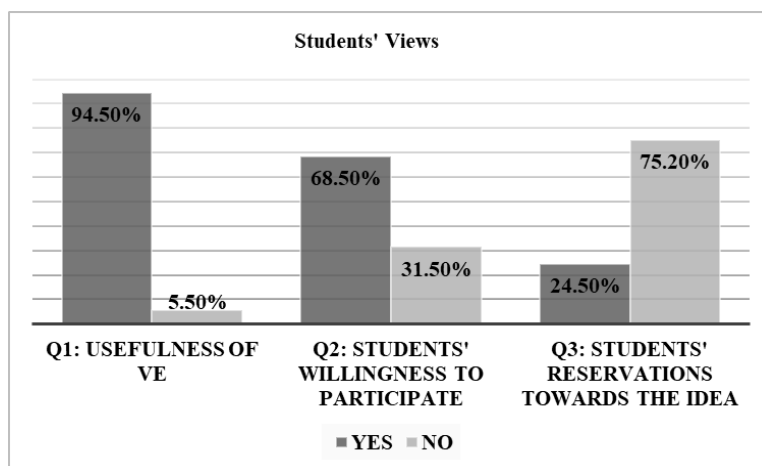

Figure 4. Students' views regarding VE in ESP courses

In addition to three Yes/No questions students were also given two open-ended questions to provide additional details as a follow-up to their responses. There were 35 students, which is 21% of the total number, who provided additional details

and comments which can be grouped either as those favouring VE or those opposing it. Further content analysis of these responses revealed additional categories within these two groups, as shown in Table 1:

Reasons for the use of VE in ESP classes	*Reasons against the use of VE in ESP classes*
New approach to studying and language learning	Level of English as a potential problem
Cultural knowledge expanded	Personality constraints
New friendships created	Reservation towards teamwork and additional obligations

Table 1. Students' views expressed in open-ended questions

When it comes to the responses favouring VE, most of the students recognized how valuable and beneficial this type of study would be for the development of their language and communication skills (*'добар вид да се усаврши језик'* [*a good way to improve language*], *'одличан начин да се побољша енглески језик'* [*an excellent way to improve English*], *'супер начин да проширим своје знање енглеског језика'* [*a great way to expand my knowledge of English*]). In addition, many of them recognized the intercultural aspects of this type of work, stating that they think such approaches would provide an opportunity to learn about the culture of foreign countries (*'омогућава шире богаћење знања не само језика него и културе страних држава'* [*facilitates not only broadening the knowledge of the language but also the culture of foreign countries*]), and also to establish closer contacts with peers from different countries, (*'не само одличан начин да се побољша језик, а са друге стране да се остваре пријатељства и контакти'* [*not only a good way to improve the language, but on the other hand, to create friendships and contacts*], *'одлична прилика да упознамо колеге из САД, ...и да се распитамо о студијама тамо'* [*a great opportunity to meet the colleagues from the USA and to find out about the study programmes there*]). They also believe that this is a new approach that would contribute to new activities and make the coursework more interesting (*'у потпуности нови вид учења* [*a completely new form of learning*], *'мислим да би омогућило нове активности код студената па би самим тим било занимљивије'* [*I think it would provide new activities for students and thus would be more interesting*]).

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At the same time, there were responses and comments in which students expressed their negative attitudes towards VE and reasons underlying that point of view. Within this category, one of the common reasons was insufficient knowledge of English as a concern for students to participate (*'недовољно знање језика'* [*insufficient knowledge of the language*]*, 'не знам толико добро енглески'* [*I don't speak English so well*]) provided by those who rated their English language knowledge either as average or poor. In this regard, it is also interesting to mention that the respondents in this survey, as stated in the previous section, mostly rated their knowledge of English as "very good" and "excellent". However, when it comes to real-life communication in English as VE implies, particularly with native speakers of English, it seems that many of them felt less self-confident. Some of those students did not feel reluctant to participate because of their knowledge of English but were apprehensive about other aspects. For instance, they had reservations expressed towards potential new colleagues from the US in terms of how considerate they would be towards our students' difficulties with their English language fluency. This can be illustrated with one of the responses by a student who rated their level of English as very good – *'али можда студенти из САД-а не би излазили у сусрет уколико дође до неких потешкоћа у говору, стога би ову наставу могли да похађају само студенти који већ течно говоре енглески'* [*but maybe the students from the USA would not be so considerate regarding some speaking difficulties, so this type of classes could be attended only by students who already spoke English fluently*]). Furthermore, some affective aspects were observed among the responses. In particular, some students claimed to suffer from anxiety when they needed to speak in English (*'нервозна сам када треба да причам на енглеском'* [*I feel nervous when I have to speak in English*]*, 'има особа које би се устручавале због тога што не би имали исто знање енглеског језика'* [*some people would be reluctant because they would not have the same level of English*]) or they felt generally insecure to interact socially (*'несигурност'* [*insecurity*]*, 'имам страх од социјалне анксиозности'* [*I fear social anxiety*]*, 'нисам довољно социјалан и екстровертан за тако нешто'* [*I am not sociable and extrovert enough for something like that*] or they feel fear of failure or underperformance (*'због страха од неуспеха и шта ће друга страна мислити о мени'* [*fear of failure and what the others will think of me*]). Both the general feeling of anxiety which is then transferred to foreign language anxiety and the anxiety closely related to the performance in the foreign language are both corroborated with previous research findings (MacIntyre 1995: 91-93). Furthermore, there were a few concerns about the actual mode of learning ranging from the concerns regarding the time-consuming aspect of the process (*'верујем да би ми одузело више времена него што је потребно'* [*I believe that it would take more time than necessary*]). There was

a rather extreme attitude expressed by one of the students with a self-reported very good knowledge of the English language who, from previous experience, concluded that online teamwork was horrible especially with people in different time zones and it would be much easier to communicate with the team members when they were all present physically in one space: (*'Лично сматрам да су радови у тиму онлајн ужасни, када је тим присутан физички лакше је комуницирати са члановима'* [Personally, I find online team collaboration terrible, it's easier to communicate with people when they are physically present]). This comment pointed to insufficiently developed collaborative and teamwork skills of our students as an additional factor that could discourage them from participating in VE. Finally, a few students suggested that it was a great idea only if it remained optional.

5. CONCLUSION AND PEDAGOGICAL IMPLICATIONS

The presented findings about students' views on introducing VE in their university ESP courses led to a general conclusion that the students at the Faculty of Sciences, University of Novi Sad showed positive attitudes towards this innovative form of collaborative work in the language classroom and that their ESP teachers should follow it up. This would mean incorporating VE activities into their syllabi and establishing specific connections with their international collaboration partners. Additional reasons and motives for ESP instructors to introduce this type of activity in their courses at the Faculty of Sciences, University of Novi Sad can be found in a number of positive responses that students in this survey recognized as strengths of this learning practice. By pointing to numerous benefits of this approach, such as communicative and intercultural competence development, and an innovative approach to language learning, the respondents showed a high level of maturity and language learning awareness, leading us to a conclusion that they would make reliable and responsible participants of VE practices.

The responses expressing certain constraints, however, should also be taken into account as they yield a number of pedagogical implications. These responses, as shown in the previous section, mostly address the affective and social domains of language learning. The implications, therefore, should mainly refer to the necessity of stimulating students' communicative competence by encouraging them to communicate more often and freely in their ESP classes and put fluency over accuracy. At the same time, collaborative tasks and activities, both face-to-face and online, should become an integral part of ESP courses, so that students' collaboration and teamwork skills are well developed before a VE programme is initiated. Furthermore, careful planning of VE collaboration is essential. Prior to the VE, the paired teachers should clearly define the

goals, tasks, assignments and assessment procedures before presenting them to students. They would also need to negotiate the ways of synchronous and asynchronous communication, learning and/or communication platforms that will be used taking into account students' previous experience and familiarity with them, so that they would feel more confident and comfortable in VE tasks. At the very start of VE, joint icebreaker activities should be introduced to establish group dynamics and facilitate interaction between the students from each institution. From the aspect of the survey findings, these activities seem particularly important, as they would serve as initial anxiety and stress reducing techniques and would help students gain more confidence for their VE tasks. Continuous monitoring of student activities will also help keeping the dynamics and effectiveness of the VE. Since part of the VE is performed by the students on their own, outside regular university lectures (often because of different time zones of partnered universities), self-directed learning readiness (Knowles 1975; Guglielmino 2013) should not be neglected. In this paper, some aspects of this were investigated, such as students' willingness to participate and their awareness of the effects of this type of learning. Nevertheless, some other aspects will need further investigation since a detailed analysis of students' readiness for online learning (as part of VE activities) covers not only constructs of self-direction and self-regulation, but also technological and digital skills, access to technology, study habits, academic skills, time management, and many more (Martin et al. 2020).

Finally, overall access to technology, digital competences of both teachers and students, VE integration into regular academic syllabus and curriculum and its recognition at the policy-making levels (O'Dowd 2018) are contributing factors to the successful implementation of VE in university courses. Further action is needed, such as piloting VE activities in a broader context outside the already existing projects, which will provide further insight into its benefits and potential limitations that have to be tackled. More elaborate support activities and wider dissemination of previous success stories and best practices would be a step forward in the promotion and implementation of VE.

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Dragana B. Vuković Vojnović
Univerzitet u Novom Sadu, Prirodno-matematički fakultet
Ljiljana J. Knežević
Univerzitet u Novom Sadu, Prirodno-matematički fakultet

UKLJUČIVANJE VIRTUELNE RAZMENE U UNIVERZITETSKU NASTAVU ENGLESKOG JEZIKA STRUKE – PERCEPCIJE STUDENATA

Sažetak

Virtuelna razmena podrazumeva onlajn interakciju studenata i profesora u međunarodnom kontekstu, često iz kulturološki različitih zemalja koji ne govore istim maternjim jezikom. Takav vid saradnje studenata zasniva se na zajedničkom ispunjavanju određenih zadataka u sklopu redovnog, već postojećeg kursa, a uz superviziju nastavnika (O'Dowds 2021: 1). Primena takvog vida virtuelne razmene u okviru nekog predmeta postaje sve dominantnija u visokom obrazovanju. Virtuelna razmena čini se posebno pogodnom za engleski jezik struke (EJS), jer uključuje dva glavna aspekta ove oblasti učenja engleskog jezika: saradnju na nekom zadatku ili projektu specifičnom za kurs ili određenu naučnu oblast i komunikaciju na engleskom jeziku. Neposredan povod za naše istraživanje bila je mogućnost povezivanja studenata Prirodno-matematičkog fakulteta Univerziteta u Novom Sadu i studenata sa Državnog univerziteta Pensilvanije (The Pennsylvania State University) kojima je engleski maternji jezik. U radu su prikazani rezultati ankete o stavovima naših studenata u vezi sa uključivanjem virtuelne razmene u univerzitetske kurseve EJS sa ciljem utvrđivanja prednosti i eventualnih prepreka za primenu ovog novog načina rada. Opšti pregled rezultata ukazuje na prilično pozitivan stav ispitanih studenata prema ovoj inovantnija pedagogiji, ali istovremeno otkriva i niz razloga koji mogu ugroziti njenu uspešnu implementaciju u kurseve EJS. Većina proširenih odgovora studenata odnosi se na afektivne i sociološke aspekte učenja jezika. U skladu sa tim, u završnom delu predstavljene su neke pedagoške implikacije o tome kako stimulisati komunikativnu kompetenciju studenata i što bolje ih pripremiti za uspešno učešće u aktivnostima virtuelne razmene. Pored toga, ukazuje se i na važnost integrisanja kolaborativnih i timskih veština u sklopu redovne nastave EJS, kao i na važnost dobrog planiranja aktivnosti u vezi sa virtuelnom saradnjom.

Ključne reči: virtuelna razmena, engleski jezik struke, onlajn saradnja, stavovi studenata.