Perceptions of Fostering Creative Thinking Skills in ESP Classrooms in Ukraine and Portugal

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Nataliia Saienko, Yuliia Olizko (✉)
National Technical University of Ukraine
"Igor Sikorsky Kyiv Polytechnic Institute",
Kyiv, Ukraine
juliukrainekyiv@gmail.com

Anna Cunha
Lusófona University, Lisbon, Portugal

Abstract—The purpose of the study was to investigate BA and BSc students' and their teachers' perceptions of fostering creative thinking skills in the ESP classroom. Respondents of the questionnaires included 51 BA students from Portugal and 56 BSc students from Ukraine, as well as their 30 Ukrainian and 16 Portuguese ESP teachers. The results proved that Portuguese teachers spend, and would like to spend, more time on creative thinking skills development than their Ukrainian colleagues. More than a third of teachers in both countries stated that they use PBL to foster students' creative thinking skills. The main difference noticed was that ESP teachers in Ukraine often chose project-based learning (57.7% – 15 respondents), whereas their Portuguese colleagues prefered role-playing (50% – 6 teachers). The majority (83.8%) of all 37 interviewed Ukrainian future engineers reported a positive attitude to role-playing. However, twelve Portuguese (75%) and twenty-one Ukrainian ESP teachers (70%) admitted combining both creative and traditional approaches in their classrooms. The creative skills most students would like to develop in their ESP classroom include trying new experiments (71.4% of Ukrainian and 56.9% of Portuguese), searching for new ways to solve the problem (69.6% and 82.4%), creating new associations and interdisciplinary links (57.1% and 43.1%), and choosing new information sources (44.6% and 41.2%). Professional situations, which according to the students' answers demanded from them these skills were defined in the article. The creative ESP tasks students in Ukraine, Portugal and other countries had in their classroom were stated as well.

Keywords—English for Specific Purposes (ESP), creative thinking skills, problem-based learning (PBL), project-based learning, engineers, BA (Bachelors of Art), BSc (Bachelors of Science)

1 Introduction

Creativity is one of the skills that has interested education researchers in the 21st century [1], and nowadays is seen as an essential feature in higher education [2]. According to Amabile [3], a complete and useful theory of creativity cannot be a single, simple theoretical statement. However, Boden [4] tries to define it as "the ability to come up with ideas or artefacts that are new, surprising and valuable" and that can be distinguished in psychological or historical creativity. For the former, the idea is new to the creative person, while, for the latter, it is new to human history.

As Hafner, Miller and Ng [5] explain, the meaning of creativity has changed from exceptional individuals' abilities in arts and sciences, which we can relate to historical creativity, to "not a capacity of special people, but a special capacity of all people" [6] − which we relate to psychological creativity. What's more, when we talk about creativity in classrooms, we can think about teachers' creativity or teaching for creativity. According to Arifani and Suryanti [7, p. 239], the former is teacher-based and "relies on an innovative approach to obtain effective teaching implemented by the teachers". In ESP, which usually uses a learner-centred approach, teachers can inquire students in a way that inspires creative thinking and creative problem-solving. Having analysed creative and traditional teaching contrasts, Kind and Kind state that creative teaching is associated with open-ended, student-oriented, exploratory and group-based learning strategies [8]. Creative practices of teachers used in the classroom help students to navigate new cognitive pathways by exploring new routes of inquiry they previously had not travelled.

Creative approaches in teaching and learning have many benefits. They can stimulate, engage, motivate, and improve self-esteem and the confidence of a student [9]. As Marzano and Pickering state [10], "engagement happens as a result of a teacher's careful planning and execution of research-based strategies" which teachers can deliberately use to increase student's attention in the classrooms. Creative tasks help students to be engaged in the lessons. The development of creative thinking and language skills can happen simultaneously as they are interconnected. Thus, creativity is important in both teaching and learning a language [9]. Creative approaches should be applied by each teacher.

Creative thinking skills are defined as complex and important skills of the 21st century. We agree with Alan Maley that creativity is not only about making something new [9], using original ideas in the classroom. In the ESP studying context, creative thinking can include such skills as analysing, accepting challenges, making new associations, interdisciplinary links, connections, comparisons, judgments, experimenting, taking risks, and searching the methods and information needed to solve the problem or to get a result.

In addition, it is necessary to outline some international experience of fostering creative thinking skills in ESP and define the most common approaches and creative techniques used by teachers. For example, Ladislav Václavík tried to mix creative and traditional types of activities while teaching English for laboratory technicians in the Czech Republic [11]. He considers his approach to be active, open-minded, student-friendly and capable of promoting creative thinking.

A group of scientists in Romania tried a creative approach with economics students [12]. Quotations from Steve Jobs inspiring discourse were used. As a result, students were engaged in a debate about success and used specialized terminology. Students also developed their ideas and predictions based on a given beginning on an economic problem. According to the authors it was involving, memorable and inspiring experience for all students.

A digital storytelling project allowed ESP Spanish students of design engineering to recreate a story relating to their field of study [13]. The process of digital story creating included 15 stages such as pre-survey, web quest, writing the script, creating the video, voice-over recording, peer-assessment forms, assessment comments in the forum, and others. As a result, students developed different skills such as language, research, organization, digital, presentation, interpersonal, problem solving, and critical thinking. The author highly recommends digital storytelling as a useful and engaging approach within a technical university setting.

A digital video creation project with Biotechnology students was conducted in Ireland [14]. In mini-groups students created videos (3-4 minutes) on Biotechnology, describing the aspects they find most interesting about it. To foster creative thinking skills, the only requirement was for each member of the team to speak and feature in the video. Special guidance on how to create and edit videos was given. The software Windows Moviemaker and Me Move were introduced. In the questionnaires, students described their experience, skills acquired, advantages and disadvantages of creating a video for learning ESP. Students claimed the improvement of language skills, especially the acquisition of specialized vocabulary, self-correction, technical skills, teamwork, creative thinking and other 21st century skills. Students used props, music and humour to present themselves creatively. However, they noted some technical problems with editing and the fact that the project was challenging and time-consuming.

Privas-Breaute [15] from France used role-playing, multimodality and PBL. She demonstrated efficient usage of the multi-player video game Second life for students of customer relationship management. Players could talk, listen, move, write, and read. The project was multidisciplinary and supervised by the English teacher, the marketing teacher, two experts in e-learning and a technical engineer. A special business company and offices were created online, with necessary scenarios developed. Students had to communicate effectively and creatively with angry customers (played by teachers) plus both students and teachers created their avatars giving each other unique and creative characteristics. Among the disadvantages of the approach, the author admits that not all players master the special skills and competencies necessary before playing a video game. Besides, it was hard for students to know when to speak, so the approach facilitated the development of linguistic and general competencies, encouraged autonomy, and helped to practice the language in professional contexts.

In Thailand, ESP students created learner-contributed content materials studying tour-related projects of their country [16]. For example, they observed and videotaped real nail dancers, interviewed them on attempts, identified hardship and suggested that this information should be available for Thailand visitors to create mood, appreciation

and impressions of the nail show. The author connects the success of the studying with the combination of project-based learning, communicative language learning and awareness-raising tasks. Communicative learning helped learners to communicate in an interactive, meaningful and active way. Awareness-raising questions attracted students' attention to the semantic, linguistic and pragmatic aspects of the target language.

A creative online course of ESP was developed in Latvia [17]. Developing the project for the power engineers, the authors took into account the application of modern technologies to effectively use the traditional energy sources, the increasing role of renewable energy sources, and the goals of the Erasmus project on sustainability. It is noteworthy that the ability to see the whole earlier than its separate parts is considered essential to foster creativity. Similes and role-playing were also utilized to encourage creativity. The Blackboard software was used to deliver information and tasks, assess the performance and get feedback. ThinkTank software was suggested to generate new ideas and find creative collaborative solutions for the range of tasks. The process of solving tasks contained brainstorming, categorizing, and voting. Evaluation of creativity was based on Tunik's four criteria of fluency, flexibility, originality and elaboration [18]. As a result, students developed creative thinking skills and language skills.

An interesting project was also held in Indonesia using creative textbook design in ESP. Students were asked to design a job-related ESP textbook. The project improved a learner's cooperation, knowledge and creativity, plus enhanced the learner's social values [19]. At first, students were asked to choose the area of their interest and do needs analysis in the field (for example, English for the Chemist). Based on this information, students present the textbook outline to discuss and improve the book. At the final stage, they design a cover, write a table of content, complete all units, and present the book.

Despite the fact that some ESP teachers in different countries try to use creative approaches and sometimes make claims about their positive influence on students' creative thinking skills development, students' perceptions of fostering creative thinking skills in the ESP classroom is not usually studied. In Portugal, the research about perceptions of creativity by university students concerning their subject areas is practically nonexistent [2]. In Ukraine, there is a lack of information about creative thinking skills perception among ESP students and teachers. Since "culture influences people's attitudes towards the value and utility of creative endeavours" [2], it is relevant to compare how fostering these skills are understood and used in different countries.

The results of the study can be helpful to foster students' creative skills in ESP classes, for art and ESP integration or STEAM (Science, Technology, Engineering, Arts) implementation as BA students' answers are compared with BSc students' answers. The finding can help ESP teachers in different countries reconsider their usual practices for creative thinking skills boosting while trying new approaches.

Research questions include investigating:

- Whether creative skills development is considered to be an important objective of learning ESP for Portuguese BA and Ukrainian engineering students and ESP teachers in Ukraine and Portugal.
- ESP Ukrainian and Portuguese teachers' classroom approaches and tasks for fostering creative thinking skills.
- Whether ESP teachers of future engineers in Ukraine and BA students in Portugal use the same or different methods/approaches for fostering creative thinking skills.

It is also necessary to define creative skills that are perceived to be necessary, and the professional situations where ESP students in both countries can use these skills.

2 Purpose

The purpose of the study is to investigate how fostering creative thinking skills is perceived at the ESP lessons by university students and ESP teachers in Portugal and Ukraine. The scientific variability of the results lies in understanding the similarities and differences between the perception of creative thinking skills in ESP classrooms in different cultural contexts and academic areas, in particular, by Portuguese BA and Ukrainian BSc students and by their ESP teachers in Portugal and Ukraine. The teachers of the students asked in both countries tried to apply creative approaches in their ESP classrooms.

3 Methodology

An online survey about fostering creative skills in the ESP classroom was conducted with Portuguese and Ukrainian English teachers and students in the spring and summer of 2020. The students' sample size was approximately the same for each country (43.8% for Portugal and 56.2% for Ukraine), as seen in Figure 1.

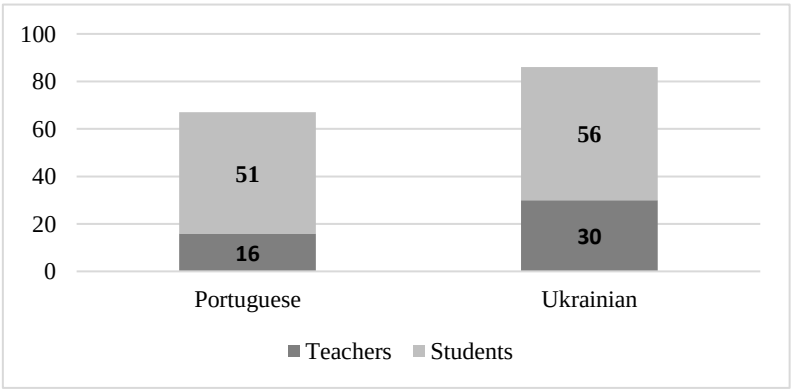

Fig. 1. Sample distribution

For the research ESP teachers and students from Ukraine and Portugal were asked about their perception of fostering creative skills in their ESP classrooms, and common types of creative tasks used in their ESP classes. A total of 153 volunteers participated in completing the questionnaires anonymously. Results from Portugal and Ukraine were compared and analysed. Observation, classification, specification methods were also used.

Portuguese ESP teachers were from Lusófona University and other higher education institutions and training centres in Portugal, offering ESP. All 51 respondent students were from Lusófona University, from the School of Communication, Architecture, Arts and Information Technologies and the Faculty of Social Sciences, Education and Administration. The undergraduate students were enrolled in BA courses in the areas of Tourism, Communication and Journalism and Applied Communication: Marketing, Advertising and Public Relations.

The Ukrainian ESP teachers were from the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute" (Igor Sikorsky KPI). All 56 students were future engineers from the technical departments of Igor Sikorsky KPI.

This selection was made to compare the perceptions of creative skills development between BA and BSc students and their ESP teachers in two culturally different contexts.

Semi-structured online interviews were also held in spring 2021 with 37 ESP students of Igor Sikorsky KPI. This method was added after the results from the previous questionnaires stating that role-play is underused by ESP teachers in Ukraine. This method helped us to gather students' reflections on the efficiency of role-playing for the development of the creative skills of future engineers.

This study reveals an opportunity for further exploration of the landscape about the perception of creative thinking skills in ESP classrooms in Portugal and Ukraine as well as in other culturally different contexts.

The research methodology also involved the analysis of Ukrainian ESP teachers' professional development to check if it involves modern international training on creative skills development. The study also included a theoretical analysis of the modern international experience of fostering creative thinking skills at the ESP lessons worldwide.

4 Results

4.1 Results from Portuguese teachers

The 16 Portuguese teachers who answered the survey believe that creative thinking skills are important for ESP learners; they try to foster students' creative thinking in their ESP classes; they want their ESP courses to be more focused on the development of creative thinking skills; and they agree that creative thinking skills in ESP include analysis, making new associations, comparisons, experimenting, searching new methods and information needed for problem-solving. Twelve teachers shared their practices to foster students' creativity, half of them use role-playing (50% – 6

teachers). Problem-based learning (PBL) was used by 5 out of 12 teachers (41.7%) in their classes.

Although there was unanimity about the importance of creative thinking skills for ESP, teachers spend different amounts of their class time on fostering them. On a Likert scale of 5 points, in which 1 means 0% and 5 means 100% of the time, five (31.3%) teachers chose option 2, five (31.3%) chose option 3 and six (37.5%) chose option 4. However, when asked how much time of the lessons they would like to spend on creative skills development, five teachers (31.3%) chose option 3, nine (56.3%) chose 4 and two (12.5%) chose 5. These results show that, although teachers spend some time of their lessons on fostering creative thinking skills, they would like to spend more time on that, as seen in Figure 2.

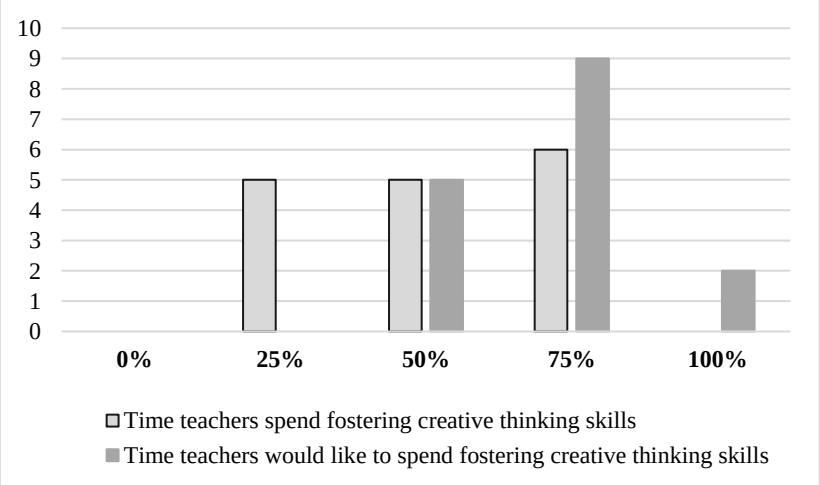

Fig. 2. Class time spent on fostering creative thinking skills (Portugal)

Most teachers (87.5% – 14 respondents) think that creative thinking skills development should be one of the objectives of learning ESP. Four respondents (25%) would choose creative tasks (for example professional debates, digital storytelling, video creation, role-playing profession situations, designing job-related games) for teaching English, the majority (75% – 12 respondents) would also include an emphasis on grammar, writing down new vocabulary, retellings of the texts connected with the future job, and specialist terminology.

4.2 Results from Portuguese students

All 51 Portuguese students who answered the survey agreed that being creative is important for their future jobs; and that fostering their creative skills can stimulate, engage, motivate, and improve their self-esteem and confidence in their abilities. The majority (94.1% – 48 respondents) said that creative thinking skills development in their English lessons is important for them and think that their ESP lessons can help

them develop their creative thinking skills. Concerning their professional situations that require more creative thinking skills, students mentioned job interviews, media, marketing, design-related actions, advertising, sales, product launch, brainstorming process, writing, prototyping, event organization, presentations, and similar situations.

Forty-three respondents (84.3%) would like ESP to be taught more creatively, and 72.5% (37 respondents) have tried to do creative tasks in their ESP classes. Of these, 97.5% (36 respondents) like working on creative tasks within their ESP course; and 92.3% (34 students) believe creative tasks help them to be engaged in the lessons. Some of them have already experienced role-play, presentations, debates, and creative projects as ESP tasks that can improve their creative thinking skills.

When asked about creative thinking skills they would like to develop in the ESP classroom, forty-two students (82.4%) selected the option "searching for new ways to solve the problems", twenty-nine (56.9%) selected "trying new experiments/tests", twenty-two (43.1%) chose "creating new associations and interdisciplinary links" and twenty-one (41.2%) selected "choosing new information sources", as seen in Figure 3. Moreover, forty (78.4%) also believe they need to be creative at job interviews, and twenty-eight (54.9%) believe they need to apply creative thinking skills to pass IELTS or any other tests for B2/C1.

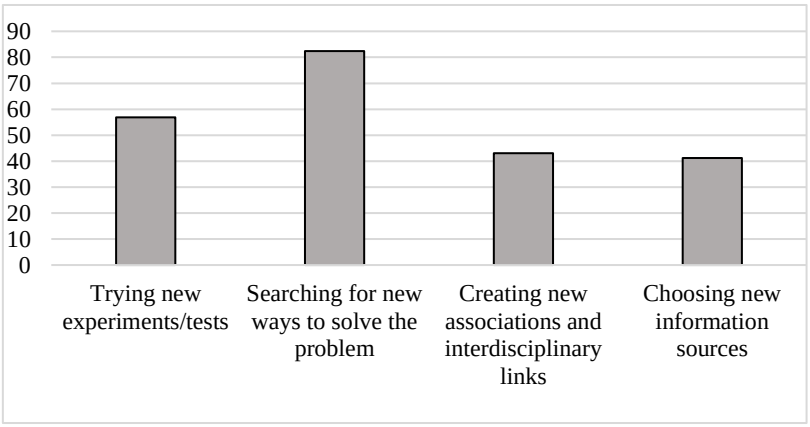

Fig. 3. Important creative thinking skills (Portugal)

Regarding their lessons, only three students (5.8%) would choose the main emphasis for learning ESP to be on grammar, writing down new vocabulary, retellings of the texts connected with the future job, and specialist terminology, while nineteen (37.3%) would choose creative tasks (for example professional debates, digital storytelling, video creation, role-playing professional situations, designing job-related situations), and the majority (56.9% – 29 respondents) would prefer both options.

4.3 Results from Ukrainian teachers

Thirty Ukrainian teachers participated in the survey. Unlike Portuguese teachers, there was no unanimity in their answers. However, a majority of 90% (30 respondents) believe creative thinking skills are important for ESP learners and try to foster students' creative thinking in their ESP lessons; 93.3% (28 respondents) want their ESP course to be more oriented on creative thinking skills development and agree that in ESP it includes analysis, making new associations, comparisons, experimenting, searching new methods and information needed to solve problems. Almost all Ukrainian teachers (86.6% – 26 respondents) shared their practices to foster students' creativity, and most of them use project-based learning (57.7% – 15 teachers) or PBL (34.6% – 9 teachers) in their classes to foster students' creative thinking skills.

When asked to represent how much of the lesson they spend on fostering students' creative skills, on a Likert scale of 5 points, four teachers (13.8%) chose option 1, eleven teachers (37.9%) chose option 2, twelve (41.4%) chose 3, one (3.4%) chose 4, and one (3.4%) chose 5. When asked how much of the lesson they would like to spend on creative thinking skills development, one teacher (3.3%) chose option 1, four (13.3%) chose 2, five (16.7%) chose 3, seventeen (56.7%) chose 4, and three (10%) chose 5. The results are similar to the previous ones and show that, although teachers spend some time of their lessons on students' creative thinking skills development, they would like to spend more time on that, as seen in Figure 4.

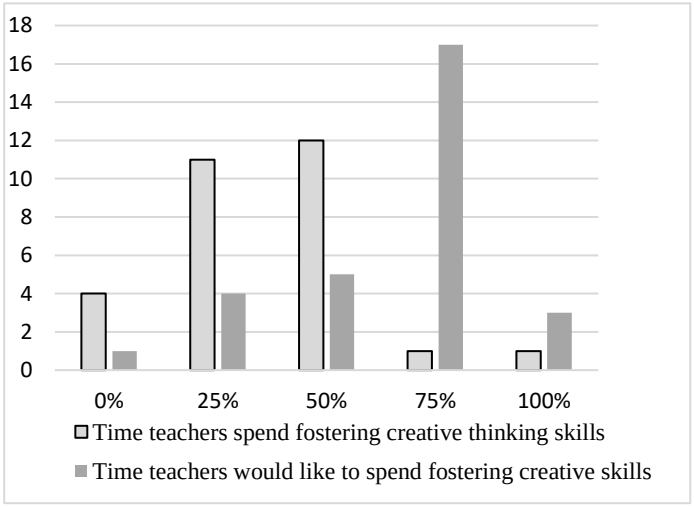

Fig. 4. Time of lessons spent on fostering creative thinking skills (Ukraine)

However, when we compare the results in percentages from Portugal and Ukraine, it becomes clear that Portuguese teachers spend a lot more time on creative thinking skills development and would also like to spend more than Ukrainian teachers do. The comparison is shown in Figure 5.

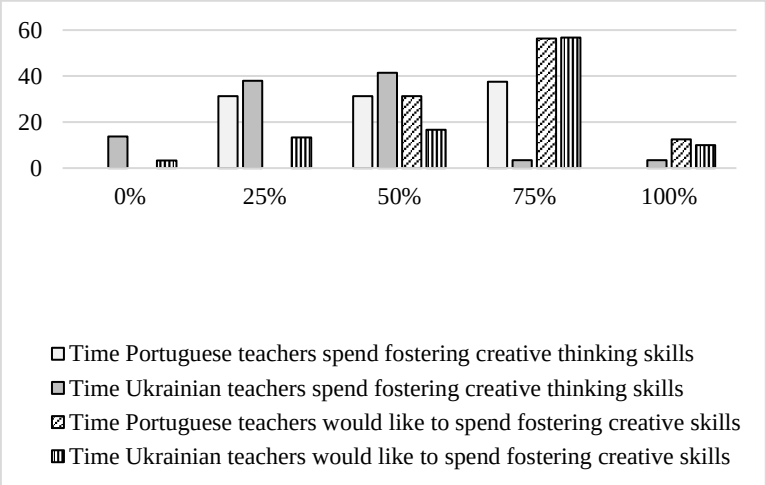

Fig. 5. Comparison of time spent on fostering creative thinking skills

Most Ukrainian teachers (80% – 24 respondents) think that creative skills development should be one of the objectives of learning ESP, and while nine respondents (30%) would choose creative tasks (for example professional debates, digital storytelling, video creation, role-playing profession situations, designing and modelling job-related situations) for teaching English, the remainder (70% – 21 respondents) would also include the main emphasis to be on grammar, writing down new vocabulary, retellings of the texts connected with the future job, and specialist terminology.

4.4 Results from Ukrainian students

A total of 56 Ukrainian students participated in the study and, unlike Portuguese students, there was no unanimity in their responses. Fifty-three (94.6%) agree that fostering creative thinking skills can stimulate, engage, motivate, and improve their self-esteem and confidence in their abilities; and forty-six (82.1%) think their ESP lessons can help them develop these skills. Also, forty-four students (78.6%) said that creative thinking skills development in their English classes is important for them, and forty-three 76.8% believe that being creative is important for their future jobs. When asked about the professional situations where they would need to apply their creative skills, they mentioned job interviews, creation of new projects, development of new products, communication with foreigners, problem-solving.

In addition, forty-four students (78.6%) informed they have already tried to do creative tasks in their ESP classes; and thirty-three (58.9%) would like ESP to be taught more creatively. Of those who have experienced it, forty-five (80.4%) like working on creative tasks within their ESP course; and forty-four (78.5%) believe creative tasks help them to be engaged in the lessons. Some of the creative ESP tasks

they have had were creative writing, projects, debates, presentations, and activities with movies or drawings.

When asked about which creative thinking skills they would like to develop in the ESP classroom, forty students (71.4%) selected the option "trying new experiments/tests", thirty-nine (69.6%) selected "searching for new ways to solve problems", thirty-two (57.1%) selected "creating new associations and interdisciplinary links", and twenty-five (44.6%) selected "choosing new information sources", as seen in Figure 6. Most students (69.9% – 39 respondents) also believe they need to be creative in the job interview, but only thirteen (23.2%) believe they need to apply creative thinking skills to pass IELTS or any other tests for B2/C1. Those who believe creative thinking skills are important to pass the tests said it is more important to the writing and speaking exams.

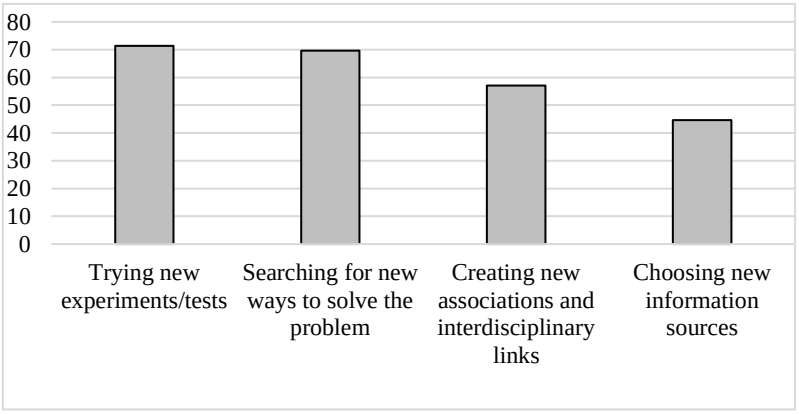

Fig. 6. Important creative thinking skills (Ukraine)

Concerning their lessons, eight students (14.3%) would choose the main emphasis to be on grammar, writing down new vocabulary, retellings of the texts connected with the future job, and specialist terminology for learning ESP, while twelve (21.4%) would choose creative tasks (for example professional debates, digital storytelling, video creation, role-playing professional situations, designing job-related situations), and the majority (64.3% – 36 respondents) would prefer both options. However, while Portuguese students (37.3% – 19 out of 51 respondents) chose more emphasis on creative tasks than Portuguese teachers (25% – 4 out of 16), Ukrainian students (21.4% – 12 out of 56 respondents) chose less emphasis on creative tasks than Ukrainian teachers (30% – 9 respondents out of 30), as seen in Figure 7.

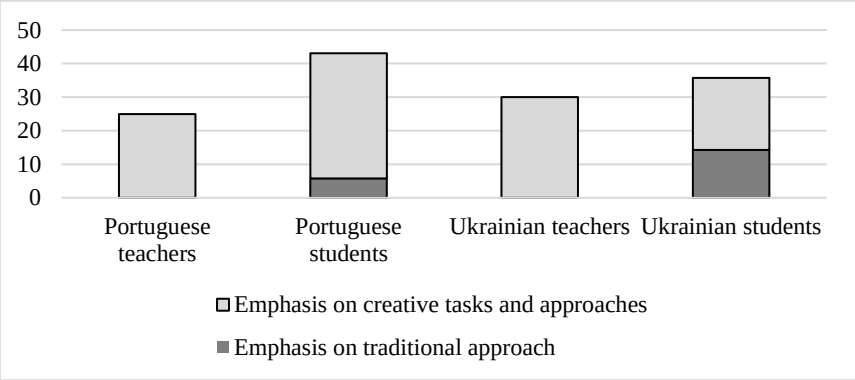

Fig. 7. Comparison of choices regarding English lessons

Having analysed the results that ESP teachers in Ukraine underuse role-playing to foster creative thinking skills of future engineers, an additional interview was held in spring 2021. Thirty-seven Ukrainian future engineers were interviewed about the influence of role-playing on the development of creative thinking skills which they can use in the professional setting in the future. To increase students' understanding of role-playing they had to choose a card with a role and in pairs create a dialogue at home and play it at the lesson. They performed the roles of interviewers and interviewees (famous scientists). Students also revised the types of creative thinking skills using infographic materials. Students' reflections on predetermined questions were analysed. Most of them (83.8% − 31 respondents) expressed the opinion that role-playing can help them utilize acquired creative thinking skills in the professional setting in the future. Among the creative thinking skills, they mentioned communication, analysis, problem-solving, openmindedness. One of them expressed the opinion that "role-playing can help develop creative thinking skills necessary for the future job only if it is applied on a regular basis in the ESP classroom". Six students (16.2%) concluded that role-playing is not necessary because as future engineers they are going to follow instructions and standard procedures that don't require any creativity.

5 Discussion

According to the results of the questionnaires we got, PBL turned out to be popular in both countries – 34.6% (9 teachers out of 30 in Ukraine) and 41.7% (5 teachers out of 16 in Portugal) confirmed that they use this approach for their ESP lessons to foster creative thinking skills. In PBL students enjoy the process of solving a problem or special task and eventually, with teachers' prompting if required, they reach the solution. PBL is a well-known approach for fostering students' creative thinking skills. As Jaleniauskiene confirms, it can help to integrate the development of the 21st-century higher-order thinking skills [20]. The fact that it is used in both countries

correlates with the idea of ESP teaching becoming more international and oriented towards the development of 21st-century skills.

Studying the approaches chosen by the scientists who foster creative thinking skills in the ESP classroom, we noticed that a great number of them chose project-based learning [13]-[16]. Many ESP teachers choose it to implement their creative approach. It was discovered that most Ukrainian teachers who participated in the research have used project-based learning (57.7% – 15 teachers who shared their experience) in their classes. However, it turned out to be not popular in Portugal where there was also a greater use of role-playing (6 teachers out of 12) as a part of a creative approach.

Project-based learning is an instructional approach that engages students in an organized and cooperative manner [21] to get a result/product. It focuses on content and the process of creation. The result can be a product, presentation or performance [22]. This approach helps students to generate their ideas by solving relevant tasks. We agree with Ismuwardani, Nuryatin, Doyin [23], Ravitz [24] that project-based learning significantly affects students' creative skills and consider it to be one of the best approaches used in ESP to boost creativity.

Besides, project-based learning allows teachers to use different resources leaving space for students to choose the resources they consider relevant and purposeful for future jobs and interests. Project-based learning challenges students to think, conduct research, solve authentic problems, meet deadlines, and employ creative thinking and digital skills [25]. Project-based learning helps students to move from reproductive to meaningful language use. It increases students' motivation, engagement, autonomy, communication skills [19], [26]. Sometimes it takes additional time for teachers to prepare thoughtful scaffolding for this approach. On the other hand, a teacher's workload can be reduced because they encourage students to find resources for project-based learning [27] so teachers can maintain their facilitator role.

Fifty per cent (50% – 6 out of 12 Portuguese teachers) confirmed that they use role-playing in their ESP lessons to boost student's creative thinking skills. Bekteshi [28] states that "creativity as a skill could be easily noticed in dramas and role-plays". Another research in Romania [29] revealed that creativity, when applied in relevance to ESP, drama and theatre prepares students for better communication in their profession, makes the process of learning easier and joyful, develops creative thinking skills and self-confidence of the students. Lithuanian researchers [25] studied creative ways of building ESP vocabulary. They consider that role-playing, especially mock trials (imitated ones) helped law students to build their ESP vocabulary in a meaningful and interesting way.

The results of the interviews proved that future engineers (83.8% − 31 out of 37 ESP students) have a positive attitude to role-playing as a mean to develop their creative thinking skills which they can use in the professional setting in the future. It proves the fact that Ukrainian ESP teachers should reconsider the power of role-playing, develop more professionally oriented role-playing games and use them more often.

Twenty-eight respondents (93.3%) of Ukrainian ESP teachers and 100% (16 respondents) of their Portuguese colleagues confirmed the wish for their ESP course

to be more oriented on creative thinking skills development. This result is consistent with previous research from other countries which confirms that teachers of English also have a positive opinion about the value of creative thinking skills cultivation [30], [31].

The findings showed that the majority of ESP teachers in both countries would like to spend more time on fostering creative skills than they did. Forty-three Portuguese students (84.3%) and thirty-three (58.9%) of Ukrainian ones would like ESP to be taught more creatively. However, positive attitudes are not enough as it turned out that teachers still combine creative and traditional approaches to learning ESP (75% of Portuguese and 70% of Ukrainian ESP teachers). Retellings of the texts connected with the future job and rote learning of specialist terminology are still often used. This result can be caused by the fact that ESP teachers feel unprepared to foster creativity in their classroom. Moreover, this finding also correlates with previous research [32] and students' answers: twenty-nine Portuguese respondents (56.9%) and thirty-six Ukrainian ESP students (64.3%) chose for their ESP lesson to be a combination of creative tasks and traditional approach with emphasis on grammar, writing down new vocabulary, retellings of the texts connected with the future job, and specialist terminology. This result can be explained by the fact that students in both countries are still not used to creative approaches to learning a language. Another reason can be connected with the fact that learning results are often expressed in analytical terms. For example, all Ukrainian BSc students take their English language proficiency standardised test for master's admission. A similar problem is detected in other countries. For example, in Albania where traditional methods or tests are stressed more in the classrooms [31]. Also, there is international research on fostering student's creativity in 11 countries that also proved that it is difficult for teachers to change their teaching practices and expand their teaching portfolio [33].

However, it is important to remember that some tests also contain open-ended reasoning, classifying, and explaining tasks that demand critical and developed creative thinking skills. Moreover, they allow students to see the problem from different sides and analyse it better. Job interview questions usually check creative thinking skills which can be developed due to a creative approach. In spite of the fact that high school or university students are expected to apply creative thinking skills in professional situations, their development is not often an objective of the learning and assessment process in the ESP classroom. It is sometimes not perceived as a key skill to be developed in the ESP classroom especially in the engineering context.

Meanwhile, ESP should be taught more creatively because finding brand new solutions is an important part of many jobs. As De Bono states, better and more creative thinking will result in more profits [34, p. 151] as creative abilities form an integral part of an innovative productive professional activity [35]. There is a need for pedagogical activities with a creative component [36], utilizing arts processes and practices [37]. Creativity is a necessary ability because it could be one of the drivers in the learning process by stimulating knowledge conversions [38]. However, some teachers think that creative tasks take too much time and it is hard to control the process of their completion and check the result. Taking into account the limited time allocated for ESP (for example, 90 minutes of classroom activity once per week for

all courses at the National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute"), many teachers try to place additional emphasis on the traditional approach which involves memorizing grammar rules, writing down new vocabulary, a retelling of the texts connected with future job and rote learning of specialist terminology, leaving less space for fostering creative skills.

The fact that students in both countries often chose to try new experiments (71.4% of Ukrainian and 56.9% of Portuguese), searching for new ways to solve the problem (69.6% and 82.4%), creating new associations and interdisciplinary links (57.1% and 43.1%), choosing new information sources (44.6% and 41.2%) as skills they want to develop in the ESP classroom supports and promotes the idea of implementation of STEAM and other interdisciplinary approaches in the ESP classroom.

Fifty-one Portuguese students mentioned professional situations that require creative thinking skills. These are job interviews, media, marketing, design-related actions, advertising, sales, product launch, brainstorming process, writing, prototyping, event organization, presentations. Fifty-six Ukrainian ESP students noted job interviews, creation of new projects, development of new products, communication with foreigners, problem-solving. As can be seen from the results BA and BSc students tend to have similar professional situations where they need to apply creative thinking skills.

Among creative ESP tasks, BSc students in Ukraine mentioned creative writing, projects, debates, presentations, and special activities with videos or drawings. Portuguese BA students experienced professional debates, digital storytelling, video creation, role-playing professional situations, designing job-related situations in their ESP classrooms. This list can inspire ESP teachers to use different creative tasks for students from different cultural contexts.

Although Ukraine and Portugal have different cultures in general, ESP teacher training and methodology is becoming more and more international. One of the positive changes is that more and more enthusiastic teachers tend to visit teacher-training courses, conferences, seminars, and webinars where creative approaches are introduced. Sometimes ESP university teachers in Ukraine and Portugal attend similar professional development training to widen their teaching approaches. These events are provided by British Councils, American Embassy in different countries and other international organizations and language specialists for language teachers from all over the world. Some of the training promotes creative thinking in the ESP classroom. The global pandemic in the world made it easier for ESP teachers in Ukraine and Portugal to become a part of international language teacher's communities using online means of communication. As a result, 34 in-service ESP teachers of the Department of English for Engineering № 1 at Igor Sikorsky KPI completed 3344,3 hours of professional teacher development in March-December 2020. Although the educators mostly concentrated on ICT teacher skills, 18.4% of all their training was about teaching approaches, methods and techniques. Some webinars such as Developing Critical Thinking Skills, how to teach pronunciation creatively, Project-based learning during quarantine helped educators to foster creative thinking skills in their classrooms. ESP teachers in different countries in turn should visit more professional training on fostering creative thinking skills, develop or adapt curriculum

with emphasis on creative skills development taking into account cultural beliefs and norms, interests of each specific group of students, their age, level and needs. There is still much work on the way of ESP learners' creative skills development at the tertiary level in Ukraine and Portugal.

6 Conclusion

ESP teachers should pay more attention to the development of creative thinking skills as an important factor of staying competitive in the 21st century. Almost all participants agreed with the importance of fostering students' creative skills in the ESP classroom. The answers to the questionnaires conducted among 30 ESP teachers in Ukraine and 16 in Portugal showed that they thought that creative skills development should be one of the objectives of learning ESP and they would like to spend more time on fostering creative thinking skills than they did. However, it contradicts with their classroom approach as most teachers and students asked in Portugal and Ukraine (75% – 12 Portuguese teachers and 56.9% – 29 Portuguese students compared to 70% – 21 Ukrainian teachers and 64.3% – 36 Ukrainian students) chose both creative approach and rote learning of grammar, writing down new vocabulary, retellings of the texts connected with the future job, and memorizing specialist terminology. These findings in creativity perceptions lead to the necessity of additional professional education, training of the educators in the sphere of creative skills development, the introduction of more creative activities for learning grammar, terminology, and using creative retelling.

Besides, it was found that Portuguese teachers, more than Ukrainian teachers, spend and would like to use the time for fostering creative thinking skills in their classrooms. This fact can be caused by the historical tradition of language learning in Ukraine and the necessity of additional professional development of educators.

It was discovered that most Ukrainian teachers use project-based learning (57.7% – 15 teachers) in their classes while Portuguese colleagues prefer role-playing (50% – 6 teachers) to foster students' creative skills. This may be caused by the fact that Portuguese students are bachelors of art while Ukrainians are bachelors of science. This result can stimulate teachers to try different methods/approaches for fostering creative thinking skills as both role-playing and project-based learning can be efficient for fostering creativity in BA and BSc students.

However, despite the different academic areas of students, PBL turned out to be popular in both countries – 34.6% (9 out of 26 teachers in Ukraine) and 41.7% (5 out of 12 teachers in Portugal) use it to foster creative thinking skills.

To conclude, in spite of political, socioeconomic, cultural differences between Ukraine and Portugal, there are similarities in perceptions of fostering creative thinking skills by Ukrainian and Portuguese teachers and students in the ESP classroom at the tertiary level.

The research opens the opportunity for further research into perceptions of creative thinking skills in the ESP classroom by students and teachers from Ukraine, Portugal, and other cultural contexts. Such research can help ESP teachers and students further

cultivate a positive mindset towards fostering creative thinking skills and motivate ESP teachers to attend professional training on the topic and implement diverse creative practices in their classrooms.

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8 Authors

Nataliia Saienko is a Professor, Dean of the Faculty of Linguistics, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Peremohy Avenue, 37, 03056, Kyiv, Ukraine. E-mail: saenko106@gmail.com Her research interests relate to Psycholinguistics. ORCID 0000-0001-8898-5198

Yuliia Olizko is an Assistant Professor, The Department of English for Engineering № 1, National Technical University of Ukraine "Igor Sikorsky Kyiv Polytechnic Institute", Peremohy Avenue, 37, 03056, Kyiv, Ukraine. E-mail: juliukrainekyiv@gmail.com She is interested in art and ESP integration in a foreign language classroom. ORCID 0000-0003-3473-9324

Ana Cunha is an Assistant Professor at Lusófona University, Avenida do Campo Grande, 376, 1749-024, Lisbon, Portugal. E-mail: ana.cunha@ulusofona.pt She coordinates the Translation and Languages Department and European projects related to Language teaching. She is interested in ESP integration in a foreign language classroom. ORCID 0000-0003-2522-402X

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