Creating ESP-Based Language Learning Environment to Foster Critical Thinking Capabilities in Students’ Papers

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Abstract: The purpose of this research is to experimentally evaluate how the “flipped classroom” model used to deliver Business English, which is commonly an integral part to the ESP course at tertiary schools of Economics in Ukraine, to the students majoring in Economics fosters students’ critical thinking skills and improved their academic performances and what students’ perceptions of this model are. The learning environment used a multimedia-based textbook entitled “Business skills through English”. This was experimental research which used a mixed-methods approach. Students’ critical thinking skills and academic performance (learning outcomes) were the variables for this study. Placement tests, needs analysis questionnaires, Course Satisfaction Questionnaire, a test to assess the students’ critical thinking skills were used to collect the statistical data. Cronbach Alpha coefficient was applied to interpret the test on critical thinking data and SPSS AMOS statistical package programme was used to analyse the consolidated data. The study found that the “flipped classroom” model used to deliver ESP and Business English to the students majoring in Economics has the potential to provide a better learning experience for the students and teaching experience for the teachers. This model fosters students’ critical thinking skills by involving them in problem-solving-based learning and improves their academic performances by increasing their responsibility for learning results and stimulating them to use different learning styles. Overall, the above model substitutes a teacher-centered with a student-centered approach that engages learners in the true-to-life business world and language environment. In this way, learning Business English and ESP at higher educational institutions in Ukraine is a move from just training memory (memorizing professionalism-related English vocabulary and doing grammar drills) to applying language as a learning medium in the specifically designed vocational contexts.

Keywords: Flipped classroom, higher educational institutions, multimedia textbook, students majoring in economics, teaching professionalism-related English.

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Introduction

Creating a learning environment that fosters students’ critical thinking capabilities addresses the recent trends in the modern system of occupational training in tertiary school. These trends are not only about obtaining knowledge independently but also about the use different ways of gaining it, using a variety of information sources, to carry out a critical analysis of the information obtained based on the comparison of opposite views and approaches to form their attitude to a certain problem, to present and question their point of view, to make the right decisions. This, in turn, emphasises the need to develop students’ critical thinking. Accordingly, in the process of teaching a foreign language as a component of professional training, apart from developing students’ foreign language communicative competence, it is important to take into account the aspects of their future professional activity. It is crucial to ensure not only the acquisition of educational information but also the development of their critical thinking, which will allow them to fulfill professional tasks in the future (Amaral, 2014; Leutner, 2014; Education 2030, 2018; Norlis et al., 2018).

Practical experience of teaching the subject “Foreign Language for Specific Purposes” reveals several contradictions that impede the development of critical thinking of future professionals, namely: 1) the increase in the volume of information, but at the same time, a certain information deficit, in particular, of foreign language professionally-oriented educational materials for the development of critical thinking; 2) highly specialized focus on the textbooks made by teachers, the emphasis on the acquisition of professionally-oriented topics and terminology but insufficient
attention to the development of skills, including critical thinking, necessary for a particular situation in professional activities; 3) the importance of creating a foreign language environment for the development of critical thinking of students and lack of appropriate methodical support (Almarabeh et al., 2015; Babiker, 2015).

Thus, the relevance, as well as insufficient theoretical development of the problem and the need to resolve these contradictions, determine the choice of the research topic, namely, the creation of a foreign language environment for the development of students’ critical thinking in the process of teaching a foreign language for specific purposes (Gu et al., 2014).

Specifics of ESP curriculum at tertiary schools of Economics in Ukraine

It is common for the ESP course design at tertiary schools of Economics in Ukraine that it consists of two parts: first, Business English or soft skills English delivered to the first and second-year students as the induction course to the ESP, and second, the ESP core course covering students’ specialism-related topics. The soft skills course trains students in socialising, presenting, participating in meetings and negotiations, telephoning, and performing written business communication. It also increases students’ awareness of basic business concepts and context-related functional language and grammar. The ESP core course usually covers financial, economic and management topics using CLIL or task-based approaches.

In this study, the Business English course as an integral part of the ESP curriculum was used to run the experiment.

The concept of critical thinking and ESP

This literature review found that scholars interpret the concept of critical thinking in different ways. Different definitions of this concept (Skinner, 1976) are mostly based on three main approaches to understanding the essence of critical thinking. Those definitions were as follows: 1) a mental ability or a system of aspirations (Halonen, 1995; Halpern, 1998; Verburgh et al., 2013; Saleh, 2019); 2) an approach to solving the problem (Saleh, 2019; Heard et al., 2020); a skill (Saleh, 2019). In our opinion, Davies (2014) made the most comprehensive classification of critical thinking skills including analysing arguments, claims or evidence; judging or evaluating arguments; making decisions or problem-solving; drawing conclusions using a variety of standard reasoning patterns such as induction and deduction; predicting; reasoning verbally; interpreting and explaining; identifying assumptions; defining terms; asking questions for clarification.

In this study, critical thinking will refer to a set of skills (perform linguistically in certain business context appropriately – present information (as an argument) in a structured way, network affectively, maintain the flow of a conversation, arrange and hold a meeting/negotiation, deal with business issues in writing), knowledge (basic business concepts and procedures, cross-cultural awareness, professionalism-related vocabulary, and functional structures) and relationships (critically evaluate students’ own linguistic behaviour and their partner’s reactions) seen as a formation comprising argumentative, reflexive and affective components. This definition is a modification of the interpretations suggested by Davies (2014), Facione (2000), and Watson and Glaser (2008) and they summarise all previous definitions and reflect the components of critical thinking referred to in this study.

Davies (2013; 2014), Hammersley-Fletcher and Hanley (2016), Simpson and Courtney (2009), Shin et al. (2006), Whiley et al. (2017) and others emphasise the importance of the development of critical thinking in settings of the vocational training at tertiary school. Since language training has become a part of both vocational training and professional competence, Edberg (2018), Pessoa et al. (2018), Wilson (2016) draw attention to the importance of the development of critical thinking in the process of communication activity along with the development of receptive (reading) and productive (writing) speech skills that addresses the concept of ESP training that is supposed to combine both job-related skills training and language training simultaneously (Moore, 2017).

Despite the theoretical research of the problem of critical thinking, the issues of methodological support, in particular in the process of teaching the subject “Foreign Language for Specific Purposes” have not been sufficiently studied.

The “Flipped classroom” and ESP

The literature review found that the “Flipped classroom” learning concept has been studied as an integrated technical, instructional and psychological phenomenon (Panopto, 2015; Educause, 2012; Bykonia et al., 2019; Chung & Lee, 2018) which is referred as a multi-tool approach and is capable to change the perception of teacher and learner roles. It this study, the flipped classroom will be addressed as an instructional model taking advantage of the use of extracurricular time to engage the students in out-of-class activities to do all sedentary work before the class. Computers, mobile devices, and multimedia tools seem to fit this purpose best as they support learning through both the learner-generated context and different kinds of resources like video content, audio content, texts, educational use software. Panopto (2017) cited seven flipped classroom concepts that are utilised in tertiary school and ESP settings. They were the standard inverted classroom, the discussion-oriented flipped classroom; the demonstration-focused flipped classroom,
the faux-flipped classroom, the group-based flipped classroom, the virtual flipped classroom, flipping the teacher model.

Additionally, it aims at engaging students in active learning, changing students’ learning styles, optimizing the use of class time (Flip Learning, 2015; Giannakos et al., 2018). Having reviewed the currently applied flipped classroom concepts (Panopto, 2017), the discussion-based, faux-flipped and group-based types of flipped classroom models were opted in this study to elaborate on and found suitable for teaching the ESP (English for Specific Purposes) to the students majoring in Economics. This was for several reasons like increased class time for teacher-student and student-student interactive study, increased responsibility of both teachers (for the quality materials, class community building, effective classroom management) and students (for their learning outcomes and overall academic performance), increased motivation through meeting students learning needs (Cabi, 2018; Park et al., 2014; Wiginton, 2013), and increased cognitive activity (Findlay-Thompson & Mombourquette, 2014). Furthermore, Zhonggen & Wang (2016) and Cabi (2018), Findlay-Thompson & Mombourquette (2014) and Wiginton (2013) experimentally proved the effectiveness of a “flipped classroom” model to deliver the ESP courses for both instructors and students. It was found to address the pedagogic needs of the former and enhance the learning needs related to research-based and autonomous learning of the latter.

Therefore, the purpose of the study was to identify how the ESP-based language course delivered through the flipped learning model effects students’ critical thinking capabilities. The study sought to address the research questions below:

1. Is there any relationship between the flipped learning model of the ESP-based language course and improvement of the experimental group students’ critical thinking seen as a combination of such components as affective, argumentative, and reflexive?

2. Is there any relationship between the flipped learning model of the ESP-based language course and the improvement of the experimental group students’ academic performance?

3. What was the sampled students’ perception of the course delivery approach?

Materials and Methods

This was experimental research which used a mixed-methods approach. Students’ critical thinking skills and academic performance (learning outcomes) were the variables for this study. Its design and procedure were based on three stages which were a continuous flow of the empirical stage – its purpose was to examine best practices of using ESP-based textbooks to teach professionalism-related English to the future economists and specify the research gap; the experimental study – to influence the subjects sampled for this investigation through the multimedia-based textbook entitled “Business skills through English”, to collect the statistical data; and analytic stage – to consolidate and process statistical data, measure the changes in the variables (See the flow of this research in Fig. 1).

It is important to note that the core stage (the experiment) comprised two sub-stages: in the 1st semester of 2018, the studies were based on traditional mode, while in the 2nd semester of 2018 the “flipped classroom” model-based mode was used. That is, the student who was in the experimental group (EG) was treated both traditionally and through the flipped model.
Sample

The two-staged approach was used to do sampling. At the empirical stage, the general population of 541 first-year students majoring in Economics and teachers/tutors were surveyed. The online-questionnaire-based survey was administered at Odesa State University of Internal Affairs, Kyiv National Economic University, named after Vadym Hetman and Ternopil National Economic University. Following that, the population size of \( 87 \) \((e = .05)\) 95% of confidence level was calculated by the Sample Size Online Calculator. This number was used to form the experimental group (EG) involving 44 students and control group (CG) of 43 people of the first-year students of Kyiv National Economic University named after Vadym Hetman at the Faculty of Economics and Management, majoring in “Management”, “Marketing” and “Theory of Economics”. The groups were homogeneous as their needs and grades on the tests in English for Special Purposes Course were approximately the same.

Multimedia book design and experiment procedure

The multimedia book is based on methods adapted from the scientific works of Krotky and Honzikova (2013), Khaleel et al. (2016), Behnke (2016), Gunawardhana and Palaniappan (2016a, b). iSpring and SonyVegas software was used to design it. The multimedia course book entitled “Business Skills through English” was modular-based and was supposed to cover business soft oral and written skills. The modules were as follows: Socialising in Business, Presenting, Meetings and Negotiations, Telephoning, and Business correspondence, Applying for a Job. The learning activities and assignments for each module were arranged in the way as it is presented in Table 1 below:

<table>
<thead>
<tr>
<th>Module</th>
<th># of lessons</th>
<th>Learning activities and assignments delivered online</th>
<th>Learning activities and assignments delivered offline</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Theoretical basics of cross-cultural communication. Writing assignments.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>International networking through social media.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Information collection and processing. Participating in the Skype conference.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Students' written feedbacks on their groupmates’ presentations. Making videos of the students' presentations.</td>
<td></td>
</tr>
<tr>
<td>Applying for a Job</td>
<td>10 lessons</td>
<td>Seeking and analysing web job advertisements for employers’ requirements for the students’ future job, functional language to deal with writing CV, a cover letter, telephone calls, online applications. Writing a cover letter to respond to certain job advertisements. Making a personal video resume.</td>
<td>Simulations. Problem-solving tasks. Teamwork. Skills training lessons. Peer-reviewing of CVs, cover letters, simulated job interviews.</td>
</tr>
</tbody>
</table>
As formulated above, critical thinking is defined as a combination of the following components: affective that involves the actualisation of personal experience, emotions and feelings in the process of obtaining new information; argumentative that reflects the process of obtaining new information, its analysis, processing, and generalisation; reflexive that implies systematisation of the information received, its evaluation, and the development of critical attitude towards it (Davies, 2014; Facione, 2000; Watson & Glaser, 2008). In this regard, the following criteria for the relevant indicators of the levels of students’ critical thinking development were determined:

1) argumentative (the ability to correlate new information and existing knowledge, identify difficulties and gaps in knowledge, formulate a question or a problem, determine criteria for selecting information corresponding the task, compare information from several sources, exclude inappropriate and irrelevant information, distinguish between fact and opinion, analyse the problem from different perspectives, establish cause-and-effect relationships, structure, summarize information);

2) affective (the ability to correlate new information and personal life experience, to carry out emotional self-regulation when analysing information: to demonstrate the impartiality of judgments, to refrain from statements demonstrating racial, national or religious intolerance);

3) reflexive (the ability to formulate and substantiate conclusions (orally and in writing), to formulate and express one’s attitude to the problem, to self-assess the process of working with information).

At the beginning of the pedagogical experiment, the input measurements were performed using an expert assessment method called a Triangular Assessment Method that was borrowed from Pérez-Rodriguez and Rojo-Alboreca's research (2017) and that was based on deciding a criterion using alternatives ranged by the intervals.

The obtained results showed insufficient development of critical thinking among students of experimental (E) and control (C) groups, among whom no significant differences were found. In the process of pedagogical experiment in group C, teaching a foreign language for specific purposes was traditional, while in group E a foreign-language environment was created for the development of critical thinking as a complex of appropriate pedagogical conditions. The following pedagogical conditions can be distinguished:

We additionally supplemented the above textbook with the texts for reading and listening, and developed the appropriate set of exercises from the “Market Leader” coursebook.

For example, when studying the Module “Applying for a job” which was of particular interest to the sampled students as they were in the early stages of their career, and needed to get insights into job seeking strategy (How to be selected), master their skills in writing a cover letter and writing a selling CV (Types, Structures, Language), get aware of job interview secrets (An insight into the skills associated with interview techniques), practice participating in the selection process as both an “employer” and “employee”, practice making relevant telephone calls or/and completing online applications and having their body language analysed. The students were offered to choose materials for doing reading and listening activities themselves: interviews with experts and career development consultants, business coaches, successful entrepreneurs, etc. At the same time, students were given questions-guidelines for finding the necessary information:

1. Give a brief description of the people you’d like to introduce to your group mates.
2. What is their area of excellence? What did they do to get ahead in their career?
3. Summarize their tips for career success. Why are their tips valuable for you?

See Appendix D for the sample lesson plan. Expected learning outcomes for the EG students after completing each module

The EG students were expected to show progress in models-related language skills like speaking, listening, reading and writing. Moreover, they were supposed to show improved Internet search, observation, analysis, interpretation, reflection, evaluation, problem-solving, and decision-making (time response) skills which as indicators fall under certain criteria levels of students’ critical thinking development. They are provided further.

Due to independent research, students develop the ability to determine the criteria for selecting information corresponding the task, to compare information from several sources, to exclude inappropriate and insignificant information, to analyse the problem from different positions, to establish cause-and-effect relationships, to structure, summarize information (argumentative criterion), formulate conclusions and express their attitude to the problem (reflexive criterion).

It is worth mentioning that each thematic section of the textbook contained a quote of a famous person, but the authors do not provide work on its analysis and discussion. We believe that the work with quotations and aphorisms has great potential for the development of critical thinking of students, so the content of the quotations and how they relate to the topic under study should be discussed in micro-groups.

As formulated above, critical thinking is defined as a combination of the following components: affective that involves the actualisation of personal experience, emotions and feelings in the process of obtaining new information; argumentative that reflects the process of obtaining new information, its analysis, processing, and generalisation; reflexive that implies systematisation of the information received, its evaluation, and the development of critical attitude towards it (Davies, 2014; Facione, 2000; Watson & Glaser, 2008). In this regard, the following criteria for the relevant indicators of the levels of students’ critical thinking development were determined:

1) argumentative (the ability to correlate new information and existing knowledge, identify difficulties and gaps in knowledge, formulate a question or a problem, determine criteria for selecting information corresponding the task, compare information from several sources, exclude inappropriate and irrelevant information, distinguish between fact and opinion, analyse the problem from different perspectives, establish cause-and-effect relationships, structure, summarize information);

2) affective (the ability to correlate new information and personal life experience, to carry out emotional self-regulation when analysing information: to demonstrate the impartiality of judgments, to refrain from statements demonstrating racial, national or religious intolerance);

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The obtained results showed insufficient development of critical thinking among students of experimental (E) and control (C) groups, among whom no significant differences were found. In the process of pedagogical experiment in group C, teaching a foreign language for specific purposes was traditional, while in group E a foreign-language environment was created for the development of critical thinking as a complex of appropriate pedagogical conditions. The following pedagogical conditions can be distinguished:
1) methodical training of foreign language teachers to create a foreign language environment for the development of students’ critical thinking when teaching academic subject “Foreign Language for Specific Purposes”;

2) content and methodological support of the foreign language course for specific purposes aimed at the development of students’ critical thinking;

3) continuous monitoring of the quality of the process of students’ critical thinking development when teaching the subject “Foreign Language for Specific Purposes”.

The first pedagogical condition was implemented during scientific and methodological seminars and masterclasses, which were conducted by the foreign language teachers for specific purposes in turns. At these events, participants were introduced to the criteria and indicators of critical thinking; methods for developing students’ critical thinking were presented and discussed. For example, a seminar on “Critical Thinking in ESP Teaching” was held, which was aimed at assisting teachers in mastering the principles of the selection of educational materials and designing their methodological support for the development of critical thinking in the classroom. The following issues were discussed at the seminar:

1. The criteria for selecting course books and resources for ESP courses aimed at developing students’ critical thinking.

2. Designing worksheets and hand-outs for developing students’ critical thinking in the ESP classes.

After the above-mentioned events, the teachers had to complete the assessment and self-assessment sheets (See Appendices A, B) to summarise pedagogical experience they gained, readiness to create a foreign language environment for the development of critical thinking of students when teaching the subject “Foreign Language for Specific Purposes”.

The second pedagogical condition was implemented in the process of preparing and conducting classes of “Foreign Language for Specific Purposes”. Special attention was required to determine the content of training, the choice of appropriate textbooks and teaching materials. As a result of the pre-project study aimed at assessing the current state of English language teaching in the universities of Ukraine, which was carried out by the British Council with the support of the Ministry of Education and Science of Ukraine, it was revealed that most textbooks of the English language for specific purposes focused on the structural/grammatical approach; they do not develop the four macro skills; contain several texts through a detailed analysis of which English is taught (in these cases, the information related to the profession is given only in the vocabulary section); contain a limited set of text types; do not contain a sufficient number of communicative exercises; contain few hand-outs (recommendations for teachers, materials for assessment, audio) or do not contain them at all. Experts of the British Council recommend using international materials, in particular textbooks with a more general, rather than highly specialized focus, created by a team of highly qualified specialists. They also advise teachers to use more modern and diverse approaches to the development of their materials (Bolitho & West, 2017).

In the process of studying the material of each thematic section, the development of the affective and argumentative components of students’ critical thinking was provided when performing the task “Starting Up”, aimed at developing the ability to relate new information with personal life experience and available knowledge, identify difficulties and gaps in knowledge. Here we provide an example of this task from the section “Careers”:

Discuss these questions:

1. How ambitious are you?

2. Do you have a career plan? Where do you want to be in 10 years?

3. Which of the following would you prefer to do: a) work for one company during your career; b) work for several different companies; c) work for yourself?

What should you do to get ahead in your career? Choose the four most important tips from the list below: a) change companies often; b) use charm with your superiors; c) attend all meetings; d) go to your company’s social functions; e) be energetic and enthusiastic at all times; f) be the last to leave work every day; g) find an experienced person to give you help and advice; h) study for extra qualifications in your free time.

Each thematic section of the textbook ends with the work on solving a certain problem using the Case Study method. The fulfilment of these tasks ensures that students develop the ability to establish a cause-and-effect relationship to structure and summarize information (argumentative criterion), to demonstrate the impartiality of judgment (affective test) to formulate and justify conclusions as well as their attitude to the problem (reflexive criterion).

The third pedagogical condition was implemented with the help of charts and the application of the SWOT analysis for continuous quality monitoring of the process of students’ critical thinking development when teaching the subject “Foreign Language for Specific Purposes”. For each student of the experimental group, a chart-map with criteria and indicators of the levels of critical thinking development was designed and SWOT analysis determined the strengths and
weaknesses of a student (internal factors) in the development of critical thinking, opportunities and threats (external factors favourable to the development of critical thinking or, conversely, those preventing it). The application of SWOT analysis, updating its data during the pilot study, made it possible not only to diagnose positive and negative factors in the development of critical thinking but also to determine the scope of psychological and pedagogical support for each student.

At the end of the pedagogical experiment, the effectiveness of the foreign language environment for the development of students’ critical thinking was assessed. The aggregated research findings obtained using the expert assessment method are given in Appendix C, Table C.

**Instruments**

ESP achievement tests, needs analysis questionnaires, Course Satisfaction Questionnaire, test to assess the students’ critical thinking skills (Sarigoz, 2012) were used to collect the statistical data. Cronbach Alpha coefficient was applied to interpret the test on critical thinking data and SPSS AMOS statistical package programme was used to analyse the consolidated data.

**Results**

The experiment results showed improvements in both students’ academic performance, critical thinking skills and their perception towards the model (see Tables 2 and 3 below).

**Table 2. Students’ mean values in academic performance and critical thinking test, before and after the experiment**

<table>
<thead>
<tr>
<th>Group</th>
<th>AP (mean values)</th>
<th>CTS (mean values)</th>
<th>Cronbach’s Alpha</th>
<th>SD</th>
<th>t</th>
<th>p value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before</td>
<td>After</td>
<td>Before</td>
<td>After</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EG, n=44</td>
<td>75.87</td>
<td>77.21</td>
<td>8.72</td>
<td>9.11</td>
<td>0.791 (&gt; 0.7)</td>
<td>720</td>
</tr>
<tr>
<td>CG, n=43</td>
<td>76.33</td>
<td>77.41</td>
<td>9.12</td>
<td>9.33</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Note:** AP – academic performance; CTS – critical thinking skills.

As can be seen in Table 2, there was a greater increase in figures for academic performance and critical thinking skills in the students of the EG compared to the students of the CG.

**Table 3. Mean values for ESP Test in EG and CG, and assessment performed by the EG students**

<table>
<thead>
<tr>
<th>Group</th>
<th>Mean Value in ESP Test 100-grade scale (ECTS)</th>
<th>ESP model assessed by students, 5-grade scale</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before</td>
<td>After</td>
</tr>
<tr>
<td>EG, n=44</td>
<td>76</td>
<td>81</td>
</tr>
<tr>
<td>CG, n=43</td>
<td>76</td>
<td>77</td>
</tr>
</tbody>
</table>

The figures for both groups in Table 3 showed improvement in the ESP test after the treatment. However, the grades in the EG improved by approximately 8%, while the grades in the CG increased by approximately 1%. The figure for students’ perceptions of the ESP model used in the study was also suggestive – 4.3 out of 5.

Additionally, the sampled students reported that due to the “flipped classroom” model with multimedia-based textbook they improved their writing skills, non-adapted texts comprehension, language fluency, and research skills. Moreover, web-based activities like web-cases, web-quests, mini-case-studies improved their problem solving, time management, and lifelong learning skills. Due to those activities, students felt positive about the “flipped classroom” model of study as it increased commitment, self-assurance and learning motivation.

This implies that this model effectively fosters students’ critical thinking skills and improves their academic performance.

However, the use of technology by instructors in higher educational institutions majoring in Economics in Ukraine to create an environment which favours a student’s learning opportunities is still on the way to come. The majority of teachers in Ukraine give preference to book-based learning and reproductive activities which results in students’ academic underperformance.

**Discussion**

The study proved that there had been the relationship between the use of the flipped learning model of the ESP-based language course and improvement of the experimental group students’ critical thinking seen as a combination of such components as affective, argumentative, and reflexive. There was a relationship between the flipped learning model of the ESP-based language course and the improvement of the experimental group students’ academic performance. The
sampled students perceived the course delivery approach positively. The EG sampled students showed improvement in measurements for academic performance by approximately 8% and the critical thinking test by 0.32 points. There was a positive shift in SWOT analysis criterion-based measurements – by 0.81 points in argumentative criterion, by 0.44 points in affective criterion, and by 0.94 in reflexive criterion (see Appendix C, Table C. Generalized results of experimental work). The presented results met expectations of this research and agree with the previous studies of Edberg (2018), Pessoa et al. (2018), Wilson (2016), Moore, 2017 stating that the ESP training serves a double purpose, i.e. it develops the students professionally and linguistically. It goes in line with Giannakos et al. (2018) confirming that the flipped mode used in the ESP course changes students’ learning styles, optimizes the use of less time, provides the environment for the students to train and improve their critical thinking skills and overall learning performance.

It makes learning more engaging, interesting, self-paced and practical which prevents the student from developing a failure scenario of their behaviour. This study mode meets the students’ learning needs, their occupational sphere requirements, and equips them with the skills they need. There are some positive ‘side effects’ of the ‘flipped classroom’ learning to mention. They are as follows: self-reported increased confidence, self-reliance, commitment, motivation which are also indicators of the effectiveness of this model. It seems suggestive that students’ educational gains from “flipped classroom” learning mode were greater than those of the traditional one. Moreover, the implementation of this model could improve the institution’s image among the students and increase the institution’s attractiveness among potential students. It was found through the interview that the ESP training system using flipped mode increased student-student cooperation and students’ confidence and self-efficacy as learners.

The above suggested that the effectiveness of the “flipped classroom” learning model to deliver ESP increases when it uses interactive educational and didactic tools; when the content is authentic and there are the hyperlinks to the reference sources (Arnold-Garza, 2014).

The research contributed to the theory and methods of the ESP training (Bykonja et al, 2019; Fălăuş, 2017; Borg, 2019; Kostadinovska-Stojchevska, 2015; Mulleneaux, 2017), to the practice of using a “flipped classroom” learning mode in the ESP course settings (Findlay-Thompson & Mombourquette, 2014; Wilson, 2016), to theory and practice of developing critical thinking through language learning (Moore, 2017; Wilson, 2016).

Conclusions

This study showed that the ESP and Business English course delivered through the “flipped classroom” model can have a positive influence on the students’ critical thinking. It also has the potential to provide a better learning experience for the students and teaching experience of effectiveness for the teachers. This model involves students in problem-solving-based learning and improves their academic performances by increasing their responsibility for learning results, stimulating them to use different learning styles.

Overall, the above model substitutes a teacher-centred with a student-centred approach that engages learners in the true-to-life business world and language environment. In this way, learning Business English as an integral part of the ESP course at higher educational institutions in Ukraine move from just training memory (memorizing Business English vocabulary, doing grammar drills) to applying language as a learning medium in the specifically designed vocational contexts.

Further research is needed in incorporating computer-mediated simulations and/or multimedia tools like, for instance, clicker systems, into the above model.

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Appendix A

Event Report and Self-Evaluation Sheet

AIM
What is the main focus of your event?

CONTENT
Write a plan for your report and a summary of each point.

PRESENTATION
1. What went well during your presentation?
2. What helped you maintain your listeners' interest?
3. Did you succeed in interpreting and delivering material? What evidence is there?

INTERACTION WITH THE AUDIENCE
1. How did your co-operation with your audience develop?
2. Did all participants take active part in discussions?
3. Did you encounter any problems/difficulties? If yes, how did you address them?

AREAS FOR FURTHER DEVELOPMENT

Appendix B

Peer-Evaluation Sheet for Event Delivery

AIM AND CONTENT
1. Were the aim and objectives clear?
2. Was the content relevant to the topic?
3. Was the presented material appropriate to the professional needs and interests of the audience?

REPORT ORGANISATION
Did the presentation have a clear logical structure: introduction, body and conclusion?

DELIVERY
1. Comment on the use of visual aids.
2. Was the timing of the presentation well controlled?
3. Comment on the speed and clarity of speaking.
4. Did the presenter maintain eye contact with the listeners?
5. Comment on his/her body language.

INTERACTION WITH THE AUDIENCE
1. What modes of interaction were most frequent/effective?
2. How well did he/she deal with questions?

SUGGESTIONS AND RECOMMENDATIONS
Appendix C

Table C. Generalized results of experimental work

<table>
<thead>
<tr>
<th>Group</th>
<th>Overall average score</th>
<th>argumentative criterion</th>
<th>affective criterion</th>
<th>reflexive criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>before the experiment</td>
<td>after the experiment</td>
<td>before the experiment</td>
<td>after the experiment</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>1.44</td>
<td>2.25</td>
<td>1.81</td>
<td>2.5</td>
</tr>
<tr>
<td>K</td>
<td>1.47</td>
<td>1.73</td>
<td>1.8</td>
<td>1.95</td>
</tr>
</tbody>
</table>

Appendix D

Sample Lesson Plan

Module: Applying for a job

Topic: Writing CV and Cover Letter

Type of the lesson: Fluency/procedural skills training session

Learning outcomes: Students are expected to:

- be aware of the types, structure and language of CVs and cover letters;
- critically evaluate pros and cons of a certain CV and a cover letter;
- use appropriately the language for describing knowledge and skills;
- use persuasive language;
- present information in a structured way when writing and editing a draft of their own CV and a cover letter.

Prerequisite (prior the class) assignment: The students are supposed to do the activities to practice functional language in “Business Skills through English” multimedia book, and to do the Internet search for their future job advertisements and make a list of their potential employers’ requirements.

LESSON PLAN

<table>
<thead>
<tr>
<th>Segment/Activity</th>
<th>Presentation or tactics of engagement of students</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead-in/Eliciting</td>
<td>Whole group discussion: The teacher asks a question what the “hot” positions students found when they did the prior-the-class assignment. What the employer’s requirements were in the ads they had found. Whether the students could be hired to the jobs they had found. Why? Or Why not?</td>
<td>5 min</td>
</tr>
<tr>
<td>Team-work</td>
<td>After the above, the students are supposed to classify the requirements under three headings: qualification (background), personality, other.</td>
<td>2 min</td>
</tr>
<tr>
<td>Commenting</td>
<td>Matching the requirements to students’ experience and background: Students are assigned to suggest their own qualities and skills that match each requirement.</td>
<td>3 min</td>
</tr>
<tr>
<td>CV Quiz / Eliciting</td>
<td>Students do the CV quiz in groups of two. Students analyse several CVs for inconstancies and suggest what could be improved.</td>
<td>5 min</td>
</tr>
<tr>
<td>Functional language training</td>
<td>Students do a mini-check of vocabulary and grammar to describe students’ knowledge and skills.</td>
<td>10 min</td>
</tr>
<tr>
<td>Writing CV and cover letter</td>
<td>Students use templates to write the drafts of their own CVs and cover letters. Teacher assists them at request. The teacher summarizes and provides the comments on the students’ ideas and performance.</td>
<td>20 min</td>
</tr>
<tr>
<td>Wrap-up</td>
<td>See some video resumes on YouTube and write a scenario of their own video-resume.</td>
<td></td>
</tr>
</tbody>
</table>