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DESIGN THINKING PROJECT: GROUP WORK AS A WAY OF DEVELOPING BUSINESS SKILLS OF ENGLISH PHILOLOGY STUDENTS

**MYŚLENIE PROJEKTOWE: PRACA GRUPOWA JAKO SPOSÓB
NA ROZWIJANIE UMIEJĘTNOŚCI BIZNESOWYCH WŚRÓD
STUDENTÓW FILOLOGII ANGIELSKIEJ**

The aim of the article is to present the outcomes of a study conducted in Business English classes of English Philology third-year students at Pope John Paul II State School of Higher Education in Biała Podlaska. The students were asked to do a project following the design thinking method, popular in business environments as a way of developing the best concept of a product or service. The objective of the classes was to introduce the students to real-life business-related situations and to facilitate the development of practical skills, useful in effective work performance, team work including. Afterwards, the students were surveyed on the issues related to the idea of the design thinking project and its usefulness for the students' future careers and personal development. The reason behind the research is the fact that, apart from a fluent command of the language, foreign language university students ought to develop practical and interpersonal skills, including those related to business environments. The soft skills are of great significance in today's world as they frequently seem to be more important in everyday business communication and team work than the knowledge of economic or business issues. One way of teaching such skills to university students could be the implementation of a design thinking project which might, at least to some extent, imitate the immersion in the business environment.

Keywords: Business English, design thinking, project, English Philology students, survey

1. Introduction

English Philology curriculum is supposed to include various aspects of the language as well as studies in literature, history and culture of English-speaking countries. As a result, students of English Philology ought to have a fluent command of English. However, in today's world, they are also supposed to develop practical and interpersonal skills, including those related to business environments, especially if the students specialise in Business English. Therefore, the soft skills turn to be highly important nowadays as they frequently seem to be vital in everyday business activities and team work. Moreover, they may even be of greater significance than the hard skills which include the job-related knowledge of economic or business issues.

Due to the fact that students ought to master practical and collaborative skills as well as become more acquainted with business issues, a design thinking project was carried out in Business English classes of English Philology third-year students at Pope John Paul II State School of Higher Education in Biała Podlaska. Later, a survey was conducted whose aim was to find out the students' opinion on the concept of the design thinking project, its drawbacks and benefits as well as usefulness for the students in their professional and personal development.

2. Project-based learning

One way of making students familiar with practical and interpersonal skills is to introduce a project method in Business English classes. Such an approach has numerous benefits for students. First of all, working on a project helps students to bring the knowledge obtained in class into real-life or real-life-like situations. This in turn enhances students' motivation to further delve into the subject and thus their understanding of the problems dealt with in the project is more thorough (Kovácsné Pusztai, 2021). Moreover, students have an opportunity to practice the skills that are often neglected in a traditional approach to education, namely coping with unpredictable situations and changes, as well as making decisions and being able to rationally explain them. Last but not least, project-based learning allows students to develop group work and social interaction which are the skills that bring best learning results and might be particularly useful in the students' future careers (Krajcik, Shin, 2014).

What seems to be essential in a project-based learning approach is the fundamental principal of instructions to the students, namely the so-called driving question, which organises the idea of the whole project. Such a question should be

feasible and ought to refer to a real-life situation of importance and relevance for the students' lives. Moreover, the question should reflect the learning outcomes that the project is supposed to achieve (Krajcik, Czerniak, 2018).

The aforementioned skills apply to Business English students for whom these aspects are of great importance as well. Business knowledge put into practice brings a necessary practical dimension to the theoretical basis, especially for students who have frequently never had any professional experience before. Therefore, project-based learning seems to be one of the most prevalent approaches in teaching business, and, as Glen *et al.* (2015) argue, has become the most popular model for teaching the method widely used in business, namely design thinking.

3. Design thinking method

The design thinking method is very popular in business environments. The concept refers to “an exploratory approach to problem solving that includes and balances both analytical and creative thought processes” (Ingle, 2013, p. 2). The definition emphasises the fact that the method is used to solve problems of a varied nature but in an innovative way. In the business environment, this usually applies to the launch of a new product or service but generally the concept may refer to any situation in which a creative approach is required, including experiences or processes.

Tim Brown, one of the creators of the design thinking approach and the Executive Chair of IDEO, a company which first introduced the method, describes the idea as “a human-centred approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success” (IDEO Design Thinking). This definition focuses on the human sphere of the process as it is the needs of people that are in the centre but with regard to the technological and business aspects. In other words, design thinking is “a discipline that uses the designer's sensibility and methods to match people's needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity” (Brown, 2008, p. 2).

Ingle (2013) adds one more feature of the design thinking approach – the nonlinearity and fluidity of the whole process. Despite being ordered and organised, the method may require returning to the previous stages and reconsidering the innovative idea from a different angle or in more detail. That is why the process may seem to be tiring and frequently does not bring immediate results. However, introduced in the proper way, the design thinking approach may lead to the creation of a completely new, innovative solution to a problem discussed.

The design thinking process consists of five phases. Their names vary depending on the author or specific concept but the terminology applied in this article follows the names used by Ingle (2013). Therefore, the terms describing five phases refer to the major objectives of each of them – to understand, to define, to ideate, to prototype, and to test. Each of these stages requires different tools in order to be carried out effectively. Moreover, the members of the design thinking team may need to return to the previous phases and repeat them if the innovative concept is not developing in the right direction.

The first stage is called **the Understand phase** (although some researchers name it **the Emphasise phase**, e.g. Helman and Rosieniewicz, 2016). Its objective is to comprehend the concept or problem to which a solution is to be found. Therefore, extensive research is required concerning the background and appropriate identification of the nature of the problem. This involves gathering facts and figures but also discussing the idea with any stakeholder in this respect. What seems to be essential at this point is the ability to restrain from jumping to conclusions but rather to listen to people related to the problem. This may be achieved by forming focus groups of 3-6 people from different backgrounds and having different approaches to the problem or simply holding detailed interviews with such persons. The more information is gathered at this stage, the easier it is to continue the project.

The Define phase allows the design thinking team to describe the nature of the challenge they are dealing with. That is the moment when the problem is in fact defined. However, this is only possible if the previous stage has been conducted properly. In order to define the problem, various tools may be applied but the most common one is a SWOT analysis which facilitates the presentation of the challenge from various angles.

The next stage is called **the Ideate phase** and is focused on generating ideas for a solution to the problem in question. At this stage, the team members may use their imagination to create solutions which theoretically might seem impractical or unfeasible. The best tool for that could be the brainstorming method since in this type of activity no idea is considered as bad which moreover means that the participants should not judge any concepts at this point. The aim is to gather as many varying ideas as possible in order to have a vast choice of potential solutions.

Once the ideas are gathered, **the Prototype stage** involves selecting one or two of these concepts to turn them into prototypes. This time the decision is based on practical and logical reasoning concerning the feasibility of the solution as well as technical and business-related aspects. Since the problem may refer to a material object but also to an experience, the prototype may take different forms – it may be a mock-up or a poster with specific pictures in it. However, what is important, the prototype should be built in great detail and have a visual rather than descriptive character.

The last stage is called **the Test phase**. The prototypes are presented to potential customers or users of the solution so that the future product does not fail on the market. The persons consulting the project might have some remarks or suggestions which may further lead to the alteration of the prototyped version. Sometimes, the comments may be so negative that the whole design thinking process must start anew, with all of the five stages repeated again.

The design thinking method is widely used in business environments but may also be applied in business teaching contexts; Cross (1982) even developed a concept of design education as opposite to traditional education. Thus, education turns out to be a third area of human activity, next to sciences and humanities, which might make use of the design thinking approach. Moreover, such an approach is recommendable as it helps develop basic competencies required to successfully operate in today's world.

The Organisation for Economic Cooperation and Development (OECD) sees three essential types of competencies that should be developed in order to function in society nowadays. One of these competencies includes the ability to use technological tools as well as language and knowledge for effective interaction. The second group refers to work in groups, which involves cooperating skills and mastering one's emotions. The last category is focused on personal goals and individual time management. These three categories ought to be integrated in order to allow an individual to function in society (Koh, *et al.*, 2015).

The design thinking project conducted in educational institutions helps to develop all these three kinds of competencies. Students have to apply their knowledge as well as language and IT skills in order to prepare the materials for subsequent phases of the project. Moreover, they are required to work in teams, which means they have to negotiate their ideas and the final result of their work. Finally, apart from group work, they have to work individually as the success of the whole group largely depends on personal performance of individual members.

The competencies developed in the design thinking project are also enumerated by Schweitzer, *et al.* (2016) for whom there are eleven design thinking mindsets: empathy, collaboration, inquisitiveness and open mind, mindfulness, experiential intelligence, action-oriented behaviour, creativity, openness to risk, modelling positive behaviour, determination, and critical thinking. These approaches are essentially compatible with the OECD competencies and indicate the skills which are critical in today's world.

By mastering these competencies, "students graduating today will be the designers of a future that transforms the world as we know it at present" (Dzombak, Beckman, 2020, p. 19). Therefore, the design thinking project teaches students the skills essential for their future careers and personal development, which leads to the global changes related to the perception of the learning process and cooperative skills.

4. The study

4.1. The aim of the study and participants

The study was conducted at Pope John Paul II State School of Higher Education in Biała Podlaska in the winter semester of the 2020/2021 academic year. The participants included a group of 16 third-year students of the first-cycle programme of English Philology (5 males and 11 females) who attended classes of Practical English in Business. Their English language skills were approximately at level C1 of the Common European Framework of Reference for Languages.

The project was based on the design thinking method due to its wide use in business environments. Therefore, the aim of the study was to introduce the students into the nature of business-related work through real-life situations like working on a project typical of business environments. Thus, the study implemented another aim – to facilitate the development of practical skills, useful in effective work performance, team work including. The students could therefore learn to operate in groups and negotiate the potential strategies and solutions for their project assignment. They were also supposed to acquire the skills of time management in order to duly perform the following stages of the project.

4.2. Material and methods

English Philology students in their course of study could generally choose between the field of teaching and the field of business and translation studies. The course of *Practical English in Business*, in which the study was conducted, was part of the specialisation in business and translation. The classes were devoted to various business-related topics, such as education and career, communication, quality and standards, managing people and projects. The course consisted of 30 teaching hours divided into 15 units, 90 minutes each.

The students were divided into groups of four. They were asked to do a project on a topic of their own choice (however limited to the university-related issues) although the structure and length of the project remained the same for all the groups. What was essential during the project was the fact that the students were supposed to follow the five stages of the design thinking method. The students had not known this approach earlier so they needed to become familiar with the concept beforehand – the teacher described the design thinking phases in detail in the first class of the semester. During the semester, the students were reminded of the subsequent phases of the project and the possible tools to carry out the research. Later, they had to report to the teacher on the outcomes of their work at each stage. At the end of the project, the students were asked to write a report on their work and the results of

their project. Additionally, they were supposed to make a Power Point presentation on this topic and present it to other project groups.

What is important, the teacher emphasised the fact that the focus was on the process itself but not the results. Therefore, what counted was the involvement in the project and going through the following stages rather than inventing a successful solution to the problem. The rationale behind such an approach was the fact that sometimes finding an effective solution may take time and may require the return to the previous stages of the project. This, however, would exceed the duration of the project which was limited to one semester only. Thus, by focusing on the process, the students avoided the feeling of frustration if the project had not brought the expected results in the form of a successful solution.

At the end of the design thinking project, the students were given a questionnaire (Appendix 1) which consisted of multiple choice and open-ended questions. Due to the lockdown, the students provided answers online, in a Google form. They were asked about their idea of the design thinking method and its usefulness for their future career. Additionally, the students were asked about the difficulty of the particular stages of the project, including the five phases of the design thinking method (understanding, defining, ideating, prototyping, testing) and two additional activities – report writing and presentation making. Moreover, the questions concerned the students' opinion on the inclusion of a design thinking project in the syllabus of Business English classes. The general aim of the questionnaire was to check the students' awareness of the concept of design thinking and to find out their opinion on each of the project stages as well as the project as a whole.

4.3. Results and findings

The questionnaire started with a question concerning the idea of design thinking itself. The aim of Question 1 was to check the students' awareness of the concept of design thinking. All students provided an answer to this question. They indicated that the design thinking process aimed at finding the best solution to a problem. They also emphasised the fact that the process required creative thinking to become effective.

The second question of the survey concerned the usefulness of the stages of the design thinking project for the students' future business career. The question included five phases of the design thinking method (understanding, defining, ideating, prototyping and testing) but also two additional skills, vital for the presentation of the project results, namely the abilities to write a report and make a Power Point presentation. The results are presented in Table 1 and show the number of students who selected the appropriate level of usefulness of the aforementioned aspects.

Table 1. Responses to the question: How useful for your future business career is each stage of the design thinking project (from 1 to 5; 1 – the least useful, 5 – the most useful)?

	1	2	3	4	5
understanding the problem	1	2	1	5	7
defining the problem	1	3	-	4	8
ideating	1	3	-	7	5
prototyping	3	1	1	4	7
testing	1	5	1	7	2
report writing	2	3	3	3	5
presentation making	3	2	4	1	6

Source: own study.

The third question was related to the usefulness of the stages of the design thinking project for the students' personal development. As in the previous question, the question referred to the five phases of the design thinking method as well as report writing and presentation making. Table 2 shows the number of students who selected the appropriate level of usefulness of these aspects.

Table 2. Responses to the question: How useful for your personal development is each stage of the design thinking project (from 1 to 5; 1 – the least useful, 5 – the most useful)?

	1	2	3	4	5
understanding the problem	2	-	5	3	6
defining the problem	2	1	4	4	5
ideating	2	3	1	6	4
prototyping	1	3	6	4	2
testing	4	1	4	4	3
report writing	4	2	4	2	4
presentation making	4	3	5	1	3

Source: own study.

The fourth question concerned the difficulty of the stages of the design thinking project for the students. The stages included the five design thinking phases and two additional skills – writing a report and making a presentation. The results are presented in Table 3 and show the number of students who selected the appropriate level of difficulty of the aforementioned aspects.

Table 3. Responses to the question: How difficult is each stage of the design thinking project (from 1 to 5; 1 – the least difficult, 5 – the most difficult)?

	1	2	3	4	5
understanding the problem	5	2	6	1	2
defining the problem	5	3	5	2	1
ideating	4	3	6	1	2
prototyping	2	6	5	1	2
testing	3	3	6	2	2
report writing	1	1	3	5	6
presentation making	2	2	6	4	2

Source: own study.

Question 5 was related to the problems that the students had at each stage of the project, i.e., the phases of understanding, defining, ideating, prototyping, testing, writing a report, and making a presentation. Most students reported no problems with following the stages of the project. However, some students found various phases difficult. The understanding stage was problematic due to the difficulty to understand the problem itself when the student was not familiar with the issue in question. In the defining stage, the problem was mainly the fact that a vast amount of information was available and the issue could be looked at from multiple perspectives. The ideating stage posed a problem with lack of creativity and the necessity to choose one unique solution. The prototyping stage was also problematic due to lack of creativity but also because of the need to present a detailed image of the problem and the lack of editing skills required to design a poster using Microsoft Office software. The testing stage was challenging because of the lockdown which made it difficult to show the prototyped solution to other people in order to learn about their opinions. The problems with writing a report resulted from lack of knowledge on how to write a report as well as from difficulties with processing and summarising the information in the report. Finally, the problems with making a presentation concerned summarising the information and making creative and interesting slides.

Another open-ended question in the questionnaire referred to the students' opinion on the design thinking project as well as its drawbacks or benefits. The students found the project interesting. They believed it was a good experience for them. They especially appreciated the fact that they could work together in groups and thus develop their knowledge of business issues. However, they also pointed out the limited choice of topics which were narrowed to the issues related to their university only. Moreover, the students found the project time consuming. Sometimes, they also had problems with communicating with other students due to the pandemic and lockdown.

The final question was related to the inclusion of the design thinking project in the Business English courses. Most students believed that the project should be added to the Business English syllabus as an innovative approach which broadened their minds. Only two students definitely stated that the project should not be part of the classes as it was time-consuming or uninteresting. Two other students viewed the project positively but saw the possible lack of interest in the project among some students or doubted whether the design thinking method could be the quickest and most efficient approach to solving a problem.

4.4. Discussion

The survey revealed that the students understood the idea of design thinking and saw that the objective of this method was to find the best solution to a problem. This means that they comprehended the general aim of the whole project, which helped them to prepare the results of their research. Working on the project was an opportunity to carry out activities which the students might have to conduct in real-life business situations. Therefore, they also generally found the project useful in their future professional lives. This fact may in turn prove that the students understood the nature of work in business environments as based on team work and cooperation with focus on creativity and ability to successfully put across one's ideas and carry the best solutions through. What seems surprising, the skill for which the results varied most was report writing, which in business environments is a frequent task. That means that some students did not see it as essential for work in business. The reason for that may be the fact that in Question 5 the students found the ability to write a report problematic and perhaps that is why they could not fully comprehend the nature of this activity.

Additionally, the students found the project and its stages useful for their personal development as well. However, the stages of prototyping and testing as well as report writing and presentation making seemed to be less useful for the students than other elements. This may be due to the fact that the students did not feel that such skills should develop their personality but solely their business skills.

The design thinking project turned out to be fairly easy for the students. What they found difficult was the writing of a report summarising the project. Therefore, it is evident that this particular skill caused problems possibly due to the insufficient knowledge of the structure of the report as a genre. The difficulty might also have been the result of the lack of skills related to summarising the topic and finding the main points. This seems to coincide with the responses concerning presentation making, which also showed that this ability was slightly problematic. Thus, the students found the two practical skills more challenging than any other phase of

the design thinking project. These outcomes reveal that students need more practice in these respects not only in the classes of Practical English in Business but also in other business-related courses.

In spite of these difficulties, most students had no problems with following the stages of the project. However, if any problems were reported, they generally concerned the difficulty in inventing creative solutions as well as the necessity to face too much information and embrace the knowledge obtained from the gathered material. Therefore, the problems did not concern the procedure itself in each of the phases but rather the challenge in conceptualising the idea. Additionally, the problems aroused from little editing skills or the pandemic situation resulting in the lockdown which blocked communication with other members of the group. For this reason, the project seemed to be quite an easy task for students, which might be an asset as thus they were not discouraged from carrying out the subsequent stages and had a greater sense of achievement, which was one of the objectives of the project.

The fact that the students found the project easy might have had a direct influence on their perception of the project. They believed that the design thinking project was an interesting experience which could develop their business-related skills and other practical skills such as group work or the ability to handle information.

However, the students also found some negative aspects of the project. One of them was the limited choice of topics which were supposed to be related to the university environment. This drawback can be easily diverted by introducing a more varied range of topics which might allow the students to show more creativity in the fields which they know better and therefore can show more expertise. Another obstacle which the students found during the project was the pandemic and lockdown, which was however unpredictable and therefore was not taken into account by the teacher while designing the project itself. Yet, this situation revealed that the lack of opportunities for direct contact with other members of the group had an impact on the general performance in the project. Another drawback in the opinion of the students was the fact that the project was time consuming. This fact indicates that perhaps the syllabus of the course of Practical English in Business should be altered so that more time could be spent on the project with less emphasis on other aspects which did not necessarily refer to the stages of the project.

However, all things considered, most students agreed that the design thinking project should be included in Business English classes. They appreciated its innovative approach which allowed the students to broaden their minds and learn a more practical aspect of work in business environments. They also emphasised teamwork as an asset, which means that such activities should be introduced in language courses more frequently, especially in those focused on Business English, as effective group work is one of the most essential skills expected by entrepreneurs.

Besides, the students simply found the project interesting due to its novelty and unusual structure; it was an opportunity for them to do research on a real problem and examine various possibilities of solving it in a real-life situation. These results are consistent with other studies which found that students developed collaborative skills and those related to investigating the problem and designing the solution; thus, such an approach may be called a learning-by-design approach (Kolodner, *et al.*, 2003). This proves the effectiveness of the design thinking project in teaching contexts, which may further be translated into business environments.

Although the majority of the responses were positive concerning the application of the design thinking method in Business English classes, two students believed the project had not brought any benefits for them. There was also a student who, apart from positive aspects, saw possible problems with arousing interest in all students. Another student doubted whether the design thinking approach allowed for the quickest and most effective solution to a problem. These doubts seem natural – they are reflected in other studies (Glen, *et al.*, 2015) which found that students might be frustrated with the inability to find a sufficient solution. Moreover, the design thinking method may not work in some situations (this is not the only approach to problem solving in business environments) or simply may sometimes be slightly altered in order to be more efficient. The doubts, therefore, are understandable and prove that the students do not take the teacher's suggestions uncritically.

All in all, however, the project met with the students' approval, which is best summarised by an opinion from one of them stating that the design thinking project was the most interesting element of the whole course. This proves that the design thinking project might be a useful tool to teach students real-life problems and assist them in mastering the practical skills essential in today's world.

5. Conclusions

The design thinking project seems to be a useful tool for Business English students who can in this way learn how to cooperate with other students and become familiar with the methods of solving problems in business environments. They master various skills which facilitate their future work, business including. Even though some students are not fully convinced to such an approach, the project appears to be an effective and innovative approach in teaching Business English. Additionally, it makes classes more interesting, which is also of great significance in conveying the knowledge of business issues to students. Thus, students become more prepared for future challenges both in professional and private spheres of life.

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Appendices

Appendix 1.

The survey conducted in the classes of Practical English in Business

1. What is design thinking?
2. How useful for your future business career was each stage of the design thinking project (from 1 to 5; 1 – the least useful, 5 – the most useful)?

a. understanding	1	2	3	4	5
b. defining	1	2	3	4	5
c. ideating	1	2	3	4	5
d. prototyping	1	2	3	4	5
e. testing	1	2	3	4	5
f. report writing	1	2	3	4	5
g. presentation making	1	2	3	4	5
3. How useful for your personal development was each stage of the design thinking project (from 1 to 5; 1 – the least useful, 5 – the most useful)?

a. understanding	1	2	3	4	5
b. defining	1	2	3	4	5
c. ideating	1	2	3	4	5
d. prototyping	1	2	3	4	5
e. testing	1	2	3	4	5
f. report writing	1	2	3	4	5
g. presentation making	1	2	3	4	5
4. How difficult was each stage of the design thinking project (from 1 to 5; 1 – the least difficult, 5 – the most difficult)?

a. understanding	1	2	3	4	5
b. defining	1	2	3	4	5
c. ideating	1	2	3	4	5
d. prototyping	1	2	3	4	5
e. testing	1	2	3	4	5
f. report writing	1	2	3	4	5
g. presentation making	1	2	3	4	5

5. What problems did you have with each stage?
 - a. understanding
 - b. defining
 - c. ideating
 - d. prototyping
 - e. testing
 - f. report writing
 - g. presentation making
6. What do you think of the design thinking project? What drawbacks/benefits does it have? What do you like about it? What don't you like?
7. Should the design thinking project be included in Business English classes? Why (not)?

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