

УДК 37.002

DOI 10.31652/2415-7872-2019-57-22-26

## МЕТОДОЛОГІЧНІ ЗАСАДИ ЗАСТОСУВАННЯ ПРОБЛЕМНИХ ДИСКУСІЙ У ПРОЦЕСІ ВИВЧЕННЯ АНГЛІЙСЬКОЇ МОВИ ЯК ІНОЗЕМНОЇ

О. В. Зарічна, Л. В. Мельник, Т. В. Савчук

orcid.org/0000-0002-6999-0538

*У статті зосереджено увагу на особливостях алгоритму впровадження проблемно-орієнтованого навчання в контексті англомовних курсів на рівні закладу вищої освіти. Зокрема, розглянуті такі варіанти проблемно-орієнтованих сесій як тематична дискусія, дискусія із застосуванням знань загального рівня, дискусія із застосуванням фахових знань з інших предметів (CLIL). Окремо проведений компаративний аналіз традиційних і проблемних методів навчання, а також стратегічні параметри, які є важливими у впровадженні проблемного методу.*

**Ключові слова:** проблемно-орієнтоване навчання, EFL (англійська мова як іноземна), CLIL (предметно-мовне інтегроване навчання), предметна тематична дискусія, дискусія за тематично суміжною темою, дискусія на основі загальних знань, дискусія на основі фахових знань з інших дисциплін.

## METHODOLOGICAL FRAMEWORK OF IMPLEMENTATING PROBLEM-BASED DISCUSSIONS IN EFL COURSES

O. Zarichna, L. Melnyk, T. Savchuk

*The main focus of the article is the algorithm of implementing problem-based learning in EFL university courses. In particular, the varieties of PBL considered are the curriculum-based discussion, the topic-related discussion, the small talk, the PBL CLIL-based discussion. Examples of each are also provided. The two main issues addressed are the aspects that the instructor should take into consideration while designing a problem and organizing pre-discussion in tutorial groups of EFL and the stages a PBL session should include. The role of the instructor as that of the facilitator presupposes careful planning and extra preparatory work: selection of thought-provoking issues that can be subjected to analysis and argumentation, following the appropriate discussion strategies like avoiding sensitive issues, pursuing political correctness and exercising tolerance, supplying students with provisional material and functional vocabulary etc. An explicit comparative analysis of traditional and problem-based methods is provided with regard to their procedural specificities and learning outcomes. An important aspect of PBL implementation as well as a possible challenge is the involvement and explication of the learners' unique mental dispositions such as personal attitudes, classifications, conclusions, categorizations, emotional memory and experience. Being a heuristic method, PBL allows permeating into learning material on the interdisciplinary level which enables the tutor to apply content and language integrated learning as a PBL practice.*

**Key words:** problem-based learning, EFL (English as a Foreign Language), CLIL (content and language integrated learning), subject-based discussion, topic-related discussion, small talk, CLIL-based discussion.

Problem solving is viewed as one of the major 21-century skills embracing enhancement of critical, prognostic and creative thinking and thus having a unique developmental effect. The ability to find creative solutions in the professional domain is a particularly valuable asset in view of the uprising demand for multiple-skilled professionals. In this regard, problem-based learning (PBL) is to be regarded as an indispensable method in institutions responsible for professional training. PBL positions itself as a method involving heuristic search of a solution through engaging in team discussions, facilitated rather than led or dominated by the teacher. What makes problem-based learning unique is its core focus on learning through solving real, open-ended problems to which there are no fixed solutions (Ertmer, Lehman, Park, Cramer, & Grove, 2003).

With regard to the recent findings in theory and practice of PBL in various settings, and taking into account our own experience, we intend to lay out an algorithm of its implementation in EFL courses. In particular, this article is aimed to provide answers to the following set of questions:

What aspects should the instructor take into consideration while designing a problem and organizing pre-discussion in tutorial groups of EFL?

What are the stages a PBL session should include and what are its possible variations?

Table 1

**Comparative Analysis of PBL and Traditional Methods of Instruction**

	<b>Traditional Instruction</b>	<b>Problem-Based Learning</b>
<b>What does the teacher do?</b>	presents the material, explains; corrects mistakes; provides assessment guided by how correct the student's speech is	exercises the communicative approach in language teaching; sets the problem; provides assistance in tricky or conflict-prone episodes of discussion
<b>What do the students do?</b>	receive ready knowledge and practice it according to an assigned scheme; learn by heart and reproduce the texts or dialogues made up by somebody else; follow the assigned roles if engaged in role-play or dramatization	take individual effort to speak spontaneously in the settings of natural dialogue; apply their speaking skills in authenticated interactions;
<b>Learning paradigm</b>	reproductive	productive
<b>Type of inclusion</b>	passive, initiated and directed by the teacher	active, innerly motivated
<b>Type of interaction</b>	material-based; teacher-centred; teacher-student instructional and learning activities	problem-based; student-centred; collaborative project work
<b>Subject orientation</b>	subject that is on the curriculum planned for final test or exam	subject that relates to the students' knowledge, interests and experience
<b>How do the students learn?</b>	students learn the language as a concept through drills, exercises and reproduction	students learn the target language by using it
<b>Expectations:</b>	short-time learning outcomes: retaining the knowledge presented; learning skills	long-term learning outcomes: interpersonal, communicative skills by fostering team work, diversity and mutual respect; strategic thinking; problem-solving skills; skills related to planning, organization, negotiation, and role distribution.
<b>How does it work?</b>	students are presented with and then practice predetermined language structures; students' motivation is to learn all the words they will need for the exam or a test.	enhances the integration of knowledge or relevance to future profession; increases engagement and reduces the achievement gap; can involve senior students acting as peer tutors to the students; provides a meaningful reason or context to use the language; students acquire a sense of when and how to use which vocabulary

Considering the fact that the primary goal of the ESL classroom is the development of ESL competences and namely speaking skills the ratio between language and expertise in a certain domain rather favours the former.

Unlike it is in other subject areas (law, medicine, economics etc.): students of medicine, for example, are given a practical task which will model a professional situation (e.g. *You have received a grant from an institution intending to improve the conditions in your clinic. How will you distribute the money?*). Language has an instrumental role in the discussion. The EFL classroom is different: the function of English shifts from being a tool to being a goal and a tool simultaneously. Consequently, the PBL tutor should direct all effort at selecting tasks that promote language production through activating creative thinking, different viewpoints, associations, emotional memory, experience, individual classifications, preferences and generalizations.

So, the aspects to consider while designing a problem and in the pre-discussion phase can be viewed as follows:

1. The problem itself does not have to be a problem to solve but rather a problem to discuss. It means it can be positioned in the PROS & CONS or FOR & AGAINST frames, it can be based on a home reading story with a moral dilemma implied (parables i.e. open-ended narratives at best) or encourage students to give tips or make generalities on a certain issue.

It might concern curriculum-based thematic field (Family Structures, Employment, Health) or just be placed in a small-talk format ("Should school uniform be mandatory?"). It is the problematic character of question setting

that matters.

While planning a PBL session we should not only go into the problem area, but also into the background and mindset of every student involved in the discussion. Thus we should:

- avoid points that might appear to be sensitive or intimidating to some of the participants (e.g. selecting a problem issue on the topic “Appearance” we’d rather avoid the problem of obesity if there is an overweight student in class);
- pursue political correctness and tolerance (e.g. if there are children from single parent families in class, discussing the potential outcomes of this status would appear to be somewhat allusive);
- avoid issues that hold too much controversy or can be viewed as suggestive and provocative (like single-sex marriages or legalization of drugs).

2. The aspect that matters in terms of idea generating and opinion exchange is topic specification. Whatever the topic addressed, the issues for discussion might relate to the individual experience, knowledge and mainly range of interest of the students. In short, the issues should be motivational. The questions must be intellectually challenging and exclude the necessity of expert knowledge. However, the students can receive a preparation task to collect statistic data on certain phenomena or information on a certain subject. The students may be encouraged to develop their own questions, mind maps or short lists of issues they can point out.

3. To ensure a sustainable talk in the PBL discussion the tutor is to provide the students with a provisional topic-related vocabulary list or material – short texts, essays or articles which might appear to come handy throughout the pre-discussion phase.

4. Complying with the objectives of the ESL class, the tutor should make use of its prerogative of involving the language material in all its possible representations. A problem concerned does not necessarily have to be set in a strictly rational or logical frame, it might be presented implicitly in a metaphorical text, a quotation, an aphorism or even a picture. Again, unlike the subject matter in other domains, the possibility of introducing metaphorisation and symbolization seems to be something that makes PBL in the EFL class still more special. Herein we provide an example of such, a method referred to as Thinking Story. The students may be encouraged to formulate their own issues or discuss those provided by the tutor.

A PBL session comprises three major stages: pre-discussion, actual discussion and reflection. While the pre-discussion phase is related both to clarifying the language points (working with functional and topical vocabulary, practicing the models of the argumentative discourse) and to familiarization with the topic-related material, the actual discussion is the engagement and involvement stage occurring in a variety of forms.

The framework in which PBL appears to be effectively applicable in the EFL format is curriculum-based thematic field discussion (Personality, Family Structures, Employment) which can also be placed in a small-talk format (“Should school uniform be mandatory?”); a discussion with a CLIL element, a moral dilemma; a situation related to the professional field, say pedagogy («In what succession should the tense forms be presented to learners?», «A pupil brings a bunch of flowers picked on the school flower-bed, what should you do?»).

The topic-related discussion is based on the previously introduced and thoroughly practiced language material involving a set of vocabulary units whose use is mandatory and carefully tracked by the tutor as an assessment criterion. This particular type of PBL session may obtain the form of a case study including a set of sub-tasks to be accomplished in the course of the discussion. The examples below represent a possible sequence of tasks for topic-related PBL sessions.

Table 2

### Examples of Topic-Related PBL Session Tasks

<p><b>Topic:</b> Environmental Protection.</p> <p><b>Specific issue:</b> Preventing and reducing deforestation in the area.</p> <p><b>Aspects to be considered:</b>                      the causes of deforestation;                      general statistics on deforestation;                      consequences of deforestation;                      what can be done about it;                      promoting the idea of forest protection through providing information, statistics etc.;                      ways of attracting investors to the project;                      suggesting alternative ways of producing paper and saving paper and wood;                      what prospective partner organizations the project may involve.</p>	<p><b>Topic:</b> Business and Employment.</p> <p><b>Specific task:</b> Opening a cat café in the city.</p> <p><b>Aspects to be considered:</b>                      situation with stray cats in the city (official statistics);                      views and opinions of common people on the problem;                      review of existing cat cafes around the world (reasons, specifics, description);                      choice of the location for the café;                      possibilities of adoption;                      attracting investors;                      advertising techniques;                      staffing and administration;                      design and colour scheme;                      possible effects.</p>
--	---

Small talk thematic discussions are the most flexible as well as open-ended variety of a PBL session. Nevertheless, preliminary information search and vocabulary studies are most desirable. The three basic formats to be applied for small talk thematic discussions are as follows: pros and cons or agree-disagree, identifying problems and giving tips, insight into a problem, making predictions. Some examples are provided in the table below.

Table 3

**Examples of small talk thematic discussion issues**

Pros & Cons	Identifying Problems and Giving Tips	Insight into a Problem	Making predictions
<ul style="list-style-type: none"> <li>- Au-pairing.</li> <li>- Working from home.</li> <li>- Taking a gap year.</li> </ul>	<ul style="list-style-type: none"> <li>- Boomerang Kids: Life with Parents after Graduation.</li> <li>- The first year at university: Challenges and Opportunities</li> </ul>	<ul style="list-style-type: none"> <li>- Men and women in employment.</li> <li>- The future of the labour market.</li> </ul>	<ul style="list-style-type: none"> <li>- Will English become a state language in all the countries of the world?</li> <li>- What professions will not exist in the future?</li> </ul>

The aspect that matters in terms of idea generating and opinion exchange is topic specification. Whatever the topic addressed, the issues for discussion might relate to the individual experience, knowledge and mainly range of interest of the students. In short, the issues should be motivational. The questions must be intellectually challenging and exclude the necessity of expert knowledge. However, the students can receive a preparation task to collect statistic data on certain phenomena or information on a certain subject. They can be encouraged to develop their own questions, mind maps or short lists of issues they can point out.

Elements of CLIL can also be introduced as a problem-based discussion or a simulation game. The specific feature of this format of discussion is that the students should be expected to attach expertise from the relevant subject fields, like those of astronomy, physics and physiology. The example below shows the necessity of applying interdisciplinary knowledge for solving a particular practical problem.

Table 4

**Example of Using a CLIL element in PBL discussion  
(derived from NASA exercise: Survival on the Moon)**

**Scenario:** You are in a space crew originally scheduled to rendezvous with a mother ship on the lighted surface of the moon. Mechanical difficulties however, have forced your ship to crash-land at a spot some 200 miles from the rendezvous point. The rough landing damaged much of the equipment aboard. Since survival depends on reaching the mother ship the most critical items available must be chosen for the 200 mile trip. 15 items are left intact after landing.

**Task:** Your task is to rank them in terms of their importance to your crew in its attempt to reach the mother ship.

Items left intact	Rating (from 1 to 15)
Box of matches	_____
Food concentrate	_____
50 feet of nylon rope	_____
Parachute silk	_____
Portable heating unit	_____
Two 45 calibre pistols	_____
One case dehydrated milk	_____
Two 100 pound tanks of oxygen	_____
Stellar map (of the moon's constellation)	_____
Life-raft	_____
Magnetic compass	_____
5 gallons water	_____
Signal flares	_____
First aid kit containing injection needles	_____
Solar-powered FM receiver transmitter	_____

For this type of PBL-session the preliminary insight into the problem, statistical review and some expertise attached from other fields of knowledge are essential. To ensure a sustainable talk in the PBL discussion the tutor is to provide the students with a provisional topic-related vocabulary list or material – short texts, essays or articles which might appear to come handy throughout the pre-discussion phase. However, it is the learners who should be given the prerogative of selecting the appropriate information and presenting it in the course of the discussion. The

problem can be set in varied formats from statements to situations, from preambles to possible solutions with further reconsiderations.

Complying with the objectives of the ESL class, the tutor should make use of its prerogative of involving the language material in all its possible representations. A problem concerned does not necessarily have to be set in a strictly rational or logical frame, it might be presented implicitly in a metaphorical text, a quotation, an aphorism or even a picture. Again, unlike the subject matter in other domains, the possibility of introducing metaphorisation and symbolization seems to be something that makes PBL in the ESL class still more special.

A PBL class in EFL practice has a two-fold mission – to enhance speaking skill building as well as to develop research skills of students and their analytical mindset. Whether the tutor should do the selection and structuring of the problem as well as providing the materials for the would-be PBL class rather depends on how experienced and competent the learners are as PBL participants. The peculiarity of an ESL modification of PBL is that the key factor is the language. It is the tutor who already has a set of materials he finds appropriate for using as basis for an English class. The students will benefit more from the right linguistic material provided by the tutor than from a Wikipedia article interspersed with new and complicated vocabulary. It is also the tutor who can predict whether the problem set can be potentially “talkable”, that is appropriate for an active discussion. As far as the formulation of the problem is concerned, it can be a collaborative effort undertaken both by the tutor and the students. It is actually the students’ prerogative and a matter of their interest to choose the issues they would like to discuss.

### Literature

1. Ertmer, P. A., Lehman, J., Park, S. H., Cramer, J., & Grove, K. (2003). Barriers to teachers’ adoption and use of technology in problem-based learning. In Proceedings of the Association for the Advancement of Computing in Education (AACE) Society for Information Technology and Teacher Education (SITE) international conference.
2. Hung, W. (2011). Theory to reality: a few issues in implementing problem-based learning. Educational Technology Research and Development, Volume 59, Issue 4, p. 529-552. Nasa Exercise: Surviving on the Moon. Retrieved from: <https://www.humber.ca/centreforteachingandlearning/assets/files/pdfs/MoonExercise.pdf>
3. Problem-based learning in teaching English as a foreign language: theoretical and practical issues (Проблемно-орієнтоване навчання у викладанні англійської мови як іноземної: теоретичні і практичні питання): монографія/за заг. ред. Н.Є. Дмитренко. – Вінниця:ФОП Т.П. Барановська, 2017. – 164с.

### References

1. Ertmer, P. A., Lehman, J., Park, S. H., Cramer, J., & Grove, K. (2003). Barriers to teachers adoption and use of technology in problem-based learning. In Proceedings of the Association for the Advancement of Computing in Education (AACE) Society for Information Technology and Teacher Education (SITE) international conference.
2. Hung, W. (2011). Theory to reality: a few issues in implementing problem-based learning. Educational Technology Research and Development, Volume 59, Issue 4, p. 529-552. Nasa Exercise: Surviving on the Moon. Retrieved from: <https://www.humber.ca/centreforteachingandlearning/assets/files/pdfs/MoonExercise.pdf>
3. Problem-based learning in teaching English as a foreign language: theoretical and practical issues (Problemno-orientovane navchannia u vykladanni anhliiskoi movy yak inozemnoi: teoretychni i praktychni pytannia): monohrafiia/za zah. red. N.Ye. Dmitrenko. – Vinnytsia:FOP T.P. Baranovska, 2017. – 164s.

УДК 378:371.315.7

DOI 10.31652/2415-7872-2019-57-26-31

## ТЕОРЕТИЧНІ ЗАСАДИ РЕАЛІЗАЦІЇ АДАПТИВНОЇ ТЕХНОЛОГІЇ ПРОЕКТУВАННЯ НАВЧАЛЬНОЇ ІНФОРМАЦІЇ В ПРОЦЕСІ ВИВЧЕННЯ ІНОЗЕМНОЇ МОВИ

О. Є. Кравець, А. М. Приймак

[orcid.org/0000-0001-9113-9515](https://orcid.org/0000-0001-9113-9515)

*У сучасній Україні, яка активно інтегрує в світове співтовариство й розвиває в зв'язку з цим міжнародне співробітництво в різних сферах, активізувався інтерес до вивчення іноземних мов. Збільшується й попит на фахівців іноземних мов, проте підвищуються й вимоги до якості навчання, удосконалення методів, розробки та ефективного упровадження в навчальний процес нових методик. Актуальним є дослідження теоретичних і практичних аспектів упровадження викладачами вищої школи адаптивної технології проектування навчальної інформації в ході педагогічної діяльності, що організує подачу навчальної інформації та забезпечує продуктивну взаємодію викладачів і студентів, а також допомагає у формуванні професіоналів нової формации.*

**Ключові слова:** вивчення іноземної мови, вища школа, проектування, адаптивна технологія навчання, навчальна інформація