Educational, Linguistic, and Media Discourses

Educational, Linguistic, and Media Discourses

Edited by

Roma Kriaučiūnienė

Educational, Linguistic, and Media Discourses

Edited by Roma Kriaučiūnienė

This book first published 2020

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 2PA, UK

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

Copyright © 2020 by Roma Kriaučiūnienė and contributors

TABLE OF CONTENTS

Introduction
Roma Kriaučiūnienė

Chapter One: Language Teaching and Teacher Education

Evelina Jaleniauskienė, Tatjana Vėžytė, Regina Petrylaitė

Virginija Jūratė Pukevičiūtė, Dalius Jarmalavičius, Danguolė Straižytė

Galina Zashchitina

Marija Liudvika Drazdauskienė

Chapter Two: Literary and Cultural Studies

Ovidiu Ivancu

Svetozar Poštić

Chapter Three: Linguistic and Media Studies

LIST OF TABLES AND FIGURES

Tables

Evelina Jaleniauskienė, Tatjana Vėžytė, Regina Petrylaitė
Development of Problem-Solving Skills in English as a Foreign
Language Classes

**Virginija Jūratė Pukevičiūtė, Dalius Jarmalavičius, Danguolė
Straižytė.** The Attitudes of 9th-10th Class Students toward Content
and Language Integrated Learning (CLIL)

Dalius Jarmalavičius, Danguolė Straižytė. Disputable Aspects of the
Historical Development of Constituents in German Compounds

Figures

Vilmantė Liubinienė, Agnė Raulinavičiūtė. Multimodal Analysis of Nike's Posts across Social Media Platforms

Liudmila Arcimavičienė, Roma Kriaučiūnienė. Metaphor and Othering in Media Discourse: a case of youth climate change protests.

ACKNOWLEDGEMENTS

INTRODUCTION

CHAPTER OVERVIEW

ROMA KRIAUČIŪNIENĖ

The aim of this book is to present a collection of research papers written by experienced as well as by emerging scholars representing Lithuania, Romania, and Russia, and to expose their research in the areas of language teaching; teacher education; and literary, cultural, linguistic, and media studies to a wider audience. Most of the research papers included in this collection were presented at the international conference *Language Teaching and Learning in the 21st Century: Linguistic, Educational and Intercultural Aspects*, held on June 7-8, 2018, organised by the Institute of Foreign Languages of the Faculty of Philology of Vilnius University, the FIPLV Nordic-Baltic Region (NBR), and the Language Teachers' Association of Lithuania (LKPA).

The chapters are grouped into three thematic sections: the first part is devoted to language teaching and teacher education, the second to literary and cultural studies, and the final section to linguistic and media discourses. The chapters can be read in any order.

The first part of the book, entitled *Language Teaching and Teacher Education*, offers new perspectives on language teaching/ learning process at a university level, such as the development of problem-solving skills, and it also presents some insights into various aspects of foreign language teaching and learning methodologies, such as CLIL, and the development of intercultural competence that might be interesting for researchers and language teachers. One chapter is devoted to teachers' work and its great demands in the 21st century.

The authors of the first chapter, **Evelina Jaleniauskienė, Tatjana Vėžytė, and Regina Petrylaitė,** contribute to the current discourse about the changing paradigms of language education. The authors argue that there is a need to revitalize English as a study of Foreign Language (EFL) at the university level, so that it moves beyond developing learners' linguistic repertoires, but also develops transferable skills that students can

apply in their future careers. The theoretical background of their study is in line with the guidelines for foreign language teaching and learning presented in the *Common European Framework of Languages* (the new companion volume, published in 2020) as well as E. Piccardo, B. North's (2019) insights into an action-oriented approach to foreign language teaching and learning. Their study focuses on the implementation of the problem-based learning (PBL) in an EFL classroom setting for engineering students, so that they can additionally develop problem-solving skills. The authors investigate students' and teachers' perceptions of the use of PBL and how teachers use the strategy of Force Field Analysis to help learners acquire decision-making skills during English classes at universities. Their research findings proved that the use of PBL and the method of Force Field Analysis provide a productive learning environment in terms of the students' academic motivation and engagement, as well as the development of problem-solving, decision-making and critical thinking skills.

The second chapter in the volume, written by **Virginija Jūratė Pukevičiūtė**, **Dalius Jarmalavičius**, and **Danguolė Straižytė**, focuses on the attitudes of 9th–10th class students toward Content and Language Integrated Learning (CLIL) in Lithuania. The authors present a short overview of research surrounding the implementation of CLIL in Europe, specifically Lithuania, by arguing that the understanding of CLIL in Lithuania is somewhat lacking consistency, both on theoretical and practical levels. The authors' quantitative research results illustrate schoolchildren's attitudes toward CLIL, support their argument, and reveal reasons why Lithuanian schoolchildren have some reservations concerning the application of CLIL, which are mainly related to their lack of full understanding of CLIL methodology and their fear of not mastering the content of other subjects learnt via a foreign language. Their research findings coincide with those of the research carried out into Lithuanian teachers' viewpoints on the implementation of CLIL in schools of secondary education in Lithuania (Kriaučiūnienė, Targamadzė, 2016), in which different subject teachers expressed similar concerns about the quality assurance and the lack of language knowledge to transmit the subject content well.

Galina Zashchitina's chapter deals with the development of students' competence, which is understood by the author as the ability of a person belonging to one culture to communicate and cooperate with the representatives of another culture, as well as the ability of accepting and understanding the interacted information by both parties. It seems to be common knowledge that intercultural communication takes place when

individuals influenced by different cultural communities negotiate shared meanings in interaction. The author of the chapter presents an argument that a systematic study of mass media discourse for culture facts, precedent phenomena, and extra linguistic data can definitely facilitate building up the intercultural communicative competence of students.

The last chapter of the first part, written by **Marija Liudvika Drazdauskienė**, deals with the discussion of problems that contemporary teachers face. The author raises the question of whether the age of information and the availability of information minimise the need of the teacher's role to instruct at schools of secondary education. The author claims that the availability of information does not diminish the load and content of teaching, if school is to retain its function, and if quality education is sought. On the contrary, the teacher has to be very well-prepared to teach. The author argues that teachers' education should be based on deep studies centered on language, literature, philosophy and psychology, and it has to develop their critical thinking skills. The chapter points out the pressures teachers experience, and highlights the value of teachers' intellectual work as well.

The second part of the book, under the title *Literary and Cultural Studies*, presents several interesting chapters to those readers whose research interests cover contemporary literature and/or cultures. The readers' attention might be attracted by an engaging discussion of inadequacy as a cultural concept, with an attempt to analyse the evolution of the concept of inadequacy and its meaningfulness nowadays. The other chapter in this section reveals the Russian worldview through the linguistic expression of the concepts of *time* and *duration* that are specific to and characteristic of Russian culture. Finally, the notions of multilingualism, plurilingualism, and issues related to them, are addressed from the point of view of the research findings obtained during the implementation of two projects conducted on both national and international levels.

The first part of this book includes **Ovidiu Ivancu's** chapter, which aims to discuss inadequacy as a cultural concept, trying to analyse the evolution of the concept and its meaningfulness nowadays. The author of the chapter argues that inadequacy - as a concept associated with the avant-garde, the literature of the absurd and the paradox as a literary device - no longer functions as an aesthetic criterion in our contemporary societies. The author states that inadequacy evolved from having a negative connotation to being a constitutive part of postmodernity. When exposed to postmodern culture, our contemporaneity needs different tools to evaluate and treasure art. The author raises questions about the adequacy and inadequacy of contemporary art, expresses doubts, and

invites the reader to contemplate the answers to the following two questions. If in the absence of inadequacy, could anyone become an artist? How can a genuine bystander distinguish between art and an everyday extreme or desperate gesture? The author leaves the reader with the rhetorical question to be answered by everyone contemplating art, i.e. when old rules and concepts do no hold true anymore, how can anyone value art and literature? The author comes to the conclusion that adequacy and inadequacy are not valid terms anymore when evaluating art and literature, so they offer the only possible solution to this – developing the attitude of contemplation and interpretation.

The author of the other chapter in this part of the book, **Svetozar Poštić**, makes an attempt to disclose the peculiarities of Russian culture through the linguistic expression of the concepts of *time* and *duration*. The author builds his argument on the analysis of a selection of Russian words (*sobirat'sia, starat'sia and dobirat'sia)* and their translation into English, which reveals the specificity of the Russian worldview. The author's research is based on time/action perception, as defined in Gary Weaver's (2002) and Geert Hofstede's (2018) models of cultural analysis. The investigation of the contextual meaning of the verbs *sobirat'sia, starat'sia* and *dobirat'sia* shows that native speakers of Russian, compared to native speakers of English, have a more flexible perception of time and are less goal-oriented. Moreover, the author considers that one of the most important characteristics of the verbs under analysis is that they imply a perception of overcoming time and space that is not entirely controlled by the will of the subject. Finally, the conclusion is made that these verbs reveal the typical Russian perception of time as being endless and ongoing, as opposed to the typical Anglophone view of time being precisely defined and dictated by a strict schedule of daily events.

The last chapter of the second part of the book, written by **Vilhelmina Vaičiūnienė**, deals with the notions of multilingualism and plurilingualism, as well as the issues related to these. The author outlines the results obtained during two projects, the first being a national project, devoted to the analysis of generic competences (communication in the mother tongue and foreign languages), and the second being the international Comenius project on plurilingualism and plurilingual teachers' competences. One of the aims of the latter project was to identify the components of plurilingual and intercultural competences for teachers and create a framework for the development of these competences. The author provides an overview of different scholars' interpretations of bilingualism, multilingualism, and plurilingualism, and makes an attempt to identify the differences and overlapping areas in the interpretations of these terms, by revealing the

complexity of the terminology and versatility of various approaches. The author presents not only a theoretical and methodological investigation into the concepts of multilingualism and plurilingualism, but refers to the empirical research data findings concerned with linguistic diversity amongst Lithuanian citizens. In answering the question of whether a multilingual society is a reality or an aspiration, the author concludes that there is some discrepancy between the political statements made within a multilingual society, with its tolerance towards cultural and language diversity, and a real-life situation of English being the dominant language in Lithuania.

The final part of the book, *Linguistic and Media Studies*, provides a chapter on disputable aspects of the historical development of constituents in German compounds and reveals not only a classification problem of some word-formation types of nominal compounds, but also offers some comments and proposals related to the specification of the terms. The last two chapters in this section are intended to expand the horizons of those who are interested in media discourse, as they focus on the analysis of digital communication and a variety of multimodal ways to convey the meaning of media discourse, as well as present an analysis of the metaphorical Othering expression in the media.

The chapter written by **Dalius Jarmalavičius** and **Danguolė Straižytė** delves into the area of word-formation processes in the German language. Their research findings might interest those readers whose scientific interests fall into this category. Based on the analysis of bilingual manuscript dictionaries of the Baltic languages, the authors identify a classification problem of some word-formation types of nominal compounds. According to the authors, it is difficult to interpret the results of their analysis and to determine which words in the German language should be analysed as formations and which should remain outside the boundaries of the analysis of word-formation. Their chapter provides comments and proposals related to the specification of relevant terms and discusses the definition of different statuses of complex words.

The second chapter in the third part of the book, authored by **Vilmantė Liubinienė** and **Agnė Raulinavičiūtė**, is devoted to media studies. The authors present an analysis of the multimodal expression of content on different social media platforms. Digital communication offers a variety of multimodal ways to convey meaning and, consequently, the content changes according to the algorithms of the software being used. Decoding information is not only a consequence of content itself but also of a technical design that is fixed differently for every social media platform. Therefore, the authors of the chapter maintain the view that research into

the interoperability between different social media platforms seems to be relevant, as the software may affect the dominant mode, distribution, and content itself. According to the authors, there has been a lack of analysis of how the same content might be presented via various multimodal forms on different platforms. Thus, their study is a novel attempt to research the interoperability of virtual media content between different social media platforms. This chapter aims to provide a deep examination of the systems, enabling media content interoperability.

The last chapter, written by **Liudmila Arcimavičienė** and **Roma Kriaučiūnienė**, deals with the analysis of Othering in (news) media discourse and contributes to an ongoing interdisciplinary investigation, focusing on ideological representations in discourses. The chapter discusses the analysis of metaphorical Othering in the news media, in the context of youth climate change protests that took place globally on September 20, 2019. The analysis of BBC articles and posters displayed in these articles revealed that Othering can be expressed by different means, both metaphorically and ideologically.

Literature

Council of Europe (2020). *The Common European Framework of Reference for Languages: Learning, teaching, assessment – Companion volume.* Strasbourg: Council of Europe Publishing.

Hofstede, G. (2018). "Country Comparison." *Hofsted Insights.* <https://www.hofstede-insights.com/country-comparison/russia,the-uk,the-usa/> (Accessed on September 18, 2018.)

Piccardo, E., North B.   (2019). The Action-oriented Approach – A Dynamic Vision of Language Education. Multilingual Matters.

Targamadzė, V., Kriaučiūnienė, R. (2016). Content and Language Integrated Learning: Lithuanian teachers' viewpoints. *International Journal of Multilingual Education*. No. 8. Tbilisi: Centre for Civil Integration and Inter-Ethnic Relations. 42–59.

Weaver, G. R. (2002) "Contrasting and Comparing Cultures." In: *Culture, Communication & Conflict: Readings in Intercultural Relations.* Boston: Pearson Publishing.

CHAPTER ONE:

LANGUAGE TEACHING AND TEACHER EDUCATION

Development of Problem-solving Skills in English as a Foreign Language Classes

Evelina Jaleniauskienė, Tatjana Vėžytė, Regina Petrylaitė

Abstract. A number of researchers and practitioners point to the need to revitalize foreign language education and encourage moving beyond developing learners' communicative language competences. The current study focuses on the implementation of the problem-based learning (PBL) approach in an English as a Foreign Language (EFL) classroom for engineering students, so that they can additionally develop problem-solving skills. The aim of the study was to investigate students' and teachers' perceptions of the use of PBL and the strategy of using Force Field Analysis during English classes to learn decision-making skills. For the study, both quantitative and qualitative approaches were employed: (1) an online questionnaire based on the five-point Likert scale was devised to measure students' attitudes toward the learning environment; and (2) teachers' attitudes were collected via an online questionnaire consisting of open questions. The findings indicate that the use of PBL and the method of Force Field Analysis provide a productive learning environment in terms of students' motivation to learn English and their engagement in the learning process, as well as the development of problem-solving, decision-making, and critical thinking skills.

Keywords: English as a Foreign Language; problem-based learning; Force Field Analysis; problem-solving skills; decision making.

1. Introduction

Higher education institutions are expected to support and facilitate the development of competitiveness, so that citizens are able to perform successfully in a knowledge-based society. The European Commission argues that formal education can no longer restrict its mission to narrow learning goals and should be responsible for equipping students with a

broad range of skills, in order to prepare them to be successful in their studies, future life, and careers (European Commission, 2016). In terms of foreign language (FL) learning, it is not sufficient to focus on developing language proficiency, considering the challenges of the modern world. As stated by Kohonen et al. (2014), FL teaching does not happen in a complete social vacuum, and it sets "a broader goal than promoting linguistic and communicative skills only" (p. 2). The role of an FL teacher becomes more complex – not only is her/his aim to teach a language, but s/he also has to foster the personal competence of the learner.

Problem solving is agreed to be one of the most important 21st century career readiness skills, and therefore many educational researchers indicate that the development of this skill is expected to be incorporated into every curriculum (Hassan et al., 2012; Foshay & Kirkley, 2003; Tawfik & Jonassen, 2013; Jonassen, 2011; Luckin et al., 2017). Problem solving is expected to be incorporated into different subjects as learners need proficiency in the field (Hassan et al., 2012; Foshay & Kirkley, 2003; Tawfik & Jonassen, 2013; Cho et al., 2015; Jonassen, 2011; Knowlton, 2003). Jonassen (2011) considers problem solving both as a goal of education and as a tool to achieve it. According to the author, "problem solving is the most authentic and therefore the most relevant learning activity that students can engage in" (p. xvii). Learning becomes meaningful when it is goal-driven and when skills to process information are acquired, which leads to knowledge being better retained.

PBL is a unique approach that develops problem-solving skills and engages students in learning about a subject while working collaboratively in small groups in the context of real-world problems. Vdovina (2013) points out that if sufficiently developed, critical thinking that is usually entwined with problem solving can provide students with a more skillful way of communicating, acquiring new knowledge, and dealing with attitudes, ideas and beliefs, where language plays an important role.

Merging FL learning with learning to solve problems or learning in the context of problem solving is advocated by the action-oriented approach, which is considered to be the most up-to-date approach for foreign language education (Piccardo & North, 2019). Introduced in the *Common European Framework of Reference for Languages: Learning, teaching, assessment* (hereafter the CEFR; its first version was published in 2001by Council of Europe), this approach marks a paradigm shift in foreign language education (Piccardo & North, 2019). Building on both sociocultural and socio-constructivist theories, the action-oriented approach stresses the importance "on the use of tasks in collaborative group work, on discovery learning, and collective problem solving"

(Piccardo & North, 2019, p. 74). Therefore, placing language learners in collaborative problem-solving contexts is consistent with the modern ideas about foreign language education.

In addition, the updated version of CEFR (Council of Europe, 2001), recently published as the *Common European Framework of Reference for Languages: Learning, teaching, assessment – Companion volume* (Council of Europe, 2020), suggests encouraging language learners to perform authentic tasks that give opportunities for extensive and purposeful communication, allowing the improvement of mediation (facilitation of communication and understanding among group members) strategies. Mediation activities, which include perception, production, and interaction, are considered to be central when learning languages (Council of Europe, 2020). Learners as social agents perform various social actions that have goals other than just communicating or learning to communicate. They write not just to lay down their ideas in written form, but, for instance, to try to convince someone to consider their application for a job. They speak not just to be able to speak in another language, but, for instance, to share knowledge and perspectives on the same problem while solving it. In this respect, according to the action-oriented approach, learners learn a language by performing various actions, and the process comprises both language activities/language goals and non-language activities/non-language goals.

In terms of conceptual approaches, the study relies on contemporary constructivist, sociocultural, and situated conceptions of learning that share the following ideas: learning is a process not of knowledge transmission but of meaning-making; it is a dialogue, a process of internal and social negotiation (Jonassen & Land, 2012). The aforementioned tenets emphasize student-centered learning environments, one of which is PBL (Jonassen & Land, 2012; Anthony, 2011). In addition, the theory of situated learning suggests that learning "is most effective when […] embedded in authentic tasks that are anchored in everyday contexts" (Hung et al., 2008, p. 488). In such cases, it also results in "more authentic, socially mediated, and personally relevant kinds of learning" (Jonassen, 2011, p. 160). Too often, language educators' views are limited to the traditional understanding of learning/teaching foreign languages, i.e., teaching about a language and the development of communicative language competences solely at a learner's individual level. The current research aims at suggesting more complex collaborative tasks.

PBL has been on the rise in a wide spectrum of disciplines. However, the social sciences and humanities cannot boast of its wide application and too little research has been conducted in the field (Anthony, 2011;

Larsson, 2001; Li, 2013). Although the reflections on PBL of both learners and teachers are positive, the integration of PBL into FL teaching and learning is just beginning, and the experimentation using the approach of PBL is slow (Coffin, 2011; Anthony, 2011; Othman & Shah, 2013). Coffin (2011) points out the lack of proper training to supervise, the lack of understanding, and time constraints as the main reasons the approach has not taken root yet. Adopting PBL "requires a substantial commitment to innovation that many teachers and professors are unwilling to take" (Jonassen, 2011, p. 180). In addition, the integration of PBL into an FL course requires special consideration of intervention to be made in terms of language use, which complicates the task. There have been a few scientific attempts to describe the phenomenon in the area of FL teaching (see Larsson, 2012; Ciuciulkiene, 2003; Mathews-Aydinli, 2007; Anthony, 2011; Anthony & Kadir, 2012; Du & Kirkebæk, 2012; Doghonadze & Gorgiladze, 2008; Coffin, 2011, 2014). However, more thorough investigation and substantiation are needed, with the focus on developing problem-solving skills and critical thinking in an FL.

The aim of the current study was to find out students' and teachers' perceptions of using PBL and integrating the learning of decision making by applying a Force Field Analysis strategy during EFL classes. The research questions were: 1) Does the strategy of Force Field Analysis in decision making contribute to the development of students' problem-solving skills in EFL? 2) How does the aforementioned strategy affect foreign language learning?, and 3) What are the teachers' attitudes toward the PBL environment and its potential in EFL? While the first two questions focused on students' perceptions, the last one was about teachers' reflections on this classroom practice.

2. Review of the literature

2.1. PBL as an approach for EFL

The following section dwells on the discussion of PBL's suitability for FL learning and the ways to implement it.

In FL education, there is no absolute certainty as to which approach, procedure, or technique guarantees the greatest learning achievement. Still, success in language learning can be attributed to some clear-cut conditions, the most crucial of which might be providing learners with abundant opportunities to engage in meaningful communication in the target language (Belcher, 1999; Harmer, 2015a). Comprehensible input or access to the FL "is most effectively provided by exposure to authentic

texts, examples of genuinely communicative language use, rather than materials created solely for pedagogical purposes (such as the traditional language drills, fill-in-the-blank exercises, and invented dialogues still found in many language textbooks)" (Belcher, 1999, p. 254).

FL learning differs from the learning of other subjects in which emphasis is placed on acquiring certain subject-related knowledge, and traditional teaching methods – e.g., delivering lectures – are used. In FL learning, language can be considered more as a tool rather than an actual subject. The implementation of PBL in language learning can create possibilities for developing additional skills, such as problem solving, collaboration, and self-directedness in particular. In addition, the teaching of an FL is frequently criticized for being superficial (Larsson, 2001) with students seen as passive receptors of information. However, PBL might encourage students to become more actively involved through the introduction of language and vocabulary that is related to real-world situations.

High demand for learning FLs in the 1970s and the early 1980s triggered the development of the communicative approach, which considers interaction among learners as both the means and the goal of the learning process. Moreover, its underlying idea is that "language learning would take care of itself" (Allwright, as cited in Harmer 2015b). However, as Harmer (2015a) observes, it is not sufficient to engage learners in communicative tasks; at least some minimal focus on language accuracy, initiated by a language educator, is necessary for language learning to succeed. Although PBL and communicative language teaching share similar outcomes, communicative language teaching would be meaningless if communication was irrelevant to the learner. In contrast, PBL problems that are close to real life can provide the grounds for meaningful communication.

Anthony and Kadir (2012) report on positive attitudes toward the approach of PBL in FL teaching, stating that PBL increases students' engagement, motivation, and confidence levels. Moreover, English usage among students extended beyond the classroom "unlike in the case of previous traditional approaches where students hardly had time to use the language in the classroom as it was very much [the] teacher talk scenario" (Anthony & Kadir, 2012, p. 69). Anthony (2011) concludes that this approach focuses clearly on students' learning and on the development of lifelong skills (enquiry, analysis, and synthesis); it invites students to take responsibility for their own learning, and, most importantly, it enhances the development of problem-solving skills and higher-order thinking.

As Savin-Baden (2000) highlights, PBL can have various combinations of design variables, depending on the discipline in which it is implemented.

For instance, the process of PBL implementation is elaborated on by Anthony (2011, pp. 14-17) who applied it to English for Specific Purposes. The process used to implement PBL into an English language course for adults is also explained in detail by Mathews-Aydinli (2007, pp. 1-5).

Educators may face multiple challenges when carrying out PBL. First, it is important that problems are interesting and relevant to students' reality (Larsson, 2001). For other subjects, PBL problems usually serve as a means of understanding the subject area. To learn FLs, it is necessary that they are not too content-laden and do not presuppose in-depth knowledge of a specific subject matter. Problems can be interdisciplinary and related to students' interests or their future careers. Therefore, focusing on improving specific skills such as argumentation, reasoning, problem solving, or decision making in an FL is more beneficial than content learning.

Secondly, communicating in an FL is vital for successful PBL-based FL education (Larsson, 2001). "Failing to fulfil that demand would greatly decrease, if not entirely eliminate, the profits of using PBL at all" (Larsson, 2001, p. 5). A feasible solution to prevent students from switching to their mother tongue is monitoring their communication by, for instance, recording either face-to-face or online meetings.

Thirdly, the PBL approach requires learners to use an FL as a working language for problem solving. As Rybold (2010) states, thinking abilities that exist in a native language cannot be easily transferred to thinking in an FL. It may result in a delayed and poorer expression of ideas. As Larsson (2001, p. 5) argues, "if the students' command of the language is not sufficient for the task at hand, creativity and enthusiasm will naturally drop and give way to frustration and disappointment. Where is the point of balance?". In this respect, learners of basic levels may experience an extra barrier to problem solving in the target language, and, conversely, students seeking to achieve the highest levels of language proficiency would not perceive language as a restriction in the PBL approach.

According to the Sapir-Whorf hypothesis of linguistic relativity, the language we use affects how we think; however, psychologists have proved that it is only half-right since language does influence, but does not determine thinking (Halpern, 2014). This implies that if an FL is employed for thinking (like PBL in an FL course), it can also contribute to the enhancement of the ability to think critically.

2.2. The development of problem solving skills
and learning decision making

There are three types of thinking: analytical, lateral, and critical (Warner, 2014). Warner (2014, para.5) discusses the interrelation and complementary features of all three types. For relevance, patterns, trends etc., the aim of analytical thinking is primarily to analise the provided data/information. So that alternative answers or solutions are found, data/information is set in a new or different context by means of lateral thinking. Critical thinking is higher order thinking that involves making an overall or holistic judgment about the information that is as free from false premises or bias as possible (Warner, 2014).

The significance of critical thinking is highlighted in the research of numerous authors. Angelo (1995) generalizes the most formal definitions of critical thinking "as the intentional application of rational, higher order thinking skills, such as analysis, synthesis, problem recognition and problem solving, inference, and evaluation" (Critical Thinking, n.d., para. 1). Rivas and Saiz (2012) state that critical thinking is necessary for problem solving, and it "ends in action, effectively solving problems and making sound decisions" (p. 18). Glaser (as cited in Behar-Horenstein & Niu, 2011) explains critical thinking as "an attitude and logical application of skills in problem-solving contexts" (p. 26). Furthermore, Schafersman (as cited in Vdovina, 2013) confirms that "a person who thinks critically can ask appropriate questions, gather relevant information, efficiently and creatively sort through this information, reason logically from this information, and come to reliable and trustworthy conclusions about the world" (p. 56).

To quote Jonassen (2011), "decision making is the most common form of problem solving" (p. 48). Halpern (2014) gives the comparison of decision making and problem solving. The former is employed when decision-makers need to select the best alternative among several possibilities, and the latter is applied to generate alternatives. However, the distinction is considered to be arbitrary because "in real life, it is often difficult to decide if the task requires the generation of alternatives or the selection of alternatives" (Halpern, 2014, p. 190).

Jonassen (2011) distinguishes between two types of approaches to decision making: 1) normative or prescriptive theories/models and 2) naturalistic or descriptive ones (see Table 1).

Table 1. Decision-making models and theories (adapted from Jonassen, 2011)

Normative or prescriptive (Rational choice models)	Naturalistic or descriptive (Newer conceptions of decision making, more contemporary research into decision making)
How decisions SHOULD be made	How decisions ARE made (explanation-based process)
The best option is the one that provides maximum utility.	The best option may be the one in accordance with personal beliefs or prior experiences.
The focus is on the comparison, and weighing the advantages and disadvantages of alternative solutions. Rational choice methods identify criteria, evaluate each decision based on those criteria, weigh the options, and select the options of the anticipated value.	Prior experiences are emphasized. Decision makers employ argumentation rather than the calculation of the expected values. Arguments are constructed on the familiar/known options in contrast to the methods of expected values.
Possible scaffolds: Decision Matrices, SWOT Analysis, Force Field Analysis, etc.	Possible scaffolds: constructing stories, mental simulations, scenarios, arguments, etc.

According to Jonassen (2011), normative decision-making models involve rational analysis of alternatives – contrasting, comparing and weighing up the advantages and disadvantages of alternatives, whereas naturalistic models rely on prior experiences and involve constructing story-based scenarios to analyse possible outcomes in the process of decision making. Those involved do not necessarily undertake this approach as their first choice. Nevertheless, according to Klein (1998), the rational choice strategy has many advantages as it can be applied in different situations, tends to result in reliable decisions, does not leave anything out, and aids novices in situations in which more information is needed. Klein (as cited in Jonassen, 2011) emphasizes the significance of rational approaches by claiming that such methods are more likely to be used in conflict-resolution situations or where there is a need for justification.

Decision-making skills can be improved with effective training programs (Kylesten & Nahlinder, as cited in Halpern, 2014) as well as the use of tools developed to assist in decision making. A variety of them are available, several examples of which are: Decision matrices, SWOT

Analysis, Decision trees, and Force Field Analysis (examples can be found at http://managementhelp.org/personalproductivity/problem-solving.htm).

The aforementioned tools have brought about various formats of worksheets which could help to optimize decision making and serve the purpose of "framing the decision in a clear and concise way, listing many possible alternatives that would achieve a desired goal, listing the relevant consideration, and mathematically calculating a decision" (Halpern, 2014, p. 430). In this line, the final decision emerges during the process of optimization (Halpern, 2014; Klein, as cited in Jonassen, 2011).

3. Methodology

3.1. Research questions

The aim of the study was to explore the potential values of PBL in an EFL classroom by integrating the strategy of Force Field Analysis into decision making. For the study, the following research questions were devised:

- Does the strategy of Force field analysis in decision making contribute to the development of students' problem solving skills in EFL?
- How does the aforementioned strategy affect foreign language learning?
- What are the teachers' attitudes toward the PBL environment and its potential in EFL?

3.2. Context and participants

The study was conducted at Kaunas University of Technology, Lithuania, in 2017. The sample comprised 127 first- and second-year students from the faculties of Chemical Technology and Civil Engineering and Architecture, studying English at the C1 level. The PBL educational environment was developed by three English teachers. The students were provided with three problems to solve and were introduced to Force field Analysis, to help them learn one of the rational types of decision making. The tool's worksheet was downloaded from the website *MindTools* (https://www.mindtools.com/pages/article/newTED_06.htm). The website provides the description of the decision-making technique as well. Afterwards, both the students and the teachers were asked to fill in online questionnaires to evaluate the PBL environment that was developed.

3.3. Instruments

For the study, a mixed methodology was applied. First, to measure the students' attitudes toward the learning environment, a quantitative approach was used: an online questionnaire based on the five-point Likert scale, which ranged from 5 (strongly agree) to 1 (strongly disagree). Data obtained from it was analysed using the Statistical Package for the Social Science (SPSS), version 19. The questionnaire (see Appendix 1) comprised 12 statements on problem solving and decision making, as well as the relevance of the activities to language development. Second, to determine the teachers' reflections on the learning environment, a qualitative approach was employed: an online questionnaire consisting of three open questions (see Appendix 2).

3.4. Procedures

Students' and teachers' activities that they performed in the developed PBL environment are listed in Table 2.

Table 2. Students' and teachers' activities in the PBL environment

| Students	Teachers
Discussion of problems and their relevance.	Introduction to the problem itself, as well as to vocabulary/terminology related to the problem.
Individual research into problems.	Discussion of a range of available resources. Allocation of time for individual study.
Discussions in groups: generating possible solutions.	Providing advice on students' grouping and choosing the roles in favour of or against the statement. Observing, taking notes, and providing feedback on students' participation in the discussion, as well as on language mistakes.
Filling in the worksheet of Force Field Analysis.	Introduction to Force Field Analysis.
Presentation of group's results.	Evaluating feedback on the students' participation in the activity.

4. Results and discussion

The survey addressed two sets of questions. The first set was designed to determine students' attitudes toward problem solving and decision making, including the strategy of Force Field Analysis. Students' attitudes toward the tool are rendered in Figure 1.
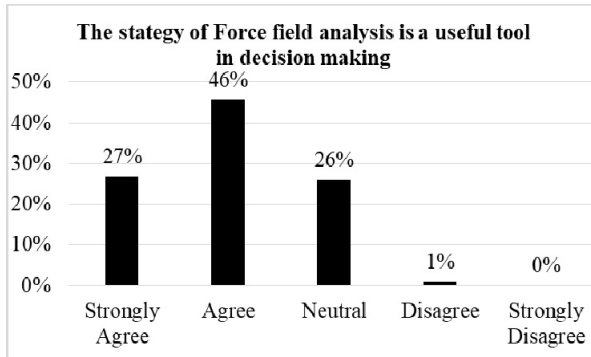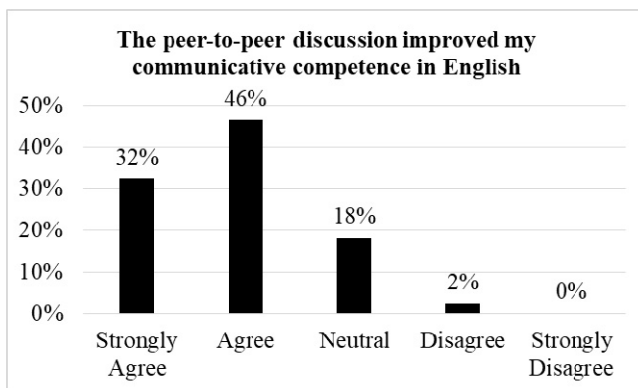

Figure 1. Students' responses toward the usefulness
of Force Field Analysis in decision making

Almost half (46%) of the participants acknowledged the usefulness of the strategy for decision making. The medium was found to be effective both in terms of language learning and developing communicative competence. In this line, Larsson (2001) emphasizes that the active involvement of students can be achieved if they are introduced to the language through a relation to real-world situations, rather than through words on a list.

The second set of survey statements related to language development produces positive results as well. Figures 2, 3, and 4 respectively reflect a general picture of the students' views on the issue.
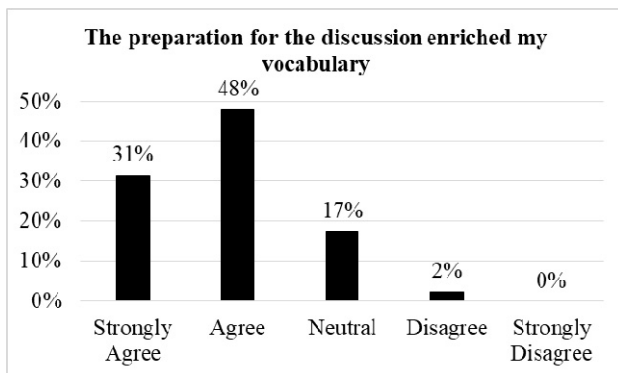
Figure 2. Students' responses toward the enrichment of their vocabulary during their preparation for the discussion

Figure 3. Students' responses towards the improvement of communicative competence in English during the peer-to-peer discussion
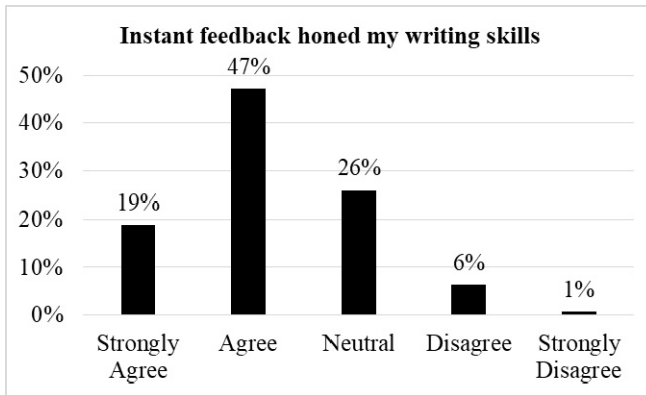
Figure 4. Students' responses toward the contribution
of instant feedback on the improvement of their writing skills

The five-point Likert scale was applied to gauge the relevance of the aforementioned sets of statements. The results for all the statements are provided in Table 3.