

## Managerial Factors Conditioning the Collaborative Learning Environment in the University Studies

Jurgita Vizgirdaite and Laura Fridrikaite

Kaunas University of Technology  
Donelaicio 73, LT-44239 Kaunas, Lithuania

**crossref** <http://dx.doi.org/10.5755/j01.ss.76.2.1963>

### Abstract

**A competent educator builds well comprehended and prepared educational environments to promote student learning. Meanwhile, students develop their own learning environments that may or may not match the educator's educational environment as well as the individual environments of the other learners. Collaboration among learners enhances the process of learning, creation and acquisition of new knowledge and experience. Thus, the goal of the educational system and its all components should be to concentrate on creating adequate collaborative learning environments in the university studies. Although educational environments have been analyzed in the scholarly literature, the managerial factors that condition the development of the collaborative learning environment have not been researched yet. Therefore, this article seeks to achieve the following goal and answer the question: what managerial factors and how they condition the creation and maintenance of the collaborative learning environment in the master's level studies in the area of social sciences in university X located in Lithuania? This article identifies the theoretical model of the environment that is based on collaborative learning and explains the conditioning of the specific external and internal managerial factors. The created theoretical model is then tested in reality through the empirical research in a specific case and findings are compared.**

**Keywords:** collaboration, collaborative learning, collaborative learning environment, managerial factors.

### Introduction

Collaborative learning is one of the methods used to enhance the quality of teaching and learning. It provides students with opportunities to obtain valuable social abilities, skills of working in a pair, group, or team, and achieve better learning results. Meanwhile, these factors prepare students for their careers (Barkley, Cross and Major, 2005; Udvari-Solner and Kluth, 2008; Iborra, Garcia, Margalef and Perez, 2010).

While examining the problems encountered in the studies scholars research study programmes, processes,

studying environments, however, the managerial factors of academic environments that are significant for the creation of educational environments, are scarcely analyzed. Lipinskiene (2002) studied the environments that empower students to learn. However, a very important dimension, an analysis of the environment where collaborative learning can take place, is not detected here. The goal to determine the managerial factors that condition a collaborative learning environment has generated the following *research problem*: what managerial factors and how they condition a collaborative learning environment in the university studies?

The research aim is to reveal a collaborative learning environment and detect the managerial factors that condition it in the university studies.

The theoretical framework of the concept of collaborative learning environment and of the managerial factors that condition it, is validated based on the general literature review encompassing the works of various authors. Meanwhile, the empirical research is based on one specific case study performed in the context of Lithuania, the country that after regaining its independence more than twenty years ago, is on the way of building its democratic traditions, thus, the phenomena of collaboration and collaborative environment are of great significance for it and determining the managerial factors that condition such an environment is needed.

The article addresses the following research objectives:

1. to theoretically validate the collaborative learning environment in the university studies and the managerial factors that condition it;
2. to validate research methodology of the collaborative learning environment and the managerial factors that condition it;
3. to determine the collaborative learning environment and the managerial factors that condition it in the master's level studies in the area of social sciences at university X in Lithuania.

The research methods of case study, literature review, document analysis, semi-structured interviews, qualitative content analysis.

Collaborative learning environment is analysed drawing on the theoretical conception of social constructivism (Vygotsky, 1986), group work (Thelen,

1949) and cooperative learning conception (Slavin, 1983, 1984, 1986; Slavin et al., 1985; Johnson, Johnson and Smith, 1991). Collaborative learning environment is analyzed as a result of shared personal learning environments that also coincide with the educational environment that is being created by an teacher (Lipinskiene, 2002; Juceviciene, 2007). The 'power with' perspective is used as the foundation necessary to condition the collaborative learning environment (Juceviciene et al., 2010), where 'power over' means that hierarchic relationships are present and a subordinate person respects, trusts, or even fears the superior person and 'power with' is used in the equal relationships and power is shared. Collaborative learning environment is approached as an educational environment which is educationally empowered through three aspects: legitimacy (Freire, 1970, 1985, 1989; Kreisber, 1992; Forrest, 1999; Brandenburg, 2008; Juceviciene, 2007, 2010), educational (Vygotsky, 1986) and managerial (Hall, 1966; Barkley, Cross and Major, 2005; Low and Lawrence-Zuniga, 2003; Brindlay and Walti, 2009; Iborra et al., 2010; Villa et al., 2010; Vitale, 2010; Allodi, 2010) aspects.

The article consists of three parts. The first part provides rationale for collaborative learning environment in the university studies and the managerial factors that condition it.

The second part of the article provides rationale for the research methodology of the detection of managerial factors that condition collaborative learning environment in the university studies.

The third part analyzes a specific case and reveals the managerial factors that condition the collaborative learning environment in the master's level studies in the area of social sciences at the university X in Lithuania.

## 1. Conception of collaborative learning

**Collaboration and cooperation.** To begin with, it must be noted that there are two terms in the English language that signify one similar meaning: *collaboration* and *cooperation*. Thus, the question arises whether these two terms can be used interchangeably? If not, which one fits the purpose of the research in this article better?

Quite frequently in the scholarly literature the concepts of collaborative learning and cooperative learning are used interchangeably. These two concepts have some similarities, but they also have significant differences that must be emphasized and due to which the aforementioned concepts should be utilized with appropriate care with the purpose to fulfill their specific intentions. In cooperative learning a teacher's authority is emphasized and often individual participants seek personal goals and complete independent portion of work just to get one cooperative final result (Vizgirdaite, 2011). In collaborative learning, an educator becomes the participant in the learning process, where mutual work is interdependent, knowledge is shared with the goal to create new knowledge and co-produce an enlarged result, thus getting a synergy effect (Bosworth and Hamilton, 1994; Joiner et al., 2000; Barkley, Cross and Major, 2005; Arends, 2008; Luzzatto and DiMarco, 2010). Since the learning (future) paradigm

(Juceviciene, 2007) underlines the importance of interactions among students and an educator, the concepts that precisely fit the aim of this research, is *collaboration* and *collaborative learning*.

Bruffee (1999), Barkley, Cross and Major (2005) as well as Iborra et al. (2010) analyze the similarities and differences between cooperative and collaborative learning. These authors state that cooperative learning represents the traditional structure of teaching hierarchy, where an educator possesses the main responsibility of transferring the information onto the students and is the coordinator in charge of the entire educational process. On the other hand, the same authors concur that collaborative learning is absent of hierarchic management, learners have the responsibility of and may control their own learning processes and participate in it together with an educator. Both cooperative and collaborative learning emphasize working together with other individuals during teaching and learning processes, specifically through different methods, considering the participants' abilities, experience, attitudes, accomplishing the goals of the study programme and a module, and creating adequate conditions to foster the creation and acquisition of new knowledge.

According to Bruffee (1999), in a collaborative learning an educator does not persistently require a continuous and equal participation of all learners, specific roles and responsibilities that a learner should accomplish are also usually not assigned, letting the groups select their own strategies and methods to reach the educational goals. Thus, the responsibility of the learning process becomes a learner's priority and the performance evaluation is accomplished based on a student's ability to apply the learned information that they acquired while collaborating with others.

Barkley et al. (2005) state that in a cooperative learning educatees work together to accomplish a mutual task, share information and help one another by completing their own personal portion of the task and, thus, achieving the group's goal where the result is the collection of independently completed work. The work of the educatees is monitored and guided by an educator who is also an expert and authority in the process. In the collaborative learning process, an educator works together with learners, does not control or interfere with the students' decisions or choices, if they are not asked to do so, and becomes an equal participant who co-produces new knowledge together with the students. Overall, collaborative learning tasks and methods emphasize individual accountability and interaction (Barkley et al., 2005). Therefore, learners must be able to not only work together, but also be proactive participants responsible for own and the other learners' quality of learning. In summary, collaborative learning enhances individual learning through mutual learning together with others while attempting to achieve common educational goals. Thus, cooperative learning deals with an educator and educatees, whereas collaborative learning emphasizes an educator and learners roles and relationships.

**Educator, educate and learner.** Another question that should be answered when analyzing the development of the environment that is grounded on the collaborative

learning is the specificity of the terms used in the educational context and what meanings they carry behind them? The logics of using the terms of an educator, educatee and learner should be explained before going further in order to understand which ones fit this research better and should be utilized in the area of this thematic. The term of an educator is used by the authors of this article to represent a person who provides purposeful information that relates to the goal of education as well as creates an educational learning environment and who grounds her/his educational techniques on the learning (future) paradigm. An educator may play two roles. One role may be realized traditionally by transferring knowledge from an educator onto the students and, thus, following the *teaching paradigm*. Freire (1970, 1985, 1989) calls this a *banking model of education*, where an educator deposits information into the educatees, to withdraw it later when needed. This process does not require any critical thinking or discourse for the purpose to build new knowledge. Another role played by the educator maybe accomplished by sharing knowledge and participating together with the students in the teaching and learning processes, therefore, grounding the educational process on the *learning (future) paradigm*. The nature of the role is also conditioned by the context. Therefore, an educator fulfills a more traditional role in the cooperative learning setting. Meanwhile, collaborative learning ensures not only the process of knowledge sharing, but allows for the educator to also become a participant of the educational process and together with the students enlarge the final result of learning, specifically co-produce new knowledge that would not have been achieved if an educator only transmitted the information onto the students or if the students learned individually. On the other hand, an educatee is also defined as a representative of the traditional hierarchic teaching system, where she/he is a passive receiver of the transferred information and knowledge (Juceviciene, 2007). Contrary to the educatee, a learner is an active participant of the collaborative learning process who together with an educator and other learners engages in the process of learning through interactions, discourse, critical thinking, and, thus, participates in mutual work of collective knowledge building (Juceviciene, 2007). More importantly, during collaborative learning, an educator may also take upon the role of a learner depending on the existing conditions of the context and adapt the educational didactical system based on the circumstances present at hand.

Barkley et al. (2005) define the characteristics of collaborative learning and state that its main component is an in advance prepared educational model. All of the learners should proactively engage while trying to achieve the educational goals together with others. Another aspect of collaborative learning underlines the relevance and applicability of material based on the learners' needs and expectations. Barkley et al. (2005, p. 5) conclude that 'collaborative learning – is a mutual work between two individuals or among several learners who seek to achieve mutual goals by sharing tasks and through interdependent roles'.

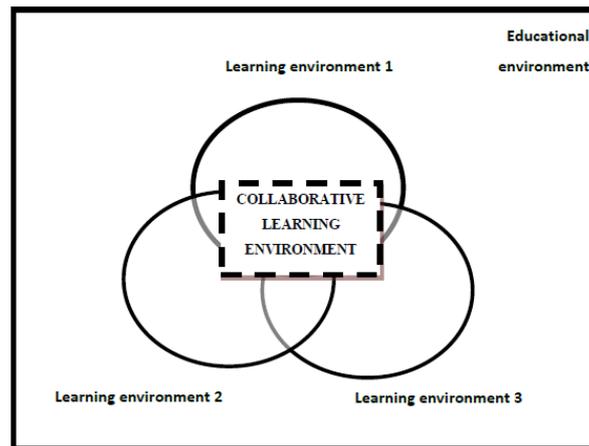
Iborra et al. (2010), state that during collaborative learning the authorship and responsibility for the learning process is shared between an educator and learners.

Udvari-Solner and Kluth (2008, p. xx) perceive collaborative learning as a process and state that collaborative learning is 'the process, where learners interact in pairs or groups with the goal to receive a specific benefit from each member and so that the abilities of every member are respected'. These authors state that during collaborative learning a discussion about the educational plan and its process occurs and individual perceptions of the learning goals are formed. Therefore, in collaborative learning learners are active members who create and control own learning processes. According to Wang and Woo (2010), a collaborative learning process should be observed and managed from aside, so that interference is minimal and learners are in charge of successfully controlling own learning and achieving own goals.

Other authors also emphasize the importance of a process in collaborative learning. Posey and Lyons (2010) note that collaborative learning can be considered a phenomenon that possesses the conditions that engage participants in a critical dialogue or mutual problem solving, where the result is not the most significant component.

Two perspectives can be used for collaborative learning. Firstly, collaborative learning can be perceived and analyzed as a goal in itself – learning what is and how one can learn through collaboration with the others (*learning about collaborative learning*). Secondly, it can be approached as a method to achieve a specific goal – learning specific educational content (subject matter) by collaborating with other participants. Thus, as a target in itself, collaborative learning is the content and subject taught to the learners so that they know how they can learn in collaboration. On the other hand, if collaborative learning is used only as a method, it means that the participants are already familiar with it, have necessary knowledge, abilities, and attitudes, and, thus, it can be used to achieve other, more general educational goals. Depending on whether collaborative learning is perceived and used either as a goal or as a method, specific managerial factors that condition collaborative learning environment should be selected. In this article the main goal is to determine what managerial factors and how they should be utilized to create adequate collaborative learning environment that could be used as a tool and method to achieve subsequent educational goals, such as learning a specific subject matter.

In summary, collaborative learning is a phenomenon that takes place in a specific environment where an in advance prepared study model is applied based on the demographic characteristics, abilities, experience, attitudes, needs of the learners and study programme as well as module goals, where an educator becomes a participant of the educational process and the learning is the responsibility of both an educator and the learners, while the learning goals are being achieved through mutual work, and interaction with the purpose to create new



**Figure 1.** Collaborative learning environment as an outcome of the overlapping personal learning environments generated by the educational environment

knowledge and acquire new experience, the outcome of which is enhanced quality of learning, development of communication and social skills necessary when making decisions and solving problems in the real world. The participants in this environment are the learners, proactive decision makers and knowledge creators, and an educator, equal participant in the learning process. A collaborative learning environment is an outcome of personal learning environments that overlap and are the product of the educational environment created by an educator (Figure 1).

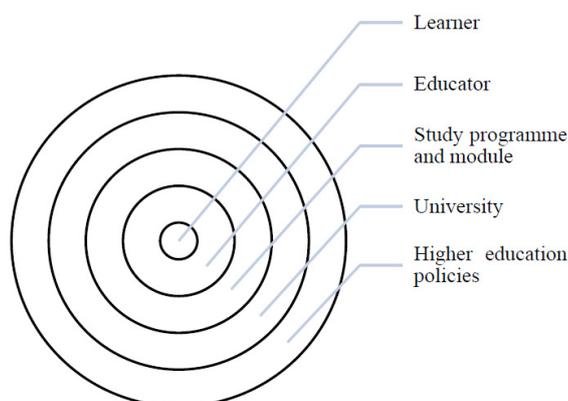
This collaborative learning environment includes mutual work, common goals and vision, shared understanding, interdependent roles and responsibilities, and the co-production of a result (Bosworth and Hamilton, 1994; Joiner et al., 2000; Barkley, Cross and Major, 2005; Arends, 2008; Luzzatto and DiMarco, 2010).

The theoretical overview can be summarized into the following characteristics of the collaborative learning environment:

- *mutual goal* - understood by all participants, relevant and acceptable to all (Hennessy, Murphy, 1999; Schneider, 2007);
- *mutual work* - where each member knows and understands their own responsibilities as well as those

of the other members, and is ready to take the role of another person should it be necessary (Bosworth and Hamilton, 1994; Arends, 2008);

- *shared understanding* – participants hold and share the same or very similar meanings and perceptions of various phenomena (Zebrauskiene and Grybauskiene, 2006);
- *communication* – timely and clear flows of information among all members (Little, 2002);
- *interaction* – reflects a positive side of interactions (support, motivation, free will) and deals with the psychological aspect of intercourse (Lekaviciene et al., 2010);
- *shared responsibility* – mutual work of the participants is directly impacted by individual accountability to accomplish personal duties and responsibilities (Tereseviciene and Gedviliene, 1999; 2003);
- *coordination* – a purposeful monitoring, evaluation, and control of the performance progress, by an adequate coordinator based on the agreement with the participants (Kumpulainen and Kaartinen, 2004).



**Figure 2.** Managerial factors that condition the collaborative learning environment in the university studies

## Conception of managerial factors that condition the collaborative learning environment

Collaborative learning environment is impacted by the external and internal managerial factors that aid in helping to achieve educational goals by utilizing the necessary human, material, and other resources. External factors include the education policies of higher education in the country that in turn condition the rest of the internal managerial factors, such as the work of universities. Internal managerial factors include: a university, study programme and a module, educators and learners (Freire, 1985; Iborra et al., 2010) (Figure 2).

Universities depend on the educational policy of the country and the latter is impacted by the economic, cultural, and political circumstances and conditions of the country. Democratic context, economic perspectives, and cultural characteristics may condition the performance of a university. National educational policies in Lithuania are proposed by the Ministry of Education and Science of the Republic of Lithuania and ratified by the parliamentary body. Therefore, Lithuania maintains a centralized education system. After the restoration of its independence in 1990, Lithuania has been implementing educational reforms. The start of these implementations was very favorably perceived by the public. The reforms were even utilized as exemplary by various foreign educational experts. However, currently the higher education and its reforms are receiving complaints and criticism (Zelvys, 2009).

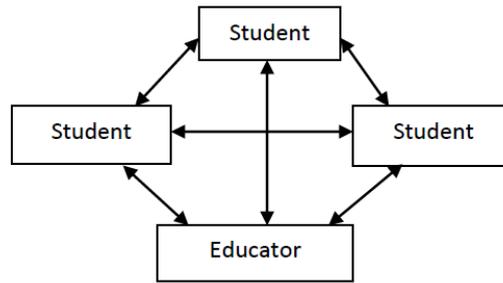
Another aspect that impacts learning is the university itself. The managerial factors of a university include *material, psychological, and competence conditions* (Lipinskiene, 2002; Bain, 2004; Tautkeviene, 2004; Juceviciene, 2007; Juceviciene et al., 2010; Linkaityte and Sirvaityte, 2000; Leibowitz et al., 2010). Collaborative learning requires adequate learning conditions. Meanwhile, a positive psychological atmosphere is also imperative. Finally, a competent academic community builds a context around a student that may promote collaborative processes through professional interactions, appropriate guidance, and integration into a university setting. Core values, as a precondition for a university's activities, were grounded by the following 19<sup>th</sup> and 20<sup>th</sup> century authors: John Henry Newman (1889), Wilhelm von Humboldt (Roberts, 2002), Kenneth Minoque (1973), Ortega y Gasset (Wyatt, 1990), and Karl Jaspers (1971). Thus, a university is an environment of high level intellectual activity, characterized by continuous search for truth and liberal education. The emphasis is on the parity-based interaction between scholars and students. Based on the above authors university culture has three fundamental values: search for truth, liberal education, and parity-based interaction among the members of academic community.

In addition, Barkley, Cross and Major (2005) note that physical environment is directly linked to the success of the learning process. Anthropologist Hall (1966) is the creator of proxemics, which analyses the impact of interpersonal space and environment on communication. Three types of environments may condition the quality of communication as well as collaboration: fixed-feature

elements are permanent things that cannot be moved (e.g. floor, walls) and semi-fixed feature elements are moveable and changeable elements (e.g. tables, chairs). Socio-petal space encourages interactions, while socio-fugal space keeps people apart (Osmond, 1957). Learners should be provided with an environment that fosters communication, thus, collaborative learning.

As a managerial factor, a study programme that permits creation and maintenance of collaborative programme, should be grounded on the modern learning paradigm. Thus, collaborative learning should be noted as one of the aims. In addition, methods, outcomes, and assessment should also integrate the aspects of collaborative learning. According to Juceviciene and Vizgirdaite (2012), two alternatives are possible: a permanent provision of power to use collaborative learning in the studies and an episodic provision of power. A permanent provision of power is ensured when a study programme is based on the learning paradigm. An episodic is available when a study programme is not based on the learning paradigm, but a specific module and its methods, outcomes, and assessment are grounded on the learning paradigm. Educational goals define teaching methods and assessment that simultaneously condition learning outcomes. An assessment system forms a student's view point towards learning as well as choosing the forms and methods of teaching and learning. If only the ability to repeat back the learned information is evaluated, then a student will not need to collaborate with others, she/he will only need to listen to an educator, take notes, remember the information and repeat it back (Ramsden, 1998). This is how educatees are developed. The need to learn collaboratively comes out from the assessment that is based on collaborative attempts, specifically the received mutual result or even the evaluation of the process of collaborative learning (Biggs, 2003). Student collaborative learning may be achieved only when developers of the study programme are familiar, have knowledge and experience about collaborative learning themselves (Leibowitz et al., 2010). This means that they need to work in collaboration, engage in team work when preparing study programmes, to understand the essence and meaning of collaboration and collaborative learning.

The educational environment that is being created by an educator is the closest to the learning environment of a learner and directly includes as well as impacts the learning processes and the development of the collaborative learning environment. A collaborative learning model, strategy, and methods should be used to create a collaborative learning environment. The following characteristics are typical of collaborative learning: mutual goal, mutual work, shared understanding, communication, interaction, shared responsibility, and coordination (Bosworth and Hamilton, 1994; Joiner et al., 2000; Barkley, Cross and Major, 2005; Arends, 2008; Luzzatto and DiMarco, 2010). Based on a learning paradigm, collaborative learning can take place between student-student, among student-student-student, between student-educator, among student-student-student and an educator (Juceviciene, 2007).



**Figure 3.** Learning based on a learning paradigm

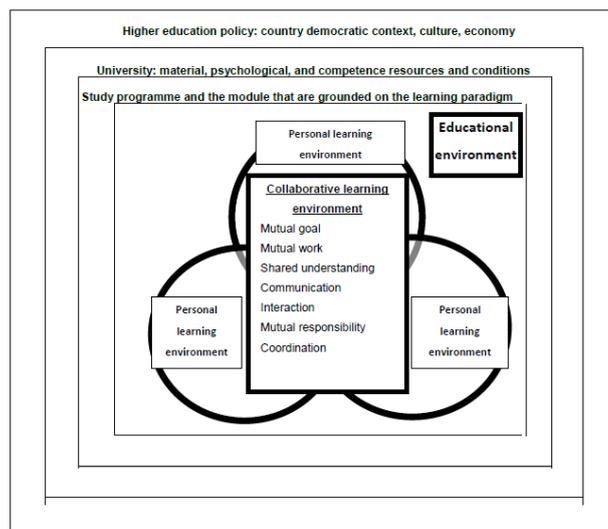
In this article a student-student-student and educator interaction is analyzed, where an educational interaction takes place and an educator provides information relevant to educational aims and becomes a participant of the learning process (Figure 3).

Firstly, both an educator and learners must possess specific characteristics in order to be able to participate in a collaborative learning process. This is defined by a collaborative learning competence and should include appropriate knowledge of the subject matter, should certain prerequisites be required, as well as of collaborative learning itself, abilities to learn and to collaborate based on cognitive, social, and reflective skills, and attitudes grounded on the values and aims to agree with those participating in mutual work (Juceviciene and Vizgirdaite, 2012). Based on the learners and their needs, an educator should prepare specific plans for the lectures and create an appropriate educational environment, by choosing adequate teaching methods (McDonald, 2010). Secondly, an educator should agree with the learners about their learning goals, objectives, and criteria. Thirdly, an educator should coordinate the entire educational process, guarantee constructive participation, and assess the learning outcomes. Next, an educator should possess abilities to communicate freely and effectively, resolve

conflict constructively, and solve problems. Finally, educators through the direct interaction with the learners, should form their social competences and social climate (Villa et al., 2010; Iborra et al., 2010).

On the other hand, a learner is responsible for understanding and fulfilling the learning aims and objectives, planning and coordination of the learning resources, accepting responsibility for own and the learning processes of the other learners, participation in a mutual constructive work, maintenance of discourse with the participants, knowledge sharing and creation, proactivity when searching and acquiring knowledge, assessment of learning methods and results (Brindlay, Walti (2009). All of these responsibilities of the learners can be defined as the competences of metalearning or self-directed learning (Juceviciene and Lepaite, 2002). Both an educator as well as learners are responsible for creating a positive social climate.

In summary, the following managerial factors condition the collaborative learning environment: higher education policies of the country, university, study programme and the module, and the educator. Figure 4 displays the theoretical model of the managerial factors that condition the collaborative learning environment in the studies.



**Figure 4.** Theoretical model of the managerial factors that condition the collaborative learning environment in the studies

## Research methodology

The aim of the empirical research is to provide rationale for the collaborative learning environment and the managerial factors that condition it in the master's level studies in the area of social sciences at university X in Lithuania.

*The objectives of the empirical research:*

1. to analyze how educators create collaborative learning environments. Presumption is made that some educators who participated in this empirical research, may be managing collaborative learning environments, but may not identify it as the set goal. Meaning that some educators may be creating collaborative learning environments, based on their educational nature, and might not even know about it themselves or consciously plan on creating and developing it;
2. to determine what managerial factors and how they impact the creation of the collaborative learning environment.

## Research instrument

*Case study.* A specific case was chosen to verify the theoretical model to analyze what managerial factors and how they are implemented in a certain university in a concrete study programme. A master's level study programme in the area of social sciences was perceived as an adequate choice due to three reasons: 1) master's level students have substantive theoretical and practical experience and this may underline their maturity level while being a positive factor for the teacher who is creating a collaborative learning environment; 2) the area of social sciences emphasizes interactive learning; and the main reason 3) the teachers in the chosen area have been known to be experts in the areas of educational and learning environments, innovation, graduate level studies, interactive methods, as well as have received outstanding student course evaluations. All of this is highly important when managing collaborative learning environments.

Interview is one of the primary data collection methods in the qualitative research. This can be one of the best ways to get closer to people, their understanding, perceptions, and definitions of various phenomena and situations in the real world (Morse, 1997; Marying, 2000; Keyton, 2001; Luobikiene, 2006). In addition, it helps to understand everyday interactions among people. Interview should not be understood only as responses provided to answer specific questions. It is a multilayered method to collect necessary data (Morse, 1997; Marying, 2000; Keyton, 2001; Luobikiene, 2006, p. 68)

A semi-structured interview was created and used in this research. The questions targeted the teachers' perceptions and creation of the collaborative learning environment and the managerial factors that are influencing this environment's creation in the studies. A total of twelve questions were included in the interview. The questions were categorized into three groups that corresponded to three objectives of the empirical research.

## Research context and sample

The interview was conducted in April, 2012.

Research was conducted in Lithuania, the country that regained its independence in 1990 after a prolonged occupation by an authoritative regime. The country where its citizens may still have negative connotations related to the word 'collaboration', which may mean collaborating with an enemy and 'cooperation', which may link back to the cooperative Soviet society (Vizgirdaitė, 2011). In addition, Lithuania follows a centralized style of education where policies are proposed by the Ministry of Education and Science of the Republic of Lithuania and ratified by the parliamentary body. The research was conducted in the university which is repeatedly among some of the highest rating universities ranked in Lithuania and is one of the largest technical universities in the Baltic States. Case study was conducted in the area of social sciences in the masters level study programme.

The sample consisted of five (5) respondents (teachers), individuals who are experts in their own area and currently work at university X. Two teachers were chosen due to their outstanding student course evaluations. A teacher who is an expert in creating and managing educational and personal learning environments was also selected as a person who is knowledgeable and has experience in maintaining adequate educational environments in their subjects. Another teacher was an expert in the area of innovations. Since collaborative learning environments and their managerial factors is a novel thing, this person was a very appropriate choice for achieving the research aim. The last selected person was an expert in the area of the master's level study programmes. As explained in the previous section of this article, the collaborative learning environment is impacted by a study programme as well as the module, as the formal documents that either give the right to create and manage collaborative learning environments during the educational processes or they do not. Interview responses were tape-recorded.

The criteria of sample selection: respondents (teachers) who work in the study programme X in the area of social sciences in the faculty X of university X were selected for this research.

A semi-structured interview method was used to collect research data.

A qualitative content analysis method was used to analyze data. There is no single correct way to conduct the qualitative content analysis, meaning that there is no unified methodological construction (Morse, 1997; Marying, 2000; Keyton, 2001; Luobikiene, 2006). The qualitative content analysis has been conducted based on Colaizzi methodology offered by Zydziunaite (2005): 1) multiple text reading, rejection of subjective assessment; 2) text division into separate parts; 3) categorization of meaningful elements into sub-categories; 4) relation of sub-categories into categories; 5) interpretation of research data. Three components are emphasized during the analysis: 1) data reduction; 2) data display; 3) making and assessing conclusions. Mayring (2003) underlines that the qualitative content analysis is a valid method that permits

making specific conclusions based on the analyzed text (data).

### Empirical research results

Empirical data were collected to identify managerial factors and the way they condition the creation, development and maintenance of the collaborative learning environment. The aim was to find out how teachers perceive the process of creating and maintaining the collaborative learning environment. In addition, it was also important to compare the theoretical model with the empirical research results.

The characteristics typical of the collaborative learning environment (shared understanding, mutual goal, mutual work, communication, interaction, coordination, shared responsibility) were identified in the theoretical part.

The following results were gathered based on the collected data and grounded on the comparison of theory to empirical information:

*Shared understanding.* Sharing of understanding, values, opinions explained in the theoretical part was compared to sharing of information in the empirical part. Using the same or similar understanding and meaning of a specific phenomenon were compared to the following empirical research elements: explanation, discussion, repetition, giving examples and explaining experience, problem solving, provision of feedback, and additional consultations. Literature (Zebrasukiene and Grybauskiene, 2006) explains that shared meaning should be present to achieve shared understanding. The empirical part discusses how such shared meaning can be created and maintained. In the theoretical part the shared understanding is created by sharing information and creating the common meanings of performance and various actions. The empirical part revealed the same strategies and methods used to create the shared understanding. Thus, shared understanding can be achieved by maintaining an appropriate way of the information flow, and utilization of the same meanings of the specific phenomena. To create shared meanings and understanding, participants must possess and use adequate communication skills, predominantly being able to send messages in the way that another person receives them in the manner intended to convey a specific purpose.

*Mutual goal.* Achieving the understanding and possession of the mutual goal among all of the participants requires accurate presentation of the goal. A learner's relevant learning goal matches the purposeful educational teaching and learning aspect emphasized in the empirical part. Mutual work and opportunity to engage with others when trying to achieve a specific goal were underlined as primary factors integral for the mutual goal. Meaning, that it is not enough for the goal to be purposeful or that shared understanding is present, but all participants need to engage in mutual work in order to achieve that mutual goal. Respondents stated that the creation of the mutual goal is accomplished together with the students. This, in turn, empowers them to offer efforts and input when trying to achieve it. In the empirical part conclusion was made that it is not enough for the learners to know of the mutual goal or that it is relevant. All of the participants (an

educator and learners) must engage in mutual work and put in their efforts and attempts in achieving it. An educator should assess the situation and choose appropriate means to motivate students and promote collaborative activities while achieving the set mutual goals.

*Mutual work.* Mutual work is defined by constructive group work or well developed team work. Physical as well as psychological factors are the integral parts when creating an efficient educational environment. Other aspects that define a constructive group that may become a team are: individual member identity with a group, group coherence, member heterogeneity, autonomy (independence, freedom), task oriented engagement, free will interdependence, motivation based on accountability, safety, optimal group size (from four to twelve members), inclination to collective work, and flexibility (Chmiel, 2000; Robbins, 2003).

*Coordination.* Respondents emphasized coordination as a very significant managerial factor of mutual work. In addition, discussion and agreement on mutual work criteria as well as individual control of specific processes were underlined as factors promoting the successful creation of the collaborative learning environment.

*Communication.* Information sharing was explained by the respondents as the process of using clear and common language that all members can understand, additional argumentation and explanations, appropriate feedback. Teachers stated that common language and explanations of own actions, were mostly addressed to their own performance. At least one of the respondents stated that it should not be only the teachers who utilize a one-way information sharing with the students, when an teacher talks and students listen. A two-way information flow, which is also emphasized by a learning paradigm (Juceviciene, 2007), where all students together with the teacher, share information in various ways, was underlined by the respondent as predominantly significant in knowledge building and experience acquisition. The process of consultations should not be limited to a teacher providing students with additional information or rephrasing the already shared information. Learners should be ready to ask questions, share inquiries, and seek out clarifications. Respondents did not mention students consulting each other. However, students should be very proactive in continuously providing constructive feedback. Once again, in this situation safety, where a student feels secure to ask questions, was mentioned as highly important. Despite the above facts and the emphasis put on an educator sharing continuous feedback with the students, respondents did not mention this as a very significant factor, for the communication to be effective. Another important factor, that was not singled out by the respondents, was active teacher's listening to the students. Perhaps, this aspect come so naturally to the teachers that it does not need to be reminded.

In summary, the theoretical part emphasizes effective communication, its creation and maintenance, as a responsibility of both a teacher as well as students, as participants who should share information, listen, and provide feedback. Nevertheless, the empirical part revealed that respondents considered themselves as the ones in

charge of an effective communication processes. They stated that their main responsibilities included adaptation to student language and finding common communication methods, descriptive explanation of own actions, consulting students by providing necessary information, especially or mostly when students ask for it, and receiving feedback from students by asking questions or gathering informal student opinions of the course components through discussions or anonymous evaluations.

Therefore, it is important to underline that although communication is identified as a very important aspect when managing a collaborative learning environment, respondents perceive it primarily as their own main task, not requiring student responsibility or initiative to engage in a two-way flow of information during a learning process.

In the empirical part sharing information and providing feedback were detected, however, the aspect of listening was not mentioned, which is contrary to the requirements listed for communication in the theoretical part. Respondents emphasized that they are the main initiators, managers, and creators of the information flows in the learning processes. Feedback was also a one-way process. This means that an educator tries to receive feedback from the students, but really initiates his/her own feedback, not including the formal grades.

*Interaction.* Psychological climate, as an integral part of interaction, was mentioned both in theory as well as empirical part. Theory claims that interaction should be based on voluntary actions. Despite this fact, respondents did not mention this free will action as a primary significance and only stated that learners should always be ready to help each other. Respondents did not mention student motivation. However, they emphasized the environment that motivates and promotes student learning. It is an educator who is responsible for creating adequate educational environments that enhance student learning and in turn condition the overlay of the personal learning environments and the creation of the collaborative learning environment. Subsequently, such an educational environment becomes a motivator. Respondents also mentioned personal traits and social abilities as aspects necessary for an effective interaction.

Overall, the empirical part revealed that an effective interaction requires a positive psychological climate, appropriate personal traits that foster empathic understanding, social abilities, and an educator's ability organize teaching and learning in such a way that it motivates various types of interactions (e.g. dialogue, discussion, group conversations based on the collaborative foundation in the educational setting). Respondents did not mention voluntary behavior or support during the learning process. Both are very important parts of collaboration.

*Shared responsibility.* Knowing and understanding responsibilities concurred both in theory and the empirical part. In addition to this, respondents mentioned the individual cumulative index, as a motivator to display responsibility.

Respondents stated that an assessment system may help in promoting collaborative learning during lectures. When one person's grade depends on their ability to work

in collaboration with another person, a learner is more inclined to engage in mutual work. Knowing and understanding responsibilities concurred in both theory and the empirical part. In addition to this, respondents emphasized the importance of the individual cumulative index, which they think promotes individual accountability and shared responsibility.

In summary, it is clear that in the social reality teachers consciously and subconsciously (without intentional preparation or goals, but just as the natural way to adjust to the audience and create such an environment that best fits and satisfies the needs of the learners and the situation) create and manage collaborative learning environments through various managerial factors.

### **Managerial factors**

Overall, the answers of the respondents can be summarized into the following observations.

*Managerial factors of higher education policies of the country.* Economic perspectives, democratic context, and cultural characteristics were mentioned in the theoretical part as the managerial factors of higher education policies. Respondents had conflicting opinions about the higher education policies as a managerial factor. Some stated that it does not influence the collaborative learning environment, because the latter is mainly conditioned by the processes taking place in the university and respective faculty. Once again, an educator is being mentioned as the primary managerial factor, who despite the country's educational system, university or faculty's internal policies and procedures, may still manage an entire module in such a way that a certain level of the collaborative learning environment can still be created and maintained. Other respondents stated that higher education policies are very influential and impacts the building and development processes of the collaborative learning environment very significantly. Respondents stated that limited university autonomy turns a university into an instructions follower and, thus, a university becomes a completer of orders and not a collaborator. There was a third opinion observed among the respondents who stated that a society's collaborative culture may influence how participants in the academic setting act.

*Managerial factors of a university.* Respondents also underlined two university managerial factors that influence the collaborative learning culture: university processes as a value based foundation and physical environment. Respondents stated that collaborative learning opportunities increase with the university democratic and academic freedom based approaches. Teachers state that for students to be able to learn collaboratively, the entire university atmosphere and foundation should be grounded on collaborative perspectives, interaction, and behavior. The material, psychological, and competence conditions were mentioned as managerial factors in the theoretical part. Meanwhile, in the empirical part, liberal atmosphere and the physical environment were mentioned as factors that may empower the creation of an educational environment.

*Managerial factors of the study programme and the module.* In the theoretical part it has been determined that the managerial factors of the study programme and the module include the goal, assessment, and the creators of the programme. In the empirical part the goal was underlined as being relevant and useful, which empowers students to learn in collaboration as well as stresses the need for the programme creators to also collaborate in order to know how to create such an environment and a collaborative culture. The assessment was mentioned in the empirical part was not mentioned as a managerial factor, but rather as a motivational factor that promotes accepting the responsibility for own learning. Respondents stated that a study programme and a module are the managerial factors that condition the creation and maintenance of the collaborative learning environment, because these formal documents may either provide an educator with a legal permission to build such an environment in a specific course or no. In addition, those who are responsible for creating study programmes and preparing the modules, must be familiar with collaborative processes, specifically utilize this method in their own practices. One of the respondents stated that collaboration can be naturally promoted, if the study programme and the module are relevant and satisfy a learner's needs and expectations.

### **Main managerial factors conditioning the collaborative learning environment**

*Educator.* All of the respondents concurred that an educator is the main managerial factor, who despite the other managerial factors, may effectively build a collaborative learning environment, if she/he is able to assess the situation and use adequate means to build an environment where learning is based collaboration among the learners. The theoretical part revealed that both an educator and students are responsible for creating and managing the collaborative learning environment. The empirical part concluded that the main managerial factor that conditions the collaborative learning environment is an educator, despite of the other managerial factors, such as higher education policies, internal policies and procedures of the university or faculty, even the formal information set in the study programme or the module. Empirical findings reveal that an educator is able to realize the learning aims in a specific situation in such a way that can promote learning by adapting to the existing situation and, thus, still being able to create learning processes and environment that would be based on collaboration. To realize all of the characteristics of the collaborative learning environment an educator must:

1. Create shared understanding by sharing information in a common language and, thus, creating the same or similar meanings of various phenomena, situations, concepts, etc.
2. Work together with the learners and create an environment that would promote mutual work and condition the circumstances to be effectively achieving the mutual goal.

3. Organize and coordinate an effective group work, with one of the main goals for the group to eventually become a team.
4. Ensure effective communication and interactions in the learning processes.
5. Allow students to be responsible for their own learning by giving the control and permitting them to also be the decision makers.

*Students should:*

1. Work in groups.
2. Understand the relevance and significance of the module.
3. Agree upon communication, interactions, and collaboration among all of the participants.
4. Know and understand own responsibilities.
5. Display individual accountability.
6. Be sincere, share support, communicate, provide constructive feedback.

### **Conclusions**

The following conclusions were made based on the objectives of this article.

*Conception of the collaborative learning environment.* Theoretical analysis revealed that the collaborative learning environment is an intentionally created environment where a model that was prepared in advance is being used based on the needs of the learners and the goals of the module. In such environment an educator becomes a participant of the processes and shares responsibilities and control of the learning process together with the educators. The collaborative learning environment is an outcome of a well-planned out and organized educational environment where individual learning environments are shared and the following characteristics occur: mutual goal, mutual work, shared understanding, communication, interaction, mutual responsibility, coordination.

*Conception of the managerial factors that condition the collaborative learning environment.* The managerial factors that influence the collaborative learning environment can be approached from the human and institutional perspectives. Based on the human resources perspective, an educator and learners are responsible for creating the collaborative learning environment. Both should possess a collaborative learning competence. On the other hand, the institutional managerial factors and resources are the higher education policies of the country that are impacted by political and economic as well as cultural circumstances of the country. The higher education policies simultaneously condition the processes of the universities that maintain internal policies. The study programme and the module, as managerial factors, should be based on the learning paradigm to promote the creation and maintenance of the collaborative learning environment.

*Validation of research methodology.* Research methodology of the collaborative learning environment and the managerial factors that condition it was substantiated. A specific case was studied. A semi-structured interview was used to collect research data. The

research questions targeted the respondents' understanding of the collaborative learning environment and how it should be created. Interview was comprised of the twelve questions that were categorized into three groups based on the three empirical research objectives. The qualitative content analysis was used to analyze the collected data and interpret it.

*Empirical research results.* The collaborative learning environment is being created by the teachers in the social reality, specifically in the master's level studies in the social sciences area of the university X in Lithuania. An educator is constructing an empowering educational environment, where a purposeful and relevant for the learners goal is formed, so that it promotes shared understanding by all participants, and fosters mutual work for this aim to be accomplished. The shared understanding is created by sharing information and while creating mutual meanings of common performance. The mutual work which is primarily based on a well-organized group-work that may later turn into the team is coordinated by the teacher. Learners in the educational collaborative learning environment should know and accept their own rights and responsibilities in the learning process. An educator should ensure effective communication and adequate interactions among all of the participants through accurate observations and active listening. An individual cumulative index should be utilized in the collaborative learning environment that encourages the learners to base their learning process on the individual accountability and strategize their own learning process and plan on how they should be achieving their own desired results.

*Managerial factors conditioning the collaborative learning environment in the master's level studies in the area of social sciences in University X in Lithuania.* The following aspects were identified as the managerial factors of the study programme and the module: a relevant and purposeful aim, which is based on the learning paradigm, and the creators of the study programme, who should possess a collaborative learning experience and competence to be able to create a collaborative learning culture. Democratic environment and physical environment that influence the development of the collaborative learning environment, were determined as the managerial factors of the university. The respondents' opinion about higher education policies was different: some respondents saw no influence of higher education policies on the collaborative learning environment, because the latter should be the concern of the faculty. Meanwhile, some respondents stated that the higher education policies have an immense influence on the work of the university, because it impacts its autonomy and freedom what in turn conditions the development of the collaborative learning environment. Analysis of the managerial factors that influence the collaborative learning environment in the master's level studies in the X study programme of the university X in Lithuania, revealed that an educator is the main managerial factor, who is responsible for managing such an educational environment.

## References

1. Allodi, M.W. (2010). The meaning of social climate of learning environments: Some reasons why do not care enough about it. *Learning Environ Res*, 13, 89-104. <http://dx.doi.org/10.1007/s10984-010-9072-9>
2. Arends, R.I. (2008). *Mokomės mokyti*. Margi raštai.
3. Bain, K. (2004). *What the Best College Teachers Do*. Cambridge, Massachusetts and London, England: Harvard University Press.
4. Barkley, E.F., Cross, K.P., & Major, C.H. (2005). *Collaborative learning techniques*. San Francisco: John Wiley & Sons, Inc.
5. Biggs, J. (2003). *Teaching for quality learning at university: what the student does*. Philadelphia.
6. Bosworth, K., & Hamilton, S.J. (1994). *Collaborative Learning: Underlying Processes and Effective Techniques*. San-Francisco: Jossey-Bass Publishers.
7. Brandenburg, R. (2008). *Powerful pedagogy*. Self-study for Teacher Educator's Practice. Australia: Springer.
8. Brindlay, J., & Walti, Ch. (2009). Creating Effective Collaborative Learning Groups in an Online Environment. *International Review of Research in Open and Distance Learning*, 10, 3, 1-18.
9. Bruffee, K.A. (1999). *Collaborative learning*. United States of America: The Johns Hopkins University Press.
10. Chmiel, N. (2000). *Darbo ir organizacinė psichologija*. Oxford: Blackwell Publishing Ltd. Poligrafija ir informatika.
11. Forrest, W.D. (1999). Education and empowerment: Towards untested feasibility. *Community Development Journal*, 2, (34), 93-107. <http://dx.doi.org/10.1093/cdj/34.2.93>
12. Freire, P. (1970). *Pedagogy of the Oppressed*. NY: The Seabury Press.
13. Freire, P. (1985). *The politics of education: Culture, power, and liberation*. Bergin & Garvey.
14. Freire, P., & Faundez, A. (1989). *Learning to question: a pedagogy of liberation*. NY: Continuum.
15. Hall, E. (1966). *The Hidden Dimension*. Doubleday, Garden City: NY.
16. Hennessy, S., & Murphy, P. (1999). The potential for collaborative problem solving in design and technology. *International Journal of Technology and Design Education*, 9, 1-36. <http://dx.doi.org/10.1023/A:1008855526312>
17. Iborra, A., Garcia, D., Margalef, L., & Perez, V. (2010). *Generating collaboration contexts to promote learning and development*. *Collaborative learning: methodology, types of interactions and techniques*. NY: Nova Science Publishers, Inc.
18. Jaspers, K. (1971). *Philosophy of Existence*. Philadelphia: University of Pennsylvania Press.
19. Johnson, D.W., Johnson, R.T., & Smith, K.A. (1991). Cooperative learning: Increasing college faculty instructional productivity. ASHE-FRIC Higher Education Report No.4. Washington, D.C.: School of Education and Human Development, George Washington University.
20. Joiner, R., Littleton, K., Faulkner, D., & Miell, D. (2000). *Rethinking Collaborative Learning*. London: Free Association Books.

21. Jucevičienė, P., & Vizgirdaitė, J. (2012). Educational Empowerment of Collaborative Learning at the University. *Social Sciences*, 1, (75), 41-51.
22. Jucevičienė, P. (2007). *Besimokantis miestas*. Kaunas: Technologija.
23. Jucevičienė, P., Gudaitytė, D., Karenauskaitė, V. et al. (2010). *Universiteto edukacinė galia*. Monografija. Kaunas: Technologija.
24. Jucevičienė, P., & Lepaitė, D. (2002). Competence as derived from activity: the problem of their level correspondence. *Social Sciences*, 4, (36), 57-63.
25. Keyton, J. (2001). *Communication Research: Asking Questions, Finding Answers*. NY: McGraw Hill.
26. Kreisberg, S. (1992). *Transforming power: Domination, empowerment and education*. Albany: State University of NY Press.
27. Kumpulainen, K., & Kaartinen, S. (2004). Negotiating a shared understanding in collaborative problem solving dyads. K. Littleton, D. Miel, D. Faulkner (ed.). *Learning to collaborate, collaborating to learn*, p. 67-93. NY: Nova Science Publishers.
28. Leibowitz, B., Bozalek, V., Carolissen, R., Nicholls, L., Rohleder, P., & Swartz, L. (2010). Bringing the social into pedagogy: unsafe learning in an uncertain world. *Teaching in Higher Education*, 15, 2, 122-123. <http://dx.doi.org/10.1080/13562511003619953>
29. Lekavičienė, R., Vasiliauskaitė, Z., Antinienė, D., ir Almonaitienė, J. (2010). *Bendravimo psichologija šiuolaikiškai*. Vilnius: Alma Littera.
30. Linkaitytė, G., ir Širvaitytė V. (2000). Nuolatinio mokymosi gebėjimai ir juos veikiančios sąlygos. Suaugusiųjų švietimas dabarčiai ir ateičiai: straipsnių rinkinys. Vilnius, 52-57.
31. Lipinskienė, D. (2002). *Edukacinė studentą įgalinanti studijuoti aplinka*. (Daktaro disertacija, Kauno technologijos universitetas, 2002).
32. Little, J.W. (2002). Professional communication and collaboration. In W.D. Hawley, D.L. Rollier (Eds.). *The keys to effective schools: Educational reform as continuous improvement*, pp. 43-55. Thousand Oaks, CA: Corwin Press, Inc.
33. Low, S.M., & Lawrence-Zuniga, D. (2003). *The Anthropology of Space and Place: Locating Culture*. Blackwell Publishers Ltd.
34. Luobikienė, I. (2006). *Sociologinių tyrimų metodika: mokomoji knyga*. Kaunas: Technologija.
35. Luzzatto, E., & DiMarco, G. (2010). *Collaborative Learning: Methodology, Types of Interactions and Techniques*. NY: Nova Science Publishers, Inc.
36. Marying, Ph. (2000). Qualitative Content Analysis. *Forum: Qualitative Social Research*, 2, (1), 1-10.
37. Mayring, P. (2003). *Qualitative Inhaltsanalyse, Grundlagen und Techniken* (8th ed.). Weinheim: Beltz, UTB.
38. McDonald, T. (2010). Positive Learning Framework: Creating Learning Environments in Which All Children Thrive. *Reclaiming Children and Youth*, 19, 2, 16-20.
39. Minogue, K. (1973). *The Concept of a University*. London: Weidenfeld and Nicolson.
40. Morse, J. (1997). *Completing a Qualitative Project: Details and Dialogue*. Thousand Oaks, California: Sage Publications.
41. Newman, J.H. (1889). *The Idea of a University*. London: Longmans, Green, and Co.
42. Osmond, H. (1957). Function as the basis of psychiatric ward design. *Mental Hospitals Architectural Supplements*, 23-27.
43. Posey, L., & Lyons, L. (2010). The instructional design of online collaborative learning. *Collaborative learning: methodology, types of interactions and techniques*, p. 363-370. NY: Nova Science Publishers, Inc.
44. Ramsden, P. (1998). *Learning to teach in higher education*. London, NY. <http://dx.doi.org/10.4324/9780203278116>
45. Robbins, S.P. (2003). *Organizacinės elgsenos pagrindai*. Pearson Education, Inc. Poligrafija ir informatika.
46. Roberts, J. (2002). *German Liberalism and Wilhelm Von Humboldt: A Reassessment*. Mosaic Press.
47. Schneider, F.J. (2007). Teaching collaboration to education majors. *The Community College Enterprise*, 13, (2), 7-25.
48. Slavin, R. (1983). *Cooperative learning*. NY: Longman.
49. Slavin, R. (1984). Students motivating students to excel: Incentives, cooperative tasks and student achievement. *The Elementary School Journal*, 85, 53-62. <http://dx.doi.org/10.1086/461391>
50. Slavin, R., Sharan, S., Kaga, S., Hertz-Lazarowitz, R., Webb, C., & Schumck, R. (eds.). (1985). *Learning to cooperate, cooperating to learn*. NY: Plenum Press.
51. Slavin, R. (1986). *Student team learning* (3rd ed.). Baltimore, Md.: Center for Research on Elementary and Middle Schools, Johns Hopkins University.
52. Tautkevičienė, G. (2004). *Studentų mokymosi aplinkų susiformavimui iš universiteto bibliotekos edukacinės aplinkos įtaką darantys veiksniai*. (Daktaro disertacija, Kauno technologijos universitetas, 2004).
53. Teresevičienė, G., ir Gedvilienė, G. (1999). *Mokymasis bendradarbiaujant*. Vilnius: Garnelis.
54. Teresevičienė, M., ir Gedvilienė, G. (2003). *Mokymasis grupėse ir asmenybės kaita*. Monografija. Kaunas: Vytauto Didžiojo universitetas.
55. Thelen, H. (1949). Group Dynamics in Instruction: The Principle of Least Group Size. *The School Review*, 57, (3) 139-148. <http://dx.doi.org/10.1086/441592>
56. Udvari-Solner, A., & Kluth, P. (2008). *Joyful Learning: active and collaborative learning in inclusive classrooms*. United States: Corwin Press.
57. Villa, R.A., Thousand, J.S., & Nevin, A.I. (2010). *Collaborating With Students in Instruction and Decision Making*. US: Corwin.
58. Vitale, C. (2010). Foundations of University Learning and Teaching: A Reflection on the Curriculum Alignment. *E-Journal of Business Education & Scholarship of Teaching*, 4, 2, 52-64.
59. Vizgirdaitė, J. (2011). Meaning of Collaboration: from Different Social Contexts to Common Understanding. *Social Sciences*, 4, (74), 70-83.
60. Vygotsky, L.S. (1978). *Mind in Society*. Cambridge, MA: Harvard University Press.
61. Wang, Q., & Woo, H.L. (2010). Supporting collaborative learning by using web 2.0 tools. *Collaborative learning: methodology, types of interactions and techniques*. NY: Nova Science Publishers, Inc.
62. Wyatt, J. (1990). *Commitment to Higher Education*. Bristol, Pa.: Open University Press.

63. Žebrauskienė, Z., ir Grybauskienė, I. (2006). Mokymo(si) bendradarbiaujant metodo taikymas technologijų pamokose ygdant vartotoją. *Pedagogika*, 84, 108-113.
64. Želvys, R. (2006). Visuomenės požiūris į švietimo reformą: Kas pasikeitė per 20 metų. *Pedagogika*, 24-27.
65. Žydzūnaitė, V. (2006). *Taikomųjų tyrimų metodologinės charakteristikos*. Vilnius; LR Švietimo ir mokslo ministerija ir pedagogų profesinės raidos centras.

J. Vizgirdaitė, L. Fridrikaitė

### Vadybiniai veiksniai, sąlygojantys mokymosi bendradarbiaujant aplinką universitetinėse studijose

Santrauka

*Tyrimo aktualumas.* Mokymasis bendradarbiaujant yra vienas iš būdų pagerinti mokymo ir mokymosi kokybę, kuris atveria studentams galimybes įgyti vertingų socialinių gebėjimų, darbo poroje, grupėje ar komandoje įgūdžių, pagerinti mokymosi rezultatus. Visa tai pagerina studentų galimybes pasiruošti būsimai karjerai.

Mokslininkai, gilindamiesi į studijų problemas, nagrinėja studijų programas, procesą, studijų aplinkas, tačiau mažai tiriama vadybiniai aplinkų veiksniai, kurie yra ypač svarbūs kuriant edukacines aplinkas. Studentą įgalinančias studijuoti aplinkas išsamiai nagrinėjo Lipinskienė (2002), tačiau jos tyrimuose nėra akcentuojama svarbi šiuolaikinių studijų dimensija - aplinka, kurioje gali vykti mokymasis bendradarbiaujant (Barkley ir kt., 2005; Udvari-Solner, Kluth, 2008; Iborra ir kt., 2010). Siekis išanalizuoti vadybinius mokymosi bendradarbiaujant aplinkų veiksnius inspiravo mokslinę problemą, kurią būtų galima formuluoti klausimu: kokie vadybiniai veiksniai ir kaip sąlygoja mokymosi bendradarbiaujant aplinką studijose?

*Tyrimo objektas* – mokymosi bendradarbiaujant aplinka universitetinėse studijose ir įtaką jai darantys vadybiniai veiksniai.

*Tyrimo tikslas* – atskleisti mokymosi bendradarbiaujant aplinką universitetinėse studijose ir ją veikiančius vadybinius veiksnius studijose.

*Tyrimo uždaviniai:* 1. Teoriškai pagrįsti mokymosi bendradarbiaujant aplinką universitetinėse studijose ir ją veikiančius vadybinius veiksnius. 2. Pagrįsti mokymosi bendradarbiaujant aplinkos ir ją veikiančių vadybinių veiksnių universitetinėse studijose tyrimo metodologiją. 3. Nustatyti mokymosi bendradarbiaujant aplinką ir ją veikiančius vadybinius veiksnius socialinių mokslų magistrantūros studijose X universitete Lietuvoje.

*Tyrimo metodai:* mokslinės literatūros analizė, dokumentų analizė, atvejo studija, apklausa žodžiu, kokybinė turinio analizė.

*Rezultatai ir išvados.* Atlikus mokslinės literatūros analizę buvo prieita prie išvados, kad mokymosi bendradarbiaujant aplinka – tai specialiai sukurta aplinka, kurioje taikomas iš anksto apgalvotas studijų modelis pagal besimokantiems būdingus bruožus ir modulio tikslus, kai ugdytojas tampa mokymosi proceso dalyviu, bendroje veikloje apylygiai pasidalijančiu atsakomybe su besimokančiuoju, tokiu būdu siekiant padidinti kiekvieno besimokančiojo žinias arba pagilinti dalyko, kurio mokomasi, supratimą. Mokymosi bendradarbiaujant aplinką sąlygoja ugdytojai ir besimokantieji; studijų ir modulio programų tikslai, vertinimo sistema ir programų rengėjai; universiteto materialiosios, kompetencinės

ir psichologinės sąlygos; aukštojo mokslo politikos prielaidos šalyje: demokratiškumas, ekonominės perspektyvos ir kultūros bruožai.

Pagrįsta mokymosi bendradarbiaujant aplinkos ir ją veikiančių vadybinių veiksnių studijose tyrimo metodologija. Analizuotas konkretus atvejis. Empirinio tyrimo duomenų rinkimui taikytas pusiau struktūruoto interviu metodas. Pusiau struktūruoto interviu klausimai buvo orientuoti į dėstytojo suvokiamą ir kuriamą mokymosi bendradarbiaujant aplinką bei vadybinius veiksnius, kurie galimai sąlygoja mokymosi bendradarbiaujant aplinkos kūrimą studijose. Interviu sudarė 14 klausimų – t.y. trys klausimų grupės atitiko tris empirinio tyrimo uždavinius. Empirinio tyrimo duomenų analizei taikytas kokybinės (content) turinio analizės metodas, kuris leido, remiantis analizuojamu tekstu, padaryti specifines išvadas apie mokymosi bendradarbiaujant aplinkos kūrimą ir ją sąlygojančius vadybinius veiksnius studijose.

Nustatyta mokymosi bendradarbiaujant aplinka ir ją sąlygojantys vadybiniai veiksniai. Socialinėje realybėje šiai aplinkai yra būdinga: bendras suvokimas, bendras tikslas, bendra veikla, komunikacija, bendravimas, abipusė atsakomybė. Dėstytojas kuria įgalinančią edukacinę aplinką, kurioje yra suformuluojamas aktualus besimokantiems tikslas, kurį stengiamasi pateikti taip, kad visi vienodai jį suprastų ir dirbama kartu, kad tas tikslas būtų pasiektas. Bendras suvokimas kuriamas dalijantis informacija ir kuriant bendras veiklos reikšmes. Bendra veikla dirbant grupėje yra koordinuojama dėstytojo. Besimokantieji edukacinėje aplinkoje, kurioje kuriamas mokymasis bendradarbiaujant, turi suvokti modulio svarbą, susitarti, kad visi bendradarbiaus, taip pat kiekvienas turi žinoti ir suprasti savo atsakomybę mokymosi procese. Dėstytojas stengiasi užtikrinti efektyvią komunikaciją ir bendravimą. Mokymosi bendradarbiaujant aplinkoje turi būti kaupiamojo balo sistema, kuri paskatina besimokančiuosius prisiimti atsakomybę ir planuoti savo mokymosi procesą bei norimus rezultatus. Studijų ir modulio programų vadybiniais veiksniais įvardinti: tikslas ir programų kūrėjai; liberali universiteto politika ir fizinė aplinka. Dėl aukštojo mokslo politikos prielaidų respondentų nuomonės išsiskyrė: vieni teigė, kad tai nedaro jokios įtakos mokymosi bendradarbiaujant aplinkos kūrimui, kiti teigė, kad daro didelę įtaką, nes centralizuota švietimo politika sąlygoja universiteto politiką, riboja jo autonomiją ir laisvę, o tai trukdo plėtoti bendradarbiavimo kultūrą. Prieita prie išvados, kad pagrindinis mokymosi bendradarbiaujant aplinkos vadybinis veiksnys yra dėstytojas.

*Reikšminiai žodžiai:* bendradarbiavimas, mokymasis bendradarbiaujant, mokymosi bendradarbiaujant aplinka, vadybiniai veiksniai.

First received: April, 2012

Accepted for publication: May, 2012