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Use of Project-Based Learning in Preparation of Education Managers: Case of Post-Soviet Azerbaijan

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ABSTRACT

This study explores the implementation of Project-Based Learning (PBL) in Master of Education Management Programs in two Azerbaijani universities. The aim was to find out if the sample universities integrate projects into their programs using a systematic PBL model. Interviews with the faculty and administration were conducted and the curricula of programs were scrutinized to assess the level of the consistency in the subjects on offer. Although the courses in both programs are quite suitable for PBL integration, only in one of the sample universities was there evidence of extensive use of projects, albeit mainly in a single assignment level. The results show that Azerbaijani universities need to develop a well-structured PBL model adapted to the local context. The results of the interviews emphasize the crucial role of PBL in the acquisition of employable skills and competences in education management. Major limitations in the process of PBL implementation include a lack of awareness about PBL, inadequate organizational support in the form of staff trainings, the provision of facilities and negotiations with stakeholders.

Keywords: *Project-based learning, higher education in Azerbaijan, Master of Education Management, teaching approach, teacher perspectives.*

INTRODUCTION

Today, changing higher education towards a more student-oriented paradigm is an important focus of worldwide educational reform. The reason for this transformation is that universities are becoming more accountable to meet societal demands and expectations than in the past. Their mission is to achieve excellence in teaching and learning. However, to achieve quality in learning, universities must employ different

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effective pedagogical approaches. Mere lectures, it is often argued, can no longer serve the purpose of innovative pedagogical aims. Traditional lectures stem principally from the theory of knowledge transfer from lecturer to student. As a result, students do not focus on knowledge *per se* but often accept the lecturer's words uncritically as truth (Surif, Ibrahim & Mokhtar, 2013). This approach cannot cultivate graduates with critical thinking, teamwork, interpersonal communication, evaluation and other soft skills. This lack of skill development also does not satisfy the demands of the contemporary labor market. Thus, taking into consideration the needs of the labor market in education can improve the employability of graduates (Stehling & Munzert, 2018). This does not necessarily imply that additional activities must be used to supplement lectures. Rather, students' projects and initiatives should be supplemented by traditional teaching methods (Henriksen, 2011). Currently, best practice involves teachers doing their best to make their classes more student-centered by engaging their students in different projects (Ngo Cao, 2018).

Many pedagogical changes are involved in this process. Among them, Project-Based Learning (PBL) is an effective approach in Western countries. Although PBL is often referred to as an innovative teaching approach, its history dates back to the end of 19th century when John Dewey and his student William Kilpatrick, representatives of pragmatic pedagogy, underlined the importance of the connection between the real life and practice on the one hand, and education and theory on the other (Bilgin, Karakuyu & Ay, 2015; Kwietniewski, 2015; Mansur, Fernando & Alves, 2018; Rousova, 2008). This idea is still up to date. PBL changes the role of students from passive recipients to generators of knowledge (Araz, 2007; Chin, 2014; Evensen, Salisbury-Glennon & Glenn, 2001; Ngo Cao, 2018;). This educational methodology is seen as one of the most effective methods of instruction capable of contributing to the development of soft skills and competencies and creating a clear bond between academic and professional life (Musa, Mufti, Latiff, & Amin, 2011; Kondratyuk, 2019; Rios, Cazorla, Diaz-Puente & Yagüe, 2010). As a pioneer, McMaster University at Hamilton in Canada initiated and widely used PBL in its medical school (Borhan & Yassin, 2013; Krishnan, 2009). As a result of this change, students demonstrated increased motivation, problem-solving and independent learning skills. Soon after McMaster, medical schools in the Netherlands and Australia also shifted to PBL.

The positive influence of PBL eventually resulted in its move beyond medical education. Today, it is practiced in various disciplines and at various levels (Strobel & Barneveld, 2009). Aalborg University in Denmark started to use PBL as its main teaching method in engineering degrees. Following this, Central Queensland University and the University of Technology, Sydney identified gaps in the competencies of their engineering students as well as in their curriculum and began changing their approach to PBL accordingly (Krishnan, 2009). Back in the 1990s, PBL started to be implemented in general and liberal

education curriculum in Samford University, Birmingham, Alabama. As this method gained success, the university started promoting it across the curricula of its five schools: arts and sciences, business, education, nursing and pharmacy (Savin-Baden & Major, 2004). However, research shows that curriculum reform in higher education towards the project-oriented teaching has met with resistance, since the aim of the reform was to change all the elements of the curricula, such as syllabi, traditional lectures, and formal examinations (Krishnan, 2009).

In the literature, there is a common view about the four main types of relationship that is important for PBL: those between subject and problem, teacher and student, individual and the social, and single discipline and the interdisciplinary (Li, Du & Stojcevski, 2009). PBL focuses on four main principles - collaborative learning, critical thinking, self-directed learning and reflection, which are also related to each other. As the studies state, collaborative learning eventually develops critical thinking. While working in teams, students learn to give each other feedback and to evaluate the ideas of others. At the same time, critical thinking is important for self-directed learning. Through assessing their own performance, students become responsible for their learning and for shaping their learner personality. Taking turns to reflect also happens throughout the whole process and links to each principle significantly. Thus, PBL focuses squarely on lifelong learning skills and "understands knowledge as changing and context dependent." (Doig & Werner, 2000; Nunez, Jonasen, Skov & Thomas, 2016, p. 19).

While extensive research has been conducted regarding, amongst others, the design, application, and assessment aspects of PBL in disciplines as diverse as engineering, medicine, computer science, and business administration, research concerning the use of PBL as a pedagogical approach in Education Management programs, especially at Master's level, is limited. Education Management is a field of study which must meet the needs of a changing society. Competent education managers are no longer just those who simply manage educational institutions. They are expected to have the skills and competencies of leaders who can address contemporary educational issues which, in turn, concern education not in isolation, but in close connection with many global, social, political, economic, environmental, and cultural factors. The education offered to future managers should therefore equip them with knowledge and skills, which will in turn help them to make sensible decisions, foresee problems, solve them in collaboration with colleagues, and foster resilience.

Thus, the purpose of this study is to examine if Master of Education Management Programs in two sample universities of Azerbaijan display these elements of PBL in their curricula, and to ask if PBL is implemented as a stand-alone mode of instruction, or as a curriculum-based approach. One of the universities is Azerbaijan State Pedagogical University (ASPU) and the other one is ADA University, which previously was

Azerbaijan Diplomatic Academy (ADA). At ASPU, graduates of the program must have a broad understanding and knowledge about theory and research methods and must be competent at solving unpredictable and complex problems in the field. They must acquire skills in interpersonal communication, independent work, decision-making, leadership, planning, analysis, adaptation etc. (State Standard of Higher Education, 2012). Students are expected to accumulate 120 ECTS upon graduation. The subjects taught within the program can be seen in Table 1 (See Appendix 1). At ADA University**,** the MA in Education Management is a two-year full-time program focused on developing policy and management in the education sector. Graduates of the program are trained to become educational leaders, who provide smart solutions to problems and manage educational institutions focused on shared governance and ethics. Students must accumulate 90 ECTS to graduate from the program. The program consists of Major Core and Technical Elective subjects (See Table 2, Appendix 1).

The study tries to contribute to the research related to PBL in higher education by scrutinizing the following research questions:

> To what extend does Project-Based Learning exist as a systematic pedagogical approach in Educational Administration master's programs in two sample Azerbaijani universities?
> If it exists, how is it implemented within the programs?

THE SIGNIFICANCE OF THE STUDY

Since gaining independence in 1991, Azerbaijan has undertaken numerous actions to enhance its education system. Due to the Soviet education structure, the country had been left with faculty and researchers trained in the old system. The predominant teaching approach in HEIs was lecturing with the teacher at the center of the process. Unsurprisingly, little attention was given to the extent of learning achieved during the classes. However, since Azerbaijan joined the Bologna Reform Process in 2005, the country's higher education system has undergone significant transformations, particularly regarding teaching and learning. Entering into the European Higher Education Area (EHEA) required Azerbaijan to bring its higher education system close to a European model, which meant promoting pedagogical approaches that foster in students the skills required for the internal and external labor market. To meet such requirements, PBL can be considered an effective teaching and learning approach, supported by a large body of international research demonstrating its effectiveness in developing students' skills and competences.

Azerbaijan is a country for whom the post-Soviet transformation period has been quite painful. Crucial moves in the economic and political life of the country demand significant changes in the education system as well. Hence, Azerbaijan has no option other than to develop high-quality graduates capable of contributing to the progress of the country and being highly valued by the modern labor market, particularly in the field of education. It is a necessity to explore how Azerbaijani universities have tackled the challenge of a paradigm change in instruction and learning, specifically, by making education more student-oriented and outcome-based. The sample program of study is the master's degree in Education Management. In keeping with other disciplines, Education Management now needs to be understood within a larger social context, thereby creating a question as to how far it prepares graduates who can add value and leadership capacity. Thus it is vital to know if professors in the Master's in Education Management program in Azerbaijani universities employ PBL methods to prepare education leaders who can apply educational theories in practice, identify and solve problems that their institutions encounter, make collaborative decisions, evaluate changing a political and social context, and create an environment which encourages lifelong learning.

LITERATURE REVIEW

What is PBL?

PBL is a student-centered approach through which students identify a gap in their knowledge and study to fill that gap. Teachers' role in PBL is mainly seen as that of a facilitator. Students are more responsible for their learning in PBL when compared to the traditional approach (Borhan & Yassin, 2013). The study identifies that since students must find solutions to problems with the help of projects, it enhances their self-directed learning. Other studies reveal that generally, there exist six core characteristics of the PBL approach: learning is totally student-centered; students learn in small group tutorials; teachers are facilitators; problems (projects) are the main elements of learning; problems lead to the development of problem-solving skills; new knowledge is acquired with the help of self-directed learning (Barrows, 1996; Borhan & Yassin, 2013; Ribeiro & Muzikami, 2005; Rousova, 2008; Stolk & Harari, 2014).

PBL is considered an effective approach which puts students at the center of the learning process, making the learning outcome-oriented, and equipping learners with real-world skills to fit them into a technologically advanced and rapidly changing environment (Borhan & Yassin, 2013; Ngo Cao, 2018; Rios, Cazorla, Diaz- Puente & Yagüe, 2010; Strobel & Barneveld, 2009). Choosing authentic problems and collaborating with specific industries gives students opportunities to solve realistic issues, actively practice employment experiences, and develop teamwork and communication skills through the learning process (Nielsen, 2009). As a result, PBL students perform better in knowledge application. Also, PBL helps students to construct flexible knowledge as well as to

become lifelong learners. This is explained by the fact that PBL emphasizes self-directed learning, which includes the planning and developing of learning as well as the use of specific strategies, including resources, for the learning process (Hmelo-Silver, 2004; Sukerti & Yuliantini, 2018). The study also shows that in contrast to traditional students, PBL students develop their own strategies during learning and are more likely to use new information in different situations. Hmelo-Silver (2004) states that PBL students use more self-chosen learning resources, whereas traditional students mainly rely on the choice of their teachers. The results of other qualitative studies show that PBL students are significantly more competent and skilled than traditional learners because they retain knowledge for the long term and gain more life skills through the successful facilitation of PBL strategies and scaffolding. These skills include communication, critical thinking and problem-solving, team-work, and lifelong learning. The studies conclude that thanks to PBL, students develop their employability skills (Baharom & Palaniandy, 2013; Strobel & Barneveld, 2009). Regarding academic achievements, the findings from a quantitative study conducted by Barak and Dori (2004) reveal that PBL students from the Department of Chemistry at the Israel Institute of Technology received higher scores on their exams compared to their peers who studied in a traditional way.

As for the development of soft skills, the studies reveal the positive role of PBL in students' development. Students involved in the studies claim that their communication skills were enhanced considerably with the help of group activities and interaction between group members (Barrows & Tamblyn, 1980; Surif, Ibrahim & Mokhtar, 2013). Research also highlights that students' critical and creative thinking skills were boosted as a result of analyzing and solving problems, which is the core of the PBL approach (Siti Norbaizura, 2006). Research on social studies curricula shows that PBL instruction students outperformed their traditional curriculum peers (Summers & Dickinson, 2012).

Although the positive impacts of PBL are acknowledged by many educators, the implementation process is not always smooth and properly conducted. Best practice involves developing a full model of PBL which enhances success by including lecturers in a systematic and professional development process (Lasauskiene & Rauduvaite, 2015). Research suggests that if any educational institution wants to implement PBL effectively, it needs to change its curriculum and organizational structure, develop its resources and infrastructure and, of course, change its organizational culture (Li, Du & Stojcevski, 2009). Aalborg University started using PBL in 1974, something that has become an established model. Yet, their practice shows that it is not enough merely to move from a traditional approach to a new one labelled as PBL. Studies done on the Aalborg model of PBL demonstrate that although it may be crucial to make fundamental changes to the curriculum, this must be done with caution. To achieve a successful change, it is vital that academic staff, regardless of their years of experience, receive training in innovative teaching methods, as well as different forms of formative and summative assessments.

The researchers also emphasize the importance of aligning elements of the PBL curriculum model to the local context (Kolmos, Holgaard & Dahl, 2013).

Several studies identify a number of disadvantages related to PBL implementation. The main concern articulated by students is about the time constraint. As they state, the period provided for the PBL activities are insufficient for developing the skills needed. Moreover, inadequate scaffolding of PBL skills creates barriers for its application at curriculum level. As for limitations regarding academic staff, the study identifies a lack of communication and coordination among professors as a problem, something which impedes the process of implementation (Kolmos, 2017).

Thus, analyzing various PBL models is crucial for identifying the most practical and appropriate ways of designing curricula and adapting them to different disciplines and contexts. Generally, studies emphasize eight models of PBL practice implemented today. Some implement a PBL approach at a module level, whilst others structure the whole curriculum according to PBL. Overall, research shows that designing the program curriculum based on content and then shifting to PBL synthetically results in failure. Thus, consideration of the culture and context where PBL is going to be implemented is very important since this differs across countries, groups, disciplines, and institutions (Coffin, 2013; Savin-Baden & Howell Major, 2004).

PBL Across Disciplines

Considerable research has been conducted regarding the use of PBL in engineering education, a professional field which makes extensive use of PBL as its predominant pedagogical approach. Today, graduates from engineering faculties are not expected only to solve engineering problems and possess only disciplinary knowledge and skills. Rather, today's industry requires them to have leadership skills, an ability to collaborate, and to generate ideas and solutions that will meet the demands of our modern and technologically advanced society (Krishnan, 2009). Similar ideas were stated by Carmenado, Lopez, and Garcia (2015). The authors refer to the American Society for Engineering Education (ASEE) to claim that engineering discipline must go beyond theory and experimentation and must prepare students for continuous learning. The authors emphasize the importance of graduate employability which is an issue central to the European Higher Education Area (EHEA). The research concludes that modern engineers should be taught skills derived from three interconnected dimensions. The first is technical skills, which is important for engineers to be able to design and produce. The second is the contextual aspect, which helps engineers adapt to, amongst others, political, legal, and financial factors. The last is the ethical and social dimension of the required skills is about the development of character and behavior. The researchers believe that the PBL approach enables the development of these competences (Carmenado, Lopez & Garcia, 2015).

Research on PBL in medical education is also very rich and robust. This is not surprising, since the systematic use of this pedagogical approach started in the field of medicine. Studies reveal that although PBL students in medicine perform less successfully in standardized tests, they have better self-directed learning, problem-solving, and information gathering skills (Strobel & Barneveld, 2009). Research conducted to examine the effectiveness of PBL has identified how significant its impact can be on students' clinical reasoning and diagnostic abilities, psychological knowledge, and professional capabilities such as planning and ability to work under pressure (Alexander, Tedman, Wallace & Pountney, 2011).

Since a significant number of studies reveal that PBL boosts students' problem-solving ability, teamwork, communication, and leadership skills, the usefulness of its implementation in business administration education may seem obvious. Criticism about the quality of business management education has made educators think about how to transform curricula. Some critics claim that many MBA students lack practical knowledge, and teachers mainly teach what they know best in their disciplines. As a result, students mainly develop their analysis and calculating skills which in future puts them in an awkward situation when faced with different problems. PBL responds to the main requirements of modern business management education in the sense that it prepares managers for action, equips students with leadership and management skills, teaches them to control their emotions and integrate technology into their daily practice (Hallinger & Bridges, 2007). Another research analyzed the effectiveness of PBL in business education in terms of knowledge acquisition and knowledge application. Quasi-experimental research reveals that both PBL and conventional groups scored low at the pre-test stage of knowledge acquisition. However, at the end of the first year, PBL students showed better results. Although conventional students were stronger at the end of the second year, they were outscored by PBL learners over the course of their whole study period. Overall, the results coincide with those of many other studies, which proves that PBL has a positive effect on students' knowledge. The study also confirms the hypothesis that PBL learners apply the knowledge better than traditional curriculum students (Dochy, Segers, Bossche & Gijbels, 2002). However, for the successful implementation of PBL, an appropriate level and form of guidance should be chosen by teachers and advisors, students must be willing to take part in classes, university management should support the PBL implementation process, and active collaboration with stakeholders should be priorities.

The introduction of PBL as an innovative pedagogical method in different fields, such as engineering, business, and medicine has created a question as to why it cannot be extensively employed in teacher education. Thus, the use of PBL in educating educators was adopted and implemented with the purpose of developing teachers' skills and

competences. The first PBL cohort in teacher education dates back to 1999, when the University of British Columbia (UBC) used it among elementary and secondary teachers in small group tutorials to supplement lectures. The purpose of this change was to demonstrate the importance of practice in the learning process. The results of the study show that PBL is a highly effective model for cultivating teachers and helping them to become "constructive solution seekers" (Filipenko and Naslund, 2016). Another research done among 32 Masters of Education students claims that there must be clear alignment between the elements of a PBL curriculum. The study supports the idea that, above all, seven elements in the PBL curriculum must be aligned before starting the implementation process. They are: 1) objective and knowledge, 2) types of problem and project, 3) progression and size, 4) students' learning, 5) teachers and facilitation, 6) space and organization, and 7) assessment and evaluation (Borhan & Yassin, 2013; Coffin, 2011; Du, Graaf & Kolmos, 2009). This qualitative research examines the problems and benefits of the implementation of PBL from the master's students' perspective. The analysis shows that anxiety, struggle, and lack of time impede the process. The students mainly emphasize insufficient time for discussions, group meetings, and understanding the PBL tasks. Regarding the positive sides of PBL, study participants emphasized the crucial role of PBL in developing their skills, expanding their ideas and enhancing group formation (Borhan & Yassin, 2013). Another study conducted among pre-service teachers, introduced results consistent with the aforementioned research. This supports the idea that students taught with the PBL model are successful in problem-solving, logical reasoning, and communication (Wilhelm, Sherrod & Walters, 2008). Similarly, a quantitative analysis carried out among students regarding the use of PBL in pre-service teacher education explain the reasons for supporting it as a methodology. The participants emphasize the positive role of PBL in their development, motivation, interest, and comfort in the learning process (Nikolayeva, 2012).

Fundamental changes happening in the economy, politics, information technology and other aspects of life, have changed the way organizations are managed. This is particularly true for Education Management. Research emphasizes important aspects that must be taken into account while designing an education management course. Management graduates must learn to "manage for action", think globally, and apply their knowledge in the local context, manage and lead by considering values, emotions, and ethical norms, and incorporate technology into practice (Hallinger & Bridges, 2007). Currently, the need to cultivate educational leaders capable of dealing with unpredictable problems, adapting to change, collaborating with internal and external stakeholders, and possessing not only rich theoretical knowledge but also many soft skills, is among the key problems facing the educational sector. Although the literature emphasizing the role of PBL in management education is valuable, its focus is mainly on the business sphere. Research regarding the implementation of the project-based approach in preparing leaders for educational institutions is either outdated or limited. The current research aims to help

address this gap by examining the potential of the PBL approach in education, a discipline outside those traditionally discussed in this context – namely, medicine, engineering and business. It achieves this by examining how far PBL is integrated into the curricula of two education management programs in Azerbaijan.

METHODOLOGY

This study employed semi-structured interviews. This was because interviews create more opportunity to probe the perspectives of respondents, including through follow-up questions. Document analysis too is an effective way of eliciting meaning and acquiring empirical knowledge (Corbin & Strauss, 2008). Thus, an analysis of the programs' curricula was also undertaken.

The interviews were conducted at two universities in Baku. The reason for this is that Education Management Program exist only at those universities. The first sample university was ASPU, established in 1921. The second was ADA University, established in 2006 under the Ministry of Foreign Affairs of the Republic of Azerbaijan as Azerbaijan Diplomatic Academy and transformed into a full-fledged university in 2014.

Interviews were conducted with the five academic staff and two program administrators. The study used purposeful sampling, since the number of the faculty teaching in the education management program is limited. We contacted with the maximum available faculty and administrators. All the participant professors are the holders of a PhD degree whose teaching experience in HEIs ranges between 10 – 30 years. Data collection lasted for a three-week period from the end of October to the middle of November 2019. The interviews took place at the venues the respondents had chosen and ranged in length from 45-60 minutes. There was a total of 27 questions. The open-ended questions were designed to learn about the respondents' background and the description of the Master of Education Management Program, to study the learning and teaching process within the program, and to identify if PBL exists at a systematic level in the program. An informed Consent Form was sent to each respondent prior to the interviews. Upon the participants' approval, the interviews were tape-recorded. All recorded interviews were transcribed. Topics and sub-topics were identified based on the literature review. The data was coded using a lean coding approach. Categories and themes were identified.

Additionally, the curricula of the Education Management Programs of the universities were analyzed and compared. The purpose of the analysis of these documents was to gain insights about the taught subjects within the programs and to identify similarities and differences between the two universities of Azerbaijan. Thus, descriptive comparative analysis was used aa a methodological tool.

Participants	Gender	Academic degree	Position	Years of teaching experience in HEIs	Years of teaching experience in master's level
Interviewee 1	Female	MA	Administrator	-	-
Interviewee 2	Male	PhD	Administrator	-	-
Interviewee 3	Male	PhD	Professor	10 years	8 years
Interviewee 4	Male	PhD	Professor	14 years	10 years
Interviewee 5	Female	PhD	Professor	8 years	3 years
Interviewee 6	Female	PhD	Professor	30 years	10 years
Interviewee 7	Female	PhD	Professor	20 years	10 years

Table 1. Participant Demographics.

LIMITATIONS OF THE STUDY

We recognize that the study is not free of limitations. First of all, the number of the participants may limit the generalizability of the findings. This was beyond the control of the researcher, since the number of professors teaching in the education management programs is not high. In each university, there were approximately 6-7 full time instructors available for the interview. Secondly, the collected data could not be supported with observations and surveys among students. A more extended study would supplement our findings with these data sources.

RESULTS

The aim of this study was to examine the use of PBL in two universities of Azerbaijan offering a master's degree in Education Management. The analysis of the documents reveals that both universities offer courses covering important aspects of education management. They deal with leadership and management, instruction and learning, research and public policy, finance and budgeting and other major issues in the education field. Almost all the courses could in theory incorporate PBL into their course structures.

Interviews with administrators and teachers reveal their insights into the following aspects of PBL:

PBL in the Teaching and Learning Process

The interview results from the Azerbaijan State Pedagogical University show that more emphasis is put on theoretical and disciplinary learning predominantly by means of lecturing. The topics of the courses are based on pre-determined objectives and are approved by the academic staff. Normally, the learning process in the university is teacher

oriented. The lessons are conducted in the form of lectures and seminars. The teacher is the main source of information, and the students are primarily assessed by exams. To graduate, the students must write an individual master's thesis and successfully defend it. Although there exist some group activities within the subjects, they are of a fragmented nature. One of the professors describing the group project specified:

> We have some group work during the semester. The students choose their group members themselves. Some of them, however, prefer to work alone. We provide them with the topics, which are pre-determined and approved by the relevant department. We can make minor alterations in the topics. The task of the students is to prepare a presentation on the given topic.

The results from ADA University are considerably different in terms of the teaching and learning happening within the program. According to the professors, virtually all the courses include some kind of project-oriented learning elements. As a graduation requirement, the students have an opportunity to choose either a master's thesis, which is written individually, or a Capstone project, which is carried out through group work. The students are encouraged to research and find a problem in the field of education and work on the analysis of that problem in their groups. Groups are formed randomly or by students themselves depending on the professor. The students play a central role in this process. They are responsible for their own learning. They conduct a real small-scale piece of research to find a problem and present their findings and propose solutions. The Capstone project, which lasts for one semester, requires students to identify a problem in the education field, negotiate with external stakeholders, and present their results to committee members to defend their proposals. As stated by the Capstone supervisor:

> Professors and supervisors introduce only the broad area for the research, and the students must find the problems themselves.

As we can see, the professors encourage learners to find their own path and direct their learning through enquiry.

PBL and the Role of a Teacher

In terms of the teacher's role in Education Management, the interview results show differences between the programs at the sample universities. The outcomes of the research show that the professor's role in the universities differs considerably depending on the approach used during the teaching process. Azerbaijan State Pedagogical University, which tends to stick to a more conventional pedagogical approach, focuses on a content delivered predominantly by a teacher. The teacher is the main decision-maker regarding the topics of any assignments, the structure of the lesson, and the students' role in the process of learning. Also, the teacher is considered the main source of information.

Mostly, the professor presents the topic in a lecture format, and the students are passive receivers. In the case of group presentations, the professor's main responsibility is to assess the end product. One of the professors describes the situation as following:

> The students are provided with the list of topics, and they choose one to work on, yet under the supervision of the teacher. We try to suggest up-to-date topics. To identify the portion of the work done by each individual, I check their written reports. My main role in the process is grading.

By contrast, teachers at ADA University have multiple roles in the teaching process, according to the results. They also deliver lectures within the courses, which mainly have an interactive format. Regarding project-based assignments, ADA professors see their role as that of a facilitator. They leave it to the students to decide on the topic for inquiry, analysis, and data collection. As a rule, they meet with the project groups once a week or every two weeks with the purpose of guiding them in narrowing down the topic, gathering data, or simply answering any of their concerns. Professors state that they are more satisfied with their role in projects than in traditional assignments.

> I enjoy teaching with projects. They make the learning more alive and engaging.

> Projects are more interesting, interactive, and applicable than traditional lectures. But there are also many difficulties because the students do not always understand what is expected from them in the project. Teaching with projects is less stressful but requires more creativity from a teacher. It requires a more individual approach.

Assessment Procedures and PBL

It is crucial to highlight the importance of assessment methods in teaching both in traditional and contemporary teaching environment. As can be seen from the results of the interviews in Pedagogical University, the main assessment is summative. The students are predominantly graded based on the midterm and final exams. As for the group activities, one of the professors says that:

> The students mainly prepare presentations on given topics and are assessed according to their performance during the presentations. Sometimes, the whole group gets one grade, sometimes they are graded individually. It is based on their speech and answers to questions.

Thus, summative assessment is the dominant way of evaluating the students' oral or written performance.

The experience at ADA University is different, however. The professors in this university use diverse assessment methods. The students have midterm and final exams as well.

However, the exam is not the only, or even predominant, assessment tool. Regarding group project assignments, although the professors mainly grade the end product, they state that the students receive feedback along the way, which eventually helps them to learn from mistakes.

> Usually we assess the end product. Although we may assess the first or second draft. But we use formative assessment during the process.

The results of all the interviews conducted reveal that anonymous peer evaluation and individual performance of each student contribute to the final grade of the project. Nevertheless, they state that they do not know any effective ways of monitoring and ensuring equal contribution to the group projects.

Perceived Problems and Benefits of Teaching with Projects

Some questions in the semi-structured interviews were related to the concerns of teachers while using projects within their courses. Virtually all the respondents articulated the same problems while teaching with projects. Primarily, the lack of organizational support at various levels was highlighted by the participants. While the representatives of the Azerbaijan State Pedagogical University see the main obstacle for project-based teaching in the insufficiency of technology and facilities, ADA University professors emphasize other problems, namely awareness among some students, teachers and administrators alike about project-based teaching and learning. Weak negotiation with the external stakeholders, a shortage of ideas related to authentic problems, and time constraints were also highlighted among the perceived difficulties.

> They don't negotiate with stakeholders. They may involve stakeholders who have no clue about the problem. Some of them don't even understand why they are invited.

> Main complaints are related to stakeholders. Not all of them want to see students. In our country, it is almost impossible. We are mostly too optimistic about it. Even when we invite, they do not understand what we want. We need partners.

The professors also think that in order to teach successfully with the projects, there is a need for professional trainings related, especially related to teaching methodology and assessment.

As for the beneficial aspects of using projects within courses, the respondents emphasized the enhanced motivation of students. Their engagement in the learning process increased even more if the students were dealing with authentic problems, something stated by most of the participants. Nearly all the respondents stressed that project-oriented lessons help

students to develop their soft skills (See Table 2).

Perceived Problems	Perceived Benefits
Insufficient organizational support	High motivation to learn
Inadequate infrastructure	Developed research skills
No awareness about teaching with projects	Ability to work in teams
Weak negotiation with stakeholders	Independent learning
Shortage of ideas for projects	Self-discipline
Time constraint for completing the tasks	Creativity
Lack of knowledge about monitoring equal contribution	Problem solution skills

Table 2. Problems and benefits of teaching and learning with projects.

DISCUSSION

By analyzing the data, we were able to generate a list of principal issues relating to PBL in the Azerbaijani university context. These issues were as follows: the overall teaching and learning process within the programs; the role of the professor within the process; the method of assessments used; perceived difficulties and benefits of using project-oriented assignments. The comparison of two universities shows that ASPU tends to use more traditional approach whereas ADA University has more combined approach in terms of implementation of PBL.

In general, at universities where the projects are integrated vigorously into the program, students take a more active role in the learning process than they do in classrooms with traditional teacher dominance. The literature emphasizes that students' participation and involvement in the activities is paramount for achieving deep learning which should be the main goal of higher education institutions. Universities today are spaces which require innovative approaches in teaching. As seen from these results, although project-based learning does not happen as a curriculum-based and systematic approach in the sample universities, the observable elements of it are nonetheless contributing to the development of learner-centered pedagogical practices. Fluck (2010) describes those practices as opportunities for students to carry out collaborative work on complex and real-world problems, and to going beyond classrooms to communicate with different people.

The analysis of the teaching approach within the education management program allows us to divide the sample universities into various types. Jamison et al. (2014) identify three university types, two of which might be considered consistent with the results of our study. Thus, ASPU can be considered as a mode one academic university, which emphasizes "theoretical learning and the process of knowing." Jamison et al. (2014) calls

this type a "traditional" university i.e. one which offers mandatory and elective courses based on the purpose of theoretical knowledge acquisition. According to this division, ADA University, by contrast, can be considered a mode three university, i.e. one which focuses on hybrid learning and has a combined approach (Jamison et al., 2014). Our results obtained from the ASPU are consistent with the idea that in a mode one university, problems are usually designed by staff to fit learning objectives, and projects are very short-term (Kolmos, 2017). Hence, this type of teaching approach cannot be called a systematic PBL approach. One positive side of it, however, is that an attempt to stimulate active learning and encourage team work to prepare a project does occur, yet within very narrow and discipline-specific confines. We should emphasize that in a mode one university, skills and competencies are not the focal points during the learning process. Our outcomes from ADA University are also consistent with how the literature describes a mode three university. Specifically, mode three universities focus on the development of skills and competencies. Nevertheless, PBL is integrated into the curriculum across the existing courses.

It is obvious that students in Azerbaijani universities are not experienced in learning through projects, since the approach itself is new to these universities. Thus, undoubtedly, to be able to learn in a team setting, the learners need the appropriate and adequate instruction and assistance of a professor. The results of the study display that in these two universities, the role of a teacher differs in terms of both teaching and assessment approaches. There exists a considerable body of research concerning the role of a professor in PBL classrooms. Our findings are mainly consistent with the idea that in institutions which emphasize the outcomes and the process of learning as equally important as the content knowledge, teachers see their responsibilities as primarily facilitative. In contrast, in universities where the focus is primarily on content, the main role of teachers is to promote memorization of the material and to grade performance accordingly (Savin- Baden & Wilkie, 2004).

Although the professors at ADA University with a more student-centered approach see their responsibilities as a guide or a facilitator, all of them perform their roles based on the experience as former students in universities abroad or based on discussions and collaborations with their international counterparts. Therefore, they echoed the ideas stated in the research done by Graaf (2013), who claims there is a profound need for staff training, particularly when a new pedagogical approach is introduced at the institution. In a similar way, our participants emphasize the importance of teacher training in methodology and assessment while using projects within the courses. Thus, there is no doubt that teacher training in PBL teaching can first of all raise awareness about PBL, change the perception of teachers about their role in the teaching and learning process and, most importantly, develop their facilitation skills (Graaf, 2013).

Overall, all the participants stated that by integrating projects into the courses, teachers help students to become responsible for their learning and to acquire the practical skills now highly sought by employers. This finding is consistent with numerous studies which claim that PBL is an effective teaching approach which cultivates marketable graduates (Baharom & Palaniandy, 2013; Strobel & Barneveld, 2009). Additionally, as stated in the literature, learner motivation is enhanced through the authenticity of tasks, through finding solutions to problems, as well as through teamwork and self-evaluation (Hmelo-Silver, 2004).

CONCLUSION

Considering that PBL is seen as a robust method of teaching capable of educating skillful graduates for the labor market, the current research attempted to answer the question if PBL exists in the preparation of education managers at master's level in Azerbaijani universities. Two universities offering this program were chosen as a sample. The goal was to talk to the program administrators and professors in order to identify any signs of PBL integration into the program. The results show that in both universities, there is no indication of a well-developed systematic curriculum based PBL model. Nevertheless, different kinds of project are included into the courses. Yet at ASPU it appears to exist in a more fragmented and task-based form. Overall, the results show the dominance of a teacher-centered approach. Moreover, a lack of awareness among teachers about PBL makes the current situation in the program less promising. In contrast, the findings from ADA University display a more aligned approach in the use of PBL. The professors are conscious about PBL and use projects either at the assignment level or in a semester-long final project. As a result of this study, we can claim that for preparing education managers with the required practical and soft skills, both universities need to create structured PBL models by scrutinizing international experience and considering the local context and the available organizational culture and capacity.

The research was conducted only through interviews with teachers and administrators. Thus, to be able to support the findings, further quantitative research among students of this program would need to be done. Furthermore, there is a need to research the reasons for the difference in terms of the PBL elements in two universities. A preliminary hypothesis might be the differences in the financial conditions, organizational structures, and infrastructures of the two universities, was well as the human capacity and motivation present at each. Although this research can contribute to the body of knowledge about PBL in Education Management Programs at Azerbaijani universities, future studies with the aim of uncovering hidden aspects behind the fragmented and surface level of project-oriented teaching and learning might shed more light on the issue.

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