ных пород и стен долины замедляет и ускоряет движение ледников. Эти напряжения приводят к образованию трещин, которые затем включаются в структуру айсбергов. Арктические айсберги, как правило, меньше и имеют более произвольную форму, чем антарктические, а также имеют присущие им слабости, которые могут легко привести к дальнейшему разрушению. Если их осадка превышает глубину устья фьорда, недавно отелившиеся айсберги могут оставаться в ловушке в течение длительного времени в своих фьордах происхождения. Такой айсберг будет менять форму, особенно летом, когда вода во фьорде нагревается, под действием дифференциальных скоростей таяния, происходящих на разных глубинах. Такие колебания таяния могут повлиять на устойчивость айсберга и привести к опрокидыванию айсберга. Изучение профилей опрокинутых айсбергов помогает исследователям определить колебания летней температуры, происходящие на разных глубинах фьорда. Кроме того, верхние поверхности опрокинутых айсбергов могут быть покрыты небольшими зубчатыми углублениями, которые являются побочными продуктами небольших конвекционных ячеек, образующихся при таянии льда на границе раздела лед-вода.

Литература

- 1. Богородский А.В. Гидроакустическая система дистанционного измерения рельефа подводных частей айсбергов // Датчики и системы. 2020. \mathbb{N} 4 (246). С. 37-42.
- 2. Корнишин К.А. Снижение айсберговой опасности при освоении месторождений углеводородов на шельфе посредством разрушения айсбергов и их обломков // Вестник Ассоциации буровых подрядчиков. 2021. № 1. С. 30-32.
- 3. Леоненко, П. Д. Загадочные айсберги: в поисках истины / П. Д. Леоненко, Т. П. Шехмаметьева // Юный ученый. 2020. № 4 (34). С. 111-114.
- 4. Меримский А.А. Концепция разработки технологии утилизации айсбергов // В сборнике: Молодежь и научно-технический прогресс. материалы региональной научно-практической конференции. Дальневосточный федеральный университет, Инженерная школа. 2020. С. 349-352.
- 5. Сатурченко, М. В. Горячие факты про лед / М. В. Сатурченко, Т. В. Мощенская // Юный ученый. 2016. № 1.1 (4.1). С. 57-58.

PEDAGOGICAL SCIENCES

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IMPLEMENTATION OF PEDAGOGICAL TECHNOLOGY FOR FUTURE MARKETOLOGIST LEADERSHIP COMPETENCE FORMATION INTO THE PRACTICE OF UNIVERSITY EDUCATION

Abstract.

The article describes the process of implementation of the developed pedagogical technology for future marketologist leadership competence formation into the practice of university education. The paper describes the directions in which the content of the educational process was modernized.

Keywords: pedagogical technology for leadership competence formation, technology for future marketologist leadership competence formation, leadership competence formation, university education.

Introduction. Previously we developed the pedagogical technology for future marketologist leadership competence formation which consists of blocks and stages that reproduce the structure of future marketologist leadership competence and with the help of certain methods, forms and means of training using interdisciplinary links as well as forms of classroom activity, self-study work, internship and research work contribute to the training of marketologists with developed leadership competence. This allowed us to proceed to the formative stage of the experiment.

The process of implementation of pedagogical technology was conducted by stages. The first, **orientation-motivational stage** (first semester) was aimed at raising awareness of the importance of leadership competence among future marketologists; the second, **practical stage** (second semester) was aimed at developing the system of knowledge and skills necessary for future marketologist leadership competence formation using interdisciplinary technologies; the final, **reflexive and analytical stage** (mainly the third semester) was used to analyze the level of formation of future marketologist leadership competence.

The **content-organizational block** of the technology began with the *orientation-motivational stage*. Here are a number of activities held. The stage started with an educational lecture-discussion with the use of multimedia "Well-known marketologists leaders". It was an integration of the disciplines "Foreign Language", "History" and "Marketing". Students watched TED-talks with famous marketologists leaders and about leadership, some in English, which are a remarkable speech by Steve Jobs in front of Stanford University graduates, Seth Godin's "How to spread your ideas", Simon Sinek's "How leaders promote action", Stephen Johnson's "How do brilliant marketing ideas occur?", "What it takes to be an effective leader" by

Rosalinda Torres, "Surprising habits of Original Thinkers" by Adam Grant, "Leadership everywhere" by Drew Dudley and others. After the watch students were involved into the discussion. The participants discussed the issues "In which way do you think the leadership competence of prominent marketologists can be demonstrated?', "Which of them is most popular and why?", "What are the qualities and skills that make a person a leader?", "How do brilliant marketing ideas emerge and what lies underneath?" etc. The students generated a wave of words-associations for the concept of leadership (brainstorming method) using the online server Word Art [7].

Within the discipline "History of Economics and Economic Thought" students performed the exercise "Time Machine". The goal was to familiarize students with the history of business activities, which were carried out in the 1st - 2nd century AD, acquiring general knowledge about leadership competence. The exercise consisted of two stages. On the first stage the students were divided into four subgroups. Each subgroup was asked to prepare a presentation about the life and work of a marketologist of any historical epoch, by choice in English. On the second stage of the game each subgroup role-played a situation on the theme chosen. The task required interdisciplinary knowledge of history, economics and foreign language.

Further, at the webinar "Increasing competitiveness of marketologist", which was a combination of disciplines "Marketing Innovation", "Marketing Communications" and "Information Technology", students learned about professional and personal qualities. They participated in the discussion about the role of leadership competence in the professional success of the marketologist practitioner.

The following activities are described in Table 1 below.

The *practical stage* began with a multimedia lecture-discussion "Leadership: past and present". The first stage was the introduction of participants to each other and updating their knowledge about leadership ("Business card").

Then students watched the presentation about origin of leadership, leadership as a phenomenon, forms of leadership (servant leadership, charismatic leadership, transactional leadership), the evolution of leadership theories. The students also watched a video on You-tube (B&B Whiteboard videos), one of them in English ("Behavioral leadership theories"), followed by a discussion. The students were given a game called "Counterpart" aimed at understanding the phenomenon of leadership, development of self-confidence and expressive qualities of a person. One of the students develops an image of a political, public figure or a wellknown person who exhibits typical leadership qualities. The students play the roles of journalists who have been asked to attend a press conference with the person. A jury evaluates each player. After the end of the game a collective analysis took place [10,14]. The seminar was the implementation of the links between the disciplines "Foreign Language", "Philosophy", "History", "Psychology".

Implementing the principle of visual pluralism, at the lecture-discussion "Empathy and emotional intelligence: their role in the effective communication of marketologist" (the discipline "Consumer Behaviour") students marketologists were introduced to the concepts of "empathy" and "emotional intelligence". They learned about the links between emotional intelligence and styles of emotional leadership, the role of empathy and

emotional intelligence clusters in the leadership competence structure and how they contribute to the effective professional activity in the marketing area [1; 3]. The lecture was held with the use of multimedia tools (power point presentation). Students got acquainted with the structure of the emotional intelligence, basic human emotions, discussed how these emotions manifest themselves, how often they feel this or that emotion, with which place/people they associate these emotions, etc. Then the students performed the exercise aimed at developing students' emotionality, moral and ethical skills of preventing conflicts. Interconnections between the disciplines "Foreign language", "Information technologies", "Psychology" were implemented.

At the training "Negotiation skills", future marketologists learned about the key factors that influence the negotiation process, and how to overcome the main obstacles during negotiations, negotiation models, using universal approaches to the preparation and conduct of negotiations internationally (also in English). They role-played real negotiation, using a model of negotiation (by means of interactive "negotiation" technique) with the use of information technology. The students made videos "Negotiations", where each pair of students conducts negotiations, and then independently analyzed the presented videos, finding mistakes and identifying effective techniques of business verbal and non-verbal communication, techniques of reflexive listening. The interdisciplinary approach was based on the synthesis of disciplines "General Psychology" and "Public Speaking", etc. The following activities are listed in the chart as well as the activities for orientation-motivational and reflexive and analytical stage.

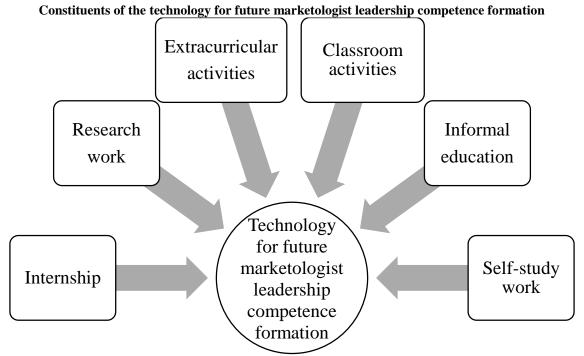
Table 1

The list of activities done during the formative stage of the experiment on formation of future marketologist leadership competence in the process of interdisciplinary training

Orientation-motivational stage	Practical stage	Reflexive and an-
		alytical stage
• lecture-discussion "Well-	• multimedia lecture-discussion "Leadership: past and	 exercises on
known marketologists leaders"	present"	reflexion develop-
• webinar "Increasing	• lecture-discussion "Empathy and emotional Intelli-	ment
competitiveness of marketolo-	gence: their role in effective marketologist communica-	 lockbook
gist"	tion"	 sharing im-
• lecture-discussion "Leader-	 seminar-discussion "Leaders I am impressed by" 	pressions and ex-
ship competence in marketolo-	lecture-discussion "My Superteam"	perience
gist 's profession"	• practical session "Goal-setting in marketologist pro-	
• practical session "Thinking	fessional activity"	
positively"	• practical session "Decision-making as a directive	
• seminar-discussion "Stay	function of a marketologist"	
motivated! "	 practical session "English for leaders" 	
	 training "Self-management for marketologist" 	
	binary lecture "Stress management"	
	 lecture on "Time management for team and self" 	
	• training "Professional relationship of marketologist"	
	• seminar "Crisis leadership"	
	 training "Negotiations skills" 	
	 interdisciplinary project "Servant leadership" 	
	• classes "Marketing projects development with the	
	means of Google docs", "Information systems as means	
	for marketologist leadership competence formation "	

The development of leadership competence of the future marketologists in the process of interdisciplinary training must be fulfilled through a combination of educational *classroom* and *extracurricular work*, *internship*, *research work*.

Table 2



The following are some of *extracurricular activities* held:

- group project "Start-up". Students are marketologists in the establishment, which is engaged in the production of goods/production of. Assignment is to jointly develop a marketing project of selling a product (service) on the local market, using digital training tools. The task was carried out in small groups (4-5 people). These tools facilitated the implementation of cognitive teaching methods (synthesis; heuristic questions and observations; comparisons of facts; construction of rules, theories, hypotheses) and creative methods (brainstorming, imagery, hyperbolization and agglutination). The project was developed using Google Docs online tools (chat, collaborative work on documents, conducting online surveys, creating questionnaires, interviewing respondents, collecting and evaluating questionnaire results using spreadsheets, making reports in the form of presentations using tables, diagrams, mental maps, information posters, presentation of the survey results), use of Internet information resources. Thus, the traditional brainstorming technique is complemented by elements of communication through information technology. The students not only carried out the research tasks, but also used research tools. The project was then subjected to defence by the students. Thus, the interdisciplinary technology of the project was combined with the disciplines "Marketing", "Foreign Language" and "Information Technology";
- discussion club "Modern marketologist leader". The club is another interactive form of work aimed at discussion, exchange of ideas, improvement and development of students' knowledge in various spheres of activity, formation of individuality. The basis of functioning of various clubs is a certain interest

- of people, their enthusiasm, commitment, creative potential. The special role of clubs lies in organizing intellectual communication, creation of atmosphere of collectivism, building up skills of social activity, in giving possibility for emotional, psychological safety valve. [5]. At the club meetings, students listened to the promos of prominent world leaders (N. Mandella, A. Sakharov, W. Churchill, Mary Kay and others, read books about leadership ("Leadership Development", "The Theory and Practice of Leadership Formation", "Leadership Pedagogy"), watched fragments of films ("Dead poets society", "Joan of Arc", "The Woman Who Changed Everything", etc.), afterwards discussions were held [9];
- brain ring as a summary of acquired knowledge and leadership skills;
- meetings with successful marketologists graduates of the university. In our opinion, inclusion of successful marketologists practitioners in the training programs, who will be able to demonstrate the power of leadership potential by their own example, increases motivation and guide students. Leadership lessons are best received when they are given by people who have the authority and respect they deserve. The students were given the task of preparing a project entitled "Prominent leaders of the university" or "Prominent leaders of the city/region/country". Some speakers delivered their speeches in English [3];
- "Pedagogical workshop" at A. Nobel University. Within the framework of the workshop, students visited master classes conducted by professors and associate professors. By looking at the example of the professors, the students gained experience in communication, establishment and development of professional relations, reflexivity, which in its turn contrib-