Assessment of Reflection Abilities of Maritime Students : Maritime Education and Training

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ABSTRACT

We share the instruments for assessment the reflective abilities of the maritime students. In the research we analyze the reflection component of communicative activity and correlation of reflective thinking and risk assessment. The group of participants of the research was 80 students of Navigation Department. Methods we used are the author's questionnaire; the author's method of determining the development of abilities for reflection and introspection; the method of evaluation "emotional intelligence" by Hall; the test "Readiness to risk" by G. Schubert. The results of the research show that maritime students demonstrate a high level of ability to reflect on self-analyses, a middle ability to introspection, and a low ability to reflect on communication and emotions. Students mostly demonstrate attitudinal motivation, but active motivation needs correction, respondents overestimate their abilities to manage other people's emotions and overestimate their communication skills, most of the respondents do not overestimate their failures and successes therefore cannot feedback their learning outcomes. We state that the practical activity of the students in a professional environment has a positive impact on the development of reflection abilities. We offer two author's tests which can be used by maritime lecturers to assess the students' ability for reflection with the purpose of improvement education process.

1. Introduction.

When we invite the future student to study at the educational programs of navigators or ship engineers in educational institutions, we stress only on advantages of their future job, but, of course, we do not mention the difficulties, which they will encounter in their future. Influence of the work exposure of seafarers was researched by Abrahamsen et al. (2022), psychological defenses mechanisms and self-management by Lileikis (2022), coping behavior of seafarers by De Jesus (2022), categorizing of communication by Edmunds et al. (2022), the importance of ESP (Maritime English) by Kurshubadze et al. (2022).

As the responsible educators, we devote our article to the issues of how to manage the challenges of the work of a seafarer. Johan Smith (2016), a researcher from the University of Technology in South Africa stated in his research, that the instructors mostly worried about sailor's technical skills, maritime employers seek to acquire the most competitive workers to accomplish the tasks for every voyage, therefore separating the role of emotions, ideas, feelings, behaviors, needs, and values in seafarers' lives on board. However, the author emphasizes that while working at sea, the instructors should pay attention to the five aspects of wellness of the seafarers - Social Wellness, Emotional Wellness, Physical Wellness, Intellectual Wellness, and Spiritual Wellness. There are various tools to ensure the well-being of seafarers, one of which is the ability to communicate effectively. Communication can be considered as a simple transfer of information, and then knowledge of Maritime English is important for a seafarer. But there is also a social side of communication, when it is important how you perceive your interlocutor, how you treat him, whether you understand cultural differences, whether you know how to evaluate the emotions of your interlocutor and control your emotions. This means acquiring soft skills, developing close rela-

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tionships with other people and creating a backing network of family members and friends. Social well-being inserts showing respect for others and oneself; contributing to your community and the world, creates a sense of being a part of society.

Analysis of psycho-pedagogical literature has shown that the development of reflective thinking, ability to the reflection on learning process and reflective practice lead to the improvement of educational process. Reflection was researched in learning (Chang, 2019; Helyer, 2015), as the instrument to develop future leaders (Roberts, 2008), for teaching (Roskos et al, 2001), for teacher education (Ovens & Tinning, 2009), education through systematic reflection in practice (Agouridas & Race, 2007), reflection in practice (Larsen et al, 2016), network reflection (Berrill et al., 2008). Kurshubadze et al. (2022) analyze a cognitive aspect of the foreign language competence and show the significance of the cognitive component in the process of foreign language teaching and learning. The researchers emphasize that language teachers should recognize that there is the need to teach and evaluate the learners in the three domains (cognitive, psychomotor, and affective). Scientists have extensively studied the concept of reflection in the learning process and its impact on cognitive development. The scholars who have contributed to the understanding of reflection in the learning process came to the consensus that reflection enhances learners' ability to connect with their experiences, deepen their understanding, and foster continuous personal and cognitive growth. In the article, we present the research where we analyze the reflexive component of communicative activity, which reveals the ability, and skills of students to evaluate the results of their own activities, to be able to understand and correct their behavior, to strive for self-improvement. Besides, we analyzed correlation of reflective thinking and risk assessment. In this article, we use the notions "reflection" and "reflexivity" as the same ones. We rely on The Cambridge Dictionary that provides the following definition for the word reflexivity: Reflexivity (noun) the fact of someone being able to examine their own feelings, reactions, and motives (reasons for acting) and how these influence what they do or think in a situation.

The reflective component allows students to become aware of themselves as a subject of activity, their characteristics, abilities; realize the goals and evaluate the structure of activity, determine ways of its improvement and optimization; assess the influence of external factors on the state of professional and personal self-development.

2. Methodology.

The reflection component refers to the ability of an individual to reflect upon their own thoughts, actions, and beliefs. It involves introspection and self-awareness, allowing a person to examine their own reactions and motives. Self-reflection, on the other hand, is the act of consciously thinking about one's own thoughts, feelings, and experiences. It involves analyzing and evaluating oneself to gain deeper understanding and personal growth. Both the reflexive component and self-reflection are essential aspects of human consciousness and self-development.

They enable individuals to learn from their experiences, identify patterns in their behavior, and make conscious choices about their actions and beliefs. In the research, we paid special attention to the following tasks: 1) analyses of students' ability to reflection on communication, introspection, emotions, risk perception; 2) finding out what abilities to reflection of respondents need correction 3) implementing own methodology of assessment abilities to reflection.

Methods that were used:

1. The author's questionnaire.
2. The author's method of determining the development of abilities for reflection and introspection. We offer questions that reveal the ability to introspect (intellectual reflection), the ability to analyze oneself as an individual (personal reflection), and the ability to find ways to communicate effectively (socio-communicative reflection).
3. Method of evaluation "emotional intelligence" (N. Hall questionnaire) was also used. The objective of the testing methodology is:
   - determine the level of emotional intelligence of future seafarers;
   - check the assumption that the level of emotional intelligence increases as a result of practice that requires active professional foreign communication;
4. The test "Readiness to risk" by G. Schubert became the basis of the development model of foreign language competence considering psychological characteristics of the life of seafarers. This test was performed twice 1) before having a shipboard training 2) after obtaining the experience of life in the conditions of a sea voyage.

The limitation of the study is related to the procedure of shipboard training. An ideal study should have gone like this - a certain number of respondents completed the tests, then everyone went to practical training as a group, then everyone returned and took the test or survey again. Unfortunately, this is impossible for the maritime industry. The place of a cadet on a sea vessel is obtained individually by students. For this, firstly, there must be a request from the ship owner for a cadet vacancy on the ship, then the applicant must pass interviews with representatives of the crewing company, pass tests on knowledge of Maritime English and on professional knowledge and skills. Sometimes the applicant is also interviewed by the ship's captain. And such places on the ship appear at different times, so students go to practice at different times. Therefore, we collect students' questionnaires gradually, throughout the year, and often these are not the same students who were tested as students without experience on a ship. But the experience of constant monitoring allows us to say that this fact does not affect the validity of the results.

3. Results.

Reflective practice involves actively analyzing personal experiences and actions, in order to help himself improve and develop. Broadly, reflective practice involves thinking about how

you do things, and trying to understand why you do what you do and what you can do better. To engage the respondents in reflective practice we asked guiding questions. When it comes to reflective practice in the context of recent learning, we offered to answer the following:

1. Are you preparing to take professionally oriented online tests?
2. In what language is the CES (Crew Evaluation System) test?
3. Have you registered on the websites of crewing companies?
4. Do you have a set of necessary documents for the first voyage?
5. Do you have experience in interviewing a crewing company?

In the survey, 80 students took part.

3.1. Interpretation of results.

We would like to stress that the survey was conducted by the teachers of Maritime English who have been teaching these students for two or three years having three lessons of English a week. Their main task is to form their foreign competence according to the requirements of STCW (Standards of Training, Certification and Watch keeping). It is a certain procedure how to get a position of a cadet on a vessel. The specific procedures and requirements may vary between different shipping companies and countries; therefore we recommended our students to research thoroughly and stay updated with the latest regulations and guidelines for cadetship programs. To get a position as a cadet in an international crew, the students should follow these general steps:

1. Have the necessary educational background and qualifications. Typically, they will need to have completed a maritime-related program, such as a degree in nautical science, maritime studies, or marine engineering. Additionally, you may need to obtain relevant certifications like Basic Safety Training (BST), Security Awareness Training (SAT), and Medical Fitness Certificate.
2. Explore different shipping companies or maritime agencies that offer cadet programs. Research their requirements, application process, and deadlines. Some companies may have specific eligibility criteria, such as age limits or language proficiency.
3. Gather all the necessary documents required for the application. These may include your resume or CV, academic transcripts, certificates, identification documents, passport, and a cover letter explaining the interest in joining their cadet program.
4. Prepare themselves for an interview or selection process by studying industry-related topics, understanding basic navigation principles, and familiarizing with international maritime regulations.
5. Undergo a medical examination to meet the prescribed medical standards for a seafarer.

If the students successfully pass the selection process and medical examination, they will be enrolled in a cadetship program. The applicants show their knowledge through interviews with superintendents of crewing companies and take different tests to test Maritime English (Marlins Test or author's tests depending on the crewing companies' decisions) and professional competencies (CES, I-Test, Video tell test and others). 81 % of respondents told that they are preparing for the tests, 15% are not preparing for these tests and 4% even claimed that they don't need to do it. The aim of the next question is to control the truthfulness of the first question. It is known that all these tests are in English, so 89 % of the respondents knew that the tests are in English, nevertheless, 8% said that they may be in any language and 3% said that the tests may be in Ukrainian language. We wanted to get to know the students' active motivation. 60% of respondents have already registered on the websites of crewing companies, 30% have not registered, and 10 % claimed that they don't need it. The lack of active motivation showed 23% of respondents, who had not prepared a set of documents which are necessary for the first voyage in a position of a cadet. 18% of them even didn't know what documents they needed to have. Anyway, 77% of respondents have already prepared a set of documents and are ready to the interview in a crewing company. To achieve aims it is necessary to understand all steps, which are inevitable, but some students delay the stages, which are out of the university curriculum, which need self-control, active communication and self-sufficiency. During three years they used to be controlled by the university, just study, improve the knowledge without initiative actions concerning own professional career. Thus, the next question was about their experience of interviewing in a crewing company. Only 33% of respondents had such experience, 58% didn't have such experience and 9% answered that they don't need it. Why? What do they mean? A small number of answers "I don't need it" can be explained by the general emotional mood of the respondent, disappointment with the content of training, disappointment in the choice of profession, lack of faith in oneself and one's capabilities, low learning results, lack of knowledge of English, skepticism about the questionnaire, etc. In general, the goals of the survey were achieved. We were interested in the active motivation of students- future navigators on the eve of compulsory practice. The results also showed that not all survey participants are already actively engaged in promoting their careers in their future profession. This survey will make them think about how to improve the situation. We also decided to correct and direct the activity of students in the right direction. Online meetings were held with students who returned from shipboard training on a sea vessel. The most frequently asked questions were about responsibilities on the ship, difficulties and joys. Now we recommend having talks on "How I became a Cadet", "What I started with and what I achieved" and the like. Communication opportunities with cadets who are on the ship through the Internet make it possible to hold short motivational meetings on the Zoom platform.

3.2. The author's method of determining the development of abilities for reflection and introspection.

Reflective learning typically involves looking back at something, a past experience or an idea and critically analyzing the event. By looking at successful and unsuccessful aspects of an experience, reflection will help students learn from their experiences. Assessing reflective thinking abilities is not an easy task. We have studied the experience of many researchers who have conducted research on the ability to reflect on the learning process (Nurlatifah et al., 2023; Nurjamin et al., 2023). Some of them stress that many courses aim to promote reflective thinking or reflection upon practice, but there is a scarcity of readily usable instruments to determine whether students engage in reflective thinking (Kember et all, 2000). The best picture is still given by the descriptive method when you work individually, with an individual student. The assessment of the group of students is mainly carried out on the basis of a questionnaire to assess the ability to reflective thinking, the questions of which, in our opinion, require knowledge of psychology, they scarcely real the perception of students who are focused on the study of technical sciences, dream of the sea, very pragmatic but romantic. For years, we have been engaged in improving the communication competence of future seafarers, we have conducted a number of tests on communication styles, motivation to learn a foreign language, motivation and readiness for communication, a number of questionnaires and interviews about their vision of the future way of life. We have selected questions from the methods that have already been tested and will be able to show the ability to reflectively analyze. The questions were also selected according to a certain criterion, namely: to assess the ability to self-analyses (learning difficulties), to assess the ability to analyze communication (socio-communicative reflection), to assess the ability to self-regulation (emotional reflection), to assess the ability to see one's inner world. Thus, we conducted a new test with an emphasis on introspection, communication, understanding emotions, understanding oneself.

Reflective practice refers to the deliberate and systematic process of critically examining one's own thoughts, actions, and experiences, with the aim of gaining insights and improving future performance. It involves thinking deeply about what happened, the reasons behind it, and the potential implications.

On the other hand, reflective ability refers to the individual's capacity to engage in reflective practice. It is the cognitive and emotional ability to analyze, evaluate, and make connections between past experiences and present circumstances. Reflective ability enables individuals to gain meaningful insights, learn from their experiences, and adapt their behavior accordingly.

In summary, reflective practice is the actual process of reflecting on one's experiences, while reflective ability is the underlying skill or capacity that allows individuals to engage in that process effectively. Reflective ability can be developed and enhanced through practice and self-awareness.

Here are the questions and statements we have chosen to analyze the students' reflective abilities:

1. Is it difficult for you to concentrate on the learning English while working in a team?

2. Dealing with something new, I always feel nervous, can even forget words, or lose the idea of the task?

3. I like work related to various tasks, in which you can face complex problems, new turns.

4. When alternating between successes and failures, I am more inclined to overestimate my failures.

5. In different situations and in communication with different people, do you often behave completely differently?

6. Are you able to find an approach to each person during communication?

7. Do you pay attention to what is not said by the interlocutor, but is reflected in his voice, gestures or facial expressions?

8. Do you feel and take into account the mood, emotional state of the interlocutor?

9. Are you able to act prudently, not to lose self-control and reason under the conditions of a conflict situation?

10. When alternating between successes and failures, do you tend to overestimate your successes?

11. Do you manage your emotional state well, restraining the manifestation of unwanted feelings and expressing yourself in accordance with the situation?

The questions offered to the participants of the research will 1) prompt the participants to assess the situation and identify gaps in their knowledge and areas where they need to improve; 2) show the ways how to improve their learning process and identify which learning techniques work well for you and which ones don't; 3) help understand themselves better, consider what kind of assignments or information you struggle with the most; 4)prompt to think critically about how they communicate;5) increase motivation to learn; 6) improve learning outcomes.

The participants have the choice to answer "Almost always", "May happen" and "Almost never". All participants have to answer anonymously, voluntarily, at the convenient time for them. The researcher collects answers during several weeks. Thus, we got three data for each question. How to interpret these data to assess reflection abilities is our finding. We claim that the more even percentage of three variants of answers, the more reflective ability is developed in a group of respondents. We calculated the significance of the differences of the data and concluded that the less significance, the higher the ability to reflection and vice versa (Table 2). This methodology can be used in any educational institution, using the questions we offer.

Questions 1, 2 and 3 show the ability to self-analyses. As we can see in Table 1, there are no high preferences of answers in the group, therefore we admit middle and mostly high ability of respondents to self-analyses. Questions 5, 6 and 7 depict abilities to communicative reflection. Here the respondents showed middle and low ability to reflection. Thus, communication abilities need correction, which can be applied during lessons of English and in out-curricular activities: thematic meetings, watching and discussing films with the emphasis on communication techniques, discussing some episodes of the films or abstracts from books with the communication faults, etc. Questions 4 and 10 depict the ability to introspect, inner world. Here we admit the respondents' ability to reflec-

tion but here we also state that their behavior needs correction. Many respondents don't overestimate their successes and failures. Questions 8, 9 and 11 show the respondents' perception of emotions where most of respondents showed a low ability to reflection.

Table 1: Results of the assessment of different aspects of reflection.

№	answers			Type of reflection	Level of ability
	almost always	sometimes	almost never		
1	30,3%	45,5%	24,2%	self-analyses	middle ability to reflection
2	37,8 %	35,2%	27%	self-analyses	high ability to reflection
3	35,1%	29,8%	35,1%	self-analyses	high ability to reflection
4	29,7%	37,8%	32,4%	introspect	high ability to reflection
5	43,2%	32,4%	24,3%	communication	middle ability to reflection
6	64,9%	21,6%	13,5%	communication	low ability to reflection
7	59,5%	29,7%	10,8%	communication	low ability to reflection
8	81,1%	16,2%	0,7%	emotions	low ability to reflection
9	45,9%	37,8%	16,2%	emotions	low ability to reflection
10	27%	27%	46%	introspect	low ability to reflection
11	43,2%	43,2%	13,6%	emotions	low ability to reflection

Source: Authors.

Table 2: One-way analysis of variance.

?	1	2	3	4	5	6	7	8	9	10	11
P	0,028	0,42	0,77	0,59	0,06	0.0001	0.0001	0.0001	0.0007	0.0271	0.0002
	middle	high	high	high	middle	low	low	low	low	low	low

Source: Authors.

If the calculated P-value is small (<0.05), then there is a significant difference between the three data of the answers to the offered questions and statements in the frame of the author's method of determining the development of abilities for reflection and introspection.

The answers that puzzled us were: "Are you able to find an approach to each person during communication?" ("Almost always" answered 64.9% of participants); "Do you pay attention to what is not said by the interlocutor, but is reflected in his voice, gestures or facial expressions?"("Almost always" answered 59.5% of participants); "Do you feel and take into account the mood, emotional state of the interlocutor?" ("Almost always" answered 81.1% of participants). Questions need a deep understanding of such notions as "emotional state", "paralinguistic characteristics of communication", "approach to the interlocutor". These notions have some psychological sides, not easy to understand. What do the participants mean? Maybe

they don't understand these notions, maybe they are too self-confident, and maybe they were thinking only about close friends? Besides, in their future work environment safety is the first, and no attention to facial expressions or voices, just rules, duties and safety. Of course, such results show low reflection abilities. To prove our idea that not an even division of results shows low reflection abilities we referred to the results of previously conducted research on evaluation of emotional intelligence of the students of navigation department (Hall emotional intelligence test).

The test consists of 30 statements and contains 5 scales:

1. Emotional awareness, which means the understanding own emotions;
2. Ability to regulate and control own emotions;
3. Self-motivation - managing behavior by managing emotions.
4. Empathy which means the understanding of other people's emotions, the ability to feel the current emotional state of the interlocutor, as well as the readiness to give some support. This ability implies the understanding the human psychological state by facial expressions, gestures, tones of speech, posture.
5. Social skills through recognition of the emotions of other people - the ability to influence the emotional state of the interlocutor. Emotional wellness is a part of well-being of any individual. Emotional wellness of seafarers can affect how well they can function day to day or how they can cope with change or uncertainty. Difficulties in the emotional sphere may have a negative effect on their mental and physical health.

First of all, we were interested in changes in the emotional sphere that occur during the shipboard training of seafarers in the international crew. Therefore, testing on the evaluation of "emotional intelligence" by N. Hall has 80 students, including 30 of the surveyed who have had the experience of professional foreign communication. A valid number of students with experience of professional foreign communication was gained due to involvement in the study of a large number of surveyed who are working in international crews – students of the correspondence department. Testing was conducted for 2 years from 2022 to the end of 2023. The final interpretation of the data was done in 2023. The results of all the tests are presented in Tables 3 and 4.

Table 3: The results obtained by the method of evaluation of emotional intelligence (N. Hall)(in percentage).

Levels	Navigators with shipboard training experience in a mixed crew					Navigators with shipboard training experience in a local crew				
	1	2	3	4	5	1	2	3	4	5
High	10,4	3,3	8,4	49,6	5,4	13,5	5,6	5,6	50,4	13,4
Middle	22,4	20,7	11,6	28	9	25,8	22,4	22,4	28	37
Low	67,2	76	80	22,4	85,6	60,7	72	72	21,6	49,6

Source: Authors.

Table 3 notes: 1. The level of emotional self- awareness; 2. Ability to self-regulation; 3. Self-motivation; 4. Empathy; 5. Social skills (Recognition of other people's emotions).

As the result of the research, we determined the levels of the development of all components of emotional intelligence of the navigators with experience and no experience in professional foreign communication in the process of life activity on the ship. About 70% of the surveyed in both groups showed a low level of formation of the components of emotional intelligence such as emotional awareness, control of their emotions, motivation and recognition of emotions of others. Half of the surveyed demonstrated a high level of development of empathy as an emotional component. Taking into account the socio-psychological features of interpersonal interaction of seafarers and future conditions of their life during the voyage, the task of forming a proper level of emotional intelligence is urgent to preserve the health of seafarers and their life safety.

Realizing that competence of professional foreign communication of the seafarer is formed both at the educational establishment and during the shipboard training, we found out the significance of differences in levels of formed components of emotional intelligence for seafarers with experience and no experience in professional foreign communication during the process of shipboard training.

Table 4: Results of the comparison of the components of emotional intelligence of future navigators with experience and with no experience in professional foreign communication.

№	Scales	χ2critical	P	χ2empirical	P
1.	The level of emotional awareness	5,991	p0≤,05	0,69	p≥0,05
2.	Ability to control own emotions	5,991	p≤0,05	0,77	p≥0,05
3.	Self-motivation	5,991	p≤0,05	4,412	p≥0,05
4.	Empathy	5,991	p≤0,05	0,021	p≥0,05
5.	Recognition of other people's emotions	9,21	p≤0,01	30,034	p≤0,01

Source: Authors.

The empirical values regarding the recognition of emotions of others make it possible to argue that in the professional foreign communication with other cultures, students learn to co-exist in an international environment, involving the emotional sphere. Thus, the assumption of the practical impact of foreign language at the level of formation of emotional intelligence for future professional seafarers "man-man" - navigators were partially confirmed (dynamics occurs only by one indicator).

Thus, our assumption about the low level of reflection regarding the emotional sphere of communicative activity, according to the developed methodology for determining the ability to reflect in a group of respondents, is confirmed by the results of a study of the emotional intelligence of students of the same educational institution. Of course, we can continue the discussion, because the groups for the study of reflective abilities and the group for the study of emotional intelligence are different, but the teachers who conducted the studies also con-

firmed the results of all the tests conducted, since they have known the respondents for several years.

3.3. Influence of reflection abilities on the way of thinking.

Reflective thinking makes judgments based on reasoning, force to examine own thinking and thinking of the others, where individuals analyze options, and draw conclusions. People who think reflectively are analytical and reflect on the information they receive through observation and experience. The study of the influence of the emotional sphere of future seafarers on the course of thinking in the process of professional communication in the international crew has demonstrated that the level of emotional intelligence of future seafarers increases as a result of practical activity that requires an active professional communication. According to our hypothesis, the life activity of students on board changes assessing feasibility to perform an action that is risky for their own safety and the safety of others. We attribute these changes to the processes of professional reflective thinking that occur during the shipboard training. Reflective thinking can significantly help in the assessment of risks by providing a structured approach to evaluate past experiences, explore potential consequences, and make informed decisions. The reflective thinking influence risk assessment in the following ways:

1. Reflective thinking encourages students after a shipboard training to review and analyze previous experiences involving risks. By reflecting on these experiences, they can identify patterns, lessons learned, and factors that led to positive or negative outcomes. This analysis will provide better decision-making and risk assessment in similar future situations.
2. Reflective thinking involves understanding the cause-and-effect relationships within a given context. When assessing risks, this approach helps in identifying potential triggers, vulnerabilities, and their corresponding impacts. By recognizing these relationships, the future seafarers can better evaluate the likelihood and severity of risks, allowing for more accurate risk assessment.

Ultimately, reflective thinking enables a more comprehensive, informed, and critical evaluation of risks. By leveraging past experiences, considering different perspectives, examining cause-and-effect relationships, addressing biases, and generating alternative solutions, the students can enhance the quality and accuracy of risk assessments. Mostly, risk perception is studied by medical science (Freudenstein et al, 2021). Test by Schubert "Readiness to risk" makes it possible to assess the readiness of the surveyed to risk. The test includes 25 questions. We planned not only to assess the degree of respondents' readiness to commit extreme actions but check the reflective ability to justify the willingness to take risk and check the changes under the real professional activity. Risk is interpreted as the effect of chance with the hope of a happy outcome or action made under conditions of uncertainty. This test was conducted twice: before the shipboard training (20 students of a second year of study) and after gaining the experience of life in the conditions

of a sea voyage (20 students of a fourth year of study). In testing there were involved the same respondents, because this study is longitudinal, this experiment lasted two years. In the study, we tested the assumptions by which before obtaining the first real experience of life at sea the students are more ready to take risky actions, they manifest it in categorical statements in communication. After obtaining the first (and especially the second) experience of the real challenges of maritime voyage students are not so ready to risk and more moderate in their statements, which is positive for the safety of their life at sea. The obtained results are given in table 5.

Table 5: The results of manifestations of readiness to risk of future seafarers.

Students-navigators	Not inclined to risk	Reasonable caution	Inclined to risk
2 year of studying	17%	25,5%	57,5%
3 year of studying	10,2%	68%	21,8%
The value changes	-6,8%	+42,5%	-35,7%

Notes: Data are statistically significant at p <0.01.
Source: Authors.

Thus, the 6.8% reduction in the number of students who are ready to take a risk suggests that the students considered reasonable caution and rational behavior. Almost by half the number of surveyed who have changed their attitude concerning readiness to risk increased and changed to a moderate caution. Reduction in the number to one third of surveyed inclined to risk confirms our assumption that after gaining experience of sailing on board in a long voyage students become softer, more realistically assess the risks. In our opinion, this is very positive, because the professional activity of seafarers at sea and river is carried out in sufficiently high risky conditions for life.

Despite the fact that the practical work of a student in the process of voyages gives positive development of rational attitude to risk, rational attitude to risk and the development of moderation in statements require constant correction during practical classroom classes as well as during extracurricular work in by the lecturers of humanitarian and social disciplines. The results of a longitudinal study of risk perception led us to the conclusion that real practical activity influences reflective ability.

Thus, while learning respondents' ability to reflection, we found out the problems in the learning process where the correction is needed: 1) active motivation; 2) emotional intelligence; 3) ability to introspect (analyze own failures and successes); 4) communication skills (connected with emotions).

3.4. Practical recommendations how to develop students' ability to reflection.

There is a new challenge - how to correct each aspect, how to teach them to control their communicative behavior and how to teach to control their own emotions and distinguish other people's emotions, how to force the students to be active to achieve results of their learning, how to teach them to be ready to self-analyses, through what techniques, at what educational disciplines, by whom? Franco et al (2022) describe the reflective writing as the tool to develop communication skills and stress that "although reflection must be encouraged, the question of, how and when it is used, specifically in teaching communication skills, and what its outcomes are remains unclear". We are not completely certain with the answers but nevertheless, we offer the set of psycho techniques, situational and role games which can be used by the lecturers while teaching humanitarian and social subjects. Here are some suggestions for the teachers of English:

1. Written Reflections: Assign students regular written reflections, such as journal entries, reflective essays, or response papers. Review their writing to evaluate the depth of their reflections, critical thinking skills, and ability to connect personal experiences with course content.

2. Self-Assessment: Encourage students to evaluate their own learning and growth through self-assessment tools like rubrics or questionnaires. This can provide insights into their awareness of strengths, weaknesses, and areas for improvement.

3. Group Discussions: Conduct group discussions or peer reflections where students share their thoughts, perspectives, and insights. Observe their engagement, active listening and speaking skills.

4. Presentations: Ask students to give presentations on a particular topic, incorporating elements of self-reflection. Evaluate their ability to analyze their own learning process, and demonstrate critical thinking in the presentation.

At the linguistics department we offer our students motivation material at YouTube channels of our lecturers, have meetings with students in the frame of scientific society, and of course, introduce different interactive techniques in the practical lessons of English as a foreign language. Nowadays, many educators (Chen et al., 2022; Alf et al., 2023) offer gamification. Besides, we teach our students to use different psycho techniques to manage emotional states at the lectures of Psychology, such as auto-training, visualization and others with the hope they will be able to use them during the voyage at sea. The development of reflection and introspection abilities is a gradual process that requires consistent effort and practice. Encouraging individuals to engage in these activities regularly can help cultivate these essential skills. .Here are some tools for the lectures of Psychology:

1. Journaling: Encourage the students to maintain a personal journal where they can write down their thoughts, emotions, and experiences on a regular basis. This practice allows them to reflect on their thoughts and actions, leading to increased self-awareness.

2. Mindfulness meditation: Introduce mindfulness techniques, such as meditation, to help the students develop the

habit of being present in the moment. This practice allows for deeper self-reflection and introspection by observing thoughts, sensations, and emotions without judgment.

3. Guided self-reflection exercises: Provide structured questions or prompts to reflect upon. This can include topics like values, goals, strengths, challenges, or significant life events. Encourage them to analyze their thoughts and emotions surrounding these areas.

4. Reading and learning: Encourage to read books, articles, or listen to podcasts that explore self-reflection, personal development, and introspection. This exposure to different ideas and perspectives can stimulate deeper thinking and introspection.

In order to design exercises for the development of reflective abilities, it is advisable to divide reflection into practical forms: reflective speaking, reflective writing, and reflective listening. Such division will help to design exercises for the development of communication skills. But how can we develop reflection on own inner world? Here the reflection on past events, here and now events and the future may help.

4. Discussion.

Throughout the whole article, we stressed the positive sides of reflective learning. Reflective learning encourages the learners to examine their thoughts, actions, and beliefs. This process develops self-awareness and helps them understand their strengths and weaknesses. By reflecting on experiences, the learners identify areas for improvement and can develop plans to enhance their skills, knowledge, and performance (active motivation). Reflective learning promotes critical thinking as individuals evaluate their experiences, analyze situations, and consider different perspectives. This leads to better decision-making and problem-solving skills. Reflecting on achievements, challenges, and lessons learned promotes personal growth and development. The students learn from mistakes, and correct their behavior. Reflection on emotional sphere develops empathy and understanding how the students' communication and actions perceived by others. It helps develop interpersonal skills and strengthens relationships.

We would like to start a discussion about negative sides of reflective learning. Reflective abilities in education can be highly beneficial, but they also have some drawbacks. Reflective learning requires time and effort to engage in deep self-reflection, which may not always suitable during a lesson or a lecture. Engaging in reflective practices requires time, as it involves pausing, thinking, and analyzing one's learning experiences. This can be challenging in packed academic schedules where there is already a lot of content to cover. Besides, these individual reflections are very subjective. Reflective abilities heavily rely on personal perspectives and interpretations. As a result, the insights gained may be subjective and influenced by personal biases, which could hinder the objectivity of the educational process. Reflection can trigger emotional responses, especially when confronting mistakes, failures, or challenging experiences. Dealing with these emotions might be difficult for some learners, potentially hindering their willingness to engage in reflective practices. Reflective activities often lack a standardized structure, and learners might struggle without clear guidance or frameworks to follow. Assessing reflective abilities is a challenging process. Traditional assessment methods, such as exams and quizzes, may not effectively reflect a student's reflective growth, making it challenging to evaluate and provide feedback on such abilities. The integration of reflective practices into the educational system may vary across institutions, teachers, or subjects, which leads to inconsistent implementation. This inconsistency may limit the overall impact of reflective abilities in education. While reflective abilities can enhance learning experiences, it is essential to acknowledge and address these drawbacks to ensure their effective and unbiased application in educational settings. Thus, maybe, we are too enthusiastic about the importance of reflective abilities of the learners.

In addition, we assume that that the discussion may arise our way of assessment the ability to reflection, which we have described in this article.

Conclusions.

All participants of the study demonstrated a high level of ability to reflection on self-analyses, a middle ability to introspect, a low ability to reflection on communication and emotions. The study of the abilities to reflection revealed problems in the educational process, students mostly demonstrate attitudinal motivation, but active motivation needs correction, respondents overestimate their abilities to manage other people's emotions and overestimate their communication skills, most of the respondents do not overestimate their failures and successes therefore cannot feedback their learning outcomes.

The research proved our hypotheses that real practical activity improves the ability to reflection. During the study, we checked the assumption according to which after the first and especially the second) experience of the real challenges of the voyage, students become less willing to take risks and become more moderate, which is positive for the safety of their livelihoods. The shipboard training becomes an effective factor in the development of emotional intelligence as a factor of influence on the way of thinking of future seafarers. Taking into account the socio-psychological features of interpersonal interaction of seafarers in multinational crews and conditions of their life during the voyage, the task of forming a proper level of emotional intelligence is urgent to preserve the health of seafarers and their life safety. Reflection abilities are necessary to control their behavior during shipboard training and it is a part of the formation of a competent seafarer.

Reflective practice improves communication skills by developing self-awareness and emotional intelligence, the factors which allow to recognize communication mistakes. Ultimately, reflection enhances the quality of communication by promoting deeper understanding and more effective interaction between people. Reflective abilities can be developed, influenced and

corrected by lecturers of humanitarian and social subjects in the classroom or during extracurricular work.

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