The use of the case-technologies in teaching Maritime English in a competency-based approach

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Abstract. In this article the author describes the technique of teaching Maritime English communication based on case-technologies, as its implementation will provide a high proficiency level of the future deck officers, and characterizes the features of its implementation in maritime education. The use of this technology facilitates professional development, provides an opportunity to solve the problem by analyzing its components, involves cadets in solving collective professional issues; allows to activate their knowledge of professional disciplines; transform theoretical knowledge into practice.

Keywords: *Maritime English, communication, case-technologies, teaching methods, educational form, deck officer, competency-based approach*

Introduction. In the competency-based approach, learners study English within situations and contexts that are varied and relevant. In other words, the language is introduced and practiced in different cases that are similar to situations that could occur in real-life. The competency-based approach involves clearly described learner competencies which can be considered as the ability to act in English using a range of skills and knowledge and the ability to use English in various situations in which the skills and knowledge were learned.

The challenge lies in selecting such materials which will: correspond with the topic of the lesson and cadets' language proficiency level; have a potential of provoking discussion, argument, drawing conclusions, etc.; arouse interest and emotional feedback; contain relevant grammar or vocabulary. Another challenge is called forth by the need to incorporate authentic cases into the lesson while complying with the requirements of communicative approach to foreign language teaching and meeting the demands of competency-based learning.

So **the** p**urpose of the article** is to encourage the use of well proven case-technologies in teaching Maritime English in a competency-based approach. This hopefully will give cadets the chance to develop and form not only communicative skills in listening, speaking, reading and writing in professional sphere but also will facilitate the formation of important professional skills by means of English language.

Materials and Methods. Analysis of theoretical sources on competency-based learning [2; 3; 4] gives a possibility to consider it as a process of learning, developing and forming of concrete skills unlike to abstract learning, it's necessary to underline its extremely fine grained nature. It means learners move gradually from one mastered competence to the next in order to gain a larger learning goal. In case of reasonable teaching management each competence corresponds to a certain necessary set of individual skills, which together constitute a common learning outcome.

After completion of the program the cadets shall be able to: conduct teamwork and cooperate in groups of different backgrounds, with focus on maritime safety; demonstrate an ability to both nationally and internationally, orally and in writing explain and discuss information, problems and solutions in dialogue with different groups and contextually completed by prompts referring to technical understanding, skills and abilities, to put Maritime English competency into perspective.

The problem of using case-technologies has been examined by many scientists: Louis Barnes, John Boehrer, David Dunne, Lynn Laurence, David Schodt, Ann Velenchik, and others. Notwithstanding the contribution made by native and foreign scientists in the solution of the issues related to the use of the case-technologies, there are still some contradictions in the use of case-technologies in teaching future deck officers to communicate in English.

We propose to teach English through a comprehensive use of knowledge for the profession and improving the speaking skills in terms of professional communication. Case-technologies contribute to solving this problem. They are aimed at organizing interactive foreign language communication during solving professional problems. The main goal of these technologies is the actualization of communication on a professional level by involving cadets in activities that reflect the content and situations of the future specialty. Short maritime cases are sometimes used in lessons at the practice stage to drill active grammar or vocabulary subskills on a particular topic in discussing a real life situation, drawing conclusions, making assumptions, revealing misdoings and sequences of faulty actions, developing alternative scenarios or giving pieces of advice for avoiding similar accidents.

Methodology. If we use traditional learning with just thoughtless plain reading of professionally oriented texts and doing homogeneous exercises for linguistic competence formation, this method activates mostly the left half of learners' brain, which is logical, verbal, linear, vertically analyzing, non-emotional and is occupied with details, and is responsible for knowledge deepening, without putting these details into order. But if we use case-technologies with its motley interactive teaching techniques, the right side of the learners' brain considerably activates during horizontal processing of information and putting all accumulated details in emotionally-spatial order with further synthesizing them in one big picture. Using interaction as the means and the goal of study, this method is focused on communicative competence with learning outcome in form of individual communicative skills.

Thus we see that case-technologies are greatly contributing to maintain self-extending system of Maritime English learners' linguistic and professional knowledge, and its integration with competency-based approach puts the

most number of learning information details into spatial order, facilitates development of communicative skills of learners and graduated formation of maritime navigational professional competences.

So we understand case as a narrative, situation, select data sampling, or statement that present unresolved and provocative issues, situations, or questions. Presented in a narrative form to encourage cadet involvement, a case provides data essential to an analysis of a specific situation, for the framing of alternative action programmes and for their implementation, recognizing the complexity and the ambiguity of the practical world. The important case elements are description of reality, true life and photo of reality.

The case-technologies have their distinctive components, such as cognitive, conceptual, didactic, social, heuristic, analytical, motivational and solving. The borders between these components are not clear and definite, on the contrary, these structures penetrate each other. The cognitive component of a case is represented by tactual elements that expand cadet's knowledge with specific examples taken from navigation. The conceptual component is connected with it – a case makes cadets use accurate professional language, in which usage of terms and concepts is specific and clear for the cadet and his partners who take part in presenting decisions relating to the situation being analyzed. The didactic component is mainly defined by the characteristics of case analysis. The social component of a case represents the possibility to exchange ideas in a group and to compare different view points, which is done in the form of a group discussion. The analytical aspect of a case requires a deep analysis, splitting of a complex situation into initial elements (simple situations) which are easier to evaluate. This allows to identify the alternatives of possible solutions and to choose one of them, which seems to be the best from some point of view (heuristic component). On the other hand, the motivational component of case structure is connected with creating an interesting didactic situation which encourages cadets to search the ways of solving the case problem. The interconnection of these components provides better results in forming knowledge than traditional, passive methods of education.

As a result of the analysis of psychological and educational literature we infer that the effectiveness of case-technologies in teaching Maritime English is provided by a set of procedural educational conditions: motivation of cadets to study a foreign language; organic combination of case-technologies with other methods used in teaching a foreign language; development of instructional aids for discipline and selected topics of the discipline in which the case-technologies are used; the changing in nature of the "teacher-cadet" relationships; organization of dialogic interaction. We also distinguish the group of content (instructive) educational conditions: the selection of the course content based on the cadets' professional motives, interests, needs and objectives; structuring the content of educational material; development and implementation of practically oriented content in a foreign language training by using case-technologies combined with traditional teaching methods; engaging cadets in the vocational training operations that simulate various aspects of their future profession; monitoring the progress of the stages in the cases discussion, evaluation of cadets' professional development.

J. Boehrer states that among the purposes of case-technologies are to:

- foster critical thinking,
- encourage student responsibility for learning,
- transfer information, concept, and technique,
- develop command of a body of material,
- blend affective and cognitive learning,
- enliven the classroom dynamic,
- develop collaboration skills,
- teach questioning and self-directed learning [1].

The task of the case-technologies is not just to convey the knowledge, but to train the ability to cope with unique and unconventional situations, which, as a rule we actually have to deal with in real life. The focus is shifted from the process of conveying concepts and knowledge to the development of analysis skills and decision making skills.

The cadets engage in the intellectual, and emotional, exercise of facing complex problems and making critical decisions within the constraints imposed by reality, e.g. limited time and information, and pervasive uncertainty. Considering them from the protagonist's perspective, which calls on analysis to inform action, the cadets strive to resolve questions that have no single right answer. Their differing views and approaches produce a creative tension that fuels the enterprise and a synergistic outcome that both recognizes and exceeds their individual contributions. In their effort to find solutions and reach decisions through discussion, they sort out factual data, apply analytical tools, articulate issues, reflect on their relevant experience, and draw conclusions they can carry forward to new situations. In the process, they acquire substantive knowledge, develop analytic and collaborative skills, and gain in self-confidence and attention to detail.

Cases can be more or less "directed" by the kinds of questions asked – these kinds of questions can be appended to any case, or could be a handout for participants unfamiliar with case-technologies on how to approach one.

To work with cases the following analysis techniques are used:

- answering case study questions,
- completing a table with case data,
- multiple choice tasks,
- brainstorming students' ideas,
- case discussion,
- demonstration,
- conference,
- role play,
- jigsaw,
- completing an evaluation form.

Case Discussion. Discussion is the main technique used in case-technologies. It enables cadets to analyse the case data, to interact and to exchange information, expressing their opinions and responding to other participants' ideas and opinions. For case discussion to be useful it must be throughly prepared, structured, regulated in time and controlled.

The instructor should provide a series of written questions to guide the discussion. Pay careful attention to the sequencing of the questions. Early questions might ask participants to make observations about the facts of the case. Later questions could ask for comparisons, contrasts, and analyses of competing observations or hypoth-

eses. Final questions might ask cadets to take a position on the matter. The purpose of these questions is to stimulate, guide or prod (but not dictate) participants' observations and analyses. The questions should be impossible to answer with a simple yes or no.

Most important, the instructor needs to make sure that the discussion of the case meets his pedagogical goals. This is a process of questioning, listening, and questioning again. Note that the instructor role shifts dramatically, and perhaps uncomfortably, from content provider to process facilitator.

Completing a table with case data. If the answers to case questions can be organized or grouped in some way or another, it is better to use the technique of completing a table with the answers. It helps to structure the material and thus, enhances knowledge acquiring. Cadets can also get a better opportunity to compare the existing alternatives. Here are two sample tables.

Table 1. Gaining familiarity. Complete the chart below with the information from the case

What happened?	When did it happen?	Where did it happen?	What vessel suffered?	How did the accident happen?

Table 2. Look at the layout of the case and name the facts which formed the chain of misdoings

16:00	
18:45	
20:00	
20:35-20:40	
20:42	
21:45	

Multiple Choice Tasks. A teacher can give cadets a choice of possible answers to choose from. As case study admits more than one correct answer, cadets can choose different items and a discussion can be organized around them as a follow-up task.

Sample task: Tick the problems the bridge team members had during the voyage:

- Boredom – inattention
- Edge of routine
- Fatigue
- Lack of knowledge
- Lack of training.

Brainstorming cadets' ideas. Cadets generate maximum ideas, all of which, even the weirdest, are taken into consideration and fixed, after which all the ideas are analysed with the view of finding a solution to the problem. In case-technologies brainstorming is used when cadets have difficulties comprehending or interpreting the situation. Brainstorming can be used both as a warm-up, encouraging cadets' learning activity, and as an instrument of searching new solutions.

Demonstration. Demonstration is a masterly public performance of a task or technique with a view to show how a certain task or technique must be performed. The instructor or one of the participants shows the others the proper way of performing tasks, demonstrating it in practice, describing every step and explaining the reasons of performing it in this or another way.

Conference. A group of experts who have different opinions or positions exchange ideas with each other and with the audience. Conference can be organized in this way: 3-5 experts (or participants who play the role of experts) read theses prepared in advance, discuss them with each other and respond to the remarks and questions of the audience.

Role play. Role plays are used to get cadets to put themselves in the shoes of actors in the case. These roles can be assigned in advance (a good practice to use with reluctant speakers) or taken up on the fly. Small groups are especially well suited to role playing.

Jigsaw. This technic can be used on the stage of gaining familiarity as a traditional jigsaw reading technique. Cadets are divided into small groups, each group getting only a part of the case text. Cadets read their parts of the text and do some post-reading task (i.e. complete a table), after which they are redivided into groups with different text parts and exchange the information.

Jigsaw can also be used on later stages of case analysis. For instance, role play can be a part of a jigsaw technique, in which cadets are assigned roles, each role discusses their strategy, and then cadets are redivided into groups of different roles to solve the problem.

Completing an evaluation form. The end of the discussion is also a good time for the instructor to get a sense of what cadets are taking away from the discussion. Cadets can be asked to do a form of one minute paper in which they are asked to write down their answers to a few questions, including "What was the main point of the case? What did you learn from the discussion? How well do you think you performed? What do you like or dislike about the discussion? "

The main forms of work with cases are: individual work, pair work, group work, mingle activity.

The secret to successful teaching is instructor preparation, which is why introducing the method can be so time-consuming. Here are some guidelines about what to do before, during, and after leading your cadets in discussion, which are based on the material developed by A. Velenchik [5].

Before:

– Master the case. Read the case several times, following the instructions you gave cadets. Take notes and mark important places in the text for easy reference. Do all of the analytical steps you would ask your cadets to do.
– Plan your approach. Start with your pedagogical goal, and be sure that your goal drives what you do in the classroom. Working backward from that goal, think about the problem solving steps you would have your cadets go through. Design questions to get them through those steps.

During:

– Arrange preliminary voting.
– Seat cadets according to the solution alternatives they suggested.

– Set a time limit for discussing every solution alternative.
– Foster debate.
– Push cadets to support their claims and defend their points of view.
– Be a facilitator. During the discussion, the instructor acts as a conductor, steering cadet participation to meet pedagogical goals and keeping the discussion moving.
– Ask the question, listen to the answer, ask a follow-up question or draw in another cadet.
– Rephrase your question to get more and better responses.
– Ask cadets to tell you how they know what they know and root their answers in the case.
– Be Patient – wait a while after questioning to give cadets time to think of an answer.
– Get out of the way and resist the urge to respond to each cadet intervention.
– Ask cadets to respond directly to each other.
– Incorporate other techniques.
– Be prepared for the unexpected. Your cadets may veer down a different path. How will you handle it?
– Finally, expect your cadets to fail at times. Failure is the flip side of solving problems. Be prepared to redirect your discussion to address failures. Explain the problem and the expected answer, and ask your cadets to brainstorm to figure out why they didn't find that answer.

After:

– Debrief the discussion to compare group responses. Help the whole class to interpret and understand the implications of their solutions.
– Summarize the discussion, highlight the key analytical and conceptual points. Most cadets don't take notes during the case discussion and some final summarizing remarks from the instructor can give them some record of the discussion to use for future reference.

Never:

– Behave like a patriarch who knows the only correct answer.
– Impose your answers on cadets.
– Be afraid of too much silence. What seems like an eternity to the instructor is actually very little time. Be sure to give cadets plenty of time to process your question and formulate an answer before repeating or rephrasing it.
– Answer the questions yourself. Silence will not ruin a case discussion, but a professor who answers all her own questions will.

Conclusion. Successful use of case-technologies throughout the whole lesson increases motivation for learning and communication in the classroom and facilitates the acquisition of new knowledge, practical skills and speaking competency that will promote students' communicative competence.

The case-technologies make cadets more active in the learning process and at the same time make their learning more meaningful for them.

In the nearest future it is planned to continue investigation, developing and mastering of the case-technologies which will help to implement the competence-based approach.

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