

11. Kheffe, O. (1991). Pluralizm i tolerantnost: k legitimizatsii v sovremennom mire [Pluralism and tolerance: towards legitimation in the modern world]. *Filosofskie nauki*, 12, 16-28 [in Russian].
12. UNESCO Declaration on Principles of Tolerance. Retrieved from <https://unesdoc.unesco.org/ark:/48223/pf0000151830> [in English].

*Lipshyts L. V.,*  
*orcid.org/0000-0001-6443-3321*

#### **TOLERANCE AS A VALUE COMPONENT OF PROFESSIONAL COMPETENCY OF FUTURE SPECIALISTS IN THE MARITIME INDUSTRY**

*The article emphasizes that the needs of sea and river transport development, as well as commercial shipping, have necessitated feasibility of training highly qualified and competitive specialists for the maritime industry.*

*It is noted that the problem of intercultural interaction is becoming relevant. It is closely related to the problem of forming a personality that is capable for tolerant intercultural communication.*

*Based on the analysis, it is stated that the need for a tolerant marine specialist is due to the pluralism of ideologies. Such a specialist is able to build a constructive professional dialogue, cooperate with representative and cultures of other countries.*

*The article summarizes scientific views on the concept «tolerance» and emphasizes that the problem of tolerance in the context of training of marine professionals needs special attention.*

*It is substantiated that the future specialist must have developed communicative skills that allow him to quickly adapt to the closed team requirements, to successfully cooperate with colleagues, including in the process of intercultural interaction.*

*It is stated that tolerance means equal rights for all members of the ship's crew, on the one hand, and on the other – each member of the multinational crew must recognize and accept the right of others to have different views, opinions, behavior and will.*

*The phenomenon of intolerance is characterized, and it is noted that any of its types is dangerous for the productive work of the ship's crew because it can lead to a weakening of group unity, mutual understanding and affect the safety of the voyage.*

*The significance of the value of tolerance as a component of professional competence of marine specialists for effective interethnic communication is analyzed.*

*Key words: tolerance, value, competitive specialists, intercultural communication, intolerance, professional competence, safety.*

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*Litikova O.I.,*  
*orcid.org/0000-0001-7952-9895*

#### **ADVANTAGES OF MARINE ENGLISH DEEPER LEARNING TECHNOLOGIES**

*The article considers the appropriateness of deeper learning technologies application in Marine English study, taking into account that professional training of marine cadets in maritime institutions of higher education should be accomplished in English language in compliance with the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (1978, 1995) and its Manila amendments (2010).*

*The results of training must correspond to high world standards and provided on three levels (support, operational and management levels) with compulsory development of certain number*

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*of communicative and professional skills and competencies on each training level. In respect that deeper learning represents a set of student educational outcomes, including acquisition of core academic content, skills to solve novel problems, it appears enough reasonable to apply it for Marine English language study.*

*A plenty of existing today deeper learning strategies, schools, and methods makes us to speak namely about a frame of pedagogical technology, which implies a specifically normalized educational process (form, content, training methods, products and output results) that purposefully changes the students, or provides the possibility to change by themselves.*

*The most suitable for Marine English deeper learning technologies (DLT) considered in this article are Project-Based Learning (PBL), Personalized Learning (PL), Inquiry-Based Learning (IBL), Blended learning (BL) and Flipped Class learning (FCL). Their evident and indisputable benefits are substantiated by the learning outcomes, attained in process of experimental deeper learning of Marine English language.*

*Provided experiment in Deepening Learning (DL) of Marine English affirmed positive characteristics of DLT in relation to symbiotic development of learners metacognitive abilities and intrapersonal skills for further transfer them at new tasks and contexts of maritime sphere, successfully using English as means for critical thinking and problem solving. As the result, students were engaged in positive and productive academic activity and persevered when faced difficulties.*

*Key words: deeper learning, technologies, Marine English, cadets, competencies, skills, learning outcomes.*

**The statement of the issue.** As we live in an extremely changeable environment with many new challenges, and the learners must acquire basic competencies for life (think critically, work collaboratively, communicate effectively, learn how to learn, develop new ideas using the basics of academic mindset), the use of deeper learning (DL) becomes highly demanded today for learning different subjects, especially Math and English language and not only at high school, but also at vocational colleges and universities. DL is associated with the process of such skills development, which in whole empower adaptation of learners to multiple new educational and professional contexts.

**Connection with the important practical tasks.** So as DL actually contributing to any vocational education, the same it may appear very helpful in the sphere of maritime education. In compliance with the guidelines of the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers (1978, 1995) and its Manila amendments (2010) professional training of marine cadets in maritime institutions of higher education should be accomplished in English, as this language is acknowledged to be a working language on ships, especially in multinational crews. In order to correspond to high world standards training of marine engineers, for example, should be conducted in Marine English language on three levels: *support level* (ratings, wipers, oilers, fitters, the 2<sup>nd</sup> and the 1<sup>st</sup> class motormen, forming a part of engineering watch); *operational level* (officers in charge of an engineering watch in a manned or periodically unmanned engine room) and *management level* (chief engineers and the 2<sup>nd</sup> engineers on ships with the main propulsion machinery of 3000kw). On each training level cadets have gradually master a certain number of communicative and professional competencies: 13 – on the support level; 17 – on the operational level; 14 – on the management level. Besides, acquiring of each competency by the marine engineering cadet must be confirmed with his learning outcomes in form of correspondent individual professional skills, including relevant communicative skills in English. All these require apply deeper learning technologies (DLT) to make acquiring of Marine English rather successful.

**The analysis of relevant research.** In US education DL is regarded like a set of student educational outcomes including acquisition of robust core academic content, higher-order thinking skills, and learning dispositions. It makes emphasis on the ability to apply knowledge to real-world circumstances and to solve novel problems [4, p. 1-21].

DL phenomenon is widely covered in plenty of pedagogical studies from various sides. There are studies about learning taxonomy for DL (Jal Mehta and Sarah Fine), the main domains of DL (Monica R. Martinez, Dennis R. Mcgrath, Elizabet Foster), appropriate tools for DL (Bonnie Lartham), description of suitable for DL conditions (Michael Niehoff), outcomes of DL (Linda Darling-Hammond, Kristina Zeiser, James Taylor, Jordan Rickles, Michael S.Garet), basic skills and competencies developed in DL (Cassel and Kolstad, Murnane Richard J., Levy Frank), best practices of DL (Marzano Lab, John Hattie).

**Previously unsolved parts of the overall problem.** Actually very few information we can find about technologies, which may be helpful in DL implementation. The point is that many authors name them differently and can't find mutual understanding in their rendering to technologies or strategies, schools or methods.

No matter how scientists call them, we will proceed from the definitions of pedagogical technologies, given in different time and countries, in order to justify our right to call them pedagogical technologies.

In general, the term "pedagogical technology" implies a specifically normalized educational process (form, content, training methods, products and output results) or educational activity that purposefully changes the students, or provides the possibility to change by themselves [7, p. 12].

Researchers' approaches to the definition of "pedagogical technology" are diverse: a meaningful technique for the implementation of the educational process (V .Bespalko), a description of the process of achieving the planned learning outcomes (I.Volkov), a well-thought-out model of joint pedagogical activity in the design, organization and conduct of the educational process with the provision of comfortable conditions for students and teachers (V.Monakhov), a set of psychological and pedagogical attitudes that determine a special arrangement of forms, methods, methods, methods of teaching, educational means; it is an organizational and methodological toolkit of the pedagogical process (B. Likhachov).

The clearest definition, in our opinion, is given by UNESCO: Pedagogical technology is a systematic method of creating, applying and defining the whole process of teaching and learning, taking into account technical and human resources and their interaction, which aims to optimize the forms of education.

When naming technologies for DL, different educators make emphasis on their specific priorities. So, Big Picture learning (BPL) is regarded by it's co-founder, Elliot Washor, as one of the most innovative models in education, which unites over 72 Big Picture network schools in the USA and many more around the world. Big Picture learners spend their time in advisories and internships. Advisories, a cohort of 15–20 learners and one adult advisor, stay together for four years and build bonds and relationships that last a lifetime. Students also spend two days a week learning through Interests and Internships.

Another deeper learning technology, Critical Thinking learning (CTL), is a central concept in *educational* reforms that call for *schools* to place a greater emphasis on skills that are used in all subjects learning acquisition: analysis that go beyond the memorization and recall of information and facts. Actually, any critical thinking occurs when students are analyzing, evaluating, interpreting, or synthesizing information and applying creative thought to form an argument, solve a problem, or reach a conclusion.

Chris Dede is the Timothy E. Wirth Professor in Learning Technologies at Harvard's Graduate School of Education in his outstanding work "The Role Of Digital Technologies In Deeper Learning" emphasizes on emerging technologies, immersive simulations, transformed social interactions, and online professional development in order to help all students – not just an elite few – to reach and demonstrate mastery of ambitious standards [2, p. 1].

There are many other DLT: Effective Communication learning, Collaborative learning, Inquiry-Based learning, Connected/Linked learning, Project-Based learning, Envision Education, Expeditionary learning, Cloud-Based Solution, Dream-Box learning, Personalized

learning, Blended learning, Flipped Class learning, – but there is no justified suggestions for the use of DLT in the sphere of maritime education in general and for Marine English learning in particular. There isn't still a single classification of all DLT, but the role of digital component in deeper learning technologies is undeniable (Chris Dede) and it makes them reasonably be named as digitally provided DLT. Besides, there are some studies that consider the advantages of DL in comparison with "surface learning" (Ning Yueying, Zhu Xiaodong), but no studies that make emphasis on the strong sides of same technologies for Marine English learning, though a number of studies viewed by us testified that DL of English fosters not only communicative competence of future professionals, but provide students with skills and knowledge they need to be successful in work and civic life [1, p. 13].

**The purpose of the article** is to make a selection of the most appropriate for Marine English deeper learning technologies (DLT) and to analyze their advantages, which actually facilitate the process of all necessary for the 21<sup>st</sup> century marine engineer communicative and professional skills and competencies formation.

**The body of the research.** In the USA pedagogy DL is more focused on students' educational outcomes in form of skills like analytic reasoning, complex problem solving and teamwork, rather than on robust core academic content.

Taking into account the assumption of 400 employers on 2006 Conference Board survey, into the leading DL competencies were included oral and written communication, critical thinking, problem solving, and teamwork spirit for collaboration.

Furthermore, in 2010 DL outcomes, listed by William and Flora Hewlett Foundation, were as follows: 1) mastery of rigorous academic content; 2) development of critical thinking and problem solving skills; 3) ability to work collaboratively; 4) effective oral and written communication; 5) learning how to learn; 6) developing and maintaining an academic mindset.

The outcomes outlined upper are essential for future seafarers of the international trade fleet, as they must be able to work collaboratively in multinational crews, use academic content and apply as relevant critical thinking, as problem solving skills. All these they must do using effective oral and written communication in English, because according to the IMO (International Maritime Organization) requirements the use of English language by all crew members on vessels of foreign ship-owners is obligatory. As well STCW (the International Convention on Standards of Training, Certification and Watchkeeping for Seafarers) prescribes the use of English language as the only working language onboard.

In order to substantiate the application of DLT in our experimental study during 2019–2020 we tried to comply each of them with three main domains of competencies, named by Pellegrino, Hilton, Herman (2012) – cognitive, interpersonal, and intrapersonal [6], namely:

- Cognitive: students develop a strong academic foundation in different subjects and skills to transfer knowledge to other situations or tasks. Thus, they learn how to think critically, synthesize and analyze information and solve problems, assess or evaluate the effectiveness of the proposed solutions.

- Interpersonal: students learn to work collaboratively to complete tasks, share work, understand, communicate and solve complex problems together.

- Intrapersonal: students learn to monitor and direct their own learning, recognize what they still don't know, identify the obstacles or barriers to their success, determine strategies to address challenges.

Though with the development of information technologies in American pedagogy become more popular nowadays such deeper learning tools for English language learning, as Archieve 3000, Newsela, Quill, Read 180, Mirrors and Windows (EMC), Escalate English (HMH), Lexia Reading Core5, LightSail Education, ReadWorks, i-Ready, TninkCERCA, WriteLab, WriteToLearn and others, we in our experimental study used more traditional DLT and their tools.

Our choice of DLT was guided by six strategies and pedagogical practices of Drs.

Martinez and McGrath [4, p. 5], which decently contribute to students' DL outcomes development:

- Empower students as learners with their specific learning strategies, pace, motives, who need regular feedback, revision, reflection;
- Contextualize knowledge so it is coherent through utilization of different learning subject resources and apply them to other situations and problems;
- Connect learning to real world experiences by interacting with professionals and experts in relevant fields;
- Extend learning beyond the educational institution to authentic places and contexts for learning;
- Inspire students by customizing learning experiences to pursue their own learning;
- Purposefully incorporate technology to enhance (not automate) learning.

Besides these teaching strategies for successful DL of maritime cadets we established a certain DL culture in order to reinforce core values and expectations. For example, we used such slogans as: Be accountable; Work ethically; Build community; Work collaboratively; Pursue; Do your personal best etc.

These shifts in learning culture and teaching roles required from teachers to collaborate a lot and our teachers were all the time drawing upon each other's expertise, designing or revising meaningful learning experiences for students, sharing scaffolding resources with each other or by presenting a lesson, a project to one another for getting feedback.

One of the most popular and practically useful for Marine English learning technology is PBL (Project-Based Learning). When Marine English teachers become more project-based focused, they often tend to aim their attention at targets such as professional learning, scheduling, cohorts, collaborative teams, courses, technology and graduate profiles. These are all important.

In order our teachers could serve as facilitators of PBL, while students lead their learning, different types of learning environment were required. We implemented three stages to create the conditions for deeper learning:

1. Start at the beginning stage. That meant our teachers had to be excited and make excited their cadets with something significant (field work, guest speaker, simulation, activity, etc.) from the very beginning in order to engage our cadets. If not, it would be tough to make it through the project. Our entire first week was dedicated to culture building to prepare for academic work. At week's end, we had collaboration, relationships, connections, public and professional work. It helped immediately introduce to cadets the concepts of problems solving, collaboration, risk-taking.

2. Promote, push public work stage. Taking our cadets work to the public by showcasing, exhibiting and sharing projects appeared to be foundational to PBL. We had a list of things that helped to create public options for students: 1) organize and facilitate showcases, exhibitions; 2) invite the community to these events; 3) share and promote cadets work on official websites; 4) implement wide portfolios for student work; 5) encourage to submit their work to local, regional, national and international contests. (They may get scholarship monies or prizes. But the real intent was not winning, but competing in the real world.); 6) invite and coordinate students presenting at academic board meetings, as well as other governing or leadership organizations 7) communicate and share student work with local media outlets.

3. Culminate, celebrate stage was following. We needed to create systems where students had to not only do regular presentations, but also practice reflective learning in regular semester or annual oral presentations – defense of learning – in order to capture this deeper learning experience. Reflection, presenting and teaching would represent the highest form of learning these students could both experience and demonstrate.

The other used by us deeper Marine English learning technology was Personalized Learning (PL). PL as an educational approach was aimed to customize learning

for each cadet's strengths, needs, skills and interests. Each cadet got a learning plan that was based on what he knew and how he learnt best. Cadets worked with their teachers to set both short-term and long-term goals. This process helped students take ownership of their learning.

To reach good results in PL implementation some teachers of Marine English used their learners' profiles in MOODLE LMS (learning management system) with up-to-date records to provide a deep understanding of each cadet's individual strengths, needs, motivations, progress and goals. These profiles were updated rather often, that helped teachers make decisions to positively impact cadets learning. A learner profile also helped students keep track of their own progress.

As maritime education requires from cadets the formation of certain communicative and professional competencies and skills, the teachers of PL used competency-based progression. This continually assessment helped to monitor their progress toward specific goals. This system made it clear to students what they need to master. These competencies included specific skills, knowledge and mindsets. PL encouraged cadets to speak up about what interested them in marine sphere. It also allowed them to be equal partners in their learning experience.

The cadets, who were having their post shipboard training practice period might work on several competencies at the same time. When he mastered one, he moved on to the next. The student got the support from competency-based academic environment (student's books, workbooks, MOODLE LMS platform, Internet professional services), which he needed to help master the skills. The emphasis was not on just taking a test and getting a passing or failing grade. Instead, it was about continuous learning and having many chances to show knowledge.

Also of great demand for us was an Inquiry-Based Learning (IBL), as **people retain 75 % of what they do compared to 5% of what they hear and 10% of what they read.** Here was greatly emphasized the cadet's role in the learning process. Rather than the teacher was telling to cadets what they needed to know, the cadets themselves were encouraged to explore the material, ask questions, and share ideas. IBL allowed cadets to better understand and recall material by actively engaging with it and making their own connections.

Since IBL uses different interactive approaches to learning, including small-group discussion and guided learning, it instead of memorizing facts and material, helped our cadets to learn by doing. This allowed them to build knowledge through exploration, experience, and discussion. The cadets weren't just hearing or writing what they were learning. Instead, they got the chance to explore a topic more deeply and learn from their own first-hand experiences.

Rather than memorizing facts from the teacher, IBL enhanced the learning process of cadets by letting them explore topics themselves in classrooms, exploring a topic in the Internet individually, use critical thinking and communication skills, develop their cognitive skills to improve comprehension in every subject, as well as in day-to-day life, let cadets share their own ideas and questions about a topic. This helped foster more curiosity about the material and developed skills to continue exploring topics they were interested in a way that worked for them.

As a form of active learning, this approach encouraged cadets to fully engage in the learning process. By allowing cadets to explore topics, make their own connections, and ask questions, they were able to learn more effectively, to gain a deeper understanding, to develop a passion for exploration and learning.

Blended learning (BL) as an approach to education that combines online educational materials and opportunities for interaction online with traditional place-based classroom methods appeared for Marine English learning a real pedagogical treasure, especially in conditions of distance education nowadays in connection with COVID-19 pandemic restrictions. The use of ZOOM, SKYPE, DISCORD, Google MEET, Microsoft TEAM

and other online programs helped to provide physical presence of both teacher and student, with some elements of student control over time, place, path, or pace.

By using a combination of digital instruction and one-on-one face time, cadets could work on their own with new concepts which freed teachers up to circulate and support individual students who might need individualized attention.

The use of BL improved cadet attitudes towards learning. By incorporating information technologies into class projects, communication between lecturers and part-time cadets had improved, and cadets were able to evaluate better their understanding of course material via the use of "computer-based qualitative and quantitative assessment modules" on MOODLE platform.

The software used in BL automatically collected cadet data and measured academic progress, providing teachers, cadets and parents all necessary data. Often, tests were automatically scored, providing instantaneous feedback. Cadet work times were also measured to ensure accountability. Cadets with special talents or interests outside of the available curricula used BL to advance their skills or exceed grade restrictions. BL allowed for personalized education, replacing the model where a teacher stands in front of the classroom and everyone is expected to stay at the same pace.

BL required learners to demonstrate more autonomy, self-regulation, and independence in order to succeed, making them feel confident by navigating the different components and developing a stronger sense of independence.

A virtually arranged learning environment helped connect teachers with cadets to facilitate their learning, communicating ideas effectively, demonstrating an interest in learning, organizing effectively, showing respect for cadets, and assessing progress fairly.

One more contributing to Marine English DL appeared to be Flipped Class learning (FCL), so-called instructional strategy and a type of blended learning, which aims to increase student engagement and learning by having students complete readings on their home and work on live problem-solving during class time.

According to Bloom's Taxonomy, in traditional learning, lower level of learning such as remembering and understanding is happening in class, while students are usually left to work on activities that involve higher level of learning outside of classroom. However, in the flipped classroom model, learning is inverted. Students can finish the lower level of cognitive work before class. And when they come to class, they can engage in higher cognitive levels of learning with peers and teacher present.

Some our teachers implemented FCL in six steps with the use of certain instructions from Jeff Dunn (2014). 1) The teachers were discussing what namely class would be flipped and why, also the key learning outcomes and a lesson plan were outlined. 2) Instead of teaching this lesson in-person, the teachers were making a video or presentation to facilitate better their instructional goals. 3) Then video or presentation was send to the learners. That made it engaging and clear. Further the video's content was fully discussed in class. 4) After the students have viewed the lesson's video or presentation, they were ready to actually go more in-depth than ever before. 5) An effective way to discuss the topic was chosen by each group, where students were given a task to perform. 6) Regrouping made it possible to get the class back together to share the individual group's work with everyone. After the six steps it was possible to review, revise, and repeat again.

Some other strategies that can be used in in-class activities during FCL included:

- Active learning (students were allowed to apply concepts in class, where they could ask peers or instructors for feedback and clarification);
- Peer instruction (students could teach each other by explaining concepts or working on small problems);
- Collaborative learning (students managed to increase their engagement, enhance understanding, promote collective intelligence).

– Problem-based learning (working on problems could last for the duration of a semester);

– Discussions or debate (students were given the opportunity to articulate their thoughts on the spot and to develop their arguments in support of their opinions or claims).

This pedagogical technology enabled teachers of Marine English to create flexible learning environment with its learning culture also intentional content and transform into a dynamic, interactive, where the educator guides students, as they apply concepts and engage creatively in the subject matter.

At the end of DL period there was held a round table for teachers, who took part in DLT implementation during the academic 2019-2020 year. They discussed the learning outcomes of both experimental and conventional groups, highlighting the advantages of the used five deeper learning technologies in comparison with conventional “shallow” ones. Thus, we can list them this way:

1. Project-Based Learning (PBL) benefits appeared as follows:

– PBL prepared students to accept and meet challenges in the real world, mirroring what professionals do every day;

– PBL provided an opportunity for students to engage deeply with the target content, bringing about a focus on long-term retention;

– PBL helped students to develop teamwork and problem-solving skills, along with the ability to communicate effectively with others;

– PBL improved student attitudes toward education by keeping students engaged.

2. Personalized Learning (PL) strong sides noticed by PL teachers were:

– PL enabled students to explore subjects that interest them in ways that work best for them;

– PL allowed students to use their best learning and work style, using tools and strategies that highlight their abilities rather than illuminate their disabilities;

– PL motivated all students greatly, because it allowed shining in their own unique way and students became encouraged to keep pushing themselves to do better on each successive learning step.

3. Inquiry-Based Learning (IBL) revealed such advantages, as:

– IBL enhanced learning experiences for students;

– IBL taught skills needed for all areas of marine professional sphere learning;

– IBL deepened students’ understanding of some specific maritime topics;

– IBL increased engagement with the academic material.

4. Blended learning (BL) demonstrated different priorities:

– BL offered flexibility for teachers to present material in different ways and incorporate multiple methods of instruction from an assortment of perspectives;

– BL proved to students appropriateness of work in the pace and variety of the learning approaches they experience;

– BL motivated students to have an effective learning outcome due to as more active involvement through the use of new information technologies;

– BL made students empowered as they expanded their technological skills and competency with help of new technologies;

– BL allowed high-quality digital educational tools to measure each student’s individual learning level and provide activities and instruction that meet individual students.

5. Flipped Class learning (FCL) priorities appeared to be:

– FCL allowed for real differentiation and helped students of all abilities to excel;

– FCL changed classroom management and allowed students to pause and rewind their teacher;

– FCL increased student-teacher and student-student interaction, allowing teachers to know their students better.

**Conclusions.** The experiment in DL implementation in academic process of maritime institution revealed that a selection of the most appropriate for Marine English deeper learning technologies (DLT) from great variety of available today in pedagogical practice may be conditioned by the teacher depending on the learning outcomes, which are to be achieved: mastery of essential academic content; thinking critically and solving complex problems; working collaboratively and communicating effectively; having an academic mindset, or being empowered through self-directed learning. Thorough analysis of DLT used during experimental learning of Marine English demonstrated their advantages, which actually facilitate the process of all necessary for the 21<sup>st</sup> century marine engineer communicative and professional skills and competencies formation.

Eventually we can conclude that experiment in deepening learning (DL) of Marine English affirmed positive characteristics of DLT in relation to symbiotic development of learners metacognitive abilities and intrapersonal skills for further transfer them at new tasks and contexts of maritime sphere, successfully using English as means for critical thinking and problem solving. As the result, students were engaged in positive and productive academic activity and persevered when faced difficulties. Three core components of deeper learning: feedback, revision and reflection, – encouraged students to understand better the amount of effort required to produce high quality work.

**Bibliography:**

1. Darling-Hammond L. Teaching for Deeper Learning: developing a thinking pedagogy. 5<sup>th</sup> June 2013, Keynote speech at the 2013 redesigning pedagogy conference, Nie, Singapore. *Rethinking educational Paradigms : moving from good to great /* CJ Koh Professorial Lecture Series No. 5. A publication of the Office of Education Research, National Institute of Education, Singapore. 2014. NIE/NTU, Singapore. URL : [https://www.nie.edu.sg/docs/default-source/spaq\\_cj-koh-series/cjkoh5\\_ldh\\_rethinking.pdf?sfvrsn=2%20](https://www.nie.edu.sg/docs/default-source/spaq_cj-koh-series/cjkoh5_ldh_rethinking.pdf?sfvrsn=2%20)
2. Dede C. The Role of Digital Technologies in Deeper Learning. *Students at the Center: Deeper Learning Research Series.* Boston, MA : Jobs for the Future. URL : <https://files.eric.ed.gov/fulltext/ED561254.pdf>
3. Jacobs G. & Farrell Th. Understanding and Implementing the Clt (Communicative Language Teaching) Paradigm. *RELC Journal.* 2003. № 34. P. 5.
4. Martinez M. & McGrath D. Deeper Learning: How Eight Innovative Public Schools are Transforming Education in the 21<sup>st</sup> century. New York : New Press, 2014. P.5. URL : <https://thenewpress.com/books/deeper-learning>
5. Martinez M., McGrath D., Foster E. How Deeper Learning Can Create a New Vision for Teaching. *National Commission on Teaching and America's Future 1525 Wilson Boulevard Suite 705 Arlington, VA 22209.* 2016. P. 4. URL : <http://www.monicaarmartinez.com/wp-content/uploads/2019/11/NCTAF-How-Deeper-Learning-Can-Create-a-New-Vision-for-Teaching.pdf>
6. Pellegrino J., Hilton M. Education for Life and Work: Developing Transferable Knowledge and Skill in the 21st Century. Washington, D.C.: The National Academies Press, 2012. URL : [https://www.researchgate.net/publication/265242593\\_Education\\_for\\_Life\\_and\\_Work\\_Developing\\_Transferable\\_Knowledge\\_and\\_Skills\\_in\\_the\\_21st\\_Century](https://www.researchgate.net/publication/265242593_Education_for_Life_and_Work_Developing_Transferable_Knowledge_and_Skills_in_the_21st_Century)
7. Rudy S. Consultancy, disruption, and the pulse of pedagogy. *Teaching and Learning Together in Higher Education.* 2016. 1 (11). P. 12.

**References:**

1. Darling-Hammond, L. (2014). Teaching for Deeper Learning: developing a thinking pedagogy, *Rethinking educational Paradigms: moving from good to great*, 5<sup>th</sup> June 2013, Keynote speech at the 2013 redesigning pedagogy conference. Singapore. Retrieved from [https://www.nie.edu.sg/docs/default-source/spaq\\_cj-koh-series/cjkoh5\\_ldh\\_rethinking.pdf?sfvrsn=2%20](https://www.nie.edu.sg/docs/default-source/spaq_cj-koh-series/cjkoh5_ldh_rethinking.pdf?sfvrsn=2%20) [in English].
2. Dede, C. (2014). The Role of Digital Technologies in Deeper Learning. In *Students at the Center: Deeper Learning Research Series.* Boston, MA: Jobs for the Future. Retrieved from <https://files.eric.ed.gov/fulltext/ED561254.pdf> [in English].
3. Jacobs, G. & Farrell, Th. (2003). Understanding and Implementing the Clt (Communicative Language Teaching) Paradigm. *RELC Journal*, 34, 5 [in English].

4. Martinez, M. & McGrath, D. (2014). *Deeper Learning: How Eight Innovative Public Schools are Transforming Education in the 21<sup>st</sup> century*. New York: New Press. Retrieved from <https://thenewpress.com/books/deeper-learning> [in English].
5. Martinez, M., McGrath, D., & Foster, E. (2016). *How Deeper Learning Can Create a New Vision for Teaching*. National Commission on Teaching and America's Future 1525 Wilson Boulevard Suite 705 Arlington, VA 22209. Retrieved from <http://www.monicaarmartinez.com/wp-content/uploads/2019/11/NCTAF-How-Deeper-Learning-Can-Crete-a-New-Vision-for-Teaching.pdf> [in English].
6. Pellegrino, J., & Hilton, M. (2012). *Education for Life and Work: Developing Transferable Knowledge and Skill in the 21st Century*. Washington, D.C.: The National Academies Press. Retrieved from [https://www.researchgate.net/publication/265242593\\_Education\\_for\\_Life\\_and\\_Work\\_Developing\\_Transferable\\_Knowledge\\_and\\_Skills\\_in\\_the\\_21st\\_Century](https://www.researchgate.net/publication/265242593_Education_for_Life_and_Work_Developing_Transferable_Knowledge_and_Skills_in_the_21st_Century) [in English].
7. Rudy, S. (2016). Consultancy, disruption, and the pulse of pedagogy. *Teaching and Learning Together in Higher Education*, 1 (11), 12 [in English].

Літнікова О. І.,  
orcid.org/0000-0001-7952-9895

### ПЕРЕВАГИ ТЕХНОЛОГІЙ ГЛИБИННОГО НАВЧАННЯ МОРСЬКОЇ АНГЛІЙСЬКОЇ МОВИ

У статті розглядається доцільність застосування технологій глибинного навчання морської англійської мови, беручи до уваги, що професійна підготовка курсантів у морських вищих навчальних закладах повинна здійснюватися англійською мовою відповідно до Міжнародної конвенції про стандарти підготовки, сертифікації та несення вахти для моряків (1978, 1995) та Манільських поправок до неї (2010).

Результати навчання майбутніх моряків повинні відповідати високим світовим стандартам і забезпечуватися на трьох рівнях (допоміжний, експлуатаційний та управлінський) з обов'язковим розвитком певної кількості комунікативних і професійних навичок та компетенцій на кожному рівні підготовки. Враховуючи те, що глибинне навчання являє собою сукупність навчальних результатів студентів, включаючи здобуття основного академічного змісту, навичок вирішення нових проблем, видається досить розумним застосувати його для навчання морської англійської мови.

Аналіз існуючих сьогодні стратегій, шкіл та методів глибинного навчання змушує акцентувати увагу саме на форматі педагогічної технології, як спеціально унормованому навчальному процесі (форма, зміст, методи, продукти та результати навчання), який цілеспрямовано змінює курсантів, або надає їм можливість змінитись самотійно.

В цій статті нами розглянуто технології, найбільш відповідні завданням глибинного навчання морської англійської мови, а саме: проектне навчання, персоналізоване навчання, навчання на основі опитування, змішане навчання та навчання у перевернутих класах. Їх очевидні переваги підтверджено результатами глибинного навчання, досягнутими в процесі експериментального навчання морської англійської мови.

Проведений експеримент підтвердив позитивні характеристики технологій глибинного навчання щодо симбіотичного розвитку метакогнітивних здібностей та внутрішньоособистісних навичок курсантів для подальшого їх застосування в нових завданнях та контекстах морської сфери з успішним використанням англійської мови як засобу критичного мислення та вирішення проблем. Як результат, студенти займалися продуктивною академічною діяльністю і успішно долали труднощі.

Ключові слова: технології поглибленого навчання, морська англійська мова, курсанти, компетентності, навички, результати навчання.

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Рецензент: доктор педагогічних наук, професор Кулікова Л.Б.