

THE PECULIARITIES OF INTERDISCIPLINARY APPROACH IN MARITIME ENGLISH TEACHING PROCESS

Summary. The subject of this paper is a brief research of connection between interdisciplinary approach and English for specific purpose, important points, peculiarities and advantages of this approach. The article presents CLIL as a pedagogical approach in which foreign language and subject content are learnt in combination. CLIL is based on the principles of “4Cs” namely communication, content, cognition, culture with the first being the central notion. CLIL is considered as an efficient tool of learning Maritime English which increases the motivation of cadets for life-long learning. The article touches upon educational (or instructional) scaffolding as a teaching method that enables students to solve a problem, carry out a task, or achieve a goal through a gradual shedding of outside assistance, improving the autonomy of learning process.

Keywords: Maritime English, interdisciplinary approach, CLIL, scaffolding, cognitive skills.

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ОСОБЛИВОСТІ МІЖДИСЦИПЛІНАРНОГО ПІДХОДУ У ПРОЦЕСІ ВИКЛАДАННЯ МОРСЬКОЇ АНГЛІЙСЬКОЇ МОВИ

Анотація. Стаття присвячена дослідженню зв'язку міждисциплінарного підходу та дисципліни «Англійська мова за професійним спрямуванням», висвітлюються важливі позиції, особливості та переваги цього підходу. Наводяться основні характеристики англійської мови за професійним спрямуванням або, до якої належить морська англійська мова. Підкреслюється необхідність кореляції між комунікативним підходом та професійно-орієнтовним навчанням, що відповідає вимогам міждисциплінарного підходу. Автор підкреслює можливість цього підходу для формування таких когнітивних навичок як командна робота, співпраця, автономність, критичне мислення. Наголошується важливість, доречність та ефективність предметно-мовного інтегрованого навчання в контексті викладання морської англійської мови. Саме цей підхід передбачає використання іноземної мови як інструменту або середовища для засвоєння професійно необхідних знань. Відбувається одночасне засвоєння нового матеріалу та відпрацювання мовленнєвих навичок. Курсанти мають можливість набути навички академічної англійської мови (у формі усних та письмових презентації або під час нотування нового матеріалу). Предметно-мовне інтегроване навчання ґрунтується на так званому принципі «4С». «4С» позначають зміст, спілкування, когнітивні здібності та культурологічну компетентність. Цей підхід підвищує мотивацію курсантів до подальшого навчання. Важливою стратегією розглянутого підходу є «скефолдинг» або розвиваюче/підтримуюче навчання. Такі стратегії мотивують курсантів, надають необхідний контекст із професійного середовища. Під час такого навчання необхідно поступово переміщати «підтримку», привчаючи курсантів до автономності у вирішенні життєвих ситуацій. Предметно-мовне інтегроване навчання полегшує процес набуття та відпрацювання мовленнєвих навичок та покращує рівень володіння англійської мови курсантами, бо під час такої форми роботи курсанти зосереджуються на контексті заняття.

Ключові слова: морська англійська мова, міждисциплінарний підхід, предметно-мовне інтегроване навчання, підтримуюче навчання, когнітивні навички.

Shipping industry is the international field of human activities. The demands and standards for seafarers stated in the STCW require changes in the teaching and training processes. The seafarers should be ready for life-long learning, mobility and competitiveness. They should be competent at their work. The National Framework of Qualifications defines the notion competence as the ability of person to perform certain activities by means of knowledge, understanding, skills and personal values [1]. The European Qualification Framework for LLL uses the following definition: “competence means the proven ability to use knowledge, skills and personal, social and/or methodological abilities, in work or study situations and in professional and personal development. In the context of the European Qualifications Framework, competence is described in terms of responsibility and autonomy” [2]. The professional competence at sea means safety of life of seafarers and passengers, efficient navigation and zero-environmental problems.

The common language of shipping industry is English. The miscommunications are referred to human errors and lead to accidents. The future seafarers should be aware of close interconnection between communicative competence, cross cultural issues and safety of navigation. Maritime English is a kind of English for specific purpose. Robinson highlights three characteristics of ESP, such as:

1) ESP is goal oriented. In this issue, the learner learn not because they want to know the languages as the culture and language contain on it but they learn because they have specific goals and specific field in academic or profession with another.

2) ESP substance is design and developed based of the concept of the need analysis aims to specialize and link to closer what the learner need for the field of academic or field of profession.

3) ESP more aimed to adult than for children, ESP generally taught in senior or academic level. It is logic, because it is taught at the level of academic or the senior high school. ESP is designed to meet

needs of the learners; ESP makes use of the underlying methodology and activities of the disciplines it serves; ESP is centered on the language (grammar, lexis, register), skills, discourse, and genre appropriate to these activities [3, p. 2–3]. ESP is “English instruction based on actual and immediate needs of learners who have to successfully perform real-life tasks unrelated to merely passing an English class or exam. ESP is needs based and task oriented. ESP is a challenge for all who teach it and it offers virtually unlimited opportunities for professional growth” [4, p. 27].

Problem stated. For the sake of efficient learning outcomes the communicative approach to ESP and vocationally-oriented learning should be correlated. These definitions enable to suppose that interdisciplinary approach based on the competence learning process allows achieving mentioned goals.

The purpose of the article is to investigate the connection between interdisciplinary approach and Maritime English and find out the efficient way of implementation of it.

Presentation of the main material. The interdisciplinarity permits cadets to contrast knowledge of different disciplines or subjects by integration. As a consequence, the ability to synthesize or integrate is considered as a beneficial learning outcome of interdisciplinary higher education [5]. In that case, the learning outcome is called interdisciplinary understanding or interdisciplinary thinking. Boix Mansilla et al. [6, p. 219] gave the following definition of interdisciplinary understanding, “The capacity to integrate knowledge and modes of thinking in two or more disciplines or established areas of expertise to produce a cognitive advancement such as explaining a phenomenon, solving a problem, or creating a product in ways that would have been impossible or unlikely through single disciplinary means”. This definition builds on a performance view of understanding, meaning that individuals understand a concept when they are able to apply it or think with it accurately and flexibly in novel situations. Interdisciplinary thinking in this context can be considered as a complex cognitive skill that consists of a number of subskills such as team work, cooperation and critical thinking. Critical thinking skills lead to real-world problem solving. These are of great importance for the seafarers as crewmembers. Moreover, Allen Repko [7] identifies a number of cognitive attributes that interdisciplinary learning fosters. He asserts, that interdisciplinary learning helps students to Acquire Perspective-Taking Techniques – the capacity to understand multiple viewpoints on a given topic. The students develop an appreciation of the differences between disciplines on how to approach a problem and their discipline specific rules regarding viable evidence. This approach also develops Structural Knowledge – both declarative knowledge (factual information) and procedural knowledge (process-based information). These kinds of knowledge are required to solve complex problems. Thus, as students enhance their knowledge formation capacity, teachers can engage them in conversations dealing with more complex issues. It provides as well the insight on how to apply knowledge all of which advance students understanding of how to learn resulting in life-long learn-

ing. Moreover, students are encouraged to account for the contribution of disciplines that highlight the roles of caring and social interaction when analyzing problems leading to better interaction aboard the ship. The very structure of interdisciplinary learning gain a number of benefits both for cadets and teachers. One more crucial point of working in an interdisciplinary way is the possibility to accomplish the following:

- Cooperation between mainstream and ESP teachers facilitates the acquisition of language and content in the subject area for ESP students. In addition, the dual acquisition of the English language and academic content places additional demands on ESL students and can make academic success challenging.

- Cooperation between mainstream and ESP teachers creates a deeper and more meaningful understanding of the unique needs of ESP students.

- Cooperation promotes the growth of a community of students in a study program, enhances academic achievement and language acquisition for ESP students [8].

The modern concept of higher education states that it is impossible to obtain knowledge without the language of a subject, and at the same time, that language learning effectiveness rises with using authentic and relevant to students’ future occupation context allows to presuppose that such an approach as Content and Language Integrated Learning (CLIL) or its elements will foster the ESP learning process and resulting impact on the students’ competence.

CLIL approach is widely used in teaching practice at non-linguistic higher educational institutions and is much supported by the European Commission. This approach is focused on studying the main subjects in a foreign language. Consequently, learning a foreign language in a non-linguistic higher educational institution implies a real-life setting which includes the situations closely connected with the students’ professional interests [9].

Content and Language Integrated Learning (CLIL) – is a dual-focused educational approach in which an additional language is used for the learning and teaching of content and language with the objective of promoting both content and language mastery to pre-defined levels [10]. CLIL has emerged as an example of interdisciplinary educational convergence that requires multifaceted research approaches.

The key factor of CLIL approach is a language learning process, which leads to communication, and content learning through authentic situations and materials. CLIL is the planned integration of contextualized content, cognition, communication and culture into teaching and learning practice (four basic components are usually called “4Cs”). Content refers to the subject aims. Cognition is the promotion of cognitive or thinking skills which challenge students. These skills are reasoning, abstract thinking, hypothesising, creative thinking synthesis, evaluating, identifying, ordering. They are required in real-life situations and under conditions of autonomous operation of the vessel. Communication deals with skills in oral and written speech which are required for presentations, conferences and communication with colleague,

for writing and studying e-mails, reports, holding meetings, etc. Culture is the way to understand ourselves and other cultures and to make the process of communication with foreign partners more effective. "If communication in languages is identified as a key skill for lifelong learning, success in effective communication skills is no longer seen in terms of attaining near-native competence in a language but in developing different appropriate skills according to need" [10]. Communication is the central notion of this "4Cs" system. The rest three Cs should be implemented through socializing and communication.

CLIL is based on the core assumptions, such as language acquisition, authenticity, active learning, cooperation, integration of English into the curriculum, motivation, further education, enriching vocabulary, improvement of oral skills [11, p. 220]. It corresponds to the one of the goals of interdisciplinary integration as to make students pay more attention to the development of their communicative skills in a foreign language. CLIL students should aim to acquire: knowledge of what constitutes multilingual competence in the field-specific and professional domain; understanding of the national and international dimensions of the professions in the field (including cultural differences); knowledge and understanding of how multilingual and multicultural professional teams, networks and communities operate; awareness, knowledge and understanding of target language communication conventions of the professions in the field; understanding of the importance of continuously developing one's own professional expertise. These extra lingual connections are of vital importance for seafarers.

Three analytical approaches toward the issue of language in ESP course are to be taken into consideration: the language of learning (identification of basic concepts, constructions and the language corpus to be learnt); the language for learning (exponents and chunks for discussions, summarizing, agreement, disagreement, clarifying etc.); the language through learning (functional language acquired because of CLIL classes) [12].

One more concept of CLIL which should be highlighted is scaffolding and its strategies. They allow seeing the language as a means rather than a goal in itself [13]. Educational (or instructional) scaffolding is a teaching method that enables students to solve a problem, carry out a task, or achieve a goal through a gradual shedding of outside assistance. Scaffolding strategies are geared to support learning when students are first introduced to a new subject. Scaffolding gives students a context, motivation, or foundation from which to understand the new information that will be introduced during the lesson. In order for learning to progress, scaffolds should be gradually removed as instruction continues, so that students will eventually be able to demonstrate comprehension independently. Scaffolding strategies include, although they are not limited to, the following activities:

- a) Activating prior knowledge;
- b) Breaking complex tasks into easier steps;
- c) Using verbal cues to prompt student answers;
- d) Teaching mnemonic devices to ease memorization;

- e) Providing contextualized information;
- f) Using visual aids;
- g) Teaching key vocabulary terms before reading.

The following tools for scaffolding language support can be provided: full scripts, models, brief pre-activity language practice, word lists, sentence starters, substitution tables, annotated visuals, speaking frames, notes to speak from. Scaffolding encourages cadets to communicate and interact enriching their vocabulary and speaking strategies.

In the view of the above the activities and methods reflecting the combination of communication and skills should be preferable for the practice. Four basic types of activities which can facilitate students' academic achievements despite the lack of linguistic experience and resources are suggested by: Ball, Kelly and Clegg [14]:

1. Activities to enhance peer communication (assimilate conceptual content through communicative competence).
2. Activities to develop speed reading strategies (texts are authentic and conceptually and linguistically dense; skimming, scanning strategies are used, etc.).
3. Activities for the formation of productive skills (oral and written presentation, debates, round table talks).
4. Activities that involve high order thinking skills (activities to engage higher cognitive skills giving the cadets more opportunities for employing wider range of skills and knowledge).

The choice of activities depends on the implemented model of CLIL: soft CLIL (teaching some topics from the content of the special disciplines in a foreign language); hard CLIL (a partial immersion program where more than half of the disciplines are taught in a foreign language); modular CLIL (the subject is taught in a foreign language for a certain number of academic hours) [15]. The Polish experience of CLIL application extinguishes four models based on level of English medium instruction. The Ukrainian universities are trying to implement some elements of CLIL and the curricular are at the partial or pre-CLIL stage implementation [16].

Concerning Maritime English the activities of CLIL are familiar and widely used during teaching process. The course of ME stated by the IMO Model Course 3.17 as well as demands of shipping industry and goals of ESP permit implementation of CLIL elements. The ME with regard to specific language needs requirements is relying on CLIL content-based components. These components can replenish and enrich the learning process. Furthermore according to the principles in second language acquisition the cadets focus attention on professional content rendered and learned through the medium of the foreign language, the language itself and communication skills are mastered to some extent implicitly, by way of unconscious acquisition which is the most natural and probably the simplest way of gaining command of any language [17].

Conclusions. The CLIL will ease the learning process and enhance the development of the required communicative competences within the interdisciplinarity that prioritizes thinking skills and communication.

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