СЕКЦІЯ III

ОСВІТА

CASE STUDY ACTIVITIES WHILE BUILDING ENGLISH COMMUNICATIVE COMPETENCY OF FUTURE SHIP ENGINEERS USING DISTANCE LEARNING

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The use of LMS MOODLE for distance learning at Kherson State Maritime Academy (KSMA) became compulsory because of quarantine caused by COVID-19 pandemic. E-courses of all the teachers of KSMA were developed and updated. The problem of English for specific purpose courses arose while developing courses because of the misbelief that language can't be taught using distance learning.

While developing English courses different methods and elements were used (augmented reality, gamification, communicative approach, competency-based approach, etc.). The biggest impact on courses updating had case study. This method represents investigation by cadet(s) of different real-life situations happened onboard a vessel.

To the activities and resourses in LMS MOODLE for case study of English for specific purpose to build English communicative competency of future ship engineers we refer the following: Assignment; Chat; Choice; Database; Forum; Glossary; HotPot (JClose, JMatch, JQuiz, JCross, JMix, The Masher); Lesson; Quiz; SCORM package; Survey; Wiki pages editing; Book; File; Folder; Page; URL (video, presentations, websites links). Other methods are also: problem-solving; search for relevant materials in the Internet; constructive criticism of the others work; critical remarks; information search in social networks; questioning; testing; teamwork; web conferences; working with other students and working together on a report / project / presentation / essay; conducting research and writing articles, reports; preparation and presentation of oral

presentation (in group or individually using Big Blue Button BN or Cisco Webex Meetings in LMS MOODLE) etc.

Quasi-professional tasks in practical classes and e-courses are based on the principles of communication, interdisciplinarity, problematicity and involve cadets in modeling certain practical activities. Their project activities are represented with close connection to real life practice on ship. The building of professional competences in them through the systematic organization of problem-oriented educational search is usually used in LMS MOODLE.

One of the tasks of maritime training is the formation of cadet's critical thinking (the focus of training is not on assimilation of knowledge, but on the analysis and substantiation of conclusions with the help of the obtained knowledge). The LMS MOODLE also has the ability to analyze the educational process and create a model of collaborative learning with feedback (questionnaires, forums), which is widely used by KSMA teachers to identify learning outcomes.

The dissertation research of Smelikova V.B. devoted to professionally-oriented communication by means of case-technologies in the professional training of future maritime professionals proved positive impact of her experimental model on the building of English communicative competence of future ship navigators. The remarks in her experimental model (to replace case study into the electronic pedagogical environment of maritime higher educational institution) will not decrease the impact of case study but increase its effectiveness [1, 2]. The examples are following: 1. Read the case and answer the questions. 2. Read the case and complete the text/chart/table/mind map. 3. Read the beginning of the case and predict what it is about (essay activity in LMS MOODLE). 3. Look at the photo from Internet newspaper and describe it. Express your ideas on what happened and why, who's fault. 4. Read the case and choose the correct answers to the questions below. Mostly for the activities above an element of LMS MOODLE Assignment was used. It enables a tutor of e-course to communicate tasks, collect works, and provide marks for electronic grade book and feedback for cadets. Cadets can submit any digital content (files of any format), such as word-type documents, presentations (Power point or Prezi type), pictures, or audio and video clips of their own. Alternatively, or in addition, this activity may require cadets to type their textual answers into the

text editor. When reviewing the tasks of this type, teachers can leave feedback comments and upload feedback files of any type (marked-up cadet submissions, documents with comments or spoken audio feedback) [3].

To upload case study activities Quiz is also popular element. It helps to present task from 15 ready templates (Multiple choice; True/False; Matching; Short answer; Essay; etc). The marks from the activity are also automatically transported to the grade book.

The lesson activity module enables a tutor to present cases activities in flexible ways. The case can be presented as a linear set of content pages or up-to-five types of activities (Multiple choice; True/False; Matching and Essay) according to the level of difficulty. This activity helps to motivate cadets, increases their level of engagement, competitiveness etc. All the activities in LMS MOODLE which can be graded also has the possibility to create leaderboards on the main page of e-course. Leaderboard is a list of cadets' surnames, avatars and marks according to the marks (from biggest to the lowest one).

As a conclusion, we approve that the use of case study activities (group of innovative technologies, methods and techniques based on real-life situations happened onboard a vessel) in LMS MOODLE help to build cadets' English communicative competence. Case study activities reflect practical problem and activate the complex of acquired knowledge, for complete analysis. The effectiveness of their use while distant learning was described in our work. Our next research will be devoted to other activities, methods and technologies of distance and e-learning which can help to build English communicative competence of future ship engineers.

References

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МОДЕЛЮВАННЯ ФІЗИЧНИХ ЯВИЩ МОВОЮ VISUAL PYTHON НА ПРИКЛАДІ ВЗАЄМОДІЮЧИХ КОЛИВАНЬ

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Комп'ютерне моделювання фізичних процесів є цікавою галуззю навчального програмування. Воно формує важливі компетенції в галузі програмування, математики та фізики.

У процесі навчальних дій в напрямку моделювання фізичних процесів і явищ контрастно проявляються особливості ментальних процесів людини, способи мислення, формування знань. Цьому сприяє висока формалізація, структурність і зв'язність знань з інформатики, математики, фізики. Створення фізичних моделей може бути хорошим дослідницьким полігоном для відпрацювання нових методик навчання в тому числі і в інших більш гуманітарних галузях знань де навчальний матеріал має низький контраст. Це робить дослідження в галузі методики навчального моделювання *актуальними.* Такі дослідження були проведені, зокрема, в роботах [1, 2].

Метою цієї роботи є демонстрація конструктивістського модельного підходу в методології навчання на прикладі моделювання фізичних коливань.

В якості інструменту моделювання в роботі використовується мова Visual Python. Ця мова широко використовується для моделювання фізичних явищ [3]. У роботі представлена програма моделювання