

Such an understanding of the work of the primary school teacher with gifted pupils is stipulated by the author's definition of giftedness as the systemic quality of the psyche, which permits to achieve the highest results in one or another type of activity, develops throughout life and determined by the complex of cognitive (sensory processes, thinking, memory, speech, attention), individual and psychological (inclinations, abilities, intelligence, creativity), personal (motivation, affects, will), social (environment of education and training, experience) and other characteristics and factors, not only as the highest level of development of capacities.

The models of identification ("The principle of the turngate" of J. Renzulli, S. Rice, L. Smith, the Illinois model, "Reservoir model" of J. Gaouen, the variant of the project "RAPYHT" of M. Carne, "Model of the sequential decision-making strategy" of K. Heller, etc.) and educational strategies (acceleration, deepening, enrichment, problem-making) of gifted children have been characterized in the article. An overview of the approaches of scientists to regularities and principles of teaching of gifted primary school pupils has been realized. Requirements for the selection of content and organization of educational activity of gifted primary school students have been determined.

It has been proved that teaching of gifted primary school pupils should be based on a differentiated approach through qualitative reorganization (enrichment) and problematization of the content of education using the technologies of personalized teaching and problem, heuristic, search, research methods, since this will allow to take into account as much as possible cognitive and personal peculiarities and needs of gifted children.

Key words: *giftedness, gifted pupils, primary school teacher, pedagogical activity, work with gifted pupils, diagnostic testing of giftedness, educational strategies.*

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THE USE OF LEARNINGAPPS GAMIFICATION ACTIVITIES AS CONTROLLED EXERCISES IN MOODLE E-COURSE

The article determines the concepts of "gamification" and "e-courses" in scientific discourse. It also describes the main advantages of e-learning comparing with face-to-face learning. How to create instructions of the following LearningApps interactive activities are described. Examples of the activities from "Maritime English" e-course LMS MOODLE are listed. Our research describes the experience of the use of platform LearningApps to create gamification activities in professional training of future ship engineers as one of the components of communicative competence formation. The work proves that the use of LearningApps gamification activities helps teachers to create effective tasks which will improve students' engagement, knowledge and educational productivity, etc.

Key words: *LearningApps, gamification, LMS MOODLE, e-course, Maritime English, blended learning.*

Introduction. Nowadays the process of future seafarers training has undergone significant changes in connection with digitalization process in education. It is orientation towards e-learning technologies that leads to

significant changes in its content and procedural components, determines modernization of the traditional system of training, development and implementation of a new methodological system for training of future mariners (Трофимова, 2004, с. 21).

While using e-learning technologies student stops being passive user of educational process because he receives the information as a result of his work. Many modern platforms and plugins give teachers new opportunity – not only to use ready electronic activities but also to create them with the help of template (Федорова, 2007, с. 35).

The most interesting and productive templates are those which were created with the help of gamification approach. One of the most popular platforms to create such activities is LearningApps.

Analysis of relevant research. The analysis of research and publications that deal with introduction of e-learning technologies into education process showed that most of the scientists study them as tools used to improve students' engagement, knowledge retention, increase their motivation, achievement, educational productivity, etc. (Шерман та Безбах, 2015, с. 15). Modern scientists who considered the usage of e-courses in studying process are A. M. Kaplan, M. Haenlein, L. Pappano, T. Lewin, D. Wiley, J. Cheverie, D. F. Carr, P. Adamopoulos, L. P. Saettler, L. Yuan, S. Powell, B. Olivier, C. Parr, S. Downes, D. Cormier, S. Kolowich, E. Booker and others (Akkoyunlu & Soyulu, 2006; Horn & Staker, 2014; Graham, 2005; McCall, 2011; Moebs & Weibelzahl, 2006). One of the new educational approaches which are used in e-courses is gamification. Modern scientists who dedicated their works to gamification approach are K. Kapp, I. Shatz, W. H.-Y. Huang, S. Deterding, D. Dixon, R. Khaled, L. Nacke, A. Lugmayr, J. Suhonen, H. Hlavacs, C. Montero, E. Suutinen, C. Sedano and others (Purnima, 2002; Rösler & Würffel, 2010).

Aim of the study is to analyze the experience of the use of LearningApps gamification activities as controlled exercises to study Maritime English on the example of Maritime college of Kherson State Maritime Academy e-courses in LMS MOODLE.

Research methods. In our research the following methods were used:

1) theoretical: terminological analysis – to determine the basic concepts of the study “e-course”, “gamification”;

2) methodological: competency approach; systematic approach; gamification approach.

Results. In scientific discourse e-course is determined as course of study conducted via electronic media, especially via the Internet. Most of the scientists agree that such courses have the following advantages comparing with face-to-face courses: various resources in several varying formats can be linked together; access updated content wherever and whenever users want;

time flexibility. Many surveys undertaken around e-courses usage have concluded that users learn more efficiently.

One of the new methods used in e-courses is gamification. Ukrainian Wikipedia says that gamification is the use of gaming practices and mechanisms in a non-gaming context to attract end-users to solve different problems. Otherwise Russian Wikipedia defines it as an application of approaches typical of computer games in software tools for non-gaming processes, a complex of motivational managerial techniques borrowed from computer games and their creators (Rossett & Frazee, 2006).

In our research we will define gamification as an approach of usage game mechanics in non-gaming activities like learning access. The benefits of gamification are pleasure, motivation, margin for error, etc.

The platform to create gamification exercises using the templates is LearningApps. This is Web 2.0 (or Participatory) application, to support learning and teaching processes with small interactive modules. To use LearningApps platform main instruction of website is to take your idea, pick a template, fill in your context, save created application and share it. To share applications we create SCORM package (a collection of files which are packaged according to an agreed standard for learning objects) and import application in MOODLE e-course.

In our e-courses in order to teach English for specific purpose we use such gamification approach exercises as Matching Pairs; Group assignment; Number line; Simple order; Freetext input; Matching Pairs on Images; Multiple-Choice Quiz; Cloze test; App Matrix; Audio/Video with notices; The Millionaire Game; Group-Puzzle; Crossword; Word grid; Where is what?; Hangman; Horse race; Pairing Game. To have such exercise on MOODLE e-course author must make an instruction after choosing template, download maritime English content, create Feedback and/or Help where possible, after finishing editing template author must preview his activity, save in his account and export into needed e-course.

“Matching pairs” activity allows student to connect pairs together. The pairs can be a mix of text, pictures, audio or video.

In order to create all the activities in LearningApps author must choose App title he wants, write task description – it will be shown on start up or leave it empty – nothing will be shown on start up. After writing his content author can provide a feedback text which will be displayed when the solution is found. Some hints how to solve the task can be provided. They can be viewed by the user via a small icon in the upper left corner. Otherwise it can also be left empty.

In “Matching pairs” exercise minimum two pairs of elements must be created. Up to three additional, but wrong elements can be added. They will be displayed but won't belong to the solution – that will make exercise more difficult.

The examples of tasks using this template in our “Maritime English” e-course in LMS MOODLE are 1) Match the words with their

pictures/definitions/synonyms/ antonyms; 2) Match the beginnings of the sentences with their endings.

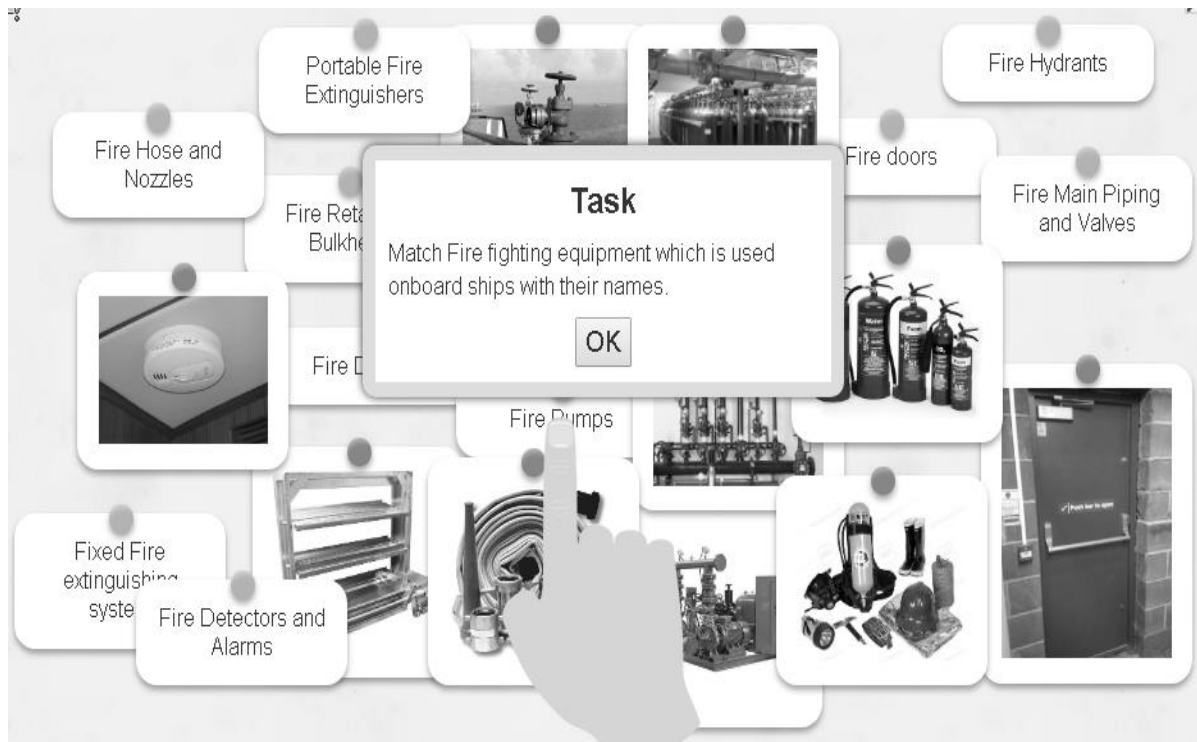


Figure 1. "Matching pairs" activity on topic "Fire-fighting equipment"

In "Group assignment" application student must put the elements into columns. Minimum two groups with two elements to group must be created by the teacher. The elements can be text, image, audio or video. The images to be background of the columns can also be chosen.

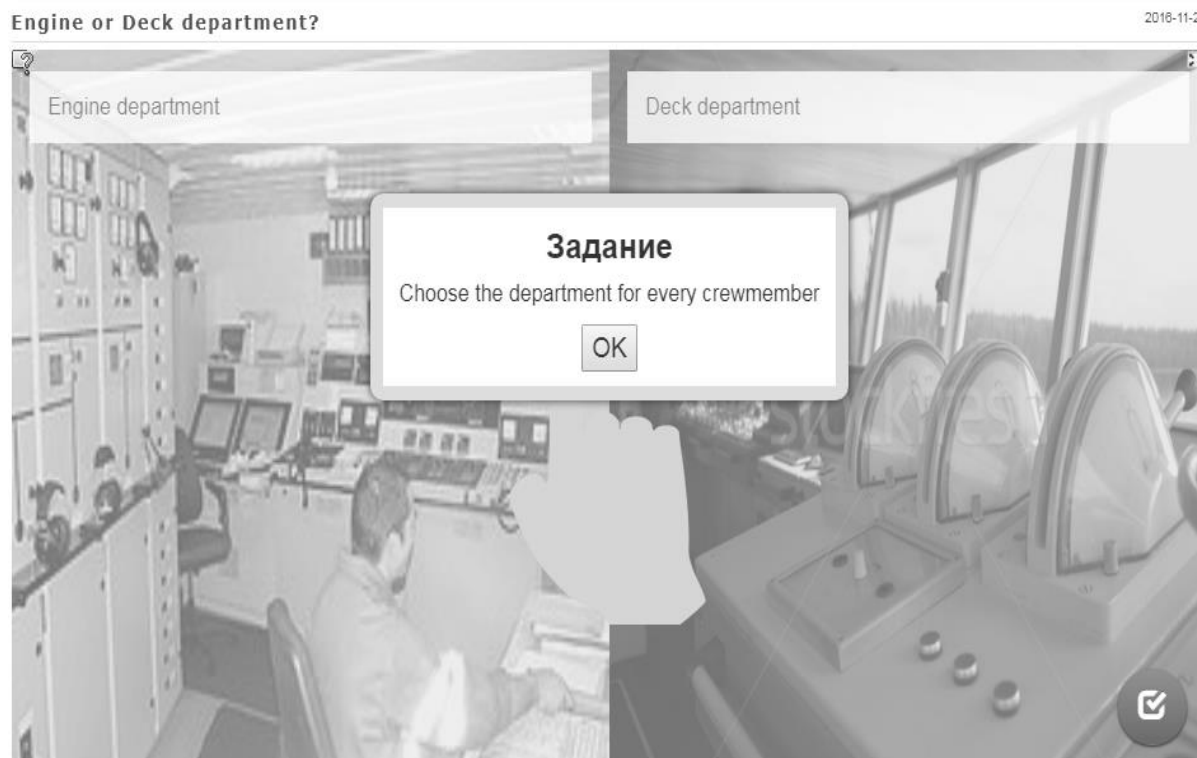


Figure 2. "Group assignment" application on topic "Crew"

Activity “Number line” is exercise where using the number line student must put elements in correct order. The elements created by teacher can be text, images, video or audio. Author must also specify the minimum and maximum of the number line using whole numbers only. The elements must also correspond to value (whole number) on the number line. The examples of tasks using this template in our “Maritime English” e-course in LMS MOODLE are 1) Group the words/word combinations; 2) Put the examples of maritime cargo/ships/personal protective equipment/tools and instruments.



Figure 3. “Number line” exercise with “Listen to the parts of text and put the audios in correct order”

Activity “Simple order” is also used to put the elements in correct order, but the elements are in form of cards. To create such application teacher must provide the cards to be sorted and give an order that is the correct solution. The elements can be text, images, video or audio. A teacher must also put the names of two elements separately: where order starts from and finishes. Author can also select in which way the elements are displayed: cards can be free placed (order from upper left to lower right corner), placed vertical (order top down) or placed horizontal (order left right).

The examples of tasks using this template in our “Maritime English” e-course in LMS MOODLE are 1) Put the phrases of the dialogue in correct order; 2) Put the annexes of SOLAS/STCW convention in correct order; 3) Put the paragraphs in correct order to make a text.

Freetext input activity allows students to type the answers using the task(s). Task and space to type the answer are presented in form of a card. A teacher must provide the card content and a valid solution for each of them. An author can enter multiple correct solutions separated by; character. The tasks in cards can be in form of text, picture, audio or video.

Examples of teacher’s tasks for Freetext input activity in our “Maritime English” e-course in LMS MOODLE are 1) Complete the sentences; 2) Answer the questions; 3) Make word combinations; 4) Write synonyms/antonyms/correct forms of the words; 5) Write the word according to its definition.

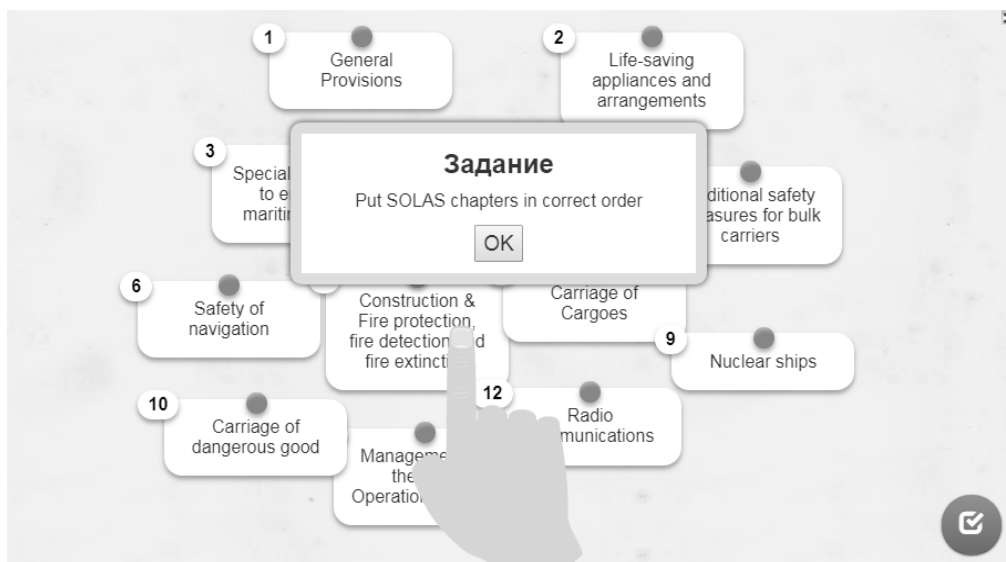


Figure 4. Activity “Simple order” on topic “Maritime education”

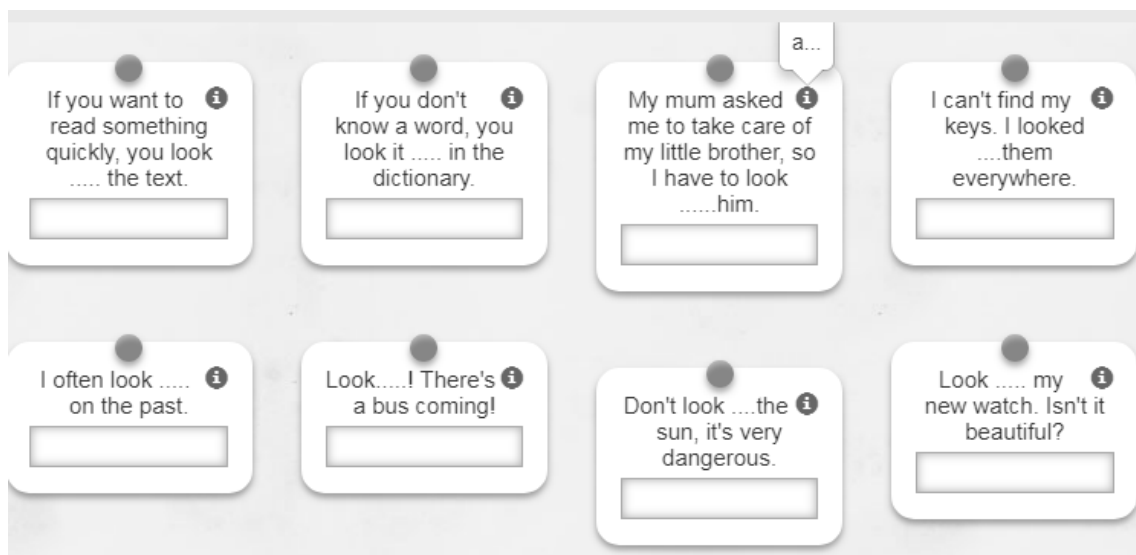


Figure 5. “Freetext input” activity on topic “Prepositions”

Matching Pairs on Images activity allows students to work with pictures. The task is to put marks on background image. In order to create such activity teachers need to enter the address of the background image or upload an image. Teacher can create markers and annotate with different content. There are six colors of markers which allows teacher to create six groups of elements. If teacher uses different colors for markers he can choose to limit answer options to there colors. For example one attribute can be with only red markers and another with only blue markers.

Examples of teacher’s tasks for Freetext input activity in our “Maritime English” e-course in LMS MOODLE are 1) Label the pictures; 2) Name the parts of the picture.



Figure 6. Activity “Matching Pairs” on topic “Life saving appliances”

Cloze test activity is very flexible because it allows students to fill in the gaps choosing the word(s)/word combination(s) or write them in. In order to create this activity, the teacher first of all needs to select the type of the task he wants to create: select word from the list or write it in. An author also can provide an optional introduction text, image, audio or video before the cloze text. The cloze text itself is provided by the teacher in a special space. The teacher can use -1-, -2- etc. as placeholders for the clozes within the text. He can use the same placeholder multiple times. Clozes are provided depending on the task type one by one. The examples of the teacher’s tasks for Cloze test activity in our “Maritime English” e-course in LMS MOODLE are 1) Complete the sentences/text; 2) Fill in the gaps.

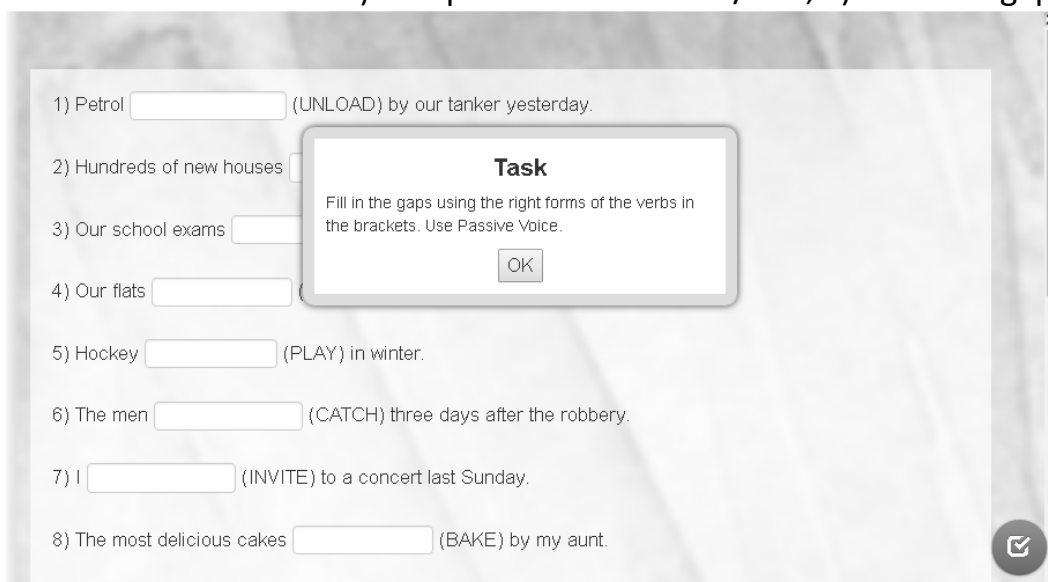


Figure 7. Activity “Cloze test” to study grammar (Passive Voice)

AppMatrix contains multiple choices of any type of activities. It helps to unite similar activities of a similar topic/module. To create AppMatrix, an author needs to provide multiple apps and add a title for everyone. He can also provide an image or text as a headline above the apps, select an image as a background, provide

feedback or hints for help. The examples of teacher's tasks for AppMatrix in our "Maritime English" e-course in LMS MOODLE are 1) Do the following tasks; 2) Play the games of one topic/module; 3) Finish the quest.

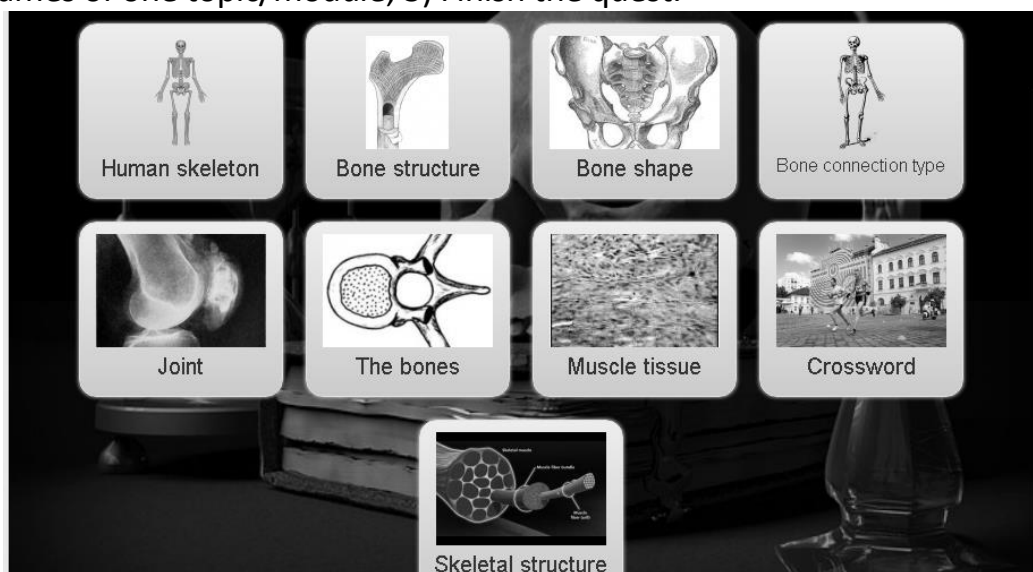


Figure 8. AppMatrix on topic "Medical first aid"

Audio/video with notices activity allows students to work with video or audio content. After watching the video/listening to the audio student must do the task which can be different. In order to create this activity a teacher first of all needs to select type of main file: video or audio, after that he needs to create questions or comments – they will be displayed during playback. First task of the author is to provide a time (like 0:01) from the source audio/video and then you to enter the text. The HTML for links or text formatting can also be used. In addition, any other LearningApp for each comment can be specified. The examples of teacher's tasks for Audio/video with notices activity in our "Maritime English" e-course in LMS MOODLE are 1) Watch the video and do the tasks; 2) Listen to the audio and answer the questions.

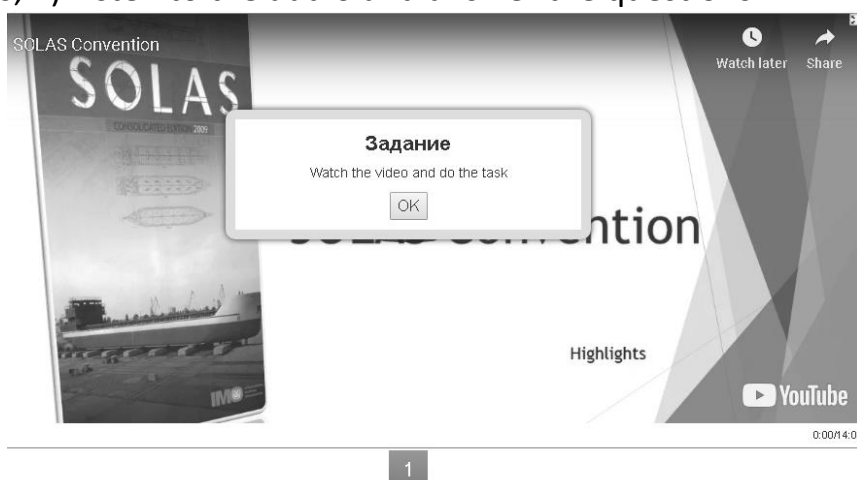


Figure 9. Audio/video with notices activity on topic "International conventions"

The objective of “Maritime English” e-course in LMS MOODLE is to develop the ability to communicate on professional topics with members of multinational crews. To form the communicative competence such main activities as e-Tests and oral competency check are developed. Other activities of e-course which we used are gamified activities, forums, quests, chats, etc.

In order to import gamification activities into e-course teacher needs to work in editing mode, add SCORM package, write its name and description, download package file and save it. Extra options are activity’s appearance, availability, grade, attempts, compatibility settings, common module settings, restrict access, activity completion, tags and connected competencies from competency framework.

Conclusions. It is proved that usage of gamification approach (an approach of usage game mechanics in non-gaming activities like learning access) in e-courses has many advantages: the activities are varied and flexible; they motivate students to study; provide high level of engagement; helps to practice real-life situations; effectiveness. Platform LearningApps proposes 18 templates to be used in e-courses with the help of SCORM package (e.g. Matching Pairs; Group assignment; Number line; Simple order; Freetext input; Matching Pairs on Images; Multiple-Choice Quiz; Cloze test; App Matrix; The Millionaire Game; Group-Puzzle; Crossword; Word grid; Where is what?; Hangman; Horse race; Pairing Game). Their advantages for teachers are easy to use, available anytime and anywhere, big variety of examples which can also be used. The advantages for students are 1) they experience “fun” during the game and still learn if the level of engagement is high; 2) e-Learning is interactive; 3) better learning experience. We conclude that the use of gamification exercises in e-courses is productive.

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АНОТАЦІЯ

Юрженко Альона. Використання гейміфікованих вправ LearningApps як контрольованого виду діяльності.

У статті визначені поняття «гейміфікація» (методика з використанням ігрової механіки в таких неігрових заходах, як навчання) та «електронні курси» (курси навчання, що проводяться через електронні засоби, особливо через Інтернет) у науковому дискурсі. Наше дослідження також описує основні переваги електронного навчання в порівнянні з традиційним.

Платформа LearningApps описана з основними перевагами. Описуються способи створення інструкцій з наступних інтерактивних вправ LearningApps: Знайти пару; Класифікація; Числова пряма; Просте упорядкування; Вільна текстова відповідь; фрагменти зображення. Наведені інші гейміфіковані вправи: Вікторина; Заповнити пропуски; Колекція вправ; Аудіо/відео контент; Гра «Як стати мільйонером?»; Пазл; Кросворд; Знайти слова; Де це?; Шибениця; Скачки; Парочки.

Додано скріншоти перерахованих діяльностей із електронного курсу на платформі MOODLE. Описано переваги перерахованих вправ для вчителів: вони прості у використанні, доступні в будь-який час і в будь-якому місці, існує велика різноманітність прикладів, які також можна використовувати. Переваги для студентів також перераховані: вони відчують «задоволення» під час гри і навчання; електронне навчання є інтерактивним; отриманий досвід запам'ятовується краще. Наведені та описані приклади діяльностей з електронного курсу LMS MOODLE «Морська англійська».

Наше дослідження описує досвід використання платформи LearningApps для створення гейміфікаційної діяльності у професійній підготовці майбутніх суднових механіків як один із компонентів формування їхньої комунікативної компетентності.

Ця робота доводить, що використання новітніх методів навчання, зокрема гейміфікаційних діяльностей, шаблони та приклади яких містить платформа LearningApps як вправ в електронному курсі MOODLE «Морська англійська» допомагає вчителям створювати унікальні та ефективні завдання, які покращать залучення студентів до навчання, допоможуть підвищити їх мотивацію, продуктивність тощо.

Ключові слова: LearningApps, гейміфікація, LMS MOODLE, електронний курс, Морська Англійська мова, змішане навчання.

РЕЗЮМЕ

Юрженко Алёна. Использование геймифицированных упражнений LearningApps как вид деятельности контроля.

В статье определены понятия «геймификация» и «электронные курсы» в научном дискурсе. Описаны основные преимущества электронного обучения по сравнению с традиционным обучением. Платформа LearningApps описана с основными преимуществами. Описываются способы создания инструкций интерактивных упражнений LearningApps. Описаны преимущества перечисленных упражнений. Приведенные и описаны примеры деятельности в электронном курсе LMS MOODLE «Морской английский язык». Наше исследование описывает опыт использования платформы LearningApps для создания геймифицированных упражнений в профессиональной подготовке будущих судомехаников как один из компонентов формирования их коммуникативной компетентности.

Ключевые слова: LearningApps, геймификация, LMS MOODLE, электронный курс, Морской Английский язык, смешанное обучение.