Moodle Online Courses in the System of Academic Staff Development

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Abstract – The paper is devoted to the problem of online academic staff development. Different points of view of different researches were considered on this subject. The content description and hierarchy of different teacher`s training courses are presented. Pros and cons of different activities (exercises, tests), which are used in digital Moodle courses for teacher`s professional development, are given. It is mentioned, that during the cource all participants not only study the material and pass the tests but also have an opportunity to take an active part in different discussions, which are posted on the Moodle course page. Described that, the training can be carried out at a convenient time and at a convenient pace for a person. Also mentioned that education in such a format is accessible to absolutely everyone regardless of age, health, social affiliation or sufficient. Prospects of our future research would be devoted to the analysis of virtual reality and augmented reality in the system of academic staff development.

Keywords – Moodle, Distance Learning, E-Learning, E-Course, Learning Management System

I INTRODUCTION

Today the idea, that a person stops learning when he/she graduates from education establishment is not relevant. Self-development and self-education are a priority now. A recent study, by the group of scientists, found that the average half-life of the skill is about five years. It means that in five years, the skills you now possess will be depreciated. That's why you need to learn and develop constantly. Every day [1, 2].

In an era of rapid development of information technologies, a person no longer has to sit in the stuffy conference rooms to learn something new and improve his/her skills. Internet, computer, smartphone - all this is perfect to develop right from home. You can close some gaps in your skills by completing additional training. Courses of advanced training of pedagogical workers is an important component in improving of their educational skills and level of proficiency. The goal of such courses is:

- to improve their educational level and vocational training by deepening, expanding and updating general and specialized knowledge and skills;

- provide with current information on innovations in the profession, develop skills, update theoretical and practical knowledge in accordance with modern requirements to the qualification level of workers and changes in requirements to state educational standards.

You gain invaluable experience by upgrading your skills which shows how fast you can adapt to new trends.

II MATERIALS AND METHOD

A lot of scientific studies have been conducted on the issue of professional activity of teachers' research. They include development of models of teachers' activity. However, there are no special works, which would reveal the essence of professional development of teachers and describe the components that affect on it.

The teacher's activity is aimed at informing new knowledge to students, development of their cognitive activity, organization of practical lessons management of students' educational activity. Its quality depends on the level of theoretical-methodological special and pedagogical training, pedagogical skills, knowledge of information and communication technologies and interactive methods training. [3].

The research of pedagogical activity was carried out by native and foreign scientists. As noted Elnikova G., the competence of the pedagogical worker has a certain hierarchy competencies:

- key (over a professional, or basic),
- general (belonging to a certain category – a combination of specialists, combined with one subject of activity),
- specialty (this is the partial competence, which is bought by certain specialties) [4, 5].

The introduction of innovative processes into the practice of work leads to certain changes, which are always related to development. According to Guskey T.R., the model of the process of the teacher`s changes, contains three levels which include such element as: changes in practical lessons, changes in the results of the level of students' studies, changes in views, beliefs and attitude of the teacher to works. Changes, which are taking place in the activity of the pedagogical worker, will acquire the nature of the process of education for the teacher himself. Education will lead to gain experience in work of both educational and scientific with students [6, 7]. This is the case directly the key factor in the length and strength of any changes in practical experience of teachers of any educational institution.

Analysis the scientific achievements of pedagogical workers showed their mutual dependence with scientific works of students and the level of special-professional preparation for the subject. Those teachers, who introduced innovations in practical lessons and get confirmation by increasing the results of training students, show more positive attitude to the process of education and his personal involvement and responsibility for the achievement of students, which can be compared with feeling self-determination [8, 9]. In other words, these pedagogical workers feel their own involvement in changes in students' studies and believe that they have a certain influence on the level of their achievements. It is possible to note that scientific and pedagogical workers, who did not apply elements of innovations on their practical lessons have no definite results at the level of education students. However, their students have much lower results and slower performance of tasks and students are less motivated to study, and they do not work in science, do not actively participate in scientific and practical conferences.

The research contains literature review (a critical analysis of existing literature relevant to the research question); experimental design (a structured approach to testing a hypothesis through controlled experiments); surveys (as tools used to collect data from a group of people to explore their opinions or behaviors on a specific topic); statistic analysis.

The research was conducted on the basis of Kherson State Maritime Academy, online courses on LMS Moodle.

III RESULTS

On the basis of Kherson State Maritime Academy, online courses of advanced training for teachers were organized. The structure of different`courses includes familiarization with Moodle, improvement of working skills with it. These courses have a clear structure, divided into blocks and modules, meets the stated goals and objectives of each. Every teacher can find a course for himself/herself according to his/her specialty (for e.g teaching Psychology, Ukrainian language, English, etc.). The courses offer different levels of competence for teachers.

Training can be carried out at a convenient time and at a convenient pace for a person. One can take the course remotely from any device. The training can be in groups or individual starts on the 1 th day of each month. The program is aimed to objectively highlight the modern educational process and bring it to a qualitatively new level.

Each course is a complex of author's materials, structured on a separate topic and designed for self-education of teachers. After successful completion of the training, the course listener receives the certificate on expansion of professional competence (advanced training) issued by the "Scientific Park of Kherson State Maritime Academy".

To start with online course for tutors-beginners was created in LMS MOODLE of KSMA. The name of the course is "E-course development on LMS MOODLE using e-learning tools and

services". The goal of the course is the professional development of pedagogical and scientific-pedagogical workers in the organization of the educational process using the LMS MOODLE database [10, 11]. E-course main tasks are the following:

1. to provide theoretical knowledge and develop practical skills in using LMS MOODLE;
2. to form the ability to qualitatively create and develop an electronic course;
3. to develop skills on how to use tools and services of LMS MOODLE;
4. to improve digital competence.

The participants have the access to the course materials during a month. There is also a map of course topics at the beginning of e-course. The topics are following:

1. LMS MOODLE -general information, creating and filling in your profile.
2. The division of e-course into parts - general settings.
3. The use of LMS MOODLE main elements.
4. Quiz settings.
5. The use of SCORM and LearningApps.org.
6. Gradebook setup
7. Course gamification - missions, badges, leader boards, maps, levels
8. The use of infographics [12, 13].
9. Course completion [14]

Each topic is followed by the module objective (e.g. By the end of the section you will know what LMS MOODLE is) and learn how to create and fill in your own profile (edit information about yourself, upload a photo, etc). The volume of topics' information depends on the volume of course chosen by participant (60 hours or 30 hours).

The course contains quizzes, games, missions, badges, leader boards, maps, levels, forums, links, presentations, text/video/audio instructions, practical tasks, lessons, infographics etc. Course tasks are divided according to lecture, practical lessons or individual works for better navigation of the participants. The course includes gradebook and competency framework with the help of which its easier for course participants to follow their progress [15, 16]. The example of course part can be seen in figure 1 below.
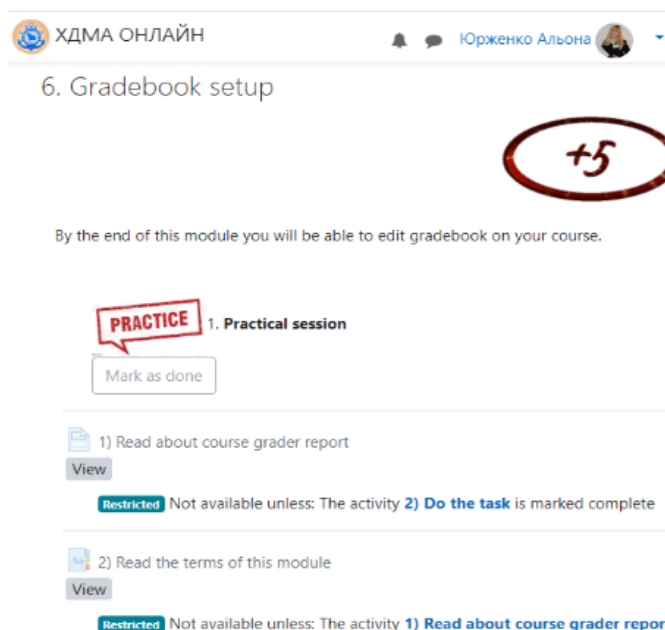

Fig. 1. Part of "E-course development on LMS MOODLE using e-learning tools and services" course with page and glossary activities

As it can be seen from the figure 1 all activities are connected with each other. It is impossible not to complete the activity and to go to the next one.

After completion the course for tutors-beginners, Science park of KSMA proposes also the next course devoted to LMS MOODLE. The next course contains information on the improvement of the content of the electronic course based on LMS MOODLE. The topics reflect some activities used by tutors with intermediate level of digital competence:

1. Recosha meet (video conferences on the BigBlueButton platform)
2. Features of using blocks in LMS MOODLE
3. HotPot as interactive element of LMS MOODLE
4. Wiki activity in LMS MOODLE
5. Lesson and its creation in LMS MOODLE
6. Questionnaire
7. H5P
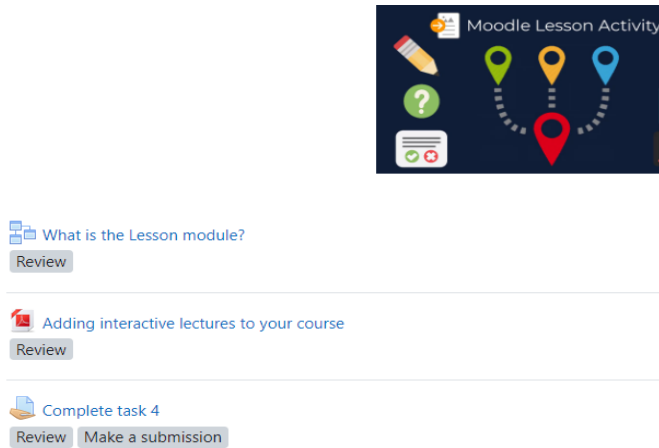8. Completion of the course

Lesson and its creation in LMS MOODLE

Fig.2. Part of "The improvement of the content of the electronic course based on LMS MOODLE" course

IV DISCUSSION

Every year the courses of advanced training are carried out by the European Credit Transfer and Accumulation System (ECTS) and offered courses on the choice of a teacher. The course "The Components of the Practical Lessons of a Foreign Language" is for foreign language teachers after completion two courses devoted to LMS MOODLE. This course offers a lot of online resources that can be used at once both in remote work and in class [17,18].

This course consists of six modules:
1.   Lesson – as a Part of Educational Process.
2.   Preparation Stage.
3.   Presentation Stage.
4.   Practice Stage.
5.   Production Stage.
6.   Types of interaction between.
Each module has educational and practical parts. As to educational part, each module has:
•   a task for discussion;
•   lecture part (where one can find important information according the topic of the stage);
•   interesting brainstorming ideas (starters, riddles, bingo, tic tack toe, etc);
•   examples of different activities during the lesson (controlled and semi-controlled);
•   how to divide a group into pairs or subgroups;
•   audio "Do you like to play games?" (with examples of different activities);
•   and bonuses (interesting and useful information for the lesson).

In Module I you can find a general information about the lesson, discuss the question (do take active part), and have a test.
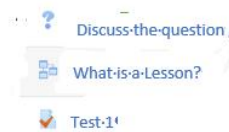

Fig.3. Module 1 part of LMS MOODLE course for foreign teachers.

Currently in the education system the competency approach is fixed, as a result, the conditions of operation (there is a wide spread of innovative educational technologies). This requires teachers to be active, independent, proactive, and responsible for complex decisions. In connection with this there is a need to study the features of the professional competence of the teacher.

In Module II a course participant can find the information and different examples of starters and brainstorms; also, a question about home tasks is raised: whether do you need them or not? Do you know about the "rule of 10 minutes" or what is the goal of home tasks? So, study the module and you can find reasoning of home task's importance. Different examples of home tasks, according to different topics, and how to check them are added. Of course, you can join the discussion and express your ideas about this topic.
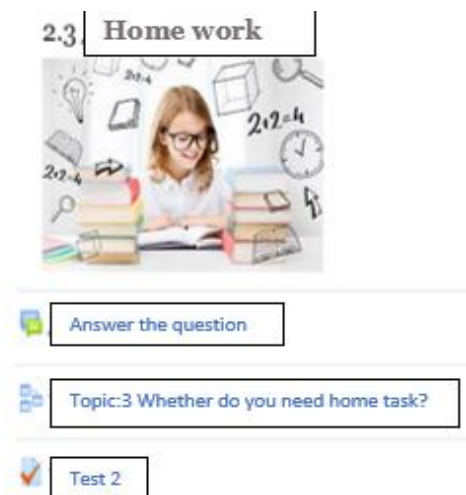
Fig.4. An example of a picture from Moodle.

Practical part of each module has intermediate test which consists of 5 questions (all the information is mentioned in the lecture part). Participants of the course should perform different types of exercises, like: "Fill in the gaps", "Choose the correct /false statement", "Put the words into the correct order to make a statement", "Label the pictures", etc. The last module has a final test, which contains the information of the whole course (in general course participant should fulfil four tests with different exercises).
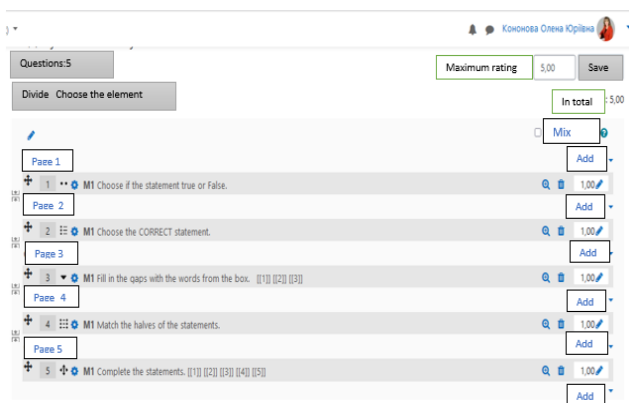

Fig.5. Part of quiz in LMS MOODLE course for foreign teachers.

The obligatory condition is the complete mastering of the course material, which is evidenced by the progress of training (it should be 100%). After passing each module, participants also have to do a test developed by the course author based on the materials offered in each module [19].

In Presentation Stage a participant can find the examples of introduction of new lexical units and different activities to work out them.
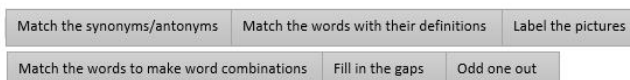

Fig. 6. An example of activities in Presentation stage.

Not every exercise is automatically a practice activity – there has to be some element of target language which is specifically being focused on. Controlled practice only has one correct answer to each question / item. Semi-controlled practice has a limited range of correct answers to each question / item. There are right and wrong answers, but there might be more than one. As to freer practice, it should encourage / enable students to use the target language. There are no correct answers. There is a focus on fluency to maintain the flow of the practice activity. Additional information you can get from next two stages (practice and production).

What activity do you prefer during the lesson: pair work or work in groups? What is the goal of these activities? What is better to use according to the class level? How to divide the class into pairs/groups? All this information can be found in the VI Module with examples of different activities and games.

In different modules course participant can find a "box" with bonus and different links with additional information to make a productive lesson. A productive skills lesson aims at helping learners produce appropriate and coherent messages either in spoken or written forms.

Fig. 7. An example of a picture from bonus`s box.

The platform provides space for "students" and tutor to work together, including tools for communication, teamwork, document management and other applications to improve performance. MOODLE offers various opportunities to track participants' progress, and supports mass registration with secure authentication.

Institutions increasingly rely on developing (innovative) technologies, i.e., introduction of new pedagogical technologies, formation of new content of the educational program and its constant updating. On this basis, the development of competences should be realized through inclusion in active activities, i.e. be educational.

Thus, there is an opportunity to improve the qualification in comfortable conditions and get a document that meets the requirements of the Law of Ukraine about education.

During 2022-year remote courses have been passed by one hundred and eight people, including teachers not only from Ukraine but from India too. Ninety-eight percent of the participants received their certificates of completion of the courses. They have increased their level of professional competency, demonstrated their ability to perform a set of tasks, improved their knowledge according to their specialty.
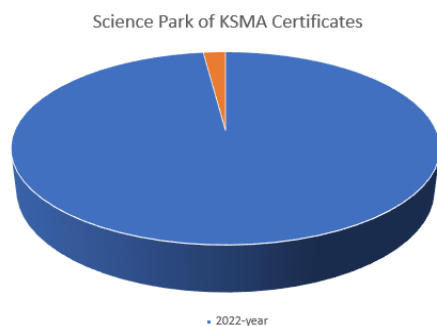

Fig. 8. Science Park of KSMA Certificate`s statistic during 2022-year.

At the end of each course there is a link to the Google questionnaire, in which the course participants give feedback (pros and cons) and their requirement to the tutor. Also, you can find a link to a page of Facebook community where is the advertisement information about different courses Scientific Park of Kherson State Maritime Academy.

V CONCLUSIONS

The Internet has been successfully integrated into all spheres of life and has long taken on itself not only entertainment, but also educational function. It is no wonder that online education has become one of the main trends of modern times. To start learning is simply, a person should have an access to the Internet. You do not need to go to another city or abroad – you can study at home in comfortable conditions. Education in such a format is accessible to absolutely everyone regardless of age, health, social affiliation or sufficient. In fact, online education is an example of perfect learning: all people have the same opportunities and rights. Learning online is comfortable: You can study at a convenient time and in fact in any place. Everyone can organize their own learning space and develop a convenient schedule. And saved time can be spent on something no less important.

When educators discover new teaching strategies through professional development, they are able to go back to the classroom and make changes to their lecture styles and curricula to better suit the needs of their students. However, these changes are hard to evaluate because they are typically implemented gradually. Professional development for teachers makes them more efficient in their presentations and course evaluations by exposing educators to new delivery methods, evaluation styles and record-keeping strategies. The more professional development a teacher undergoes, the more knowledge and industry insight he or she gains.

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