USE OF MASSIVE OPEN ONLINE COURSES TO DEVELOP MEDIA EDUCATIONAL COMPETENCE OF TEACHERS OF PROFESSIONAL PRE-HIGHER EDUCATION INSTITUTIONS

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Abstract

The article examines the use of Massive Open Online Courses for teachers of professional pre-higher education institutions during the pandemic for in-service education. The necessity to develop media educational competence of pedagogical, academic and research personnel by means of massive open online courses is substantiated that will allow them to increase their professional qualification. There is a number of massive open online courses through which educators have the opportunity to independently acquire the necessary competencies for teaching disciplines. The feasibility of using different online platforms for teacher's professional development, taking into account the pre-selected direction, is analyzed in detail. Combining different methods of obtaining information and improving the efficiency of training is substantiated. Priorities for teachers have been identified, the solution of which will allow them to master the necessary online courses freely for media competence development.

Introduction

The modern world exists in a COVID-19 pandemic reality and the situation is getting worse every day. Therefore, the main task of mankind is to learn making decisions in all conditions. One of the problems with the spread of coronavirus is the presence of a large number of people in one room. In Ukraine, these include institutions of professional pre-higher education. Today, most professional junior bachelors have to stay at home and acquire knowledge through distance learning technologies. How good the education will be it depends mainly on a teacher.

Mastering the information technology by both the student and the teacher helps to organize the educational process. Therefore, the teacher must know where to get information, i.e. from what sources, and how to submit it, ie through what means. Under these circumstances, it is necessary for teachers of professional pre-higher education institutions to have media educational competence. By definition, this is the level of media culture, which provides an understanding of the socio-cultural, economic and political context of the media, demonstrates its ability to be a carrier and transmitter of media cultural tastes and standards, effectively interact with the media space, create new elements of media culture. Achieved through the mastering of media literacy, which is an indicator of the level of media culture. For the modern organization of the educational process it is necessary to have information technology for both the learner and the teacher. Therefore, the teacher must know where to get information, ie from what sources, and how to submit it, ie through what means.

As for media culture, first of all, it is mastering information and communication technologies. These include elements of the culture of communication, collection, production, transmission and analysis of information, as well as the culture of its perception by students, adequate behavior in the information environment.

The growing role of the media in educational processes and the complexity of their actual use, as well as changing the didactic environment in which students should be prepared for life in an informatized society, require determining the content of media education of a teacher, without which it is impossible to solve this social order.

The study of the legal framework and scientific publications led to the conclusion that media education of teachers is a problem of the state level, and the task of training highly qualified personnel with the required level of media competence is relevant at all levels of the state education system and for all professionals [2].

The preparation of teachers for the use of mass media in the educational process is based on special competencies, the content of which is related to the basic concepts of media didactics (mass media, media, media education, media environment, media literacy, media competence, methods, media orientation, media competence and media competence) and focused on indicators of readiness of the teacher and the student to work with mass media. Considering that the indicator of readiness of the future specialist to perform a certain activity is recognized as professional competence, the characteristic of media literacy of a teacher will be his media competence, which will be perceived as an integrated characteristic of personality based on a set

of motives, knowledge, skills, values and abilities. media education of students of different ages [6].

The use of mass open online courses for the development of media educational competence of teachers of professional pre-higher education institutions is the main problem revealed in the articles. The availability of various teaching aids on the Internet, such as MOOC, allows the use of learning materials in the educational process.

The purpose of the article is to describe use of massive open online courses to develop media educational competence of teachers of professional pre-higher education institutions.

The object of the study are teachers of professional pre-higher education institutions, who teach students and ensure the formation of general and professional competences in accordance with the Educational and Professional Program**.**

The subject of the research is the development of media educational competence of teachers in accordance with its components by means of MOOC.

Presenting main material

The rapid spread of online learning in the world is often compared to the Gutenberg Revolution. It was the invention of the printing press that transferred the book from the category of "luxury" to the category of "accessible" for those who wanted to study and read. So for half a century the number of printed books has increased from 30 thousand to 10 million in Europe.

Online learning gives the opportunity to listen to lectures of the best professors from the most prestigious universities in the world to all who want to study. In 5 years, 25 million people in the world have used them. Online learning is the acquisition of competencies using a computer, gadget, device connected to the Internet. This training is in the "here and now" mode [8].

Online learning allows participants to fully immerse themselves in the educational environment - to watch / listen to lectures, complete assignments, consult with teachers and communicate with other participants by connecting to the network.

In the context of online learning we use the phrase "e-learning". It indicates the ability of an online learning participant to acquire knowledge in various formats: audio, video, hyperlinked text, infographics, programs, games, tools and materials for acquiring knowledge through augmented reality.

You can find a lot of educational content in the public domain. The analysis shows that the materials of such content are often not relevant. Today, learners prefer programs, techniques and tools that allow them to gain maximum knowledge and skills in a short time.

Now, it is difficult to find useful courses in a large number of media education. You need to be media literate, media competent, read reviews, communicate with graduates to use proven sources and choose what you need.

One of the components of pedagogical activity of educators is the requirement of advanced training. Every pedagogical and scientific-pedagogical employee of a professional pre-higher education institution in accordance with the Laws of Ukraine "On Education", "On Professional Pre-Higher Education" is obliged to improve their skills every year taking into account the features defined by the Procedure for professional development of pedagogical and scientific-pedagogical staff. Advanced training is also a necessary condition for their certification in the order prescribed by law.

One of the means of professional development is massive open online courses (further – MOOC). The term "Massive Open Online Course" (MOOC) was proposed by the participants of the course "Connectivism & Connective knowledge" Brian Alexander and Dave Cormier according to their specific features in 2008.

According to Robert McGeer [10], author and developer of many online courses, the administration of higher education institutions faces several key questions on the while creating and implementing MOOC: how will MOOC help the institution attract the attention of potential applicants? (for example, free short courses to get acquainted with the possibilities of the institution); how can MOOC improve the educational process? (for example, the inverted class effect, when theoretical questions are performed in the audience); how can MOOC be studied at home and practical classes help to establish communication? (both with other educational institutions and with public organizations); how can MOOC discover the potential of a higher education institution for potential applicants? (show advantages, demonstrate creative pedagogical experience, etc.); how MOOC of other higher education institutions affect the competitiveness of the educational services market.

According to Professor V. Kukharenko, who has experience in conducting open online courses since 2001 [3], students are interested in MOOC, but they are more attracted by test tasks than detailed answers or discussions. For course teachers who do not have experience in developing distance learning courses, creating and conducting a MOOC was difficult but interesting. Thus, it was found that it is best to create a MOOC for teachers with experience in distance learning courses, and for beginners to participate in them and attract participants (students).

To conduct a study on the use of massive open online courses by teachers of professional pre-higher education institutions to develop media education competence, the main components of the competence were taken:
- Mastering network functions:
  - Local area network;
  - Worldwide network.
- Mastering ICT:
  - Hardware;
  - Drives;
  - Telecommunications (video conferencing);
  - Smart devices.
- Mastering Software:
  - Word Processor;
  - Spreadsheet;
  - Graphics software;
  - Presentation app, etc.
- Searching information from the mass media, its critical evaluation.
- Ability to monitor modern IT.
- Knowledge of a foreign language.

This study is empirical in nature and uses appropriate methods and methods of mathematical statistics. The purpose of the study included measuring the psychometric parameters of the measurement tool. For this, quantitative oriented research was carried out, which allowed the use of statistical procedures to measure the reliability and accuracy of the assessment tool. We collected the data (on paper) for the analysis at the colleges of Rivne, Zhytomyr and Cherkasy regions of Ukraine. The questionnaires were anonymous and the data was processed only with the consent of the respondents.

In order to prepare the scientific-methodological and empirical basis of the experiment and to solve the problems of the research, the content and course of the experiment, educational institutions for the experimental work, research parameters (components of media education

competence) were determined; a set of methods aimed at clarifying the effectiveness of implementation of a methodology model for the development of media educational competence of teachers of professional pre-higher education institutions (observation, questionnaires, testing, monitoring); the methodology model for development of media educational competence of teachers of professional pre-higher education institutions is developed and substantiated; we developed questionnaires to monitor the level of media educational competence formation at the beginning and the end of the experiment; letter of observations on the level of mastering the components of media educational competence of teachers of professional pre-higher education institutions before and after the course training in experimental/control groups, as well as to determine the impact of various scientific and methodological events and activities of teachers of professional pre-higher education institutions in the intercourse period on media educational competence, educational programs of traditional Certification training for teachers of professional pre-higher education institutions, as well as thematic in-service education courses, programs for conducting various scientific and methodological events (workshops, seminars, trainings, Internet conferences, conferences) and materials for them, etc.

It is Massive Open Online Courses, workshops, workshops, round tables, Internet conferences, trainings, etc. that allow teachers and students to acquire media competencies.

Every modern teacher with media educational competencies provides high-quality preparation for the lesson, because while preparing he or she watches news from a certain field on TV channels, in periodicals or on the Internet, studies the legal framework, monitors its changes, selects videos that clearly demonstrate the necessary processes, designs a multimedia presentation or video lecture.

Before using MOOC teachers identify issues for course efficiency how to improve skills:

Does a pedagogical and scientific-pedagogical employee of a professional pre-higher education institution have the right to use MOOC for advanced training?

Teachers independently choose specific areas and subjects of providing educational services for professional development in various forms and types, including distance and online.

How can teachers use MOOC to improve their skills?

The main issues of in-service teacher education are:

- development of professional competencies (knowledge of the subject, professional methods, technologies).

For example, the online courses EdEra Books (https://www.ed-era.com/) are a social project of interactive educational literature. Developed by a team of young scientists, programmers, designers and experts. Online books on EdEra consist of illustrated texts with integrated videos and tests to test the acquired knowledge. They allow to combine different methods of information perception and increase the effectiveness of learning. In particular, the following courses are used by teachers of professional higher education institutions for advanced training in order to apply the acquired competencies:

- PRO POWER POINT (Interactive online course on PowerPoint presentation design. The course was created by EdEra in partnership with Reprezent);
- EASY 3HO. ENGLISH LANGUAGE (Online course "Easy 3HO. English language - preparation for EIT in English with memes, TV series and movies);
- ETHICS OF A FINANCE AND INVESTMENT PROFESSIONAL (In this online course - a simulator, which considers the concept of professional behavior of a specialist in finance and investment and teaches to solve ethical problems of varying complexity);

- MATH. SIMPLE (Mathematics - is it simple? The authors have developed an online course so that everyone can not only be interested in this science, but also successfully pass the external evaluation).

- psychological and physiological features of students of a certain age, the basics of andragogy.

For example, the platform of massive open online courses Prometheus (https://prometheus.org.ua/) is the first and largest free education project for everyone in Ukraine. MOOC's mission is to make the best courses from the world's leading teachers, universities and organizations accessible to all.

Public Association "PROMETEUS" is a subject providing educational services for professional development of teachers in accordance with NACE 85.59 in the National Classification of Ukraine. Online advanced training courses for educators fully meet the requirements of the Procedure for in-service training of pedagogical and scientific-pedagogical staff (Resolution of the Cabinet of Ministers of August 21, 2019 № 800 with changes and additions of December 27, 2019 №1133). Prometheus online teacher training certificates can be officially credited as in-service training. In particular, to improve their skills in order to apply the acquired psychological and physiological characteristics of students of a certain age teachers of professional pre-higher education institutions use the following courses:

- IN-SERVICE TEACHER EDUCATION: NEW REQUIREMENTS AND OPPORTUNITIES (This course is designed for stakeholders in the process of professional development of teachers of higher education institutions.
- NEW PHYSICAL CULTURE (The course is designed to help the physical education teacher to master the necessary tools that will help make classes useful, interesting, inclusive and effective).
- THE SCIENCE OF EVERYDAY THINKING (The University of Queensland course in an extremely exciting and visual format will talk about how we shape and change our views, why expectations distort judgments and how to make considered decisions).
- MEDIA LITERACY FOR EDUCATORS (The purpose of the course is to motivate our colleagues, teachers, school principals, school administrators to see that the world around them has changed dramatically, become digital, and therefore they need to develop new media educational competencies).
- CRITICAL THINKING FOR EDUCATORS (The course will help to solve life problems, make considered decisions, adequately interact with reality, manage their perception - to improve themselves and grow personally. Together with leading educators - the strategy of teaching students is being discussed and developed).

- use of information and communication and digital technologies in the educational process, including e-learning, information and cyber security.

For colleges, i.e. institutions of professional pre-higher education, open online courses are offered by the State Institution "Scientific and Methodological Center for Higher and Professional Higher Education" (http://nmcbook.com.ua/). Until 2019, such a center provided methodological assistance to agricultural institutions of higher education of I-II levels of accreditation. Today it is not only offline and online training for teachers, but also a way to create massive open online courses.

The Cisco Network Academy (https://www.netacad.com/ru) is a program that combines the power of technology and modern teaching methods. It helps to change your life and social life in general for better. Anyone from any country can join the team of the Academy.

Coursera (https://www.coursera.org/) is a technology company working in the field of education. Coursera offers its users hundreds of free online courses in various disciplines, after

successful completion of which the user receives a Certificate of the course completion. Coursera works with universities around the world to teach these courses online.

- formation of particular professional competencies, mastering the latest production technologies, acquaintance with modern equipment, machinery, condition and trends in the economy, enterprises, organizations and institutions, requirements for the level of qualification of workers in relevant professions (for employees of professional (vocational and technical) education);

The most common videos in this area are presented by YouTube (https://www.youtube.com) – video hosting, which provides users with storage, delivery and demonstration of videos. As an example of the use of video hosting - the channel "Educational cloud lCloud" (https://www.youtube.com/channel/UC-KWEpNyONUH6ISX0Dvs-_w), that allows you to watch videos and develop your own educational portal for a professional pre-higher education institution.

- development of managerial competence (for heads of educational institutions, scientific and methodological institutions and their deputies), etc.

Depending on the time requirements, you can use some of the above MOOC or similar.

Why do teachers need media education competence while using MOOC for in-service teacher education?

- To choose courses and register independently.
- To be trained, to download materials.
- To pass test assignments, control of mastering.

What is the advantage of MOOC for in-service education?

IT practitioners in education believe that the features of online advanced training (using MOOC) and offline (full-time form of education) should be classified by criteria: cost, conditions, training schedule, learning, communication, comfort, motivation. The results of the comparison by criteria are presented in table 1.

Table 1. Comparison of advanced training with the use of MOOC and offline

Criteria	Online	Offline
Cost	Lower	Higher
Terms	Limited time, individual pace, convenient for everyone	Solving questions immediately during the lesson, the pace depends on the group
Schedule	At any time	Only during a class
Learning	Tests, certificate	Graduation work, certificate
Communication	Chatting	Personal communication, emotional contact
Comfort	At home is not always comfortable, concentration decreases	A working atmosphere is created
Motivation	May decrease	Maintained constantly

The analysis of in-service education for teachers of professional pre-higher education institutions with the help of MOOC during 2020 displayed an increase in the following indicators:

- motivation: diverse motives of pedagogical activity: emotional, moral, aesthetic and others; the desire to improve their knowledge and skills in the field of pedagogy;

- information: systematic informing, extensive theoretical and pedagogical knowledge in the field of media education;
- methodology: developed methodical skills in the field of pedagogy (for example, the ability to set the media perception, the ability to develop students' perceptions of educational material, identify levels of their development in the field of media culture, choose optimal methods, tools and forms of classes, research skills, etc.) expressed pedagogical artistry (general pedagogical culture, appearance, self-presentation, self-control, feedback of the audience, etc.);
- practice and operation: systematic media educational activity in the process of educational classes of different types, active research media pedagogical activity;
- creativity: flexibility, mobility, associativity, originality, anti-stereotyped thinking, development of imagination, fantasy in media education [11].

As a result of the experiment during 2020, the following was established:
- teachers prefer distance learning (80.8%) and did not use correspondence form learning. Some teachers (15.2%) chose the online form of education. Quarantine conditions did not allow entire use of full-time education (4%).
- all teachers studied under the in-service training program (100%). Also, some respondents used other types of training programs: participation in seminars (4.8%), participation in workshops (6.8%), participation in practical trainings (26%), participation in webinars (24.4%), participation in master classes (34.4%).
- PPHEI teachers believe that MOOC is useful for the development of media educational competence by 8 out of 10 points. In particular, Prometheus was used by 29.6%, EdEra - 23.2%, Cisco - 18%, Coursera - 9.2%, NmcBook - 35.2%.
- teachers after mastering MOOC plan to continue using such courses for Certification training (79.2%), and to recommend students the learning materials of such courses for in-depth study of disciplines - 21.2%.

Conclusion.

The formation of media competence of a teacher of professional pre-higher education can be provided on condition that the structure and content of its preparation are relevant to modern trends in ICT in education, selection of content and forms of training in accordance with the types of information activities of teachers of each specialty, as well as educational and cognitive activities should be focused on professional education activity of the teacher in this aspect of methodical work. In the conditions of insufficient preparation of teachers for the introduction of mass media in the educational process, it is necessary to add tasks related to the formation of media literacy of teachers and media literacy of students as their professional development.

The modern world is quarantined due to the COVID-19 virus, so MOOC is of interest not only to students but also to teachers. After all, online courses today are an impulse for teachers to learn distance learning technologies that will let them qualitatively prepare future professionals. As most of them do not have experience in developing their own distance learning courses, so the procedure for creating and conducting an MOOC proved to be a difficult but interesting process.

The use of MOOC to improve the skills of teachers of professional pre-higher education is possible with modern facilities and software, providing the readiness of pedagogical, academic and research staff to master the competencies of media technology, as well as the motivational basis for professional competence of future professionals.

Thus, it was found that the MOOC within in-service education for teachers of professional pre-higher education allow to improve not only professional competencies, but also media education.

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