INTERACTIVE LEARNING CONTENT OF A LESSON: PEDAGOGICAL CONDITIONS FOR DEVELOPING THE SUBSTANTIVE CONTENT FOR TRAINING A PHILOLOGY TEACHER AT THE UNIVERSITY

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Abstract: The research is concerned with determining the pedagogical conditions for developing the interactive learning content of a Russian language lesson in the course of training bachelor's degree students at pedagogical universities. Based on the analysis of scientific papers, the authors offer a didactic comprehension of this problem, describe the experience of creating a methodology of teaching the philology students at Mordovian State Pedagogical University named after M. E. Evseviev to develop the interactive learning content relevant to teaching Russian language in today's school. They describe step-by-step implementation of the methodology, including theoretical, practical and control stages.

Keywords: educational resources, interactive learning content, Russian language lesson, lesson content, information and communication technologies, teaching tools, professional competence of a philology teacher.

1 Introduction

Interactivity is a universal concept, because it is used in various fields of human activity. In information and communication systems interactivity is understood as the ability of the system to adequately respond to the user's actions, to get engaged, to include user in the process of interaction.

Interactivity as an ability of the user to interact with the content itself is becoming a distinctive feature of the modern education at all levels. This also dictates requirements to the university training practice for teacher as concerns the development and use of educational resources.

The need to create interactive learning content for the Russian language lessons today is fixed in the official documents. According to the Decree of the Government of the Russian Federation from December 7, 2020 No. 2040 On Running an Experiment for Deploying the Digital Learning Environment" (2020), a draft order of the Ministry of Education of the Russian Federation on approving the procedure for creating and keeping the register of providers of digital learning content and educational services approved or recommended for use in the educational process was submitted for public discussion [Decree, 2020]. The document provides a detailed explanation of the requirements for the content and technical characteristics of digital lessons, electronic textbooks and other content as well as the requirements for developers of the learning content and services.

Obviously, the demands of the new generation to education, the need to become flexible and efficient in the use of computer programs and distance learning tools make it imperative to revise and update the university methods and technologies of teacher training, adding more relevance to the solution of the problem of our research.

2 Literature Review

The indicated problematics of research has a wide scope. Scientists examine the questions concerned with understanding the place and importance of interactive learning content in the modern school and higher education facilities: so, development of interactive learning content is seen as a trend of modern education (Klimenko, 2017); interactive learning content is defined as an additional resource boosting the efficiency of training and quality of higher education (Smolnik & Tonkonogov, 2019); find ways to build the content of a Russian language lesson in an electronic environment, define the role of the language teacher, and the specific aspects of organizing students' learning in a digital school (Skryabina, 2020); explore the potential of a modern digital learning environment for the professional development of young philology specialists (Sokolova & Sokolnitskaya, 2020).

Analysis of the typology of interactive learning content allowed us to explore the specific features of mobile applications as the tooling helpful for a subject teacher and identify groups of mobile learning resources, their potential for facilitating the process of mastering the learning content by students: organizers, messengers, mobile applications for various academic disciplines, visualization programs (presentations, charts), control programs (quizzes, tests) (Savelieva, 2018).

Publications describing the experience of applying interactive learning content in a modern school appear rather interesting: the results of deploying the information environment "Moscow Electronic School" in Moscow schools, presented as a factor in modernizing the professional training of a language teacher, are conspicuous in terms of revealing the difficulties associated with development and use of the learning content in the real learning process (Kokhanova, 2019).

In the modern scientific and methodological literature, a special place is given to the issues related to the formal and substantive development of the interactive learning content of different types. Thus, various algorithms for the use of virtual learning content as a constructor for developing interactive game programs are proposed (Atroschenkov et. al., 2019); principles of modeling composite interactive learning content with the focus, for example, on the function of educational e-book, coupled with automation and individualization of formative and testing processes as part of educational activities (Lanskikh, 2020) have been described.

Different aspects of the development and use of electronic learning environment, or electronic learning resources (electronic teaching and learning aids, simulators, databases, etc.) in the process of future teacher training, including practice in both contact and distance learning situations are covered in a number of contemporary publications (Chigisheva et. al., 2016; Babushkina et. al., 2017; Tsareva et. al., 2018; Kuznetsova et. al., 2018; Kizrina et. al., 2018; Kashkareva et. al., 2019; Kabanova & Vetrova, 2019; Vinokurova & Babina, 2019; Safonov et. al., 2019; Babina et. al., 2020a; Babina et. al., 2020b; Vodyasova, 2020; Beloglazova et. al., 2020; Otterborn et. al., 2020; Voinova et. al., 2020; Shukshina et. al., 2021; Vershinina & Babina, 2021).

In terms of searching for the ways to improve the efficiency of professional training of students of pedagogical universities, highly illustrative are the results of the methodology aimed at developing the skills to create and process such type of sound electronic learning resources as audio podcast (audio content) in bachelor's degree students obtaining pedagogical education within the discipline "ICT and Media Information Literacy" (Protsenko & Safonova, 2021) are revealing.

3 Research Methodological Framework

The research purpose is to describe the experience of using the methodology of teaching philology students to develop the interactive learning content for a modern Russian language lesson. The research objectives are as follows: 1) to determine how profoundly the question has been studied to date and define

the research methodology; 2) to create a model methodology of teaching philology students to develop the learning content of the indicated type; 3) to implement and test the developed methodology.

For establishing the conceptual base of research, we have resorted to analysis of scientific and methodical literature generalized and systematized the material exploring the didactic potential of the interactive learning content at schools and universities, and specific features of its creation. Pedagogical modeling was helpful for developing the methodology of teaching the philology students at pedagogical university how to develop the interactive learning content for a lesson. In order to implement and test the developed methodology, methods of observation and criterial evaluation were used in the course of the internal university contest in interactive teaching tools "Interactive Learning Content for a Modern Russian Language Lesson" held at the Philology Department of the Mordovian State Pedagogical University named after M.E Evseviev (98 third and fourth year students took part in the contest in 2020/21 academic years).

4 Results and Discussion

Analytical review of the scientific papers dealing with creation of the learning content, including interactive content, for a Russian language lesson showed that the research field of this problem is just beginning to develop. Works that look into this problem in the context of university training of a future philology teacher do not exist as yet. Thus, the underlying theoretical material for creating a model methodology of teaching philology students at pedagogical university to create interactive learning content for a Russian language lesson was obtained through didactic comprehension of this problem and its reconversion into the professional pedagogical training of bachelor's degree students.

Further we will present the results of accomplishing the research objective consisting in implementation and testing of the methodology of teaching the philology students to develop the interactive learning content for a Russian language lesson within the frames of a discipline "Russian Language Teaching Methodology" studied on 3rd and 4th courses (semesters 5-8).

At the theoretical stage (lecture topics: "Teaching Techniques", "Teaching Tools", "Russian Language Lesson") students received the knowledge about the interactive learning content as a trend in modern education, with typology of the learning content in general and the interactive learning content of a Russian language lesson. As a result, they gained understanding of the concept of interactive learning content, its specificity (user interaction with the interactive content) in contrast to the so-called passive content on the web.

Students were introduced to online services for creating content without special programming skills: https://learningapps.org/ (a collection of ready-made interactive modules, or exercises on various general education subjects and templates for creating similar online exercises for classification, multiple choice tests, etc.), Playbuzz (creating quizzes or polls), uCalcThinglink (transforming ordinary pictures into interactive ones with pop-up annotations), Online Test Pad (creating tests and simple games), Kahoot (creating online quizzes, tests and polls), etc. The analysis of the online learning platforms recommended by the Ministry of Education of the Russian Federation (https://edu.gov.ru/distance) was also carried out.

Since interactive learning content is a particular concept in relation to educational resources, students were explained the typology of digital learning resources, including integrated creative environments (editors of texts, graphics, music and a set of programmable objects) used to organize the project activities of students multi-directional in terms of covered subjects and content; virtual laboratories and constructors, providing an opportunity to create visual and symbolic imitation models and run experiments with these models, the sources of information (databases in the form of electronic encyclopedia and digital collections), simulators used for building individual learning trajectories. It was determined that of all the rich variety of interactive learning content for the modern Russian language lesson most pedagogically appropriate are the following types of content: tests, quizzes, simulators, interactive exercises, web quests, web portfolios, etc.

At the practical stage (practical course "Russian Language Teaching Methodology") the existing practices of developing and using the interactive learning content for Russian language lessons were explored, specific features associated with developing the content of different types were identified and analyzed, the effectiveness of interactive learning content in teaching the Russian language in the school of today was assessed. So, the analysis of existing practices of developing and using the interactive learning content in modern school has allowed to reveal the basic requirements to the content which is obligatory for any lesson, such as the lesson's electronic scenario representing the structured learning content which can be played on an interactive panel and on tablets of students (Kokhanova, 2019).

The indispensable components of the content of the electronic lesson script are the following: 1) lesson outline or notes to certain lesson stage (displayed on the electronic device of a teacher), 2) presentation to the lesson (displayed on the interactive board, screen in the classroom), 3) interactive worksheets (displayed on the personal devices of students).

Obligatory requirements to the scenario of a lesson: presence of interactive elements, video fragments, test tasks, tasks in the format of Basic State Examination, Unified State Examination, etc.

Analysis of the effectiveness of digital learning resources in teaching Russian language revealed the following mandatory requirements that such resources should satisfy:

- correspondence to the content of education and current educational standards;
- pedagogical appropriateness;
- relevance to the specific academic topics of the current program;
- possibility to be used in interdisciplinary and innovative learning activities,
- regard for the level of teacher preparedness for the use of ICTs in the teaching process.

The control stage of our research was focused on creation of conditions for philology students to develop the interactive learning content for a Russian language lesson. As one of such conditions we created a situation of competition: the internal university contest of interactive teaching means "Interactive Learning Content of a Modern Russian Lesson" was organized and held. The contest had the following objectives: to study the achievements in the modern methodology of teaching the Russian language; to help students master an interactive format for presenting learning content facilitating the independent study of material by school students; to boost the students' creative potential; to identify and support relevant and promising projects; to demonstrate information culture in using the ICT as a resource to improve the quality of future professional activities; self-presentation as a developer of interactive learning content in today's labor market; sparking the interest of the younger generation in the Russian language teaching as a profession. The competition was held in two rounds: First round included examination of the submitted training tools and determining the winners of the first round; and the second round was concerned with defense of the interactive learning tools. The interactive teaching tools for the modern Russian language lesson independently developed by 3rd-4th year students (a total of 48 projects) were submitted to the contest in the following categories: "Digital Learning Content" (the projects made with the use of online platforms (services) for creating web portfolios, web-quests, interactive tests, exercises, games, crosswords, quizzes); "Media Content" (the projects made with the use of tools for creating graphics, posters and videos for training or

implementing educational projects); "Interactive presentations" (projects made with the use of tools for creating electronic presentations).

The main evaluation criteria for the interactive learning tools were the following: richness of information and content; methodological integrity and structure; relevance and periodicity of updates; safety and comfort of the virtual learning environment; interactivity, the level of engagement of the users' audience and the use of Internet tools for communication with different target audiences (students, parents, colleagues); originality of the methodological idea; educational value of the methodological materials; replicability; style; literacy; logical presentation; aesthetics.

The most popular nomination was "Digital Learning Content", under which it was requested that the students created a variety of interactive exercises, and the analysis of the submitted results showed that most often students used learningapps.org templates such as "Find a pair", "Classification", "Text entry", "Quiz for choosing the correct answer", "Fill in the blanks", "Puzzle", "Crossword puzzle", etc.

5 Conclusion

The research intended to identify the most appropriate pedagogical conditions for developing the interactive learning content of the Russian language lesson by philology students led us to the following conclusions.

In response to the needs of the contemporary times and taking into account the possibilities of the modern ICT, the learning content acquires an interactive format, which affects the development of learning resources relevant to teaching the Russian language. The major requirement for the development of learning content of the modern lesson is obligatory presence of interactive testing instruments for assessing the level of knowledge (competencies and skills) of students: electronic tests, simulators, quizzes, etc.

The role of interactive learning content is determined by its ability to improve the effectiveness of teacher's proactive, activity-based, individualized forms of teaching in a modern school. Development of the lesson's electronic scenario as the main type of learning content of a modern lesson should include three obligatory components: 1) lesson's electronic outline (plan, notes to a lesson, etc.) displayed on the electronic device of a teacher, 2) electronic presentation displayed on the interactive board, screen in the classroom, 3) interactive worksheets (displayed on the students' tablets).

The discipline "Russian Language Teaching Methodology" taught at the modern pedagogical universities should include a content component familiarizing students with the methods of developing interactive learning content of a Russian language lesson. In the practice of university training of the philology teacher one of the crucial pedagogical conditions for creating the adequate interactive learning content of a Russian language lesson can be the contest of interactive training tools "Interactive Learning Content of a Modern Russian Language Lesson".

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