ORGANIZING INDEPENDENT WORK OF FUTURE FOREIGN LANGUAGE TEACHERS BASED ON THE WEBQUEST TECHNOLOGY

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Abstract: This paper deals with the problem of organizing the independent work of future foreign language teachers in the context of education digitalization. The paper substantiates the idea that modern society needs a specialist who may quickly respond to the challenges of modernity and is capable of self-development and self-organization. The authors focus on the competencies promoting systemic and critical thinking, communicative skills, teamwork skills, abilities to use modern information technologies to handle professional tasks. The paper describes the didactic potential and structure of the WebQuest educational technology. Particular attention is given to the method of organizing the WebQuest activities facilitating self-directed learning of a foreign language by students.

Keywords: WebQuest, independent work, self-discipline and self-development, communication, teamwork, information search and analysis, critical thinking.

1 Introduction

Today, digitalization of higher education is becoming one of the leading trends in the development of modern society. However, the learning process in higher education is oriented not so much toward the goal of informational saturation but toward developing productive thinking, growing intellectual potential of a learner and strengthening their skills of logical analysis and comprehensive processing of the consumed information, as well as their ability to produce creative designs. The process of digitalization in education is aimed at achieving two interrelated goals. First, the educational process is getting modernized to prepare a future specialist for living in the digital economy. Second, a digital learning environment is created which promotes self-directed learning through the use of digital learning tools, online courses, digital learning resources (Blinov, et al., 2019). The ultimate goal becomes teaching how to learn independently in an ever expanding digital space, which further facilitates more efficient search for, modification and presentation of information, and sets in motion the mechanisms self-fulfillment, self-education, self-development, selfanalysis, self-improvement (Sidorkina, 2013).

According to the Federal State Standard of Higher Education (2018), the Professional Standard for Teachers, a future teacher should acquire new knowledge independently and consciously by thoughtful study and comprehension of the material, examining carefully the facts and examples contained therein, and basing proper theoretical generalizations upon them, and the knowledge is acquired together with the ability to work with information. Today, a modern student should be not a passive consumer of knowledge, but an active creator able to formulate, analyze and solve a problem. The reform of higher education in Russia implies transition from the paradigm of learning to the paradigm of education, which in turn orients students toward the active methods of gaining knowledge and developing their creative abilities, transition to the individualized learning tailored to the needs and capabilities of students.

The modern process of teaching should be intended to develop students' ability to multidimensional modeling of cognitive learning and research learning activities, to creative self-development (Bondar, 2013). A digital learning environment may become a unique platform for interactive dialogue between the user and numerous digital tools, multimedia resources and virtual learning materials useful in acquisition of universal,

general professional and professional competences through self-directed independent work (Babushkina & Kalugina, 2020; Blatt, 2000).

The research presented in this paper is relevant due to the need of revising ways of organizing the independent work of future teachers in the context of digitalization of education in relation to the global trend of lifelong learning. This research makes a certain contribution to the process of vocational training of future teachers, since modern digital tools and technologies offer immense opportunities and advantages to intensify and optimize the educational process, and incorporate those forms and methods of learning which promote personal development of a learner.

2 Literature Review

Self-directed learning has become a target of analysis for many foreign educators and researchers (Brookfield & James, 2014; Knowles et al., 2015; Lakkala et al., 2011; etc.). Lifelong learning is seen as a special tool for shaping the personality, as a means of raising competence, competitiveness and level of personal development; as a strategy for involving every citizen in the social, cultural and political life of the country; as a form of social control (Kogan, 2000). M. Knowles (1975) describes self-directed learning as "a process in which individuals take the initiative, with or without the help of others, in diagnosing their learning needs, formulating learning goals, identifying human and material resources for learning, choosing and implementing appropriate learning strategies and evaluating learning outcomes" (p. 18).

In this context, the concept "digital didactics" takes on special relevance. According to some researchers, digital didactics includes such forms of learning in which digital tools and technologies are used as a means of learning and intercultural communication (Kerres, 2012). A digital learning environment is a trend that modifies the learning process, the way it is managed and designed, which becomes a strong motivational stimulus for both a teacher and a student (Deryuga et al., 2020; Soltovets et al., 2019). According to V. I. Safonov (2013), pedagogical education is bringing forward new requirements for a teacher. The teacher should be able to navigate the world of information, make an effective use of modern technologies in their work, as well as continuously grow as a professional. As their potential employee, the employers want to see a graduate who is able and ready to successfully master new technologies within a short time, to independently fill the gaps in knowledge and skills, to learn how to apply them in practice in a plenty of unforeseeable situations, to ensure the effectiveness of professional activities (Kizrina & Yankina, 2016). The educational system today is searching for a role model of a modern teacher - a mentor, a tutor, a consultant, a project leader, a researcher (Lazutova & Piskunova, 2020). Digital interaction between a teacher and students is becoming more diverse every year and covers all existing forms of communication (Karsenti, 2020; Vershinina et al., 2020). The modern teacher must be media competent, which means having the ability to find necessary and useful information in the virtual space (Blatt, 2000). The need to bring changes into the teacher training is driven by the interests of public and state development (Antonova et al., 2019).

3 Research Methodological Framework

The purpose of this research is to analyze the potential of WebQuest teaching technology for organizing independent work of students as future teachers of foreign languages. The stated purpose predetermined the need to address the following objectives:

 characterize the competencies aimed at developing the skills of independent work in future teachers; present the methodology of organizing a web-quest on the topic "Environmental Problems" by future teachers of foreign languages in the process of their independent work.

This research employed the following research methods: the exploration of scientific and methodological literature on the topic of research, the method of analysis and synthesis of the phenomena under study, the method of generalization of the obtained results.

4 Results and Discussion

This paper identifies the categories of universal and general professional competencies, which, in our opinion, require the solid skills of independent work: systematic and critical thinking, teamwork and leadership, communication, information and communication technologies for job-related activities. These categories of competencies are referred to the soft-skills essential in the professional activities of a modern teacher.

The Federal State Standard of Higher Education specifies the following competencies corresponding to the above categories: UC-1 – ability to search for, critically analyze and synthesize information, apply a systematic approach to solve the outstanding tasks, UC-3 – ability to engage in social interactions and fulfill the assigned role in a team; UC-4 – ability to carry out oral and written business communications in the official language of the Russian Federation and foreign language(s)), GPC-9 –ability to understand the underlying principles of and to use the modern information technologies for handling the job tasks (Federal State Standard of Higher Education, 2018).

One of the ways to strengthen the indicated competencies is through introduction and use in the learning process of the WebQuest digital technology. In pedagogy, WebQuest technology includes various tasks with game elements, which imply the broad use of information resources, including resource on the Internet. This technology is often used in universities for organizing independent work of students in order to obtain or consolidate knowledge on the studied topic/ module. In the process of a WebQuest students work independently with the content, while a teacher provides consulting support, organizes cognitive learning, problem-oriented and research activities of students, creates facilitating conditions for engaging their mental processes and creativity, supports their proactivity. Organizing independent work based on a WebQuest involves integration of three components: pedagogy, technology, and learning content (Willermark, 2018; Lund et al., 2014; Navarro et al., 2016).

- B. Dodge proposes the following structure of a WebQuest:
- introduction: introducing the WebQuest topic, making a tentative work plan, dividing participants into microgroups, assigning roles, providing an overview of the quest;
- tasks: formulating the research problem, describing an algorithm of the quest participants' actions, explaining how the quest result should be presented;
- resources: listing the required information resources;
- action plan: describing all stages of the quest for solving the quest tasks;
- evaluation: making a scale and criteria for evaluating the WebQuest;
- conclusion: summarizing the main results of the WebQuest (Dodge, 1995).

WebQuest on the topic "Umweltsprobleme" may be developed using a digital tool http://zunal.com – Zunal WebQuest Maker (2021). This webQuest is designed for 5th-year students pursuing studies in the field of training 44.03.05 Pedagogical Education, specialty Foreign Language (English, German).

1) Introduction.

Through the proposed WebQuest, students will act as researchers searching for, analyzing, and summarizing information related to environmental problems. The WebQuest consists of four big modules, each presenting certain content organized in the form

of different tasks in German language. While working on the quest, one may use the Internet resources. After completing all tasks, students demonstrate the major results of their work.

2) Objectives:

- 1. develop critical thinking of students;
- 2. develop teamwork skills to achieve practical results;
- 3. develop foreign language communication skills of students through their independent work;
- 4. develop the skills of searching, analyzing and generalizing information on the topic "Environmental Problems".
- 3) Resources are presented in the form of videos from YouTube website, texts from the online editions of the German newspapers Zeit, Deutsche Welle (2021) and Russian Internet portals.
- 4) Action plan.

Stage 1. Discuss environmental problems.

Task 1. Describe the pictures. What do they have in common? (See Figure 1).

Figure 1 Pictures on the topic "Environmental Problems"



Source: the authors

Task 2. Which environmental problems are typical for your region? What can you personally do to solve environmental problems? Take photos and refer them to one of the following categories:

- 1. problem description: photo and comment;
- 2. categories: water, animals and plants, soil, air, waste.

You may use the resources of the Environmental Problems website. Tourismportal (2021).

Task 3. Provide a written feedback in a foreign language regarding the work you carried out at the first stage of the project. Reflect on the upsides and downsides. What did you learn while working on the tasks?

Stage 2. Our Environmental Project.

This stage is concerned with the problem of "Waste Sorting".

Task 1. Divide into groups. Survey students on social media about the problem of waste sorting in their hometowns. Assign roles in the group so that each participant is responsible for a certain task: creating the group on social media, processing the survey results, and presenting the obtained results to other micro groups. The questions for the questionnaire survey should cover the following important points:

- personal experience of waste sorting;
- waste sorting in a city/ region;
- possible waste sorting solutions in a city/ region.

Task 2. Divide into groups. Have a conversation with experts (teachers of biology, chemistry, ecology). Ask them about the impact on the environment of the waste that is not recycled, how

long it takes for a plastic bottle to decompose, and how plastic gets into the waters of the oceans. Make a presentation of the results.

Task 3. Read a foreign language text about waste sorting in Germany Mülltrennung in Aschach (2015), translate it. Answer the questions in writing, attach your answers.

- 1. How is waste sorting organized in Germany?
- 2. How complicated is the waste sorting process?
- 3. What is the situation with waste sorting and recycling in your city/ region?
- Based on the analysis of information, propose your own solutions to the problem.

Task 4. Provide a written feedback in a foreign language regarding the work you carried out at the second stage of the project. Reflect on the upsides and downsides of the offered tasks. What did you learn while working on the tasks?

Stage 3. Our motto.

Task 1. Watch the video Mülltrennung DE (2017). In pairs, make a short dialogue regarding the content of the video in a foreign language. Present the dialogues to each other.

Task 2. Divide into groups, come up with an ecological appeal in a foreign language, which will make people think about the state of the environment. You are free to choose a form of the appeal. It could be a poem, a chant, a rap, etc. The appeal should reflect the problem and its possible solutions.

Stage 4. Our campaign.

Task 1. Watch the video Umweltschutz im Alltag: Wie geht das richtig? (2015). During watching it, note the recommendations that are given in the video about environmental protection.

Task 2. Make your own recommendations that will help to protect the environment.

Task 3. Read the texts "Wastes", "Large amounts of waste" in the online edition of the German newspaper "Zeit" Deutschland produziert zu viel Müll (2015).

Task 4. Try to calculate how much waste you personally produce in a year, how much waste your family produces in a year, and how much waste the residents of your city produce in a year. Present the results in a diagram.

Task 5. As a team, prepare a creative report on your WebQuest. You are free to choose a form of the report: presentation, collage, poster, video clip. In your report try to use information from the resources provided.

5) Evaluation.

An important part of any WebQuest is a comprehensive scale of evaluation criteria by which students evaluate themselves and members of other groups. A teacher should use the same scale when evaluating the quest. Since the WebQuest is a complex task, it is recommended to adhere to criteria such as:

- 1. oral and written communication;
- 2. ability to work in a team to achieve a practical result;
- demonstration of the major results of own work using various digital technologies;
- 4. persuasiveness of reasoning, etc.

A scale and evaluation parameters should be developed for each criterion.

6) Conclusion.

WebQuest helps to achieve the following results: develop the communicative skills of monological and dialogical speech in a foreign language; develop the ability to define the problem, subject and object of research; to select information sources at own discretion; to analyze the selected information sources, to

pick and structure the information relevant for research; strengthen teamwork skills, develop the qualities and skills of a leader.

5 Conclusion

The development of digital competencies of future foreign language teachers hinges on the practical application of digital tools and technologies by students in the learning process. This means that a student should be able to design a foreign language lesson based on digital technologies; to organize own activities using various organizational forms for developing the foreign language communicative competence; be able to use modern digital resources and technologies in their work to address job-related tasks.

The above tasks can be accommodated by using the WebQuest educational technology, which is an essential teaching tool for developing key competences that a modern foreign language teacher must possess. WebQuest is one of the most effective and promising digital technologies for organizing students' independent work in a foreign language class, as this technology boosts the research activity of both a teacher and students. With the help of the WebQuest technology, a teacher gets a powerful way to uplift students' motivation to learn, encourage them to comprehend the material through a creative approach, to consolidate their knowledge and check it effectively. It is worth noting that today as part of learning activities students do a lot of research work, within the frames of which they search for information, analyze and systematize it. Beyond that, WebQuest technology encourages students to think critically, to address problem tasks, to engage in a discussion in a foreign language, to formulate own point of view and to defend own opinion. Incorporation of the WebQuest digital technology in the educational process will not only give a boost to the students' learning, but also lay a solid foundation for their further selfdirected learning and self-development directed at mastering general professional competencies (GPC) and universal competencies (UC).

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