УДК 372.8:811.111 DEVELOPING CRITICAL THINKING THROUGH DIGITAL MEDIA

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Topicality. About a decade ago, there was a growing interest in integrating critical thinking education in learning programs that correspond to all levels of formal education. Nowadays it is no

longer enough to teach children to read, write and solve mathematical equations. They should be able to go further, think and solve problems.

Therefore, student learning and teaching methods should take a radical twist, since the existing methods are based on the usual memorization of material and filling in notebooks, but unfortunately these methods are not able to teach children to save information and use it in everyday life. Consequently, teachers have an interest in finding appropriate strategies for developing critical thinking among learners. It should be noted that the old traditional teaching methods have not lost their relevance and, at times, are even more productive and high-quality for a number of schools and students.

Topicality of this work is determined by the need of search and methodologically reasonable choice of the most effective ways of the usage digital media tools to develop learners' critical thinking.

The object of the research work is the process of teaching critical thinking in information educational environment.

The subject of the research work is various digital media tools used to develop critical thinking among learners (Internet resources, graphic organizers, software, etc.)

The aim of the research work is to explore the features of using digital media in foreign language lessons, to identify the significance and relevance of their implementation for developing critical thinking.

The scientific novelty of the research work lies in the fact that, based on the analysis of the work on the problem, a theoretical justification of the practical possibility and pedagogical feasibility of using digital media for developing students' critical thinking are presented.

M.I. Makhmutov indicates that in pedagogy logical, creative and critical types of thinking are considered the most valuable. They reflect the highest level of intellectual abilities of the individual [1: 56].

In pedagogy and psychology there are various approaches to defining critical thinking: «The critical is analytical, creative, reflexive and understanding, capable of interpreting and evaluating the hidden in the message, and also taking a position in relation to it» [2: 199].

According to I.O. Zagasheva and S.I. Zair-Bek, critical thinking implies «evaluative, reflexive thinking», for which knowledge is not the final point, but the starting point, reasoned and logical thinking, that is based on personal experience and verified facts. [3: 284]

Touching on critical thinking, it is worth noting foreign scientists who have contributed to the development of this concept. David Klooster found 4 signs of critical thinking:

1. Critical thinking is built on autonomous thinking. If the exercises and tasks aim at critical thinking, every learner will share his own thoughts and ideas regardless of others.

2. Information is the starting point in brain activity. And new information must be questioned. The usual process of knowledge is made conscious, productive, and endless and finds originality just due to critical thinking.

3. Critical thinking requires arguments and evidence. A person with developed critical thinking looking for an effective solution supports them with proves.

4. Critical Thinking - Social Thinking. Before you share your thoughts with other people you check them. Therefore, teachers pay attention to developing such qualities as listening skills, tolerance and responsibility for their point of view. [4: 36-40].

In this regard, it is important to note that critical thinking is interested in processing information obtained in a class by a student who develops in his process certain abilities that must be applied in practice in situations of everyday life inside and outside the school context.

Thus, based on the research of domestic and foreign scientists, we have defined our understanding of critical thinking as a complex integrative personality quality, including the skills of interpretation, analysis, evaluation, conclusion, explanation, self-regulation; text critical analysis skills; dialogic and problematic thinking, which provides the processes of its self-knowledge, selfeducation, self-realization in teaching and research activities of particular personal and professionally significant value. The situation with education in the modern world, especially in the context of globalization, new information technologies and communications, becomes very complex and full of problems. This created a number of analyses, discussions and studies concerning education at all levels and conditions.

However, there is one aspect in which all researchers agree.

This is the need to pay more attention to the quality of educational services. In accordance to these requirements, in recent years, critical thinking has been given special attention as the predominant type of thinking that helps students develop skills that will allow them to meet the needs of the modern world factor. From this point of view, digital media are becoming an indispensable ally for teachers, because the use of such electronic media will help develop skills, abilities that can be directly applied in the learning process to stimulate critical thinking. But before that, let's consider the concept of digital media and its meaning in the educational system.

Digital media includes products used for educational purposes, which requires a computer to play. If we interpret this definition more broadly, accordingly to the above meaning, digital media is regarded as any piece of audiovisual information that is somehow represented on a computer or works on digital codes. Therefore digital media is considered to be any piece of text, a formula, a spreadsheet, a picture, a photo, an animation, an audio or video clip, a presentation or database, a test, an interactive model and etc.

The use of digital media in education enables teachers to qualitatively change the content, methods and organizational forms of education. The tools of pedagogical activity are being enhanced and the quality and effectiveness of training are being improved. Digital media have many benefits contrasted it with traditional teaching means. The goal of digital educational resources is to reinforce the intellectual skills of learners in the modern society, as well as improving the capacity of education.

Using digital media as a tool to advance learners' critical thinking process involves a new model that facilitates the interaction, collaboration and participation of all students in a variety of tasks.

Actions are performed through computer such as searching for information, consulting and reading texts, visualizing images, and videos, implementing activities on screens in the form of conceptual maps, participating in simulations and publishing. Personalized and direct access means that students who have broad access to programs, applications, and the Internet become a new work environment.

These new educational contexts assign students a more active role than the one they traditionally played at school. Using digital media tools, learners have access to create their own knowledge. This innovative practice in the classroom implies a new way of generating knowledge, in which the teacher is the one who promotes this type of transformation, generates changes, accompanies and guides the learning process of learners. Teacher is becoming more and more necessary, because the student learning process becomes autonomous. Integrating digital media to develop critical thinking sets new student relationships with knowledge.

In the organization of experimental work we were guided by the following provisions:

1. Experimental work was carried out in natural conditions in accordance with the approved program of learning English at the middle stage of secondary school.

2. The study involved deliberate changes in the educational process in accordance with the purpose and hypothesis of the work.

3. Experimental work involves the study of the effectiveness tasks aimed at developing critical thinking skills in the work on a foreign language text.

4. The experiment was conducted on the same contingent of students.

The experiment was conducted during pedagogical practice. The study was attended by students of 9 classes (24 students).

Our experimental work consisted of several stages:

1. Stating

2. Forming

3. Generalizing

Table 1. Goals and	objectives of	f experimental wo	rk
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Stage	Tasks	Used method	Intended result	
Stating	Selection of control and	observation	Control (KG) and ex-	
	experimental group	testing	perimental (EG)	
	The definition of the vari-	statistical processing	groups were selected.	
	able and neurinoma condi-	analysis	The conditions of ex-	
	tions		perimental work are	
	Determination of levels of	nination of levels of		
	formation of critical think-		Initial level defined	
	ing. Developing		formation of critical	
	evaluation criteria.		thinking of students.	
Forming	Testing of the developed	testing	Effective work of the	
	exercises for students of	analysis	proposed set of exer-	
	the experimental group	systematization, generali-	cises	
	Final testing	zation of the results		
Generalizing	Fixation of the achieved	testing	Confirmation of the	
	level of formation of criti-	analysis	proposed hypothesis	
	cal thinking.	systematization, generali-		
	Calculations and conclu-	zation		
	sions on the work done			

Control and experimental groups were determined to test the hypothesis at the ascertaining stage of experimental training.

Quantitative analysis of the results of student performance indicates the homogeneity of these groups in the first group (5) - 4, (4) - 8, (3) - 0, (2) - 0, and the second (5) - 3, (4) - 7, (3) - 2, (2) - 0. Students in the two groups have approximately the same level of knowledge. The average score is 4.19.

According to quantitative analysis, we see that the gap between the groups is small. We consider the first subgroup as experimental, and the second subgroup as control.

The diagram illustrates the comparative analysis.

As a variable conditions of experimental training is the fact that the KG (12 students) classes were conducted according to the traditional method in English lessons, and in EG (12 students) we used a set of tasks developed by us.

The specificity of teaching in the experimental group was that foreign language teaching which carried out in the paradigm «media resources-student». Training in the control group was being implemented by the same sequence, but on the basis of a textbook.

The basis for demonstrating types of exercises employed by multimedia programs was the program «English: the Way to Perfection: Intermediate», which consists of two CD-ROM and 6 chapters (units). Each Chapter consists of 5 lessons devoted to one of the types of speech activity (Speaking, Reading, Listening, Writing), with the focus on the development of communication skills of students – 2 lessons of 5 in each Chapter are devoted to the development of speech skills of students.

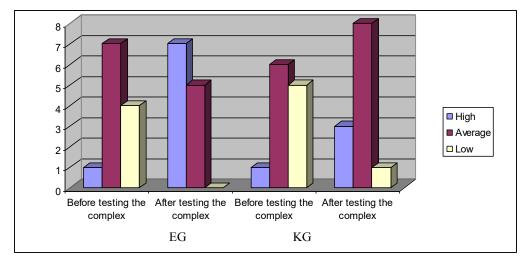


Diagram №1. Comparative analysis (before and after the experiment)

In the second Chapter of this work, we demonstrated the implementation of didactic, methodological, innovative principles of learning through the use of multimedia programs in which the communicative and cognitive principles are leading and have a great influence on the formation of intercultural communicative competence.

Multimedia programs for levels B2, C1, C2 of foreign language proficiency were selected in accordance with the selection criteria.

The exercises used in the multimedia program «English: the way to Perfection» were demonstrated.

At the formative stage, we used a specially designed set of exercises that allows us to develop the skills of critical thinking in working on a foreign language text. In drawing up the exercises, we relied on the strategies described in the theoretical part of our study.

In summing up, I would like to note that English lessons contribute to the development of critical thinking through a variety of material and interactive approaches. Performing any task students should understand the main idea, recreate the logic of presentation, highlight the problem, compare with what they already know in this area, and determine what additional information we need to draw a conclusion and formulate their point of view on a specific issue or problem.

For example, during the topic «Printed pages: books, magazines, Newspapers» I used a computer presentation «Vooks» to enter lexical units and activate them in the speech of students. Teaching grammar, I attempted to highlight the most complex and important information. In further study of this topic, you can repeatedly return to any slide, delving into all the subtleties of the phenomenon under study.

In the study of country material visibility is indispensable, because, for example, familiarity with the sights of the country of the studied language should be accompanied by their images. It attracts students and lessons such as «lessons – travel», and on the map of the city they can see any attraction. For example, using Power Point we made a virtual tour to the United States and got acquainted with its main attraction «the Statue of Liberty».

The most productive multimedia presentations have established themselves, in which, after explaining or presenting the material, exercises for fixing or control are inserted. These exercises, students are doing directly from the screen individually or in the front. The ability to show the correct answer allows you to organize an inter-or self-test quickly and efficiently.

Also in my lessons I made efforts to encourage students to get involved in a creative approach to learning. At the end of the work on a certain topic, I asked students to prepare creative work using the program «Power Point», «Excel» or simply «Word». I offered students different topics for projects, but I proceed from the practical importance of this topic for the students themselves. There are just some of the topics: «the City of military glory», « How to make your city attractive for tourists, etc. So students provide their brochures, booklets, presentations or simply abstracts and projects that are presented in the classroom.

The school has an interactive Board «Promethean»installed in the multimedia room. With the help of special markers on the screen, you can display any information, highlight important other color, work with any computer programs. In addition, it has the function of a conventional Board, where the «chalk» becomes a marker. They can write and then erase the writing with an eraser.

In our opinion, the success of the development of critical thinking skills in the work with the help of media resources depends on compliance with a number of conditions, such as:

- Use of strategies for developing critical thinking skills;

- Implementation exercises for developing critical thinking skills;

- Systematic work on developing critical thinking skills;

We believe that the developed exercises motivate students to develop critical thinking skills, their horizons and provide interest in working on a foreign language text.

The task of the controlling stage was the check the formation of critical thinking skills in students of experimental and control groups and to test our hypothesis that developing critical thinking skills in working on a foreign language text will be more successful if you use a specially designed set of exercises. At this stage we offered the same tasks from the set of exercises developed by us. The results showed that the group, which was engaged in a specially designed set of exercises, showed better results than the other group. After statistical analysis, we found that the level of formation of critical thinking skills in the experimental group increased.

Thus, we believe that our set of exercises was tested successfully and showed good results and confirmed our hypothesis that developing critical thinking skills in working on a foreign language text will be more efficient by using a specially designed set of exercises.

Literature

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