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USING WEB-TECHNOLOGIES IN THE PROCESS OF DEVELOPMENT OF STUDENTS' CRITICAL THINKING

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Abstract. The article deals with the issues of development of critical thinking of students by means of web-technologies. It presents the analysis of different scientific approaches to the organization of critical thinking training of students. The authors state that among the means of the above mentioned critical thinking development scientists distinguish information and communication technologies, particularly web-technologies, as carrying a significant didactic and critical thinking potential. The experience of using web resources for verifying information and data to the process of students' critical thinking development is explained. The article gives examples of the using remote special course on the basis of web resources implementation into real learning process. The application of using web resources provides an opportunity to intensify critical thinking motivation of students, involve them in solving the discussed problems, develop critical thinking skills, the ability to independently create and develop new knowledge based on the information received and reflection. Comparison of the results of ascertaining and forming sections allow concluding on the effectiveness of the proposed pedagogical condition for the formation of students' critical thinking by the means of web technologies and the effectiveness of the developed remote special course for forming students' critical thinking by the means of using modern web technologies.

1 Introduction

The current period of development of high education is characterized by the process of informatization. The process of informatization is much influence on all social spheres, because it is a social product, which provides scientific and technological progress. The priority of informatization in society is high educational branch, as it involves Web technologies for the implementation of new teaching methods and approaches.

Different problems of using information technology have been studied by well-known resreacher such as: H. Ajjan, R. Hartshorne, D. Kigan, A. Krouford, D. Makinster, S. Metiu, J. Pasco, O. Polischuk, V. Saul, S. Semerikov, S. Shokaliuk, D. Somenko, I. Teplytskyi, H. Tkachuk, Boubker Sbihi, Steven D. Schafersman ect.

Scientists emphasize the problem of technology of development of critical thinking of students, because they do not have stable skills to think creatively, the expansion of mental competence for effective solution of social, scientific and practical problems becomes relevant. During training, the following tasks are put forward: first, the acquisition of knowledge about the laws and methods of logical and critical thinking; second, mastering the hypothetical-deductive logic of thinking with the elements of criticality; third, learning to understand logical procedures: explaining and predicting, proving and refuting, arguing, arguing, evaluating, and self-assessment.

2 Discussion

Different scholars offer various approaches and perspectives on the technology of developing critical thinking. Most researchers offer technology that consists of three stages, however they offer different stages. For example, they offer a three-level technology for the formation of critical thinking: the first stage is provocation; the second is awareness; the third is reflection [2]. In the first stage, the cognitive processes are updated, which imply skills such as the ability to rely on knowledge and experience; the second stage is awareness, that is, assimilation of content. The main task of the second stage is to support the students' interest in the first stage of information and to stimulate students to track the learning of students. It should be noted that it is at this stage that the student is directly acquainted with new information through listening to lectures, editing text, watching a movie, performing an experiment, etc. The main task of the teacher is to intensify the activities of students, to use such tools as analysis, synthesis and comparison. The last, third stage is reflection. At the last stage, students are thinking about new material, adapting new concepts in their own system of knowledge, that is, changing the already learned idea and restructuring the formed connections which help to create new information for students.

Most often three levels of manifestation of critical thinking are distinguished: 1st level – the emergence of criticality (the subject notes that there are some mistakes in the image of the object of knowledge, but he is not able to understand and explain them); 2nd level – ascertaining criticality (students find mistakes made in the object of cognition, but they do not seek to reveal the source of their occurrence); 3rd level – corrective criticality (students do not only distinguish between parts, details of the object of cognition in interconnectedness, interdependence and detect mistakes made in them, but also they reveal the causes of their occurrence, and also indicate ways and means of their elimination) [3].

Scientists propose certain possible methods and techniques for forming students' critical thinking such as: 1) self-analysis and self-assessment of their level of

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readiness for critical assimilation of material and analysis of the critical potential of the problem; 2) the combination of reproductive and partially search methods of teaching in the performance of educational tasks and different types of criticism (criticism-analogy, criticism-praise, criticism-concern, etc.); 3) search methods of teaching, which are used while performing creative works; 4) transformation of methods and techniques of critical analysis to new situations; 5) the application of mental competence in the performance of independent work (reviewing, solving critical situations, analysis of data from Internet sources, books, public speaking, etc.).

Methods for determining the level can be divided into three groups: a) a set of tools, techniques and techniques for assessing the mental competence of criticality of mind in applying to a wide range of problems, situations, values and attitudes to criticality; b) private methods and techniques for assessing critical thinking skills and abilities in certain situations, specific subject areas; c) evaluation of certain aspects of critical thinking, expressed in the form of specific skills to see and comprehend problems, to compare their own and others' evidence in solving the problem [4].

The essence of the leading pedagogical condition that contributes to the formation of critical thinking, in our opinion, is to optimize the formation of students' critical thinking through the use of modern web technologies.

Some types of the use of information and communication tools in the educational context are: 1) *personal messaging: free correspondence* (the structure of telecommunication activities can exchange information freely between groups via e-mail); *global class* (emailing two or more classes); *electronic "meetings"* (synchronous, real communication between students and their "guest"; 2) *role-playing games* (participants communicate with each other, playing a role); 3) *information support* (the construction of telecommunication projects on the basis of collection, processing and comparison of various types of information of interest); 4) *information exchange* (thematic exchange of information between students all over the world, who, together with teachers, collects folk games, jargon, utterances, jokes, proverbs, fairy tales, information on health protection, folklore material on local and national holidays, aphorisms, tourist information. During this activity, both creators and users of the information they exchange become the communication entities); 5) *joint data analysis* (comparative and numerical analysis of information collected in different places; preparation of reviews, analysis of results, reports on what has been found); 6) *joint problem solving* (can take place both on the principles of competition and in cooperation) [5].

Following the logic of presentation of the material, we consistently reveal the key component of the pedagogical condition. First, let's turn to the definition of "web technology" and describe the main purpose of their use in the process of forming students' critical thinking.

It is stated in scientific literature that information technology is materialized on the basis of information infrastructure knowledge in the field of creation, accumulation, storage, processing, transmission and use of information data. Information technology is a set of methods, tools, techniques that provide the process of finding, collecting, storing, processing, submitting and transmitting information with the help of using computer hardware and communication [8]. There are some widespread modern information technologies such as technologies of information-analytical and decision support systems; web technologies; CASE-technologies of computer-aided design, etc.

The concept of "web technology" is interpreted as information technologies, the use of which enables the processing of web resources hosted in the web space of computer networks (local or global) [8].

Today, there are several modern web technologies that can be used by educators to solve a variety of educational challenges. One of these technologies is Web 2.0 technology, the second generation of Internet network services that has recently become the basis for the development of the Internet.

Web 2.0 technologies are a network context that contains user activity products. They allow to work with large amount of publications, share information, comment and annotate texts (blog, Wiki-wiki, LiveJournal) create presentations, slides, slideshows, videos, audio clips, self-complete sites with specific content, exchange messages (RSS-pages, wiki, chat, Skype, email, forums, messengers, and more), visualize the connections of online community members, interact, collaborate ect [5,6].

The use of Web 2.0. technologies is urgent at the present stage of development of the Internet and social networks are their prominent representatives. They have quickly become popular as they provide new opportunities for self-realization and free communication; moreover, social networks are a flexible tool for creating a learning and information environment that can be developed independently. Self-development and voluntary filling of social networking information with users are the basic foundations of Web 2.0 technology, which considers the communication of participants in the process of transmitting and receiving information, not as the developer and user (Web 1.0 technology), but the user as a co-developer, the reader as a co-author, the team of authors as a society [7, 9].

Web 2.0 is the most important component of the learning process, as the technology allows to realize new possibilities of the Internet space, in the context of which the emphasis is on socialization, getting closer to users, interaction of the curator and students, development of online services, simplifying the process of obtaining information and working with it.

Web 2.0 in learning, there are many benefits that make it worthwhile to tackle such challenges. Among these advantages are the following:

- Permanence of evidence. These tools allow students to create a sort of learning evidence portfolio. For example, the use of blogs as a periodical portfolio of learning reflections.
- Communities' creation. This sort of tools is conducive to community creation, as students go on

identifying for example, through the profile or trough certain types of content, similar interests.

- Multiple resources. Such tools provide access to a variety of information resources: presentations, documents, videos, images, etc. These resources often provide some learning activities.
- Massive and rapid scope. Students often access them several times a day, which is not usually the case with traditional learning platforms (LMS) or with the use of email address use for academic affairs.
- Creating and sharing knowledge. These tools help to foster the desire to create and share their knowledge with peers. By using these tools all peers see what each student does is important, because in the process the students feel more involved in their own learning, while contributing to the generation of knowledge in the course and sharing it with their colleagues.
- Playful environment. For students, a tool such as YouTube or Facebook makes them feel in their own environment, or at least in a neutral space, and not in an institutional one, a place where besides connecting with colleagues and friends for any given social event, you can also find out about other official activities [10].

Web 2.0 technology is the technology of a new stage of evolution on the Web that was not implemented suddenly, replacing the websites; on the contrary, it was a result. The current version of the network refers to the so-called Web 3.0, which represents the Network as a stage of "reading performance record" [7 , 11].

Web 2.0 technologies are called social services on the Internet, as their use is usually shared within an appropriate group of users. User groups can form entire online communities that work together to achieve that goal. An example of such a group could be the creation of an online community of students to share an educational web resource to generate students' critical thinking. Obviously, Web 2.0 technology can act as a means of using an educational web resource for students.

The simplicity and convenience of use of social services Web 2.0 allows to save time and not to waste it on long explanations of technology of functioning of web systems. Features of functioning of web technologies are: technical basis – local and global networks (e.g. Internet); the organization of web resources in the network is carried out using hypertext technology; web resources are viewed using a web browser; use of systems of search of web resources; unlimited number of users who can download and view web resources and more.

3 Methodology of research

The implementation of a pedagogical condition for optimizing the formation of students' critical thinking through the use of modern web technologies was carried out in order to exercise purposeful tutoring of the above mentioned process and to optimize the process of forming students' critical thinking through the use of modern web technologies. This condition was aimed at developing students' critical thinking and providing students with advisory assistance in the process of raising students' awareness of searching, retrieving and critically analyzing certain information. In order to fulfill this condition, a special course on developing the critical thinking of students who could join the project at will was created on the MOODLe platform.

In the first stage of the project on creation of students' critical thinking by means of web technologies a special course on MOODLe platform was provided with information-cognitive web resources, which would help to develop students' critical analysis skills and media literacy; secondly, it was necessary to engage and motivate students to participate in an experimental project for developing critical thinking; thirdly, it was necessary to develop criteria and indicators for experimental verification of the pedagogical condition for optimizing the formation of students' critical thinking by means of using modern web technologies. In the second stage, the content of the special course was filled with web resources that were used in the experimental study. Web resources are presented in tables.

Table 1. Web resources for verifying information and data

https://usr.minjust.gov.ua/ua/freesearch	Legal information (founders, signatories, date of registration, contact address and telephone number)
https://www.dzo.com.ua/	Public procurement system ProZorro
https://techtoday.in.ua/tips/yak-shukati-informaciyu-pro-sajti-ta-yixnix-vlasnikiv-53078.html	How to find out about a website owner? A lot of information about digital security by Vitaliy Moroz: https://internews.ua/team
http://uprom.info/	Industrial Portal (some victories against betrayals)

Table 2. Leading Ukrainian media organizations in FB

https://detector.media/ https://detector.media/	Media Detector – explores the entire media space of Ukraine (news, political (and not only) programs, talk-shows, movies, and TV shows), as well as a variety of text and video material on the site, results of social studies, etc.
https://internews.ua https://www.facebook.com/internewsukraine/	Internews-Ukraine – a variety of information that helps journalists in their work. Also they are grants organization.
http://www.aup.com.ua/ https://www.facebook.com/aupfoundation/	The Ukrainian Press Academy is the first organization to develop and implement media literacy programs in education in Ukraine.
http://idpo.org.ua/ https://www.facebook.com/IDPO.ORG.UA/	Pylyp Orlyk Institute for Democracy – researches the situation in local media, conducts media discussions in the regions
https://www.stopfake.org/ https://www.facebook.com/1stopfake https://www.bez-brehni.com/	Stopfake – a project to refute the fakes of Russian propaganda Without lies – a project to expose the lies of Ukrainian politicians and fact-checking
http://texty.org.ua ttps://www.facebook.com/TEXTY.org.ua/	Website TEXTS – data journalism. Critical analytics and research submitted in an interesting way and fairly affordable.
http://medialab.online/	MEDIALAB is a brilliant project with accessible articles from practitioners and many tests

http://www.nam.org.ua/	Independent Broadcasting Association - a lot of training in the management and marketing of television companies
https://eeas.europa.eu/delegations/ukraine_uk https://www.facebook.com/EUDelegationUkraine/	Delegation of the European Union to Ukraine

Table 3. Critical information analysis projects, guides, and films

https://www.facebook.com/behindtheukrainenews/	Beyond the news
https://www.facebook.com/groups/medialiteracylab/	Media Literacy Lab
https://internews.ua/opportunity/bots-manipulation	HOW TO SPY BOTS AND DISCOVER MANIPULATIONS?
https://internews.ua/opportunity/verification-resources	RESOURCES FOR INFORMATION VERIFICATION
http://mip.gov.ua/files/pdf/Recommendations_Infosecurity	"Information Security Recommendations on the Internet during the Conflict"
https://vumonline.ua/course/how-to-understand-social-networks	How to understand social networks.
https://bit.ly/2upgQhr	Project "Polibot Hunters"
https://bit.ly/2KmjoX4	How to distinguish real news from lies, manipulations and half-truths. Instruction
https://voxukraine.org/uk/category/proekti/voxcheck-uk/ https://www.facebook.com/VoxCheck/	VoxUkraine is more than the best analytics about Ukraine
https://www.istpravda.com.ua/	Historical Truth – a project by journalist Vakhtang Kipiani, you can find out lots of trustful historical facts here. European truth – information concerning European integration, visa waiver, etc.
http://zombi.kanalukraina.tv/#rec981810	"The Zombies" by Illarion Pavlyuk
http://ua-cinema.com/stuff/komediji/khvist_viljae_sobakoju_1997/3-1-0-2557	"Wag the Dog", "Brexit" "Shattered Glass" Series "House of Cards" (USA) "The Newsroom" (USA) "Black Mirror" (UK), "The Handmaid's Tale" (Canada)

The voluntary participants of the pedagogical experiment were students of two leading universities of Ukraine, among which we selected two universities that were displaced during the years of the information-hybrid war in Ukraine, namely State Institution "Luhansk Taras Shevchenko National University" and Volodymyr Dahl East Ukrainian National University.

We have developed the criteria and indicators of students' critical thinking: 1) *motivational* (motivation to search, retrieve and critically analyze certain information; constant motivations to achieve success, self-fulfillment in professional activity); 2) *content-related* (basic knowledge about information resources, information systems, information technologies, informatization of society; the ability to independently create and develop new knowledge based on the information received); 3) *activity-based* (the ability to operate following the sequence of actions and complete awareness of the actions for critical analysis of new information; information insight, the ability to plan and predict possible consequences based on the information received); 4) *resultative* (self-assessment and self-reflection concerning the critical analysis of the information received; the ability to predict the result through critical thinking due to the information received).

According to the results of the formative stage of the experiment for determining students' level of critical thinking by the means of using modern web technologies by the motivational criterion, we have the following data, which are shown in the table:

*Table 4.*Dynamics of levels of formation of students' critical thinking by the motivational criterion at the beginning and at the end of the experiment are presented in the table 4.

Criterion	**Motivational**			
Levels	At the beginning of the experiment		At the end of the experiment	
	CG (%)	EG (%)	CG (%)	EG (%)
High	20,4	17,4	22,7	34,1
Sufficient	25,9	29,6	25,7	40,9
Average	29,5	31,1	28,8	11,3
Critical	13,6	12,1	10,6	7,6
Low	13,6	9,8	12,2	6,1

Following the dynamics of the level of formation of students' critical thinking on the motivational criterion at the beginning and at the end of the experiment, we noted significant positive changes in the formation of critical thinking by the mentioned criterion in the experimental group.

Thus, most of the students from the experimental group at the beginning of the experiment had average and sufficient levels, which were 31.1% and 29.6%, respectively. Instead, at the end of the experiment, we recorded the best data at the average level of 28.8% in the CG, and the sufficient level of the EG increased to 40.9% by reducing the average level of only 11.3%.

The dynamics of levels of formation of students' critical thinking by the content-related criterion after the experimental work were distributed as follows, which is reflected in the table 5.

Criterion	**Content-related**			
Levels	At the beginning of the experiment		At the end of the experiment	
	CG (%)	EG (%)	CG (%)	EG (%)
High	3,0	3,8	6,1	15,2
Sufficient	8,3	7,6	11,4	21,2
Average	25,0	27,3	32,6	31,0
Critical	28,9	28,0	24,2	14,4
Low	34,8	33,3	25,7	18,2

The data obtained indicate that students had a rather low level of critical thinking formation by the content-related criterion at the beginning of the experimental work, which was only 3.8% in the experimental group

and 3.0% in the control group. It should be noted that after the experiment, the level of critical thinking by the content-related criterion improved significantly and is 15.2% in the experimental group, and in the control group the indicator is only 6.1%.

Thus, at the beginning of the experiment, most of the students had a low level of critical thinking by the content-related criterion, namely: 33.3%, after all at the end of the experiment the low level of students was only 18.2%. According to the results of experimental work, we must determine the positive dynamics of the formation of critical thinking by the content-related criterion.

The level and dynamics of critical thinking by the activity-based criterion after experiment in the experimental group is shown in the table 6.

Criterion	**Activity-based**			
Levels	At the beginning of the experiment		At the end of the experiment	
	CG (%)	EG (%)	CG (%)	EG (%)
High	4,6	6,1	6,1	18,2
Sufficient	13,6	12,8	15,9	28,0
Average	28,8	27,3	33,3	31,1
Critical	34,8	28,8	28,8	10,6
Low	18,2	25,0	15,9	12,1

The experimental data obtained indicate that the level of students' critical thinking formation by the activity-based criterion at the beginning and at the end of the forming experiment in the experimental group has positive changes.

Thus, if at the beginning of the experiment the EG had a high level of 6.1%, then after the experiment it was 18.2%, that is, the high level of critical thinking by the activity-based criterion increased three times, whereas in the EG the level almost did not change and is 6.1%. It should be noted that all indicators in the EG have changed in the positive direction, for example, the sufficient level at the end of the experiment was 28.0% while at the beginning it was only 12.8%.

The level of formation of critical thinking by the resultative criterion we were determined in the course of experimental work is defined in the table 7.

Criterion	**Resultative**			
Levels	At the beginning of the experiment		At the end of the experiment	
	CG (%)	EG (%)	CG (%)	EG (%)
High	6,8	9,1	14,4	20,5
Sufficient	11,4	12,1	19,7	24,2
Average	27,3	28,8	29,5	33,3
Critical	33,3	30,3	21,2	15,9
Low	21,2	19,7	15,2	6,1

If, at the beginning of the experiment, the high level of critical thinking by the resultative criterion in the experimental group was only 9.1%, then at the end of the experiment the indicator changed significantly and is 20.5%.

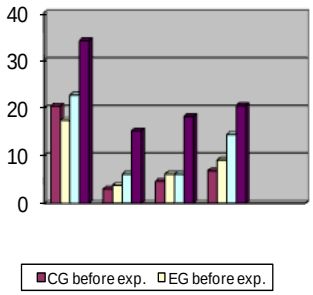
The data obtained indicate that students not only revealed self-assessment and self-reflection concerning the critical analysis of the information received, but the ability to predict the result through critical thinking due to the information received.

With regard to the control group, during the period of the experimental testing the high level of critical thinking according to the effective criterion has hardly improved – 14,4%. At the end of the formative experiment, low scores in the EG are only 6.1% of students who are not able to critically analyze the phenomena occurring in the context of the information-hybrid war, to give their own assessment of events and so on.

4 The results of the research

Based on the data obtained during the experimental work, it should be noted that the use of modern web technologies promotes the development of students to critically perceive information, as well as emotional stability and the ability to make the right decision, while abandoning the previous goal, namely, make a critical decision without hesitation.

Based on the mathematical data obtained during the experimental work, we graphically recorded the high level of critical thinking of students of the control and experimental group at the beginning and at the end of the forming stage of the experiment in the form of a diagram. Table 8.



We used Pearson's statistical criterion χ^2 to compare the levels of critical thinking of students in the control and experimental groups.

Pearson's criterion χ^2 allows us to correlate two empirical distributions and to determine whether they agree. The reconciliation criterion is based on the use of different degrees of distance between the empirical distribution we are analyzing and the feature distribution feature in the population.

The results of the calculations given in the tables (see tables 9; 10; 11; 12) indicate a statistically insignificant

difference between the control and the experimental group at the beginning of the experiment by all criteria of formation of critical thinking: motivational, content-related, activity-based and resultative(the empirical value of the Pearson's criterion is accordingly; 1,6520; 0,347; 2,551; 0,799, which is not exceeding the critical value).

The critical criterion value is 9,49 for the four degrees of freedom and the 0,05 significance level.

Thus, based on the above data, we confirm that the selected groups – control and experimental, at the beginning of the forming experiment had almost the same level of critical thinking, and had almost the same knowledge and skills by all criteria: motivational, content-related, activity-based and resultative.

After the experimental phase, on the contrary, a statistically significant difference between the experimental group values at the beginning and the end of the experiment can be observed. The empirical value of the Pearson's criterion, respectively, for the level of formation for the level of motivation criterion –24,184; for content-related criterion –29,519; activity-based – 32,707; resultative – 26,989, which is much higher than the critical value of the criterion 9,49.

The data obtained allow us to conclude on the statistical significance of the experiment and the difference between the control and experimental groups by all criteria, which confirm the value of our experimental research work.

As for the control group, we observe a statistically insignificant difference between the indicators at the beginning and at the end of the experiment the empirical value of the Person's criterion for the activity-based criterion – 1,917; for content-related criterion – 5,579; for motivational respectively – 0.289, which does not exceed the critical value of the criterion. As for the resultative, the empirical value of the criterion is 11,532, which is slightly higher than the critical value of the criterion 9,49.

Thus, the control group also experienced some changes, but they are statistically insignificant except for the resultative criterion. It should be noted that positive changes cannot happen, because both the control group and the experimental group of students in the process of studying in the institutions of higher education are forming the critical thinking. The results of formation of critical thinking as a whole are significant for our study.

During the experimental work, oral and written surveys were used, questionnaires, which showed that the students of the experimental group had a higher level of critical thinking by the motivational criterion than the control groups, with the experimental group having a high level of critical thinking by the activity-based, content-related and motivational criterion.

Table 9. Comparison of levels of students' critical thinking by the motivation criterion of experimental and control groups according to Pearson's criterion χ^2

The empirical value of the Pearson's criterion χ^2		
EG and CG at the beginning of the experiment	EG at the beginning and at the end of the experiment	CG at the beginning and at the end of the experiment
1,652	24,184	0,289

Table 10. Comparison of levels of students' critical thinking by the content-related criterion of experimental and control groups according to Pearson's criterion χ^2

The empirical value of th ePearson's criterion χ^2		
EG and CG at the beginning of the experiment	EG at the beginning and at the end of the experiment	CG at the beginning and at the end of the experiment
0,347	29,519	5,579

Table 11. Comparison of levels of students' critical thinking by the activity-based criterion of experimental and control groups according to Pearson's criterion χ^2

The empirical value of the Pearson's criterion χ^2		
EG and CG at the beginning of the experiment	EG at the beginning and at the end of the experiment	CG at the beginning and at the end of the experiment
2,551	32,707	1,917

Table 12. Comparison of levels of students' critical thinking by the resultative criterion of experimental and control groups according to Pearson's criterion χ^2

The empirical value of the Pearson's criterion χ^2		
EG and CG at the beginning of the experiment	EG at the beginning and at the end of the experiment	CG at the beginning and at the end of the experiment
0,779	26,989	11,532

The results of the test suggest that the pedagogical condition that has been offered has a positive effect on the process of forming students' critical thinking.

5 Conclusion

Theoretical analysis of different points of view on the problem of technology of formation of critical thinking has made it possible to conclude that scientists do not have a single point of view regarding the universal technology of formation of critical thinking. Summarizing the scientific experience on the essence of this concept, it was concluded that technology of critical thinking contains: self-analysis and self-assessment of the level of their own readiness for critical assimilation of material and analysis of the critical potential of the problem; basic knowledge about information resources, information systems, information technologies, informatization of society; the ability to independently create and develop new knowledge based on the information received; methods and techniques for

assessing the ability to think critically in specific situations, specific subject areas; evaluation of certain aspects of critical thinking, expressed in the form of specific skills to see and comprehend problems, compare their own and others' evidence in solving the problem.

The study identified the concept of "web technology" as information technology that allows the processing of web resources hosted in the web space of computer local or global networks.

We have developed the criteria and indicators of students' critical thinking: 1) motivational (motivation to search, retrieve and critically analyze certain information; constant motivations to achieve success, self-fulfillment in professional activity); 2) content-related (basic knowledge about information resources, information systems, information technologies, informatization of society; the ability to independently create and develop new knowledge based on the information received);3) activity-based (the ability to operate following the sequence of actions and complete awareness of the actions for critical analysis of new information; information insight, the ability to plan and predict possible consequences based on the information received); 4) resultative (self-assessment and self-reflection concerning the critical analysis of the information received; the ability to predict the result through critical thinking due to the information received). These criteria provide an opportunity to determine the level of socio-cultural competence for future foreign language teachers (high, sufficient, average, critical, low).

The results of the experimental study indicate the positive dynamics of the formation of critical thinking for the students of the experimental group compared to students of the control group. Comparison of the results of ascertaining and forming sections allow concluding on the effectiveness of the proposed pedagogical condition for the formation of students' critical thinking by the means of web technologies and the effectiveness of the developed remote special course for forming students' critical thinking by the means of using modern web technologies.

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