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STRATEGIES OF CRITICAL THINKING IN THE NEW UKRAINIAN SCHOOL AND IN SCHOOLS IN POLAND

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ABSTRACT

The article argues that critical thinking occupies an important place in the Concept of the New Ukrainian School and is an important cross-cutting skill that is implemented in the "canvas" of the implementation of all student competencies.

The article reveals the strategies of critical thinking, which are introduced by primary school teachers in NUS at different stages of lessons. The methods of conducting such strategies "Character map", "Associative grid (bush)", "Prediction", "Staging", "Fantastic story", "Finish, start a sentence" are described.

It is investigated that in the Republic of Poland the 5-stage model of the structure of critical thinking developed by Robert Duron, Barbara Limbach and Wendy Waugh is followed. It has been proven that in Poland critical thinking is a type of active learning. The description of exercises on development of critical thinking is given: "Think, form pairs, share", "Networks for and against", "Learning with use of technologies".

KEYWORDS

critical thinking, new Ukrainian school, strategies of critical thinking, schools of Poland, five - stage model of structure of critical thinking, exercises on development of critical thinking

INTRODUCTION

Ukraine has a Law "On Education", which provides for the comprehensive development of human as a person and the highest value of society, its talents, intellectual, creative and physical abilities, which in the future will create and ensure sustainable development of Ukraine and its European choice [9]. The Concept of the New Ukrainian School (hereinafter referred to as the NUS) clearly identifies the issue of introducing critical thinking in the "canvas" of student development. Critical thinking as a cross-

cutting skill takes place in the "canvas" of all key competencies and are important in the formation of NUS graduates [12]. Institutes of postgraduate pedagogical education in Ukraine during 2017-2018 conducted planned training for primary school teachers, who in 2018-2019 academic year will work in 1 class on a full-time basis. It was a question of raising the qualification of all primary school teachers, as they were supposed to recruit first-grade pupils to NUS (full-time form of education).

An important task is the training of highly educated professionals. Scientists Nestorenko T.P., Bordousov O.V. to some extent investigated the value of higher education for the individual [13]; Tsibulko O.S. analyzes the importance of the spiritual dimensions of modern education [17]; Chubrey O.S. determines the levels of readiness of future teachers for professional activity on the basis of the competence approach [18].

A number of scholars in their own research consider issues related to the forms, methods, technologies and teaching aids in the new Ukrainian school, general secondary education institutions (hereinafter GSEI) and higher education institutions (hereinafter - HEI Ukraine). Thus, Abramova O. investigates in detail the features of the application of non-standard lessons in the educational process [1], Tsinko S.V. focuses on the importance of pedagogical practice in the training of future teachers [18].

A number of scholars describe the possibilities of using information and communication and digital technologies in the professional training of students of the HEI of Ukraine, which is very important in the training of specialists in various fields, including primary school teachers and GSEI. In particular, Trifonova O.M. describes in general foreign and domestic experience in the field of ICT [16]; Alekseeva G.M. focuses in its research on the use of ICT in the preparation of students of pedagogical universities [6].

New learning technologies are currently being studied in Ukraine and abroad. In particular, Danisko O.V., Semenovska L. describe the genesis and content of blended learning in pedagogical theory and practice [7]; Demchenko O.P. explores the organization of quasi-professional activities of future educators of gifted children in practical classes in pedagogical disciplines [8]; Kuzminska O.G. describes the possibilities of "inverted learning" [11]. Scientists O.P.Yuzyk, L.M.Vysochan, N.V.Grytsyk described in their joint research innovative teaching methods in higher education institutions in Poland and in Ukraine [5].

The research of Kovaleva O.A. is relevant, who fully explored the psychological features of the development of social and communicative competence of teachers [10].

Pometun O. pays much attention to the study of interactive forms of learning, fully reveals the development of critical thinking [14]. Pirozhenko L.V. also describes the possibilities of introducing interactive forms of learning in a modern lesson [15]. However, there is no research that focuses on the interpretation of critical thinking strategies and a clear explanation of their essence with practical exercises and examples, which is extremely important for the work of modern teachers in NUS and in Poland. Therefore, we believe that the topic of our study is relevant.

The purpose of the study: to characterize the strategies of critical thinking used by teachers in the NUS in Ukraine and in Polish schools.

The methodology of our research is based on the principles of scientificity, reliability, objectivity, study of scientific works and sources.

Research methods: analysis of the literature related to the coverage of critical thinking; elaboration of analytical sources from the scientific literature concerning the visual presentation of critical thinking strategies, comparison.

Objectives of the study:

- 1) to reveal the strategies of critical thinking that can be applied at different stages of the lesson in the new Ukrainian school;
- 2) describe the method of working with students at school using critical thinking strategies;
- 3) describe the most typical critical strategies used in Polish schools.

MAIN PART

The list of strategies for the development of critical thinking is quite large. The teacher should select them taking into account the purpose, tasks, content of the lesson. In addition, you should take into account the peculiarities of these methods, because at certain stages of the lesson they are more effective, and therefore more appropriate. The teacher should oppose as many methods of developing critical thinking as possible and be aware of the peculiarities of their effective application. The most common methods of developing critical thinking at the main stages of the lesson are: 1) in the lesson "Challenge or introduction" - "Cluster", "Associative bush", "Tree of predictions", "Know-Want to know - Learned", "Brainstorming", "Work in pairs", "Basket of ideas" and others; 2) in the component of the lesson "Understanding, or the main part of the lesson" - "Concept map", "Thin" and "thick" questions "," Double diary "," Key words "," T-table "," Ask the author ", "Teaching by learning", "Discussion" and others; 3) in the component of the lesson "Reflection or summarizing" - "Senkan", "Cluster", "Loan position", "Logbook", "Know-Want to know - Learned", "Thought scale", "Press", "Diagram Venna"," Fishbone "and others.

In characterizing the term critical thinking, we will rely on the following definition that Critical Thinking is an approach to thinking in which special attention is paid to the ability to formulate independent statements or opinions and support them with arguments. Students show their ability to think critically when they make interpretations (ie interpret something) orally or in writing and support this with their arguments. Students use critical thinking receptively when they analyze / criticize other people's arguments.

We describe some types of critical thinking strategies. Strategy "Character map". Graphic organizer, often used in the consolidation phase; this method allows readers to write down the traits of the characters and organize them in a certain way for the purposes of comparison and opposition.

In primary school, you can very well work on the implementation of the strategy "Character Map" can be demonstrated by illustrations of the fairy tale "Little Red Riding Hood". The teacher shows students a series of illustrations to a fairy tale (three pieces) (Fig. 1) and asks questions.



Figure 1. Illustrations for the fairy tale "Little Red Riding Hood"

Questions for students can be: "Why did the mother let the girl go to her grandmother with treats?", "Why are hunters good?", "How are the characters similar and different?", "What would happen if the hunters did not come to the rescue?" "," Why does the wolf behave like that? "," Why does Grandma loves Little Red Riding Hood? "," Why did Little Red Riding Hood believe the wolf? ". The question should be gradually complicated: "If the wolf actually married Little Red Riding Hood, what would happen next?", "Did the mother act cautiously, and did the child do the right thing when she went through the woods to her grandmother?".

The teacher can ask the following question: "These words can be used to describe Little Red Riding Hood, the wolf and the hunters."

Students can write the following answers: "Little Red Riding Hood - attentive, inquisitive, loving and loved by his grandmother, obedient"; "Wolf - cunning, clever, wonderful actor, voracious, insidious, mean", "hunters are kind, compassionate, come to the rescue".

"Associative grid (bush)". Work in the same way as when making money, with the difference that word-associations can also be analyzed (you can choose the appropriate associations).

Strategy "Associative bush"

The rules for assembling an associative bush are as follows:

- 1) Write a key word or phrase in the center in the rain.
- 2) Write down any words or phrases that come to mind;
- 3) Put question marks after the part of the bush in which there is uncertainty;
- 4) Write down all the ideas that come up or that time allows.

Strategy "Change of structure". The essence of the strategy is that children present their own connections and, based on them, their own connections to what they do not yet know. Predictions can be viewed to analyze text, film.

For example, you and your students are working on the work of Volodymyr Vynnychenko "Fedko-Khalamidnyk". First of all, divide the text into parts so that they are incomplete and students have the opportunity for imagination. Start with the title: ask the children what they think the word "halamidnik" means, and then check its meaning in the dictionary. Suggest ways to solve your own discovery of what can happen in your work. Then read a special section or ask someone in the class. Ask the children about the possible further development of the plot.

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2. Tasks. Based on what nouns you have written down, formulate mentally predictions about the development of possible events with these words.

The same prediction can be used to analyze the picture. Invite the children to guess the facts about the author: what kind of person he or she lived in. Take a close look at the work: what it depicts, what colors the artist uses. Ask questions that will make students think again. For example: "What emotions did the image evoke?", "What could be the other works of this artist?" Gradually reveal the facts about the picture and its author and compare them with the predictions of students. For example, Fig.2.Two great illustrations for implementing a Prediction strategy.



Figure 2. Illustrations for the Prediction Strategy

"Staging" strategy. For the development of children's creative abilities, it is expedient to create stagings (staging strategy) based on the read works, which are very popular with children. For this purpose, good material is plot works (poetry and prose) with dialogues, which can convey the content and attitude of the participants, their intonation, come up with gestures and facial expressions. It is useful to invite children to supplement and change the dialogues. For example, you can suggest the poem "Green City". Options for working with this poem to implement the strategy "Staging": 1) the teacher reads aloud the poem, and the student must show it with gestures; 2) the teacher reads the poem,

and the student must reflect the meaning of what is heard with gestures and actions; 3) one student reads the poem, and another student shows the meaning of what he heard with gestures and movements, and others.

Green city

We will plant lindens and maples our city will be green.

We will plant in a poplar field let them grow slowly.

We will surround the school with lilacs
and the volume of the area with flowers,
Let the trees and flowers grow.

We are happy, joyful children.
The trees will grow with us,
branches will ring over the city,
Let the hazelnuts roar outside the city,
let it blossom - the Motherland flourishes!
Author: P. Voronko.

Fantastic Story Strategy. When implementing this strategy of critical thinking, students should be taught to begin sentences with words such as: If..... What would happen if....? What can never be? I dream of... I want to see....

The teacher can give as an example some own beginnings of fantastic stories. For example: "If people could fly,... ..", "What would happen if a cat could talk?", "I dream of a big man who can lift a train", "I want to see the sun fall asleep on the bed". The children must continue the fantastic story that has begun. The task can be complicated over time, the teacher should be offered the following task: "Children, you have already continued the fantastic stories that I started. And now try to start a fantastic story and offer a start to a friend at the desk (work in pairs).

Other tasks for the implementation of the strategy "Fantastic History" are possible:

- Fantasize and tell what kind of music of nature you can hear in the spring park, forest, field?
- Can you continue the poem "Melodies of Nature"? (S. Zhupanin).
- How to continue Vasyl Strutynsky's fairy tale "Living

Tale"? What new characters can be formed?

- In a series of paintings, fantasize "I want to see« ".

Strategy "Finish, start the sentence". This strategy requires that the words "If...., Then..." be included. We recommend that students first introduce the types of initial thought so that they understand the essence. For example: "If I'm sick, I'll be sure to see a doctor", "If I wake up at 7 o'clock in the morning, I'll come to school on time", "If the weather is good in the yard, then my parents and I will garden", "If my sister came back from school happy, she had a good day."

We provide only a partial list of strategies for critical thinking. It can be expanded. Analyzing the critical thinking strategies recommended by Polish scholars at school, we would like to highlight the 2006 publication on critical thinking. Authors Robert Duron, Barbara Limbach, and Wendy Waugh [2] propose a 5-step structure (see Figure 3) that can be implemented in virtually any teaching or learning setting to effectively transition

students to critical thinking. This interdisciplinary model, which builds on existing theory and best practice in cognitive development, effective learning environment and results-based assessment, provides teachers with a useful framework.

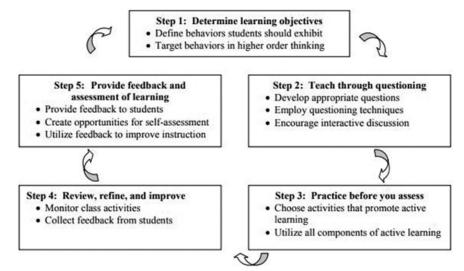


Figure 3 5-Step Model to Move Students toward Critical Thinking

In the Republic of Poland, critical thinking is largely related to the concept of active learning, where the learner becomes the center of the learning process, partially replacing the teacher. By using active learning methods, you can be sure that your students will remember more and gain a number of new skills.

In the article "How to teach critical thinking to children at school?" The authors offer the following types of exercises for the development of critical thinking:

- 1. One of the useful exercises of this type, which has a positive effect on the development of critical thinking, is "Think, form pairs, share." During it, students are asked to answer one problem. Then the groups should be divided into pairs, where both participants do not know each other very well. The next step is to discuss your ideas for couples. At the end, everyone exchanges conclusions with the whole class.
- 2. The Pros and Cons Exercise also works well. Just introduce students to the problem (or open-ended question) and ask them to prepare answers that correspond to the two most extreme possible answers. This exercise not only provokes brainstorming and decisions, but also allows you to look at the attitude that a person usually does not take into account.
- 3. The ideal complement to such exercises is "Learning with the use of technology", ie classes supported by modern inventions, such as educational work or programs for smartphones. Thanks to them, students receive additional incentives, motivation and begin to look at problems from other, alternative sides [3].

CONCLUSIONS

Thorough research allows us to say that the strategies of critical thinking in working with students GSEIand HEI of Ukraine are very important and implement the objectives of the Law of Ukraine "On Education" and the Concept of the new Ukrainian school. The most common methods used by teachers in GSEI are: "Cluster", "Associative bush", "Prediction tree", "Know-Want to learn - Learned", "Brainstorming", "Working in pairs", "Basket of ideas" and others; "Concept map", "Thin" and "thick" questions "," Double diary "," Key words "," T-table "," Ask the author "," Teaching to learn "," Discussion "and others; "Reflection or summarizing" - "Senkan", "Cluster", "Loan position", "Logbook", "Know-Want to know - Learned", "Thought scale", "Press", "Venn diagram", "Pisces" "bone" and others. Strategies "Character map", "Associative grid (bush)", "Prediction", "Staging", "Fantastic story", "Finish, start a sentence" are the most common when working with students in NUS.

The Republic of Poland follows a 5-stage structure of critical thinking developed by Robert Duron, Barbara Limbach and Wendy Waugh. It is based on the following stages: 1) determine learning objectives; 2) teach through questioning; 3) practive before assess; 4) review, refine and improve; 5) provide feedback and assessment of learning 5-Step Model to Move Students toward Critical Thinking. Step 1: Determine learning objectives; step 2: teach through questions; step 3: practice before you assess; step 4: review, refine, and improve; step 5: provide feedback and assess-ment of learning.

In Poland, critical thinking refers to active learning, where the learner becomes the center of the learning process, partially replacing the teacher. The following exercises are actively practiced, which promote the development of students' critical thinking: "Think, form pairs, share", "Networks for and against", "Learning with the use of technology". Thanks to them, students receive additional incentives, motivation and begin to look at problems from other, alternative sides. We have not provided a complete list of critical thinking strategies in NUS and exercises used in Poland.

Therefore, the prospects for further research we see a detailed consideration of the strategy in the fields of study - primary, basic, specialized in NUS and exercises for the development of critical thinking in high schools, police schools in Poland.

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СТРАТЕГІЇ КРИТИЧНОГО МИСЛЕННЯ В НОВІЙ УКРАЇНСЬКІЙ ШКОЛІ ТА У ШКОЛАХ ПОЛЬЩІ

АНОТАЦІЯ

У статті доводиться думка про те, що критичне мислення займає важливе місце в Концепції Нової української школи та є важливим наскрізним уміння, яке впроваджується у «канві» реалізації усіх компетентностей учня.

Стаття розкриває стратегії критичного мислення, які упроваджують учителі початкових класів в НУШ на різних етапах уроків. Описана методика проведення таких стратегій «Карта персонажів» (Character map), «Асоціативна сітка (кущ)», «Передбачення», «Інсценізація», «Фантастична історія», «Закінчи, розпочни речення».

Досліджено, що у Республіці Польщі дотримуються 5-ти етапної моделі структури критичного мислення, розробленої Robert Duron, Barbara Limbach and Wendy Waugh. Доведено, що у Польщі критичне мислення є видом активного навчання. Дано характеристику вправ з розвитку критичного мислення: «Думай, утворюй пари, поділися», «Мережі за і проти», «Навчання з використанням технологій».

КЛЮЧОВІ СЛОВА

критичне мислення, нова українська школа, стратегії критичного мислення, школи Польщі, п'яти - етапна модель структури критичного мислення, вправи з розвитку критичного мислення.

STRATEGIE KRYTYCZNEGO MYŚLENIA W NOWEJ UKRA-IŃSKIEJ SZKOLE I W SZKOŁACH W POLSCE

STRESZCZENIE

Artykuł argumentuje, że krytyczne myślenie zajmuje ważne miejsce w Koncepcji Nowej Ukraińskiej Szkoły(NUS) i jest ważną umiejętnością przekrojową, która jest realizowana na "polu" wdrażania wszystkich kompetencji uczniów.

W artykule przedstawiono strategie krytycznego myślenia, które są wprowadzane przez nauczycieli szkół podstawowych w NUS, na różnych etapach zajęć. Opisano metody realizacji takich strategii: "Mapa postaci", "Siatka asocjacyjna (krzak)", "Przewidywanie", "Inscenizacja", "Fantastyczna historia", "Zakończ, zacznij zdanie".

Stwierdzono, że Rzeczpospolita Polska trzyma się pięciostopniowego modelu struktury myślenia krytycznego, opracowanego przez Roberta Durona, Barbarę Limbach i Wendy Waugh. Udowodniono, że w Polsce krytyczne myślenie jest rodzajem aktywnego uczenia się. Podano opis ćwiczeń z rozwoju krytycznego myślenia: "Myśl, formuj w pary, dziel się", "Sieci za i przeciw", "Uczenie się z wykorzystaniem technologii".

SŁOWA KLUCZOWE

krytyczne myślenie, nowa ukraińska szkoła, strategie krytycznego myślenia, polskie szkoły, pięciostopniowy model struktury krytycznego myślenia, ćwiczenia z rozwoju krytycznego myślenia



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