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THE TECHNOLOGY OF ENHANCING LOGICAL REASONING AND CRITICAL THINKING THROUGH UZBEK FOLKTALES AND FOLK GAMES

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Abstract. Modern education is characterized by complex curricula, not only in secondary school, but also in primary school, with an increased volume of information. As a result, young students are suffering from high psychological and physical stress. Psychologists have identified problems with increased emotionality, activity, fatigue from monotony, and perception of the world around them. Education in primary school should be built taking into account these features, and its basis can be integrated education. In integrated education, we can understand the unity of educational activities with other types of activities that are relevant for this age: art, music, labor, physical education, games, and others. This article proposes technologies for enhancing logical reasoning and critical thinking through Uzbek folktales and national games.

Key words: logical reasoning, critical thinking, Uzbek folktales, Uzbek folk games

Introduction. Fairy tales play a special role in developing students' logical thinking in English lessons for primary grades. When choosing fairy tales for primary grades, using the pedagogical technology "shorter than longer" when choosing fairy tales, it is possible to develop not only students' logical and critical thinking, but also reading, writing, speaking and listening.

For example, using fairy tales, a problematic, research pedagogical technology called "The Best Fairy Tale Competition" can develop students' logical and critical thinking.

After several lessons with the participation of fairy tales, students are required to recommend one of the Uzbek folk tales for the "The Best Fairy Tale" competition. Students can complete this project in groups of 4 people. Students are provided with the competition conditions. We know that organizing English lessons using game technology for primary school students gives high results. Therefore, it is recommended to use the following Uzbek folk games in English lessons.

Methods. The technology of enhancing logical reasoning and critical thinking has been adapted to the needs of students of elementary classes using Uzbek folk tales and folk games.

“Take the five finger challenge” tecahnology. This technique can be used with elementary school students after reading the story "The Wild Cat". Students are asked to draw five fingers (2) and are given the task of writing the answers to the following questions on the fingers: Think about the wild cat. What makes the wild cat clever? What could the wild cat do to get better? Think about the fox, the bear, and the wolf. What makes them stupid? What could they do to get better? Using this technology, students can develop logical and critical thinking. The following technologies can be used in developmental education technology:

1. Venn diagram. We can use this technology by comparing two fairy tale characters. In this way, students develop the ability to synthesize, which is part of logical and critical thinking.
2. Argument analysis. Students are given several controversial statements based on the fairy tale they read. They are required to analyze the arguments given.

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3. Positive, negative, interesting technology (Plus Minus Interesting). We can use this brainstorming technology to make logically based decisions. Students are given a positive, negative interesting table. Decisions are given according to the fairy tale they read, and students are required to think about the positive, negative, and interesting aspects of these decisions and fill in the table.

4. Character Press Conference. At a press conference, some students play the role of journalists, while others play the role of characters from a fairy tale[1].

"Prejudice" is the main obstacle to logical and critical thinking. The following technology that prevents students from thinking incorrectly can be used with the fairy tale "Zumrad and Qimmat".

Stereotypes: The stepdaughter is always good, the stepmother is always bad, the younger son is always smart, and the older one is stupid. Why is this so? Maybe it's the other way around? Maybe Qimmat also has good sides. Or Zumrad has bad sides. Write down the good sides of Qimmat and the bad sides of Zumrad.

"Character Autopsy" is one of the technologies that helps to study and research the character traits, thoughts, and main processes of the characters after reading fairy tales and anecdotes.

Through this technology, students immerse themselves in the mind, heart, and thoughts of the hero. A postmortem analysis of the characters' actions and words is performed. During the analysis, students dissect the characters' actions and personality traits to better understand who they are and why they behave the way they do. This technology develops students' logical thinking, and through critical analysis, students develop new interpretations of the story and find solutions to the characters' hidden problems. In addition, this logical and critical thinking technology helps students develop analytical skills that are important for academic and real-world success. In this technology, the teacher should select body maps that are appropriate for students, and determine which character traits students will analyze. For example:

Head: What is the character thinking?
Shoulders: What weight is the character carrying?
Heart: What is the character feeling?
Hands: What is the character doing?
Feet: Where is the character going?

It is necessary to correctly select which tasks are logically correct for a particular fairy tale, since textual evidence is needed to support the students' analysis. The "Character autopsy" technology can be used with many fairy tales.

Fish skeleton. Work in groups. A fish model drawing is distributed. Factors are written on the top of the drawing. For example, in the example of the fairy tale "Zumrad and the Precious": factors that influenced the stepmother's decision to send Zumrad astray to the forest. Factors that influenced the father's inability to oppose the stepmother's decision to send Zumrad.

Based on each Uzbek folk tale, Reading Graffiti (during the reading of the tale, students mark their thoughts, questions, or feelings with symbols, pictures, or words/draw pictures that come to their visual imagination while reading the tale), Image-Scaping (drawing imagined images while reading the tale), Guided Imagery (Guided imagery helps students create conscious images while reading the text. It encourages students to imagine the environment in which the text is set, the role of one of the characters, or the era in which the hero of the tale lives), Storyboarding in Person (in which students show fragments of the tale through frozen images of a certain scene of the tale), and Logographic Cues (Logographic signs are visual symbols used to help students understand the text given. Visual symbols that help them understand the development of the tale are introduced into the tale. These

[1] Solijonova D. Character Press Conference. English Teaching Forum 2021, Volume 59, Number 3. P. 45-48.

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symbols are guiding signs and help students understand the characters, conflict or shows the environment[2].

Using the above technologies, students can develop their logical thinking skills in English lessons.

When analyzing the 4th grade "Guess What" textbook, it was found that the stories were presented through pictures. Therefore, we decided to use "comics" to develop logical thinking through Khodja Nasreddin stories. Khodja Nasreddin stories anecdotes suitable for elementary school students were selected, and comics were created by drawing appropriate pictures for them. The following exercises were used through these comics:

Table 1.

Exercises with the participation of anecdotes based on developmental technology

Khodja Nasreddin stories	Guided story telling
	Ability. Present ability. Past and future ability
	Buying and selling
	Describing
	What happens next?
	Talk about the pictures
	Hiding and finding
	Black mind-reading trick
	True. False
	Correct me
	Problem-solving
Activities for new anecdotes	Word-Level Reading. Sentence-Level Reading. Anecdote-Level Reading
	Re-ordered Anecdotes
	Dictogloss
	Pictogloss
	Illustration Matching
	During Reading Activities. Read and Walk. Skim, Scan, and Run. The Five Senses. Gap-Fill Predictions. Word Bank. Re-ordered Anecdotes Part Two
	Post-Reading Activities. Memory Game. Giving Advice. Summarize the Text. Personal Experiences
	Match the punchlines of Khodja Nasriddin anecdotes.

Before playing these games, students should have mastered the language material appropriate for these games:

Table 2.

Uzbek folk games and language material

Uzbek Folk Games		
The name of the game	**Objective**	**Language material**
White poplar or Blue poplar (Imperative	To act quickly; To develop logical thinking.	White poplar, blue poplar Whom do you want from us?

[2] Salas S., Williams B., Mraz M., Adrane S. Reading Eyes Wide Shut: Visualization, Language Learners, and Texts. English Teaching Forum, Volume 59, Number 1. 8 p.

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mood, to strengthen the present simple)		Give us……
Even or odd (in English lessons when teaching counting in elementary grades)	Finding a hidden object through logical thinking; learning to count	odd or even find in which hand one, two, three, four, five, six, seven, eight, nine, ten.
Hommapish (qualities, imperative mood)	Increase vocabulary; think logically and analyze and evaluate.	khommapish, atala pish. Ripen quick. Ripen quicker.
Dragonfly	Logical thinking; learning to make requests; pronouncing words correctly; learning the functions of objects.	Could you please give us the needle? Auntie, please give us a needle. I don`t have any needle. I don`t have the big needle. No my children, I don't have any needle. Children will run. If you catch them, you can take them. Forgive them. Children will not do that anymore.
Circular whip	To develop logical thinking; to accustom children to be alert and agile.	Counting
Bird's head	Develop logical thinking; increase vocabulary.	the head of the bird is so big
Find my middle hand.	Develop logical thinking; increase vocabulary.	Find the middle finger. I sat and sewed I lost two needles lya-lya-lya let a boy/girl go out his/her name is Olim/Gulnara
The elm tree is a tree that grows in abundance.	Develop listening and perceptual skills; increase vocabulary; develop logical thinking.	tapur-tupur wood take your choice and run away tapir-tupur wood take your choice
If you can find it, keep it.	Fast action; increased sensitivity; logical thinking.	Find it. If you can`t find stay.
Boylandi	Develops intonation; arouses interest in music; introduces children to the names and functions of animals; develops logical thinking.	Tied, tied We tied Ra'no why did we tie Ra'no Tied for dancing.
Sopolak	To act with agility; To develop logical thinking.	Correct Wrong One, two, three, four, five, six,

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		seven, eight, nine ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty.
Xurmacha bog‘i (Date palm grove)	Playing in a team; acting quickly; developing logical thinking.	Xurmacha garden spilled oil it's okay if it spills My neighbor has a dog he has a hole in his ear
Run, my child, a bird has come.	Playing in a team; acting quickly; developing logical thinking.	The names of animals Run, the bird came.
Hide and seek	Playing in a team; acting quickly; developing logical thinking.	One, two, three, four, five, six, seven, eight, nine ten, eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen, twenty.
Telling nightingale	Learning about domestic and wild animals; playing in a team; moving quickly; developing logical thinking	Tell me nightingale, how does….walk? Animal names.

Uzbek folk games play an important role in the education of primary school students, especially in developing logical and critical thinking skills. “White Poplar or Blue Poplar,” “Even or Odd,” “Khommapish,” “Ninachi,” and others serve to strengthen students’ analytical analysis, problem-solving, understanding of cause-and-effect relationships, and developing alternative solutions.

1. In order to develop analytical and critical analysis skills, teachers can use the following games:

Playing the “Even or Odd” game, students draw logical conclusions to find a hidden object (for example, which hand has an even or odd amount of something).

In the “Find My Middle Hand” game, analytical thinking and concentration are developed by identifying the middle finger.

2. Understanding cause-and-effect relationships:

Through the “Dragonfly” game, students ask for a needle and predict the consequences of actions (running or “forgiving”).

Through the “Circular Darra” game, counting and understanding logical order through rules help analyze the cause-and-effect chain.

3. Uzbek folk games used to develop creative thinking:

Through the “Tapur-tupur Kayragoch” game, quick decision-making skills and finding alternative solutions are developed.

The “Date Garden” game requires interactive problem-solving and creative approaches.

4. Predicting practical problems:

The games “Run, my son, the bird has come” and “If you find it, stay put” involve quick decision-making and predicting outcomes.

5. Memory and Logical Understanding:

The games “Sopolak” and “Bekinmachok” develop memory and understanding of logical order through counting in English.

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Results and discussion. According to the results obtained on the basis of exercises developing logical reasoning through fairy tales in English lessons, in the Bukhara region, the result obtained without the method was 47%, while the result obtained with the method was 56%, which was 13% higher. According to the results in the Samarkand region, the result was 11% higher. In the Navoi region, the result obtained without the method was 51%, which was 12% lower than the result obtained with the method.

According to the results obtained with the participation of Khoja Nasriddin stories, based on the results obtained in the Bukhara region, the result obtained without the method was 9% lower than the result obtained with the method (50% without the method and 59% with the method). In the Samarkand region, this indicator was also 10%, while the result obtained without the method was 48, while the result obtained with the method was 58%. While the indicator in Navoi region was 51% without the method, the result obtained with the method was 62% - an 11% higher result.

In the pilot test involving exercises for developing logical thinking through proverbs, the result obtained with the method in Bukhara region was approximately 56%, which is 9% higher than the result obtained without the method. The result obtained with the method in Samarkand region was also higher than the result obtained without the method, representing an 11% increase. The highest result was recorded in Navoi region: approximately 49% without the method and more than 62% with the method. Thus, the increase in Navoi region was 13%.

In the process of developing logical thinking through riddles, the result obtained with the method was approximately 9%, 12% and 13% higher than the result obtained without the method in Bukhara, Samarkand and Navoi regions.

Conclusion. Uzbek folk tales and games are an important tool for developing logical and critical thinking, strengthening analytical analysis, creative solutions and predicting real-life problems. At the same time, they develop language, social skills and moral education, making the learning process interesting.

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