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# ANALYSIS OF STORY LINE USING SITUATIONAL GAME "YES-NO"

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# ANALYSIS OF STORY LINE USING SITUATIONAL GAME "YES-NO"

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## **1. The problem of teaching pre-school kids how to analyze literature**

Oral preparation of children for school was and still is a problem in pre-school education. One of the most complicated tasks is forming in a kid skills of understanding literature.

The traditional method gives a recommendation to increase a child's understanding of a story line through increasing time of analyzing the story. "The longer and in the more detail you take apart a text with a kid, the better he will understand it," says the rule number one for working with a text.

This rule is actualized through detailed discussion of casual connections of characters' communications and finding out the characters' basic features. When work is conducted according to this rule, a child should answer the questions asked about a specific text.

For example, typical questions to the children after reading *The Little Red Riding Hood*:

- What was the girl told by her mother?
- Why was the wolf able to eat the girl's grandmother?
- Why didn't the wolf eat the girl right away? Why was he able to eat her later?
- And so on...

This method has serious enough minuses:

1. Because of their psycho-physiological characteristics, children quickly lose interest to the analysis of the line of a story.
2. When discussing specific literature situations, they cannot always see similar constructions in stories and cannot draw analogies between various situations (find analogies between various stories). In other words, the method does not develop in children an ability to generalize specific situations and to find analogies.
3. Pre-school kids have difficulties in independent evaluation of characters according to their features and contacts.

## **2. An abstract model of text and the algorithm of decoding it**

We have a DIDACTIC TASK: to teach a child to retell a story line briefly and accurately, and form in the child a lasting inclination towards working with a text.

To find optimal tools for solving this problem, we must first understand what a STORY LINE of a literature work is.

In our definition, it is a MODEL, which has a high level of abstraction.

Let us explain. A model of a specific situation (real or imaginary), described by someone, is understood here as a literature work. Working with a story line implies a child going from a specific described situation to a HIGH LEVEL OF ABSTRACTION. This is one of the most important characteristics of creative thinking, which may be developed using the proposed methodic. Formation of such ability allows to solve the problem that is stated above.

To ensure in the child a lasting interest for the describing the characteristics of the plot of a story, we use a game "Yes-No" (N.N. Khomenko, *Usage of the game "Yes-No" for teaching TRIZ*). Strategy of the game is similar to the general strategic line of problem solving. It allows to narrow the area of search without looking at every version of a solution when working with X number of objects and their intercourse with other object in a situation. Therefore, the proposed technique also forms in students another skill of a great importance: narrowing the area of search. This skill noticeably increases the outcome of intellectual activity of problem solving.

To decode an abstract model of a story, the following algorithm is proposed:

1. The leader gives a vague code of a story. For example: "She listened to her and left home". (*The Little Red Riding Hood*)
2. The basic rule of the game is outlined: the questions should be put in such a form, that the leader can answer "Yes" or "No" to them. Only general questions are

accepted. Questions that go through specific names of characters or stories are left unanswered.

3. The stream of questions is structured according to an algorithm of finding out details (characteristics) of a situation:

3.1. Level of reality (whether it is a situation that describes an existing fact from children's experience, or a fictional situation described in a literature work). In this example (here) it is, of course, an imaginary story.

3.2. Genre of a text (a poem, a novel, a fairy tale, etc.) Here: a fairy tale.

3.3. Characteristics of the first object (natural or man-made, shape, size, color, material, etc.) Here: an alive object made naturally, a girl.

3.4. Characteristics of the second object. Here: an alive object made naturally, a woman.

3.5. Place of action. Here: "she left home" for her grandmother's.

3.6. Connections between objects. Here: the girl and the woman were mother and daughter

3.7. Time. Here: summer.

3.8. Characteristics of secondary or implied objects. Here: the girl talked to the wolf, then to her grandmother.

4. After each step a piece of text with established features is "constructed". It is a very important part of the methodic. It reflects the process of solving real "grown-ups" problem: after every several cycles question-answer, some additional information is received. That information was not present in the initial version of

the situation, so we must reformulate the initial version, including the new information, and continue working with the corrected problem. Since situational problems usually have open conditions, which don't have enough necessary information, you have to find it. Sometimes, on a contrary, a problem may contain excess information, unneeded to find a solution. Such information should be omitted. In other words, this methodic also forms in students skills for specification of a problematic situation. Here: after finding out the characteristics of the first object, a child says, "The girl listened to her and left home". After finding out the place of action: "The girl listened to her mother and left home to visit her grandmother on the other side of the woods". Therefore, the problem now looks more detailed and gives us a few clues to its solution.

5. The text with all the found out characteristics is put by the children in the following way: "The girl listened to her mother and did as she said, so once, during the summer, she left home and went through the woods to visit her grandmother. On her way she met the wolf" (only found out characteristics may be included into the text). The changed problem allows to recognize easily the fairy tale it is based on. The children are not going to have any difficulties naming the story: it is *Little Red Riding Hood*. This simple model accurately enough presents basic steps of problem solving: analysis and changing of the problem; gathering information needed for solving the problem; combining separated fragments into one, which allows to see the solution. The problem is solved, but the work is not finished.

6. Analysis of other stories with similar model of high level of abstraction is conducted. Here: *Snow White and seven dwarfs* (Snow White listened to her step-mother and went into the woods), *Sword in the Stone*, etc. This stage is necessary as a training to find analogies.

7. Let's get back to the initial problem (here - *Little Red Riding Hood*). Children receive a task to understand the story line and make up a new, more accurate "Yes-No" problem. Is it complete: "She listened to her and left home"? The girl left home also because her grandmother was ill, and the girl wanted to bring her grandmother presents. Children compose more accurate "Yes-No" problems: "She left home to see someone who needed help", "she left home because someone close to her was sick", "she got in trouble because she talked to a stranger", "she caused problems to someone close to her, but then they got help." This is a transition to the making up new versions of the riddle by the children.

8. The last phase is reflection on the versions of the problem composed by children. A version is found that reflects most accurately the story line of a novel or a fairy tale. In the given case, the model that fits *The Little Red Riding Hood* the best is: "She got in trouble because she talked to a stranger".

### **3. Methodic of teaching pre-school students to compose riddles for the game of "Yes-No" using literature works.**

#### THE MAIN GOALS:

- Teaching children to code contents of familiar literature works, which leads to formation of skills necessary to transit from a specific situation to the abstract description.
- Formation of ability to ask question systematically, purposefully.
- Development of abilities to analyze and interpret situations.



Along with those advantages, variety of problems is solved: practice in conversation, getting rid of psychological inhibitions, stimulating children's activity, establishing creative atmosphere in the group and some other pedagogical problems that are usual for this age group.

Algorithms of creating riddles, which are used in the proposed methodic, give stable enough results. Children learn to think about the story line of literature works, describe hidden connections between objects. While coding a general idea of a story, they conduct analysis of the contents.

Time spent solving and composing problems for the game of "Yes-No" wakes up lasting interest for the process of understanding of literature works, in children as well as in pedagogues.

As we can see from the algorithm described in the second chapter, the methodic includes two interconnected stages:

1. Children solve a text, coded by the pedagogue. Basic teaching method here is the game of "Yes-No".
2. Children compose their own texts of problems for the game of "Yes-No". Basic teaching method is using algorithms of creating literature riddles.

### **3.1. The process of solving texts coded by the pedagogue.**

THE MAIN GOAL:

- Development of skills to define the whole by separate fragments.
- Formation of ability to ask questions designed to narrow the search area.

**Necessary Condition:**

Children have to be familiar with basic rules of the game of "Yes-No".

**Process of the game:**

Children are asked to solve a riddle. To do so, players may ask a leader questions that he can answer "Yes", "No", "Yes and no" (if there is a contradiction), "Does not matter" (if the question is not important for the solution) or "No information" (if the story does not contain required information).

The leader stimulates children's abilities to compose generalized questions.

A child, who starts to name different characters and stories before time, is out.

Here are some lines of questions, designed to decode a situation and composed according to a literature work:

- Level of reality.
- Genre of a literature work.
- Characteristics of every object in the story.
- Time.
- Situational connections between objects.
- Place.
- Characteristics of secondary objects.

Children solve the problem by asking questions, then explain the level to which the solved problem responds to the line of its story. Children are allowed to ask the questions in any order.

It is important that the questions do not just name different stories. The process of playing the "Yes-No" game is teaching to ask questions that narrow the search area without going through myriad of versions. That forms skills of classification, since after we classify characteristics it becomes possible to work with the whole groups of features instead of going through each one individually. Therefore, the game of "Yes-No" allows to form another skill that is important for problem solving - the skill of generalization and grouping, the ability to classify a random infinite of characteristics and objects.

For example: the pedagogue announces a riddle: "Somebody did not listen to a grown-up and fell".

Here are some questions that the pedagogue answered "yes" to:

- Is it from a literature work?
- A legend?
- Is "somebody" a live thing?
- A boy?
- Is "grown-up" related to him?
- His father?
- He warned him not to go too high?

- The final version of the situation: "In a legend a master warned his son not to fly too high, but the boy did not listen, flew up to the sun, fell down and died."

A better version was created: "Somebody died because he was disobedient and liked risk".

### **3.2. The process of creation texts of "Yes-No" problems by children**

THE MAIN GOAL:

Development of children's ability to code the basic idea of a story line.

#### **A necessary condition:**

this should be group work, organized after the leader's version of the problem is solved.

#### **Work process:**

Children are asked to compose another version of the same riddle by various methods:

1. Change of action. Example: "His father made wings, and he flew away".
2. Bringing in the character's personality. Example: "He died, because he was not obedient".
3. Changing of a place of action. Example: "He lived with his father on his island, but then escaped".
4. Formulating a riddle through bringing in a third party. Example: "He and his father were kept prisoners by a powerful man".

5. Change of features with time. Example: "First he helped his father with his work, but then disobeyed him".

The process of work becomes more individual with time. New versions are composed first by the whole collective, then by subgroups and eventually by individuals.

As children go through these stages, they understand the basic model of coding a text of a literature work:

<b>OBJECT</b>	<b>ACTION</b>	<b>RESULTS</b>
He, She, They, Somebody, Something	Did what? Do what? Will do what?	For the object #1, object #2, or a group of objects,

**Example #1:**

A model of the fairy tale *Three little pigs* composed by the pedagogue: "He (object #1) only wanted to live through the winter (action) and burned a visitor's skin (results with object #2)".

Changes, made by children: "They wanted to survive and got rid of somebody". "One was brave, but the others were cowards". "He wanted to eat, but fell into a pot".

### **Example #2:**

A model of fairy tale *Wind in the Willows*, pedagogue's version: "He left his underground house and stayed by the river."

The text, changed by the children: "He left his home and found something new";  
"He was brave and found new friends".

#### **4. Riddles composed by children ages five to seven**

- "Somebody's cleverness helped his master to get rich". (*Puss in the Boots*)
- "She liked him and he changed". (*Beauty and the Beast*)
- "She came into somebody else's apartment and messed up." (*Three Bears*)
- He would like to arrange good dinner but fall down to something large" (*Three Little Pigs*)
- "A family was injured materially because they didn't close the door." (*Three Bears*)
- He would like to arrange good dinner but fall down to something large" (*Three Little Pigs*)

Examples, presented in this article, are taken from the work with children in of cities: Tolyatti, Samara and Ulyanovsk.(Russia).

### **CONCLUSION**

Described approach may be used as a promising base to build techniques for teaching children to understand literature works and simultaneously develop certain skills that are useful for problem solving process.