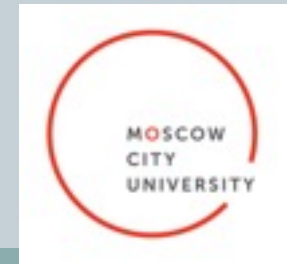


Dialectical thinking of University students and the possibilities of it's development through positional method of teaching.



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DEN HAAG, MAY 27 2016

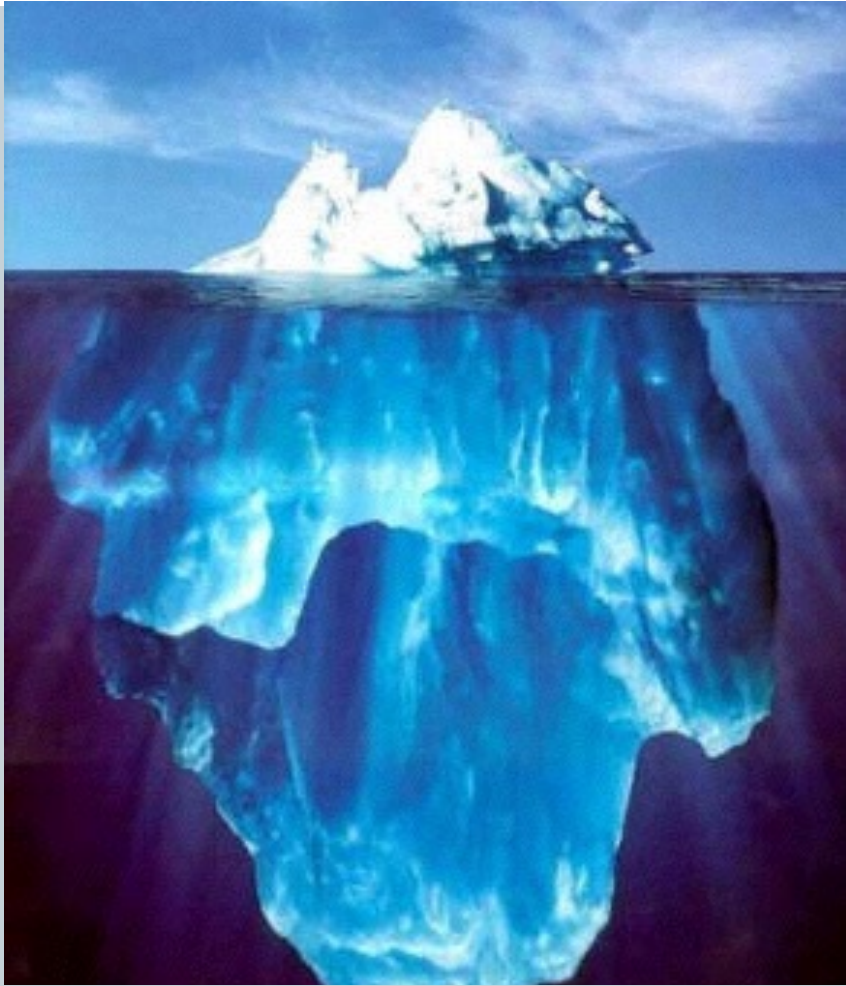


DIALECTICAL THINKING



a system of special dialectical mental actions that allow to operate productively with opposites

STRUCTURAL-DIALECTICAL APPROACH



- Dialectical thinking is operating with opposites
- Dialectical structures are universal, can be applied to any content (language, nature)
- Formal and dialectical structures are different dimensions of thinking

Both children and adults can operate with them

Formal logic vs Dialectical logic

J. Piaget

«Logic is the mirror of thinking».

Formal logic: opposites exclude each other.



Dialectical logic is the logic of creativity

Dialectical thinking as a system of the special mental actions (N.Veraksa)



DIALECTICAL THINKING

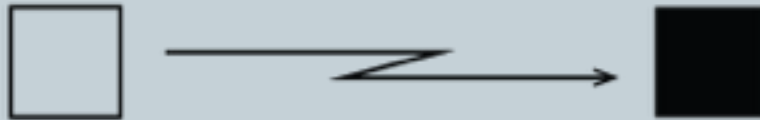


- Productive solving of the tasks.
- Reflecting the development process.
- Creativity.

M.C.Escher “Metamorphosis II”



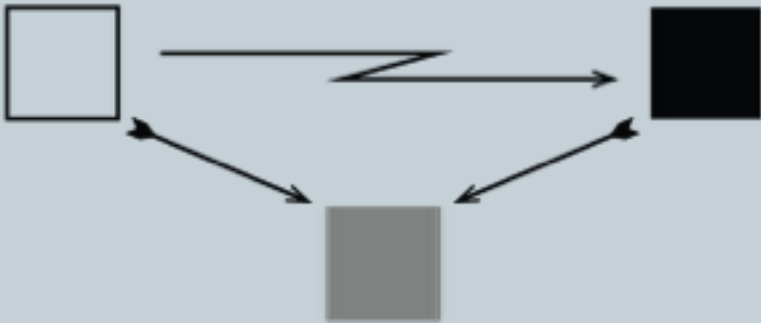
Dialectical transformation



For any objects, ideas, phenomena, situations a person finds oppositional ones.

Dialectical mediation.

- For any pair of oppositions a person finds or constructs an object where those oppositions are present simultaneously.



Mollie Faustman
“The girl in the
fishing net”



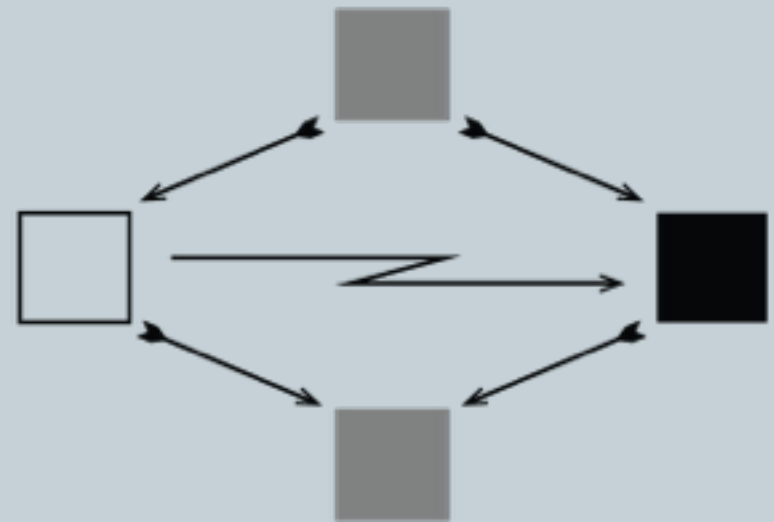
More of dialectical mental actions



- **Dialectical integration.** In a structure of any object or situation the person establishes the presence of mutually disaffirming each other oppositions.
- **Dialectical seriation.** The person regards any object or situation as an intermedium from the initial condition to the final one, oppositional for the first.
- **Dialectical transaction.** While exploration of a process, the person can regard it in reverse order: which was initially considered as an end of the process is analyzed as its beginning, and the initial condition is understood as the final one.
- **Dialectical change of alternative.** The person regards an object in the context of one pair of oppositions, and in the context of another pair.
- Etc...

Dialectical structure

- seeing of the opposites = the structure of the situation (it's much more easy to next step but not opposite);
- seeing of the mediating point connecting opposites;
- reversing of the process: to see oppositions of the direction of transformation;
- seeing of the identity and not identity of the beginning and the end of the process.



Understanding of dialectical content and dialectical thinking

83 students of the 1-st grade of Moscow psychology-pedagogical University

Significant correlation ($p=0,37$; $P < 0,05$) between

- the ability of students to understand dialectical structures within scientific content
- The level of development of creative (dialectical) thinking.

Conclusion:

- Dialectical thinking is important for comprehension of scientific texts

POSITIONAL METHOD OF TEACHING FOR UNIVERSITY STUDENTS.

Lev Vygotsky: if we want to develop the child's cultural, we have to offer him a specific means, which will help him to learn it.

Adult reader also uses certain tools: he conceptualizes text, finds main ideas in the text, builds a relational scheme of the context, asks questions and builds oppositions.



POSITIONAL METHOD OF TEACHING FOR UNIVERSITY STUDENTS.



- **“Concept”** – students have to select the *main* concepts of the text.
- **“Idea”** - students have to formulate the *main* ideas of the text.
- **“Schema”** – students have to present a graphic representation of the main elements of the text.
- **”Apologist”** - students have to find and defend elements (ideas, concepts) that are very close to them.

POSITIONAL METHOD OF TEACHING FOR UNIVERSITY STUDENTS.



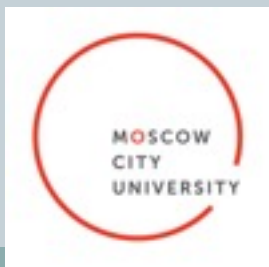
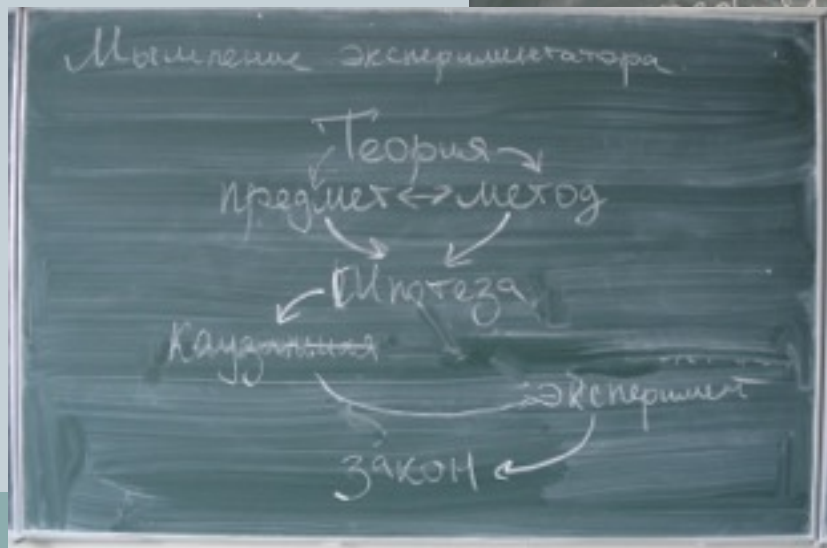
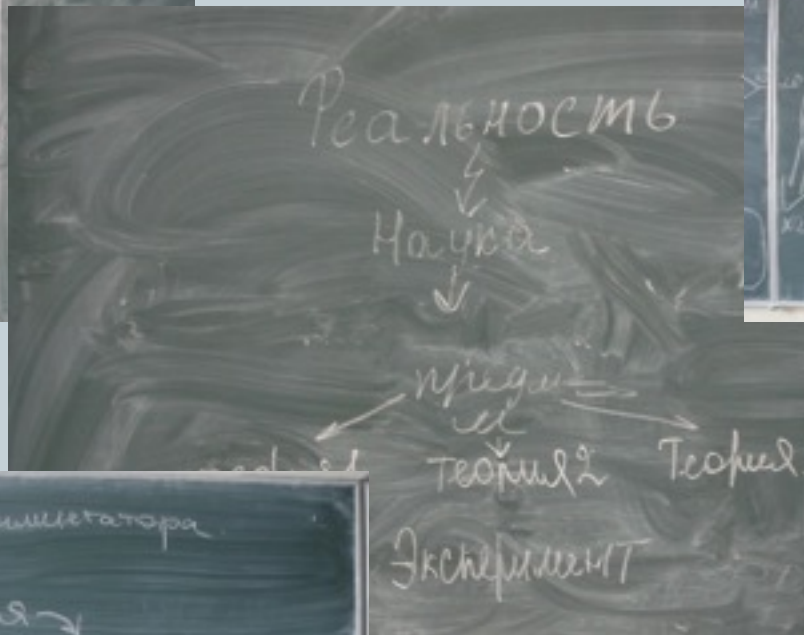
- **“Opposition” - students have to find contradictions and discrepancies of the text. The elements that they are disagree with.**
- **“Dialectic” - students have to find the “root” of new idea or phenomena and describe the type of transformation that led to its appearance.**
- **“Question” - students have to ask “smart questions” to every other position.**

POSITIONAL METHOD OF TEACHING FOR UNIVERSITY STUDENTS.

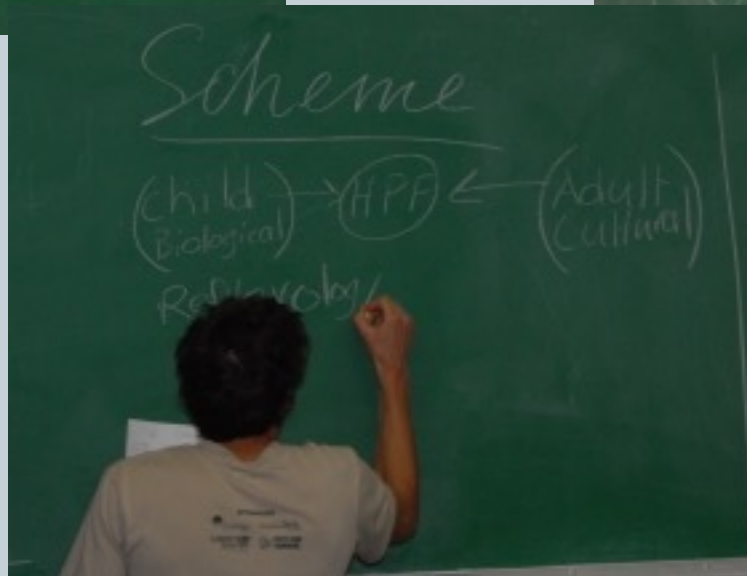


- **“Symbol” - students have to describe main ideas of the text in symbolic way. He has to draw a symbol to represent the idea.**
- **“Poet” - students have to make a poem that would reflect the idea in the text.**
- **“Theater” – students have to create and play any theatrical miniature, also reflecting the studied issues.**

POSITIONAL METHOD OF TEACHING FOR UNIVERSITY STUDENTS.



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POSITIONAL METHOD OF TEACHING FOR UNIVERSITY STUDENTS.

Research design:

- 1 academic year;
- same department;
- same lectures;
- 1 experimental and 1 control group

Research results:

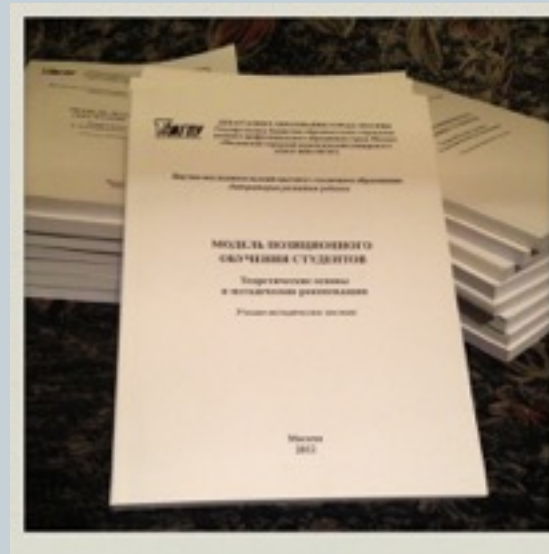
significant difference between the levels of development of dialectical thinking in the experimental group before and after the intervention and no significant difference in the control group.

PUBLICATIONS

Olga Shiyan, Igor Shiyan POSITIONAL METHOD OF TEACHING FOR UNIVERSITY STUDENTS.

- Diotome. Revue internationale de didactique de la philosophie. № 50, Octobre, 2011.
- <http://www.educ-revues.fr/DIOTIME/AffichageDocument.aspx?iddoc=39754&pos=0>

About 50 articles and the book
in Russian and Ukrainian



THANK YOU!



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