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# "To Teach Learning…" or on the Culture of Thinking of Today's Students

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**Abstract**

This article addresses a challenge of forming the culture of thinking in the learners. It demonstrates that an indicator of the progress of this quality is the students' ability to operate strings of inferences and to build a conceptual semantic web. The article considers outcomes of teaching classes with a use of a compound approach, that is, a combination of an interactive lecture and a heuristic conversation. Analysis of the outcomes was effected through a questionnaire survey with a subsequent interpretation of the outcomes by means of building a conceptual semantic web that the student had formed upon completion of the cycle of classes. The findings were analyzed from the viewpoint of the clip thinking concept and the "oversimplified mind" concept.


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*Keywords:* culture of thinking; conceptual semantic web; interactive lecture; heuristic conversation; clip thinking; oversimplified mind

## 1. Introduction

Relevance of the task to enhance the educational process' quality has especially increased in recent times, when the existing system was condemned as inadequate and a decision was made on the necessity to change the educational paradigm switching from knowledge and skills to competences. Nevertheless, fundamental truths remain effective. One of such truths is expressed by the maxima: the goal of the higher education is not in transferring particular knowledge but in teaching a student to learn. The challenge of "teaching to learn…" cannot

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be met without forming a culture of thinking in a student. The above also remains valid in new educational paradigm based on competencies: for instance, the Federal State Educational Standard FSES-3, standard requirements for bachelor's degree of management directly sets a goal of mastering the culture of thinking. Similar statements can be found in other education standards (FGOS-3, 2010) for bachelor's degree of other directions.

Comprehension of what the culture of thinking is would be inseparable from the substantive interpretation of the process of thinking. According to the classical ideahuman thinking proceeds in a form of judgments and inferences. A judgment is a form of thinking that reflects objects of reality in their connections and relations. Every judgment is a separate thought about something or other. A consistent logical connection between a number of judgments required for addressing reflective tasks, realize something, or find an answer to a question is called a reasoning. A reasoning is of a practical importance only when it leads to a certain conclusion or an inference. The inference will be that answer to the question, an outcome of the search for a thought. An inference is a conclusion derived out of several judgments that gives us new knowledge about items and events of the objectified world (Getmanova, 1995). On this basis, it can be assumed that the culture of thinking is, above all, an ability to construct reasoning, that is, sequential strings of inferences.

It is unlikely for us to know reliably how the actual inferences process proceeds, but the ultimate form of the presentation of the thinking process outcomes is well known. Specialists in cognitive psychology maintain that the semantic web demonstrated on Fig. 1 is the formalized type of the knowledge presentation.

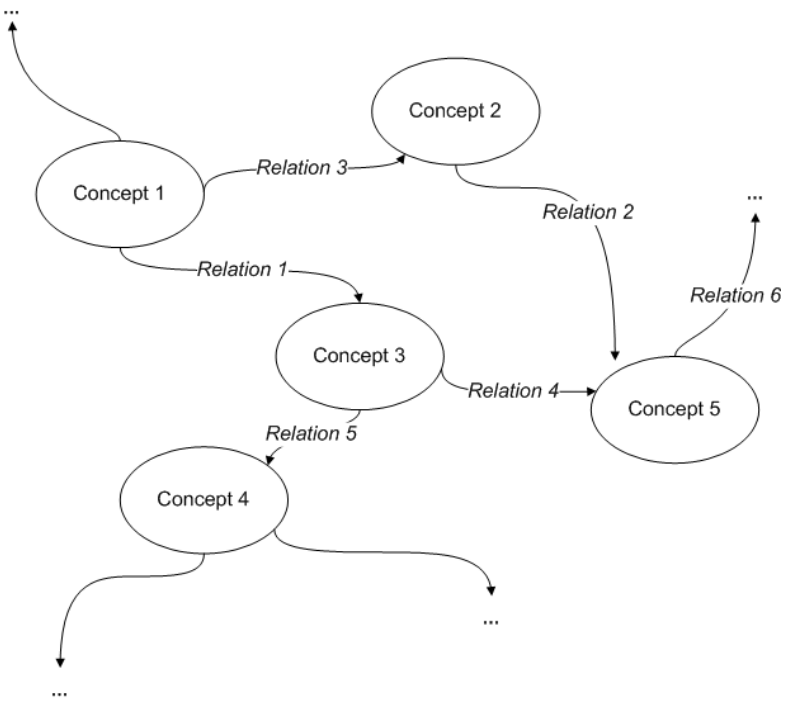


Figure 1. Example of semantic web organization
Source: Authors

Thus, R. Solso (2006) calls the semantic web a method to "represent knowledge" and B.M.Velichkovskiy (2006) calls it a way to "categorize knowledge". A standard of ontological simulation of IDEF5 application domain that is similarly based on the semantic web is also known (IDEF5 Method Report, 1994). In any case, an existence of the direct correlation between the presence of the culture of thinking and the ability to operate the conceptual semantic web may be assumed.

Therefore, assessing the student's ability to build a conceptual semantic web, we appreciate its culture of thinking. This is the subject matter addressed by this article. Next will be described the author's method to perform such an assessment.