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### **GO TO BLOOM. METAPHORICALLY SPEAKING.**

Ключевые слова: метафорическая компетенция, методическое проектирование, передача знаний, таксономия Блума, декомпозиция навыка, внутренняя онтологическая интерференция, контекст как единица информации

Key words: metaphoric competence, instructional design, knowledge transfer, Bloom's taxonomy, skill decomposition, inner ontology interference, context as information unit

A task for this investigation was set as follows: to describe metaphoric competence as an object of instructional design. Such description could serve as a foundation for instructional strategy and can also be embedded into a curriculum aimed at development of this competence.

A description of an object in terms of instructional design presents its simplified model that ignores the complexities considered in other areas. This allows the students to «forget» about cognitive problems and focus on the level of their work with the objects.

It was necessary to solve three problems to perform the aforementioned task:

1. describe metaphoric competence as a complex skill, that is, to describe cognitive activities involved with metaphor perception in terms of instructional design;

2. describe metaphor mechanism in a simplified way without losing any of the vital elements;

3. find assumptions necessary for creating an instructional description with embedded cognitive tasks.

### **Solution of the first problem**

To get the solution of the first problem, I used Bloom's taxonomy of educational objectives, cognitive domain, and the method of complex skill decomposition invented by J. Van Merriënboer.

A complex skill can be written as a skill to perform cognitive tasks (recognize, understand, apply, analyze, synthesize, evaluate). The object at which all these actions are directed in our case is ontological belonging of a meaning component.

Consequently, cognitive tasks are described as follows:

1. «recognize» - a learner recognizes the contexts where the meaning of one component becomes equivalent to and replaces the entire meaning, and the learner does not directly manipulate the elements creating such contexts;

2. «understand» - a learner manipulates the elements creating the above contexts, a set of these elements is closed;

3. «apply» - a learner creates metaphoric contexts from a closed set of elements;

4. «analyze» - a learner defines the way a metaphor is created for both open and closed sets of elements.;

5. «synthesize» - a learner creates a metaphor from open set of elements;

6. «evaluate» - a learner evaluates metaphor potential.

### **Solution of the second problem**

This solution is suggested to be found in the field of knowledge transfer because it generalizes the ideas of metaphor from other fields.

Creation of metaphoric meaning can be shown schematically as the process of inner ontology interference. If the meaning components of different objects belong to the same ontology, one of such objects may borrow the signifier of the other. It is valid only for the cases (contexts) when all of the

other meaning components become irrelevant, that is, the meaning of one component becomes equivalent to and replaces the entire meaning of an object.

### **Solution of the third problem**

It is assumed that both instruction designers and learners are able to intuitively recognize the limits of the contexts described above. More specifically, they are able to recognize the instant after which the context fails to work for understanding the metaphoric meaning of an object.