

## On Concepts as Objects of Control

In the process of learning, concepts are not equally subjected to control. It is neither rational nor necessary to do that, since not all of them need to be learned at a superior level. The opposite approach leads to mixing the important concepts with the less important ones, to overworking the students, thus lowering the results of their studies.

Three methods are used to determine the concepts subjected to control in the process of chemistry teaching at the secondary school:

- theoretical analysis
- the method of expert values, and
- the matrix method.

As a result of the investigations the following conclusions are made:

1. The variative theoretical analysis turns out to be extremely suited for determining the consistency of each concept. The development-oriented function of control can be fulfilled through the generalized construction of concepts obtained.

2. The method of expert evaluation facilitates the process of concept selection while the matrix method helps to choose those concepts which are richest in information. A scheme is made on the basis of the matrix. This scheme is used for making diagnostic problems.

3. The application of the three methods has resulted in obtaining data (concepts and their relations) on the basis of which systems of problems for control and self-control can be generated with the help of a computer.

## Reports and Communications

### Call for Participation: Third ASIS/SIG/CR Classification Research Workshop

The American Society for Information Science Special Interest Group on Classification Research (ASIS(SIG/CR) invites submissions for the 3rd ASIS Classification Research Workshop, to be held at the 55th Annual Meeting of ASIS in Pittsburgh, PA. The Workshop will take place Sunday, Oct. 25th, 1992, 8:30 AM - 5:00 PM. ASIS'92 continues through Thursday, Oct. 29th.

The CR Workshop is designed to be an exchange of ideas among active researchers with interests in the creation, development, management, representation, display, comparison, compatibility, theory, and application of classification schemes. Emphasis will be on semantic classification, in contrast to statistically based schemes. Topics include, but are not limited to:

Warrant for concepts in classification schemes - Concept acquisition - Basis for semantic classes - Automated techniques to assist in creating classification schemes - Statistical techniques used for developing explicit semantic classes - Relations and their properties - Inheritance and subsumption - Knowledge representation schemes - Classification algorithms - Procedural knowledge in classification schemes - Reasoning with classification schemes - Software for management of classification schemes - Interfaces for displaying classification schemes - Data structures and programming languages for classification schemes - Image classification - Comparison and compatibility between classification schemes - Applications such as subject analysis, natural language understanding, information retrieval, expert systems.

The CR Workshop welcomes submissions from various disciplines. Those interested in participating are invited to submit a short (1-2 page single-spaced) position paper summarizing substantive work that has been conducted in the above areas or other areas related to semantic classification schemes, and a statement briefly outlining the reason for wanting to participate in the workshop. Submissions may include background papers as attachments. Participation will be of two kinds: presenter and regular participant. Those selected as presenters will be invited to submit expanded versions of their position papers and to speak to those papers in brief presentations during the workshop. All position papers (both expanded and short papers) will be published in proceedings to be distributed prior to the workshop. The workshop registration fee is \$35.00, which includes lunch and refreshments.

Submissions should be made by email, or diskette accompanied by paper copy, or paper copy only (fax or