The Alberta Journal of Educational Research *Vol. XXIII, No. 4, December, 1977*

RICHARD B. COHEN
and
ROBERT H. BRADLEY
University of Arkansas at Little Rock

Teaching Superordinate Concepts with Simulation Games

The effectiveness of simulation games as a method for teaching superordinate concepts was examined in this study. The simulation involved instruction in map skills and was structured in keeping with Case's (1975) discussion of how to integrate developmental and hierarchical aspects of learning in instructional design. One hundred and eighty-three fifth- and sixth-grade students participated in the week-long experiment. The simulation group demonstrated superior performance on map skills and concepts on the delayed posttest, but not the immediate posttest. Members of this group also showed significant improvement in performance from posttest to delayed posttest. Results were interpreted as supporting the hypothesis that simulations can be a useful way of presenting superordinate concepts so as to facilitate learning of lower level skills. Results also appear to corroborate Case's analysis of effective instructional designs. (Dr. Cohen is Coordinator of Laboratory Experiences and Assistant Professor in the Department of Elementary and Early Childhood Education, and Dr. Bradley is Associate Professor of Educational Foundations and Research Associate at the Center for Child Development and Education, at the University of Arkansas at Little Rock.)

One of the most significant contributions to the analysis of the learning task has been the development of theories about the hierarchical structure of knowledge (Ausubel, 1963; Gagne, 1970; Taba, 1967; and Bloom, 1956). Conceiving knowledge as hierarchical has enabled educators to analyze tasks according to level of learning and to prescribe a sequence of educational activities which provides the necessary prerequisites for acquiring information at any given level.

Several theorists have argued that when individuals know a superordinate concept, it is easier for them to learn subordinate concepts and facts. Ausubel (1963) advocates the use of advance organizers presented at a higher level of abstraction as a means of facilitating learning at lower levels. However,