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An Advance Organizer is…All or None of the Above

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AN ADVANCE ORGANIZER IS . . . ALL OR NONE OF THE ABOVE

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What is an advance organizer? Some possible responses for multiple-choice question proposed in the title could be:

—a 200-500 word prose passage (Ausubel, 1960, 1963);

—a single sentence (Christie and Schumacher, 1976; Luderer, 1976);

—a graphic presentation (Dana, 1980; Eastman, 1977; Hall, 1977; Weisberg, 1970);

—a "thematic" organizer in the form of a picture, one-word topic, or a title (Farr, 1975);

—a methodology such as DRA or SQ3R (Garty, 1975);

—a slide-verbal presentation (Jones, 1977, 1979; Lawton and Wanska, 1979);

—an "organizer" lesson (Lawton, 1977; Lawton and Fowell, 1978; Swadener and Lawton, 1977);

—an audio presentation (Lucas and Fowler, 1975);

—a concrete model (Mayer, 1976);

—an empty matrix with the horizontal and vertical axes specified (Mayer, 1978);

—a game (Scandura and Wells, 1967);

—a map (Weisberg, 1970);

—a structured overview (Earle, 1969; Estes, Mills, and Barron, 1969)

The purpose of this article is to review the guidelines for the construction of an advance organizer as proposed by Ausubel and to examine why the choice in the title "all or none of the above" could be literally true.

Ausubel's Proposal

In 1960 Ausubel published his first account of the use of advance organizers. In later textbooks (Ausubel, 1963; Ausubel and Robinson, 1969; Ausubel, Novak, and Hanesian, 1978) he and his colleagues have explicated a theory of meaningful verbal learning in which the learner plays a central role. They have stated

this quite forcefully as follows:

> If we had to reduce all of educational psychology to just one principle, we would say this: The most important single factor influencing learning is what the learner already knows. Ascertain this and teach him accordingly. (Ausubel et al., 1978, p. 163)

The principal teaching strategy recommended for the deliberate manipulation of the learner's cognitive structure so as to enhance meaningful verbal learning is the use of "appropriate relevant and inclusive introductory materials (organizers)" (Ausubel et al., 1978, p. 170). These organizers are to be used in advance of the learning experience in order to establish a meaningful learning set and to "bridge the gap between what the learner already knows and what he needs to know before he can meaningfully learn the task at hand" (pp. 171-172). Advance organizers should provide the "ideational scaffolding" or superordinate ideas under which new subordinate ideas (to be learned in the subsequent lesson) may be subsumed.

Although Ausubel has not provided either an operational definition or examples of an advance organizer, for which he has been criticized by a number of reviewers (Blanton and Tuinman, 1973; Hartley and Davis, 1976; Thelen, 1976; Vacca, 1978), he has specified the characteristics which advance organizers should have (Ausubel et al., 1978). (1) They should be more inclusive, abstract, and general than the learning material they precede in order to provide a framework for the stable incorporation and retention of the more detailed material to be learned. (2) They must take into account the relevant existing ideas that learners have about the topic. (3) They must demonstrate the relationship between the ideas learners already have and the new ideas to be learned. (4) If the learners have few relevant existing ideas, the advance organizer needs to be more expository in nature; i.e., teachers will need to provide more informational framework, being careful, however, to use terminology familiar to the learners. (5) If the new material can be related to a cognitive framework already possessed by the learners, the advance organizer should be comparative in nature. It is then used "to integrate new ideas with basically similar concepts in cognitive structure and to increase discriminability between new and existing ideas that are essentially different but confusably similar" (Ausubel et al., 1978, p. 172).

In the preceding paragraph, the word "learners" has been emphasized by the author each time it occurred in order to point out that four out of the five characteristics are related directly to the knowledge that the researcher or teacher must have about the learners before an advance organizer can be planned. And even the first characteristic is related indirectly, since the level of inclusiveness, abstractness, and generality will be determined not only by the level of the subsequent material to be learned but also by the capabilities of the learners; e.g., the concept, "dog," may be abstract for a two-year-old.

All or None of the Above

It seems obvious that any given advance organizer can only be planned in terms of the cognitive gap it is designed to bridge. One may study the building of bridges in general, or the building of specific types of bridges, but the specifications for a particular bridge will depend on the width of the chasm to be spanned and many other factors. Or, if the metaphor of an advance organizer as ideational scaffolding is carried a bit further, one does not erect scaffolding for a particular building without a blueprint of both the foundation and the completed structure. A perusal of the research on advance organizers reveals an appalling lack of attention to (or, at any rate, lack of reporting of) the existing cognitive structures of the learners in the experimental and control groups. Statements abound such as "It was believed that..." and "It was assumed that..." such-and-such a cognitive state existed in the subjects. Information from pretests or other such pertinent data which would indicate the learners' existing cognitive structures were not given in the majority of the reports (Searls, 1980).

Ausubel did not specify the format for an advance organizer. In his studies with college undergraduates he used prose passages (approximately 200-500 words) which students read before reading the new material. In a recent analysis of 135 published and unpublished advance organizer studies, Luiten, Ames, and Ackerson (1980) found that the great majority of them employed a similar written organizer passage. However, as indicated by the introductory paragraph, a number of other types of presentation modes have been researched. It is not within the scope of this article to discuss the reported effectiveness of one type of presentation over another, although it should be noted that Luitaen et al. (1980) found the Effect Size for aural mode advance organizer studies to be twice that of written mode advance organizer studies.

The important point to be made is that any introductory activity which adheres to Ausubel's five characteristics for an advance organizer should be successful in enhancing meaningful verbal learning. However, in order for the advance organizer to have the stated characteristics, the user must possess detailed knowledge of the cognitive structures of the learners for whom the advance organizer is intended. Classroom teachers are most likely to have this knowledge and to be able to plan and implement effective advance organizers. In this writer's opinion, the best single source for classroom teachers who want to understand and use advance organizers is probably Eggen, Kauchak, and Harder's (1979) text, Strategies for Teachers: Information Processing In The Classroom, Chapter 7, "The Ausubel Model." Searls (1980) has summarized Eggen et al.'s ideas and presented other suggestions for using advance organizers in the classroom.

Jones (1979), Lawton and Wanska (1977), Mayer (1979), and Meyer (1979) all have hypothesized that perhaps advance organizers have failed to result in significantly improved learning in many research studies either because the learners were able to provide their own subsumers or because the organizers were not sufficient

to bridge the gap. In both instances, ascertaining the prior knowledge of the learners might have changed the results. Researchers investigating the efficacy of advance organizers in the future would do well to report how they followed Ausubel's guidelines for the construction of an advance organizer. To the extent that they do follow the guidelines and report the knowledge they obtained about the learner's cognitive structures, "all of the above" may be the correct conclusion to the stem, "An advance organizer is..." If they do not follow the guidelines and report the procedures, "none of the above" may be true.

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