Cognitive Learning and the Social Studies

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Cognitive learning in the social studies refers to those objectives that are related to knowledge and knowing and to the ways these objectives are attained. Cognitive learning includes concepts and generalizations as well as intellectual skills and abilities needed to implement independently the process of conceptualization.

The literature does not give precise and clear-cut definitions of the various specific cognitive components. Especially there is confusion in distinguishing between what is a concept and what is a generalization. Myles Platt (28), for example, reviewed several sources and discovered that a number of terms, including "generalization" and "principle," are used as substitutes for the term "concept." This is not to say, however, that there is no consensus as far as the definitions of these terms are concerned. A concept is usually a word or a phrase identifying a group of objects or ideas with common characteristics. A generalization is a declarative statement of a relationship between two or more concepts that has broad applicability in time and space.

A number of studies have been conducted to determine the various intellectual skills and abilities needed by children to function successfully as members and students of society. The Indiana experiments (20) arrived at a model of reflective thinking that included the following skills and abilities: orientation, hypothesis, definition, exploration, evidencing, and generalization. In other words, students and teacher become sensitive to an existing problem situation, they propose a solution to it, and they attempt to arrive at a consensus of definitions of related terminology. Deductively, then, they proceed to test the hypothesis in terms of the validity of its implications and in the light of empirical data. Finally, based on the evidence available, students and teacher reach a conclusion that represents the best solution to the problem at hand.

Hilda Taba (34) studied the thinking process in the context of social studies and categorized the cognitive skills in three major clusters that she called "cognitive tasks." Cognitive Task I deals with concept formation and includes the skills of differentiation, identification of common properties, and determination of the hierarchical order of items. Cognitive Task II includes the abilities to interpret, infer, and generalize. Cognitive Task III deals with the application of "known principles and facts to explain unfamiliar phenomena or to predict consequences from known conditions" (34, p. 108).

Basic Questions

One would be safe to state that in the last several years cognitive learning has been that aspect of the social studies program receiving most of the attention of the researchers. In addition to the studies designed to define the...
nature of intellectual skills and abilities, researchers have attempted to answer the following general questions:

1. What are the most appropriate concepts and generalizations to be used as the basis for the social studies program?

2. Do children informally achieve more cognitive learnings now than they did several years ago?

3. How effectively can children deal with cognitive learnings and how early?

4. What is the best method to develop cognitive learnings?

In regard to the first question, researchers consulted the social scientists in order to determine the basic structural elements of each discipline. Several studies conducted at Stanford University (13) were among the first ones of this type. The literature of the social sciences was thoroughly searched for significant generalizations that were related to basic social functions such as government, conservation, education, production and distribution, transportation, recreation, and religious and aesthetic expression. Thousands of generalizations were identified through these studies.

Two social scientists (3) made an inventory of findings in the behavioral and social sciences and published an extensive source of concepts and generalizations along with the evidence supporting them. In this source a social studies teacher can find a number of sound concepts and generalizations on which to build a successful instructional program relevant to any significant unit topic.

As a first step, most of the national curriculum projects in social studies education of the past decade attempted to define the cognitive learnings to be used as the skeleton of the program. Social scientists were invited to present the basic structure of their disciplines and discuss the methods used by social scientists to find evidence, examine it, and reach conclusions. A publication by the Syracuse Project (31) provides a good example of the cognitive learnings selected to serve as the key elements in a K-12 social studies program.

It is interesting to note that so many studies and practically all major social studies projects have proposed to identify the "fundamental" concepts and generalizations from the social sciences. As a result, one would expect that the various lists developed by the projects would be quite similar. While there appears to be some agreement, there is not as much agreement as is needed to give teachers the necessary confidence in the new programs.

One study in particular (16) reported that when 14 social scientists were asked to list the five most basic principles, or generalizations, in the social sciences, they produced 14 lists practically all different from one another. While this is understandable from the point of view of those who have a good grasp of the social sciences, it presents a problem for many teachers who are seeking specific guidance in planning for teaching the social studies.

The second question relates to whether or not present-day children informally acquire more cognitive learnings than did children of previous generations. One should realize that this question was raised as a result of observations that social studies content appeared to be oversimplified and below the children's capacity to learn. A number of studies (22, 19, 17, 27) did substantiate these observations by establishing that children knew much of the content included in their programs prior to instruction.

These studies should not be interpreted to mean, however, that children did have an in-depth understanding of the concepts and phenomena included in their programs. In the first place, the superficial nature of the traditional programs themselves did not require an in-depth understanding. On the other hand, a number of investigations (35, 12, 10, 18) do show that children left unguided have difficulty applying higher levels of thinking when confronted with social situations.

The third question consists of two rather important parts. One part deals with the capability of school-age children to use intellectual skills and abilities effectively in order to develop concepts and generalizations; the
second part relates to the now famous statement by Bruner that "any subject can be taught effectively in some intellectually honest form to any child at any stage of development" (4, p. 33). This point of view has stimulated a considerable amount of research relating to the process of conceptualization in young children. The work of Piaget has provided a basis for much of this research in education and psychology.

There is no doubt that youngsters at the secondary level are capable of applying higher levels of thinking in order to arrive at basic understandings. Massialas and Zevin (21), for example, reflecting findings of their own experimentation, speak with a considerable amount of confidence on this matter.

It appears that success in the application of higher levels of thinking requires a classroom atmosphere that stimulates the development of certain qualities in the personality of students. Reporting on the findings of a related pilot study, Oliver and Shaver point out "that the student who might be characterized as a tough-minded extrovert responded well to—perhaps even enjoyed—the Socratic discussions, while less outgoing and less aggressive students were more inclined to pursue a subject if exposed to it in the less threatening recitation situation" (25, pp. 309-10).

As far as the elementary school children are concerned, it is again abundantly clear that they can be taught to analyze their social environment thoughtfully and to discover relationships. A cluster of related studies (2, 7, 11, 14, 30) shows that this is especially true in the upper grades of the elementary school. Some investigations show that children at the primary grade level can deal with cognitive learnings (5, 33); although another study (32) cautions that limitations in children should be recognized and taken into consideration. These limitations consist of (a) reading difficulties, (b) inability to deal with complex situations, (c) the need for short attention span activities, and (d) the need for very close guidance from the teacher.

The fourth area of concern to current researchers has to do with finding the best method for developing cognitive learnings. Numerous research efforts have tried to replace the conventional textbook-lecture-discussion method of teaching with a variety of reflective methods inspired by the modes of inquiry of the social science disciplines (15, 29, 6, 8). Those studies support the thesis that reflective teaching and learning methods are more successful in terms of knowledge gained by the children and in the development of their critical thinking abilities than the traditional method of teaching social studies. Common terms identifying the new methods are "case study," "in-depth study," "themes approach," "problem solving," "inquiry," and others. Included among the new approaches are those made possible through technology, such as simulation and programmed instruction (23, 9, 1).

The term "model" as applied to instructional theory is prominent in today's professional literature. A variety of inquiry models have been developed to facilitate social studies learning. Parsons and Shaftel (26) have classified these models into "categorical" and "strategic" in terms of the degree of open-endedness that characterized them. Strategic models, placing more emphasis on the process and requiring the child to reach his own conclusions, are more open-ended than the categorical ones that demand that the children search for predetermined conclusions. According to Parsons and Shaftel, however, both types can work to the disadvantage of the development of thinking skills by restricting children to a rigid method of thinking rather than allowing them to exercise divergent thought processes.

**New Approaches Needed**

The studies cited in this paper represent just a few of many that concern themselves with cognitive learning in the social studies. In fact, it appears that concern with the cognitive domain has dominated the entire thrust of social studies curriculum revision in recent years. A great deal of research attention has been given to the content drawn from the social science disciplines and to methods of instruction growing out of methods of inquiry of the disciplines.

There are those who argue that this trend has gone too far. For example, "The
monopoly of academic disciplines presently embedded in the curriculum . . ." says Fred Newmann, “tends to preclude from formal education a large number of exciting, though nondisciplined, experiences.” He goes on to list fantasy, love, hate, humor, and daydreaming as examples of nondisciplined experiences.

Generally speaking, research in social studies education is a rather recent phenomenon. As has already been implied in this paper, the cognitive aspects of social studies education have attracted most of the researchers’ attention. This does not mean, however, that cognitive learning as it relates to social studies has been adequately investigated or that the studies conducted represent a coordinated research effort. A great number of the studies are doctoral dissertations concerned with rather small and isolated problems.

There is a need for longitudinal studies to investigate the lasting effects of the reflective methods of teaching and learning. New instruments must be developed. It is neither enough nor correct to judge the quality of the new programs and methods on the basis of standards and instruments designed to suit the old programs. Also, there is a need to study the effect that affective variables have on cognitive learnings. It is difficult to study any of the domains of the individual in isolation. This could even be considered to be inappropriate for the social studies educator who is primarily concerned with the individual as a decision maker in his role as a member of the society in which he lives.

References


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