

A COMPREHENSIVE PARADIGM OF TEACHING

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indicated many views of teaching each of which represented only a portion of the total educational picture. Some educators believe teaching can be best understood as a set of behaviors. Others prefer to see teaching studied in terms of human interaction. Some authorities believe emphasis should be placed on identification of specific teaching skills while others, who view teaching as a decision making process, are trying to analyze what decisions need to be made, who should make them, and what information gathering procedures are required for providing the data needed for quality decisions. Meanwhile, out of all of these attempts a growing effort is developing to determine a number of basic teaching competencies.

Unfortunately, none of these orientations to the analysis of teaching is broad enough for a thorough study of teaching. A comprehensive view of teaching can only come from an overarching model of education which distinguishes between development, learning, curriculum and the act of teaching itself.

The work of Anisa has provided such a comprehensive model out of which the paradigm of teaching was developed. In the context of the Anisa Model, teaching can then be viewed as the operations involved in arranging environments and guiding the child's interactions with these environments in order to achieve the educational goals specified by the educational philosophy and theory of development as translated through the curriculum. The purpose of the paradigm of teaching,

ABSTRACT

A Comprehensive Paradigm of Teaching

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The paradigm of teaching is an attempt to set forth some general hypotheses, in the form of propositions, which represent the most accurate interpretation of the reality of teaching which can be currently derived from research, experience, and the current state of knowledge.

The paradigm is termed comprehensive because it represents an effort to address all relevant aspects of teaching. However, calling the paradigm comprehensive does not mean that the paradigm includes or explains all educational practices, techniques, or goals. The paradigm represents a stand on what teaching should be instead of what it is. The focus is on teaching--not on curriculum, its goals, planning, or design. In this regard, the paradigm is most useful in the context of the broader model of education upon which it is built. The paradigm is based on the educational philosophy, theory of development, theory of learning, and theory of curriculum provided by the Anisa Model, a new comprehensive model of education.

An awareness of a need for a comprehensive paradigm of teaching grew out of a review of the literature which

therefore, is to set forth the elements and principles involved in arranging environments and guiding interaction.

PREFACE

In 1953 the American Educational Research Association's Committee on the Criteria of Teacher Effectiveness wrote:

...this committee has...the conviction that the present condition of research on teacher effectiveness holds little promise of yielding results commensurate with the needs of American Education. This condition has two significant characteristics: disorganization and lack of orientation to other behavioral sciences. By disorganization, we mean the condition in which, at present, research too often proceeds without explicit theoretical framework, in intellectual disarray, to the testing of myriads of arbitrary, unrationalized hypotheses (American Educational Research Association, Committee on the Criteria of Teacher Effectiveness, 1953, p. 657).

This indicates the need to base research on a clearly defined theoretical framework or paradigm. N.L. Gage (1963) defines paradigm as "...a systematic ordering of ideas about the phenomena of a field of inquiry (p. 102)." He explains:

Paradigms are models, patterns, or schemata... Paradigms derive their usefulness from their generality. By definition, they apply to all specific instances of a whole class of events or processes. When one has chosen a paradigm for his research, he has made crucial decisions concerning the kinds of variables and relationships between variables that he will investigate... (Ibid. p. 95).

Because of the influence of these decisions on research, it becomes necessary to have a comprehensive paradigm which includes:

...(a) a statement of the variables comprising teaching behavior, (b) a formulation of the possible relations among these variables, and (c) hypotheses about the relations between the variables comprising teaching behavior and the variables descriptive of the psychological and social conditions within which teaching behavior occurs (Smith, 1963, p. 4)

Organizing such a paradigm (model) should serve several purposes.

1. Models facilitate learning by reducing complex situations to simple ones.
2. Models allow us to see relationships...to relate one fact to another. The marshaling and organization of data for predictive purposes dictate the establishment of relationships that will put the data into their proper perspective. This is necessary for prediction, which is the end purpose of models. They confer the opportunity to step back and see the practicality--or the possible impracticality--of experiments.
4. Models are invaluable aids in problem-solving and thinking...models furnish dimension to this process (Anderson, et al, 1970).

Therefore, a paradigm can provide a framework on which research can be integrated and based. Investigation can be directed at specific hypotheses contained within the paradigm. Or, on the other hand, broader study can explore implications suggested by generalizations derived from the paradigm. All of these studies can be integrated into a meaningful whole if the research is congruent with the paradigm. And meanwhile, the paradigm provides a basis from which teachers and teacher training programs can fill in the gaps as yet to be explored by research.

Realizing the importance of these functions this dissertation attempts to present a comprehensive paradigm of teaching based upon a framework provided by the new comprehensive ANISA Model of Education (Jordan & Streets, 1972).

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reform schooling. However, to follow such a suggestion is to question the viability of institutional education.

To avoid such a conclusion, crucial questions about teaching must be answered. Unfortunately, this is difficult because, according to N.L. Gage, "...the development of theories of teaching has been neglected (1964, p.269)." He claims that

In comparison with learning, teaching goes almost unmentioned in the theoretical writings of psychologists. Many signs of this disregard can be observed. For example, Psychological Abstracts contain large sections on laboratory learning and school learning but only a small section on teaching, and that within the section on "Educational Personnel." The Annual Review of Psychology usually includes a chapter on learning but seldom more than a few paragraphs on teaching. Volumes have been devoted to theories of learning, but not a single book deals exclusively with theories of teaching. Textbooks of educational psychology give much more space to discussions of learning and the learner than to methods of teaching and the teacher. A Comprehensive Dictionary of Psychological and Psychoanalytical Terms has three pages, containing 50 entries, concerned with learning but devotes only five lines to "Teaching" ... (Ibid, p.269).

Gage believes that there are two reasons for the neglect of theories of teaching. First, "Some writers reject the notion of a science of teaching (Ibid, p. 270)." For example, Hightet wrote, "I believe that teaching is an art, not a science (Hightet, 1955)." Second, there is a "...presumed adequacy of learning theory (Gage, 1964, p.271)." In other words,

In training teachers, we often seem to rely on mere inference from theory of learning to the practice of teaching. Yet, what we know about learning is inadequate to tell us what we should do about teaching. This inadequacy is clearly evident in our educational psychology courses and textbooks. The irrefragable question of students in educational psychology courses is, "How should I teach?" While they may infer a partial answer

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from a consideration of how pupils learn, they cannot get all of it in this way. Much of what teachers must know about teaching does not directly follow from a knowledge of the learning process. Their knowledge must be acquired explicitly rather than by inference (Ibid. p. 272-273).

In addition, "The need for theories of teaching stem also from the insufficiency in principle of theories of learning (Ibid. p. 271)."

Furthermore,

Our position is that practical applications have not been gleaned from theories of learning largely because theories of teaching have not been developed. The implications of learning theory need to be translated into implications for the behavior of teachers (Ibid. p. 271)

This view is supported by some findings of Robert R. Mackie and Paul R. Christensen that resulted from a study intended to enable the Navy to gain more practical application from research on learning. "...the investigation was concentrated on experimental studies of the learning process (1967)." Some of the conclusions were:

...there has been no systematic effort directed toward practical application of the findings from learning research. As a consequence, modern learning research is producing very little impact on educational technology or training practice.

Both academic and practically oriented psychologists agree that a very small percentage of findings from learning research is useful.

Learning theory has been particularly barren of useful predictions about human learning behavior in the educational or operational environment. A major reason for this appears to be that theory development has been nourished by laboratory experiments involving tasks that bear no known relationship to real-life learning requirements. ...learning specialists in many universities show little inclination to direct their own research, or that of their students, toward problems associated with educational or training operations.

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Many learning research studies simply are not translatable because the stimulus (or task) conditions employed by the researcher bear no determinable relationship to stimuli (or tasks) outside the laboratory.

...because learning researchers tend to invent tasks, rather than study natural ones, and because of the specificity of human response to these tasks, the prospects for being able to generalize become ever more ...many psychologists prefer to live on the conceptual level, to enjoy the security of unassailable theoretical research, to avoid the risks and discomfort of stating implications. (Mackie and Christensen, 1967).

So, it appears that educators cannot depend entirely upon theories of learning.

Theories of learning deal with what the learner does. But changes in education must depend in large part upon what the teacher does (Gage, 1964, p. 271).

Gage suggests that "To explain and control the teaching act requires a science and technology of teaching in its own right (Ibid. p. 273)." He concludes, "As a concept, teaching sorely needs analysis (Ibid.) This view is supported by a recent study by Britton and Leith investigating mathematics, a technology of teaching.

A course of mathematics was taught to 200 second year college of education students to try to assess if their subsequent performance on teaching practice was improved. A group of 60 first year college of Education students took part in a course of micro-teaching, the object being to see if any effects were made on their performance on first teaching practice. The study has highlighted the need for further investigation into the development of taxonomies of teaching analysis, and the assessment and evaluation of teaching performance (1971, p. 241)

This need for an analysis of teaching has been recently underscored by the failure of a six million dollar effort by big business, supported by the Office of Economic Opportunity, to utilize the latest technology of teaching. In an article entitled, "Big Business Flunks Teaching Test," Behavior Today states:

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Office of Economic Opportunity has concluded that big business can't teach under-educated kids any better than teachers can. Both now have dismal records in compensatory ed...Reporting last week on OEO's \$6 million trial ventures in "performance contracting," research chief Thomas Glennan Jr. said data show no significant gains in either control or experimental groups and no real difference between results of contract and traditional methods. Massive evaluations covered experiments at 18 sites where contractors had, in effect, wagered their profits against a guarantee to improve skills in individual students. Glennan said other experiments, involving incentives to teacher groups, suffered same results--no improvement in outcome... Immediate impact: OEO is rethinking its role in breaking poverty cycles via education. It's back to the drawing boards," sighed OEO director Phillip Sanchez...Danger now, said one observer, is that "we may go back to blaming the kids" for underachievement and sink into acceptance of the status quo...Four of six OEO contractors have promptly gone out of performance contracting business... (Behavior Today, February 7, 1972).

Many studies could be quoted that question the effectiveness of current teaching. Silberman (1970) cites some research that indicated that whereas around 80% of the students entering school have adequate self concepts, around 60% of the students graduating from high school have poor self concepts. The National Union of Teachers has reported "...the inability of students (training for teaching) and newly qualified teachers to cope adequately in the classroom (1970)."

Thus, it's natural to assume that teaching requires further analysis. However, some people reject this view because, as pointed out by Gage, they believe teaching is an art and not a science. This view is supported either by a belief that teachers are "born and not made," or that only experience and time can really train teachers.

If it is accepted that some people are born teachers while others are not, it is difficult to explain why some teaching improves dramatically over time. The assumption provides no explanation of nor basis for improving teaching.

This, then, may lead one to conclude that only experience and time can train teachers. This assumption is untenable in view of the fact that some teachers who have been teaching for many years are ineffective while other relatively new teachers attain greater skill in a very short time. It seems that while some teachers may improve with experience, some may get worse.

What is it that makes for successful teaching? An analysis is needed to find out. Without an analysis, no technology of teaching can be developed. Without the analysis and resulting technology no new teacher can be expected to replicate the effectiveness of a successful teacher. As Montrose M. Wolf has pointed out, A.S. Neill's Summerhill is "...a great and inspiring book about working with kids, but it provides no technology. That is why attempts to replicate it have not been successful (Goodall, 1972, p.134)."

Without being able to replicate successful teaching schools will continue to fail. If the public believes that schools are failing they will refuse to support them. There will be pressure to either improve teaching or to "de-school."

Deschooling does not eliminate the need for assisting children in the learning process. Adults influence the learning process whether or not they realize it, or want to. Children will always seek help in learning from adults simply because adults are an available source of information. In addition, children need to be provided with certain experiences to help facilitate their growth. For example, they need guidance in how to interact effectively with other children. From properly directed interaction children can learn cooperation and develop a positive self concept. Without help, children's potential may be blocked by negative experiences rather than released.

Therefore, whether we decide to improve schools or to de-school, the problem of how to help someone learn will still remain.

It is with this problem in mind that this dissertation attempts to 1) review advancements in theory and knowledge about teaching, and 2) integrate the information into a comprehensive paradigm of teaching.

Part I reviews the literature concerned with teaching. There are many views as to how teaching can best be analyzed. Chapter I shows that some educators think teaching can be understood as a set of behaviors. These people reject the idea of using theory as a basis for research believing theory prejudices investigation. Chapter II presents the opposite view. Many educators feel that theory is the key factor in

an analysis of teaching. In chapter III and IV another view is presented that is not as concerned with theory or behavior as it is with specification of a systematic set of procedures. Chapter V focuses on the educational belief that prefers to see teaching analyzed in terms of human interaction. Chapter VI sets forth some current opinion that teaching can be analyzed as a set of competencies. Lastly, chapter VI also presents the thought of some educators that teaching is a decision making process.

Since each of these views fills a gap left by its competitors, none is adequate by itself. What is needed is an overarching framework within which all the views can be integrated. Therefore, Part II presents a comprehensive paradigm of teaching based upon a philosophy of education, theory of development, and theory of learning developed by ANISA, a new comprehensive model of education.