



EDUCATIONAL PSYCHOLOGY

A Realistic Approach

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Educational Psychology

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***To our wives, Suzi and Arlene, and our children,
Heather and Jeff and Cheri and Joe.***

Preface

Teachers make a major difference in students' learning and classroom adjustment. The purpose of this book is to help future and beginning teachers to understand the realities of teaching, to understand and organize relevant psychological theory, and to become competent at the tasks that teachers perform. Indeed, we hope that the book will allow the beginning teacher to enjoy the teaching role, because knowing what to do and how to do it makes it easier to enjoy professional success and satisfaction.

We have written this textbook because we believe that most educational psychology texts emphasize topics or theories of educational psychology in isolation from one another and from the tasks of teaching. We agree that prospective teachers need to master psychological concepts and principles, but we think that the key to successful teaching is the *integration* of concepts into teaching strategies that are responsive to the learning needs of particular groups of students.

This attitude reflects our belief that teaching involves more than general decision making or the isolated application of principles. Teaching problems are not simply "learning" problems. They involve learning, developmental, motivational, and personality issues simultaneously. Furthermore, teachers must respond to individual students' problems while at the same time maintaining a learning environment for an entire class.

Part of the process of becoming a successful teacher is the acquisition of the ability to diagnose the learning needs that exist in a particular class, as opposed to projecting "universal solutions" indiscriminately. True, some general strategies exist. But successful teaching requires a fundamental understanding of how students learn and develop, and the ability to use this appreciation to coordinate knowledge and skills to meet the needs of the moment. It is *not* just the performance of a few "key" behaviors. Hence, we have written this text from a decision-making perspective, stressing the need to interpret psychological concepts so that they apply to specific teaching settings.

The book is organized around classroom applications designed to enable readers to become decision makers who can function successfully in the classroom. It is research oriented, but with an eclectic attitude to theory and research. No single approach can solve all the problems that classroom teachers confront, but an integration of ideas drawn from a variety of viewpoints can provide the basis for systematic,

intelligent decision making, even under the pressures faced by teachers “on the front lines.”

Our text does not assume any prior knowledge of psychology. It begins by discussing the psychology of the teacher and the general problems to which all teachers must accommodate in one way or another. After we have identified the problems that teachers must face, concrete ways to conceptualize and deal with them are provided. Following this focus upon the psychology of becoming and being a teacher we provide a detailed treatment of classroom management. Emphasis is placed upon how teachers can minimize the number of management problems they face, and detailed suggestions are provided for dealing with those discipline problems, minor and major, that do occur.

In the next part we discuss the historical development and importance of different learning theories and concepts, followed by chapters on their application that illustrate the relevance of learning principles to typical classroom problems.

Twin chapters (the first placing relative emphasis upon theory; the second upon application) address the subjects of *development* and *motivation*. Again, choice and presentation of material have been designed to enhance its usefulness for direct classroom application.

The fifth part is on the evaluation of instruction, presenting clear and helpful advice about how to conduct classroom evaluation. Here, stress is placed upon techniques that provide information about subsequent *instruction*. Too often, evaluation is aimed only at describing student performance. Little, if any, emphasis is placed upon diagnosing student learning needs and following up with strategies designed to meet them.

The last part begins with a brief description of the ways in which physical settings can influence classroom behavior. Then, several recent and major studies that have related teaching behavior to student learning are reviewed. Finally, opportunities are presented for students to hypothesize about the learning conditions and teaching strategies that are appropriate for different types of learners in different types of settings.

In part, the organization of the text is based upon the developmental concerns that most prospective teachers experience. Early on, concern usually focuses on the ability to control students and to succeed in (survive) student teaching assignments. Concern about such matters as how to maximize the achievement of students who prefer auditory stimuli to visual stimuli usually does not develop until more pressing problems are solved. More generally, students usually want basic facts and general concepts about teaching, learning, and development at first. Later, they become interested in more complicated issues, such as those involved in coordinating activities for all students.

At the end of each topical discussion, we present open-ended case studies to stimulate thinking about the application of concepts to realistic situations. The scope of these problems is limited to the content of the preceding material (such as learning or motivation). Ultimately, as information accumulates, students are presented with opportunities to apply material from several content areas to more complex problems.

We recognize, of course, that teachers, at all grade levels, are both men and women, and we sympathize with the resentment of women over the way in which masculine terms and pronouns have monopolized usage. But most readers find the constant use of "his or her" and similar constructions awkward and irritating. Consequently, it should be remembered that when we use *either* "he" or "she" we intend to include both male and female teachers and students.

We have been gratified by the positive reactions of students (at universities other than our own) who were taught with earlier drafts of the text. We also are thankful for the constructive suggestions they made. This student feedback was used to make the book as useful as possible, and we hope it will help you to become an active decision maker.

In particular, we hope that this book will aid you to conceptualize and deal more effectively with the problems you will face in the classroom, to develop realistic and appropriate expectations, and to design effective and pleasant learning environments. Finally, we hope that you will develop the belief that teachers can make a difference in the educational progress and day-to-day satisfaction of their students. Becoming an effective teacher takes effort, but it is possible. When accomplished, it is immensely satisfying.

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THE PSYCHOLOGY OF BECOMING A TEACHER



INTRODUCTION

Jane took the guest list from her husband Jim. She glanced at it and said, "We should invite another couple."

"Why?" Jim asked.

"Well, you have eleven couples on the list. If we add one more we can set up four tables with three couples at each. There'll be more interesting conversation with three couples to a table."

"Yeah," Jim agreed. "And it's easier to serve at a small table, too. But whom do you want to ask?"

"Well," Jane said with finality, "the Hortons can talk for hours. If we put them at separate tables, we'll have good conversations at both. But the Millers can't stand either Millie or Terry, so we'll have to think about whom the Millers would enjoy meeting."

Sam looked at the tie approvingly, and then reluctantly put it back on the rack. He really liked the tie, but it would go only with his brown suit. "With my lack of funds," Sam muttered to himself, "I can't afford that tie."

June felt good as she typed up her list of extra-credit reading books. She wanted to include action books that the fourth grade boys would enjoy, and books that didn't portray females in negative roles. She felt she had balanced both those needs successfully.

Rick looked at the bored, confused faces on his students and decided to end the lesson. They still hadn't mastered the material, he knew, and he was just wasting time. Better to stop now and replan the lesson tonight, he thought; then I can try again tomorrow.

Teaching is largely decision making. The most difficult thing about decisions is that a number of students are influenced by them, and successful planning means anticipating the effects that any one decision will have on each student involved. An instructional program must make sense for everybody.

The first vignette illustrates the fact that planning must incorporate the unique needs of specific individuals. The second vignette suggests that we do not always have the resources to accomplish what we want to do. Discussions of such important topics as sex education, an opportunity for social development, teaching subject matter, career education—all take time. Successful teaching is the identification of key objectives, followed by the development of a plan that will accomplish those objectives. Attempts to respond to every need may result in nothing being done well.

The third vignette suggests that teachers can meet the needs of individual students through careful planning. And the fourth suggests that despite careful planning, lessons will sometimes be unprofitable; a successful teacher is willing to examine student responses and to alter the plan as necessary.

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Learning Concepts

Decision making is a basic and continuous aspect of teaching.

Decision making starts with goal clarification, followed by collection and use of relevant information and evaluation of effectiveness.

Teacher attitudes, expectations, and openness to information affect decision making and thus teaching.

Decision-making options may be limited by temporal or physical constraints, pressures on teachers and students, and lack of information.

"Effective" teaching varies with the situation. This is why so much decision making is involved, and why doing it well is so important.

Teachers can make a major difference in the way students learn and develop. Some teachers are vital forces; others make but minor differences. Teachers that make a difference in students' lives are those who have a genuine interest (and can express that interest) in students, know their subject matter, and possess detailed information about instructional processes and the way students learn and develop.

In essence, effective teachers are persons who combine teaching skills with an active belief that teachers can make a difference. Effective teaching is largely decision making: the application of principles drawn from the study of learning, motivation, development, and teaching.

In this first chapter we want to introduce you to a model, a way of looking at classroom decision making that illustrates the fact that teachers who make good decisions (and who are willing to correct poor ones) have an important influence upon student motivation and learning.

Decisions, of course, occur in a particular setting. It is important to recognize that. The particular classroom that one teaches in sets

limits upon what can and cannot be accomplished. Teaching pupils who average 128 in IQ is not the same as teaching a class whose average is 100. After presenting a decision-making model, we want to discuss a few problems that almost all teachers will face and must solve if they are to effectively fulfill a decision-making role within the context in which they teach.

❖ TEACHERS MAKE DECISIONS

Jan Reisch moved nervously across the room as she conducted a discussion with her American studies class. She was generally irritated because the discussion wasn't going particularly well and she felt that few of the students had read the material. Specifically, she was irritated and distracted by the minor but constant misbehavior of a few students. She gradually became angrier (feeling the back of her neck stiffen and her palms become moist). Finally, she reacted: "Ralph Jordan, give Terri her pencil back and get in your seat now. You've been fooling around for the last two weeks. I've had it! The next five afternoons I want you to report to detention period."

At the end of class, Ralph came to her desk and said (politely but with confidence), "Look, I'm sorry about being out of my seat playing with Terri. I know I've been a pain recently. I've had problems at home for the past few weeks and . . . well, I don't want to talk about it" (his voice trails off). He hesitated a moment and then said, "I'm genuinely sorry and I'll shape up. Last Thursday I started work at the grocery store on Main Street and I need to be there after school. I really need the job. Can we work something else out?"

Should Jan stick with her statement so as not to undermine her credibility with students? Should she compromise (perhaps give Ralph a couple of days to rearrange his schedule with his employer)? If she cancels the punishment or provides a substitute, should she say anything to the class?

Bill Bower looked at the test results of his fifth graders on the social studies unit. Half the class had got less than 60 per cent: a miserable performance. He asked himself, "Should I reteach the unit? It's an important one. Should I go on? It's getting late in the year and I've only covered half the text. At this rate they won't be ready to do sixth grade work. Maybe I should go on but assign some type of homework review."

Should Bill Bower reteach the unit? If he assigns homework, but students still do relatively poorly, what then? Is the "sixth grade curriculum" a relevant restriction on a fifth grade teacher?

John Dalton paused and tried to think of a way to rephrase a question to help Helen answer. He felt that she really knew the material; however, Helen and two other students, Rick and Jeannie, were so shy that it was very difficult to determine whether they did not respond because they didn't know the answer or because they lacked the confidence.

Should John Dalton usually ask Helen, Rick, and Jeannie easier questions than

he asks other students? Or will asking them easier questions increase their embarrassment? When they don't answer his first question should he keep asking additional questions until they do give a response? Will his staying with them teach them to respond and to understand that sincere, but incorrect, answers are no "big deal"? Or will his persistence in seeking a response only deepen the insecurity that these students feel in public response situations?

■ EDUCATIONAL PSYCHOLOGY

Teaching involves the resolution of countless decisions. As Lindgren (1972) notes, educational psychology provides a framework for looking at the learner, the learning process, and the learning situation. Dembo and Hillman (1976) argue that teaching is based upon mastery of three areas: (1) knowledge and conceptual skills (the content of educational psychology), (2) teaching skills, and (3) decision-making skills. Our goal in this text is to provide a format for integrating these three areas.

Specifically, this book provides information and concepts that can be applied in developing solutions to the problems that Jan Reisch, Bill Bower, and John Dalton face, and to the general decisions that teachers face. Hence, we see this text and educational psychology generally as the systemization of information and concepts that assist a classroom teacher: (1) to be more aware of classroom behavior; (2) to interpret the significance of such behavior; and (3) to plan purposeful strategies for bringing about desired changes in learners.

McDonald (1965) has observed that any teaching plan is: (1) a guide for action; (2) a set of decisions; and (3) a small theory about how to produce learning. Although the word "theory" is an aversive one for many persons (typically because they incorrectly interpret "theoretical" to mean "impractical"), we all use personal theories (systematic sets of beliefs about what we should do) in making decisions. For example, we all have theories about how to maximize our chances of making a good impression in a conversation. Some of us feel that listening is the best strategy; others prefer to take the initiative. Our theory, whether or not we have made it explicit to ourselves, predicts our behavior in a conversation with a new acquaintance.

Gage (1963, pp. 94-95) presents the view that "all of us are theorists" this way: ". . . They differ not in whether they use theory, but in the degree to which they are aware of the theory they use. The choice facing the man in the street and the research worker alike is not whether to theorize but whether to articulate his theory, to make it explicit, to get it out in the open where he can examine it. Implicit theories . . . are used by all of us in our everyday affairs."

It is interesting to note that many common beliefs and assumptions which are accepted and sanctioned by teachers turn out to be myths when they are subjected to systematic study. For example, the popular view that frequent teacher praise of student performance facilitates student achievement has been shown to be false. The selective use of praise is useful, but excessive praise may interfere with student learning.

Teaching plans
and theories

To reiterate, a major goal of educational psychologists is to make explicit assumptions about the conditions that facilitate learning and to collect data that verify or refute those assumptions. Some readers have probably raised a puzzled eyebrow upon reading the last sentence. We prefer the facts . . . “Just tell me what works. That’s all I want to know.” Unfortunately, if we were to restrict ourselves to a discussion of what always works we would stop the book here. No teaching strategy or plan is going to work for all students, all goals, and in all settings. However, some teaching behaviors have a high probability of bringing about a desired response. For example, correcting a minor disturbance in the classroom nonverbally (with perhaps a shake of the head), is typically (but not always) more economical and less disruptive than a verbal strategy.

A hypothesis is simply an intelligent guess based upon all available information. Most decisions are hypotheses about what will work. The more information we have, the more intelligent the “guess” we make. The less information we have, the greater the risk that our strategy will fail.

Hypotheses

For example, one may hypothesize that the attractive stranger is “dateable” because there is no ring on the “key” finger. Or one may hypothesize that the garage on Graver Street is the place to go for an automobile safety inspection because of its illegal but profitable pattern of quick, easy-to-pass inspections. However, in practice many married people do not wear a ring and are “undateable” (they may not wear a ring to irritate a mother-in-law, or because a ring irritates their skin, and so on). Similarly, even if the Graver Street garage’s general reputation is well-earned, several of the individual mechanics in the shop may do reputable and careful work.

Teaching strategies operate in the same way. Often one must use minimal knowledge (similar to the ring example) to make a decision (“Will they integrate these facts better if I require them to prepare for a formal exam or if I make them write a paper?”). At other times, we make decisions with a lot of dependable knowledge (research, use of strategy with previous students, and so on) but there is still the risk that the strategy will not work.

Teaching decisions
and goals

If we are explicit about our teaching goals and the type of behavior that we will accept as evidence that students are making satisfactory progress, we can quickly identify poor hypotheses and change our teaching plans.

In Figure 1.1 a model for decision making is presented.

❑ DECISION MAKING: A CASE EXAMPLE

According to Figure 1.1, the process of decision making starts with an instructional goal (or problem). Assume that Ted Wilson, a high school speech teacher, wants students to develop the ability to make skillful extemporaneous responses. When does Ted teach this skill: early or late in the year? How can he decide (make a hypothesis)?

To make this decision, Ted will have to specify the other goals that he has in mind. Let us assume that Ted has the following learner goals in mind: to introduce a speaker; to deliver a formal, informative speech; to deliver a formal, persuasive