EDUCATIONAL PSYCHOLOGY

A Developmental Approach



Norman A. Sprinthall / Richard C. Sprinthall

Fourth Edition

987654

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PREFACE

As if to prove the dictum that nothing worth-while is permanent in the world of education and psychology, the time is ripe for this, our fourth, version of *Educational Psychology: A Developmental Approach*. Long ago (or so it seems, though it was only the late 1960s), we decided to create a text with a developmental theme. We had been very dissatisfied, in teaching at both the undergraduate and graduate levels, with the eclectic nature of most works on educational psychology. We decided to stop complaining and try our hand at the venture.

History since then has proved two points. First, there was a very substantial gap in the field, which our work has filled nicely in a succession of editions. Second, the generic theme of development has been the most important single feature of those several editions. So, for all those hundreds of institutions of higher education that have continued to adopt the text, the fourth edition carries on the tradition of the earlier versions. To those who have said "I'm sticking with Sprinthall" (words often overheard at professional conventions), your expression of allegiance has been heard. We have carefully reviewed huge amounts of new material and made selective and substantial changes. You will find, as a result, even more research and practical applications to comprehend our model.

To those, on the other hand, who may still be unsure of the value of a generic theme and are wavering between eclecticism and relativism, we invite you to take another look at our content and organization. The cognitive-developmental base for educational psychology has gone through two distinct periods since we started. With the publication of the first edition, the developmental approach was clearly "in" as the major new model for the field. The joining of a variety of developmental domains represented by such giants as Jean Piaget, Erik Er-

ikson, and Laurence Kohlberg marked a new era. Then, as is often the case in intellectual history, there was a Thermidorian reaction (like the one following the French Revolution). Questions were raised concerning the model, and rightly so. Some of the earlier claims and suggestions were controversial and others were wrong. The research did not back up what the early theory implied. Thus, in the late 1970s an increasing number of articles cast doubt on the significance of some of the basic tenets. Is the transition between stages really so abrupt? Are women so different that the theories are sexbiased? What about cultural differences? Also, from a practical stance an additional series of questions surfaced: As the so-called directteaching model emerged, was there any relevance to understanding developmental stage differences? If teaching effectiveness was to be defined exclusively in direct terms, it could be that developmental concepts might be redundant.

It is instructive to see how the developmentalists have answered these criticisms. Rather than respond to each new study by debate and counterpoint, the field tended to business and produced a new generation of research-based studies. These studies now form the backbone of the revision. Shortly after Piaget's death, attempts were made to replace his entire framework because some studies questioned certain elements. One of the interesting reactions in social science to the death of a giant is often a new wave of highly critical commentary, a fate most recently experienced by Margaret Mead's theory for anthropology. So too for Piaget. The results, however, have been positive: a stronger research base for the overall framework and a more detailed understanding of the transition points. It is now clear that, except for the end of the first stage, there is more overlap between stages than was previously thought. Thus, there is some potential for concrete thought prior to age 5 to 7 when the shift was predicted to occur, just as there is some potential for abstract thinking prior to adolescence. This does not mean, as we note in the text, that we as educators should shift the main teaching focus to promote such premature development. Instead, we now have a greater appreciation for children's range of development, even while

seeing the essential validity of the stages Piaget identified.

The same holds true for Kohlberg's system. There were many second thoughts voiced in the late seventies, particularly concerning sex bias and cross-cultural differences. The most recent research data, however, have strengthened the earlier contentions. The ability to understand and act on principles of justice is not sex-biased, and the framework for the development of moral behavior holds in both Western and non-Western industrialized countries. It does not hold, however, in tribal or feudal societies. So here, too, we now have a clearer understanding of theory as well as practice in the important area of value development.

The story of the challenges to developmental theory can go on and on. Since the greatest "sin" in education is to bore, we will not continue that story. Suffice it to say that if you want to know more about revisions to the approach, don't wait for the movie—read the book.

We decided to do some pruning, always one of the most difficult decisions because it means omitting some of our own writings. Yet, we had to face the music and set some priorities or risk a text much too long to cover in a semester. Based partly on a market survey and partly on our own reading of recent research, we decided to drop chapters on language development, creativity, and affective education. In the first case, it seemed that language development had become too technical and specialized for treatment in a text like this; we chose instead to focus on reading development in the context of Jeanne Chall's work. In the case of creativity, we felt that the questions of assessing creativity and applying what is known about it had not really been pursued in any more depth since the first edition. Rather than devote a complete chapter to covering very old ground, we have simply reviewed briefly the current state of the art in Chapter 13. Similarly, in the case of affective education, we thought there was almost no new material. Still, because aspects of the psychological education of the child or adolescent are important, we decided to delve into the meta-analysis research on effective teaching. That research shows the importance of classroom morale, a positive atmosphere, and using a variety of teaching models to boost academic

achievement and promote a positive self-concept in students—topics covered in both Chapter 20 on discipline and Chapter 21 on mainstreaming.

Another change was our decision to write an entirely new chapter on information processing. What goes on inside the heads of pupils, so to speak, has always been a mystery wrapped in an enigma (as Churchill once said of Russia). The information-processing approach may provide a model of how pupils make connections between what they already know and what they are currently learning. Combined with developmental stage concepts, this new theory may help bring together theories of individual differences and stage theory to promote a finegrained analysis, perhaps reducing both the mystery and the enigma.

One last point on changes: Since unusual progress has been made in the area of teaching effectiveness, we have completely revised two of the three chapters in Unit 3 and made considerable additions to the third. The synthesis we discuss, however, is not a simple-minded version of direct teaching for students at all ages and in all subject areas. Instead, we now think that a clearer basis than ever before exists for what we call teaching—the process of matching and gradual mismatching, or what is termed "attribute-treatment interaction." Together, the developmental understanding of pupil learning characteristics and this teaching model can be a guide to teaching and learning. Along with information processing, this model of effective teaching is an important new trend in the field.

Naturally, we would be remiss if we didn't thank those colleagues, both "old" and new, who have helped us immeasurably with the revision. The input from Jim Rest, Bill Bart, Maynard Reynolds, and Martin Haberman from the Midwest continues to inform our efforts as does the feedback we received from Larry Kohlberg, Jeanne Chall, and colleagues from the banks of the Charles River in Cambridge.

We have received help from others as well. Don Locke, an expert on cross-cultural development, and Sam Snyder, an expert on adolescence (both from North Caroline State University), have been very valuable. Marvin Berkowitz from Marquette University contributed many insightful new approaches to the

moral-dilemma discussion. At American International College, important contributions were made to the information-processing section by Carol Spafford and Joanne Carlisle. Bob MacLachlan and Lee Sirois provided invaluable help in the learning and intelligence chapters, and Greg Schmutte and Art Bertrand added their expertise to the measurement sections.

So, after some 500 new pages of typed manuscript, and almost 500 new references, we have once again revised and updated the standard for the developmental approach to educational psychology. It's been a difficult and time-consuming task. We've had clerical and editorial help and we appreciate that very much. Robin Hughes and Pat Knowles in Raleigh, and Pat Cusing and Gwen Payne in Springfield, have done valiant work in preparing the manuscript. At Random House, a strong vote of apprecia-

tion must be given to both Lane Akers and Elaine Romano for their many helpful suggestions. They proved to be genuine experts in the overall production and supervision of the fourth edition.

Finally, we wish to thank our spouses for their assistance. We know that may sound somewhat conventional, yet in this case both Lois and Dianne have careers in their own right—in teacher education and art education. Their professional help was substantial, their personal support incalculable.

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EDUCATIONAL PSYCHOLOGY: A BRIDGE STEPPED ON AT BOTH ENDS?

THEORY AND PRACTICE: TWO CULTURES

Why Theory? Why Practice?
One Theory or Many?

EDUCATIONAL PSYCHOLOGY: FOUR PROBLEMS TO SOLVE SIMULTANEOUSLY

EDUCATION: YESTERDAY AND TODAY

Yesterday: Trivia in the Classroom? Today: Still Trivia in the Classroom?

EMERGENCE OF A THEORETICAL FRAMEWORK

William James: The Early Promise
E. L. Thorndike: Scientific Education
John Dewey and Human Interaction
Maxine Greene: The Teacher as Stranger

THE ART AND SCIENCE OF TEACHING



1

INTRODUCTION AND HISTORY

EDUCATIONAL PSYCHOLOGY: A BRIDGE STEPPED ON AT BOTH ENDS?

Educational psychology as a field of study has quite literally struggled throughout its history with an identity problem. Existing by definition somewhere between psychology and education, the discipline has experienced the crosscurrents and whirlpools often created when two great oceans meet. Psychology as the science of human behavior has as a major concern the discovery of laws. As such, it focuses on basic description and prediction to uncover gradually the nature of human beings. In this mode psychology is a science, a body of knowledge about ourselves. In the tradition of rigorous science, the questions it raises are generic. The rate of progress is slow. Human beings have been and will be more complex than psychological theories. Indeed, psychology as a science is forever limited by the size of the cerebral cortex of the investigators. Ultimately, we study ourselves. Breakthroughs are hardly a common outcome. Even at best, progress in basic theory proceeds more at the speed of a glacier than at that of great oceans on the incoming tide.

Psychology's theorists are committed to a careful and comprehensive analysis of what it means to be human. This is a long-term enterprise. The payoff is future oriented. As a professor of psychology and education puts it, "It's like investing in recreational land in Labrador. Don't expect an immediate return." At the same time theorists are quick to point out that without theory, practice has nothing to guide it. Thus, those who wish to act without an informed theoretical basis do so at their own hazard. The traditions of science require a conceptual framework for practice.

On the other side, we have the profession of education. A profession generally has exactly the opposite agenda as a science. Education—like law, medicine, and business—has practice as its foremost concern. The practical world is completely different from the scientific realm. To many in a profession, applied knowledge is the only kind that matters. Otherwise, they claim, "It's too theoretical" or "It will never work." "It's another case of excessive navel gazing," they might say, or, "Remember that ac-