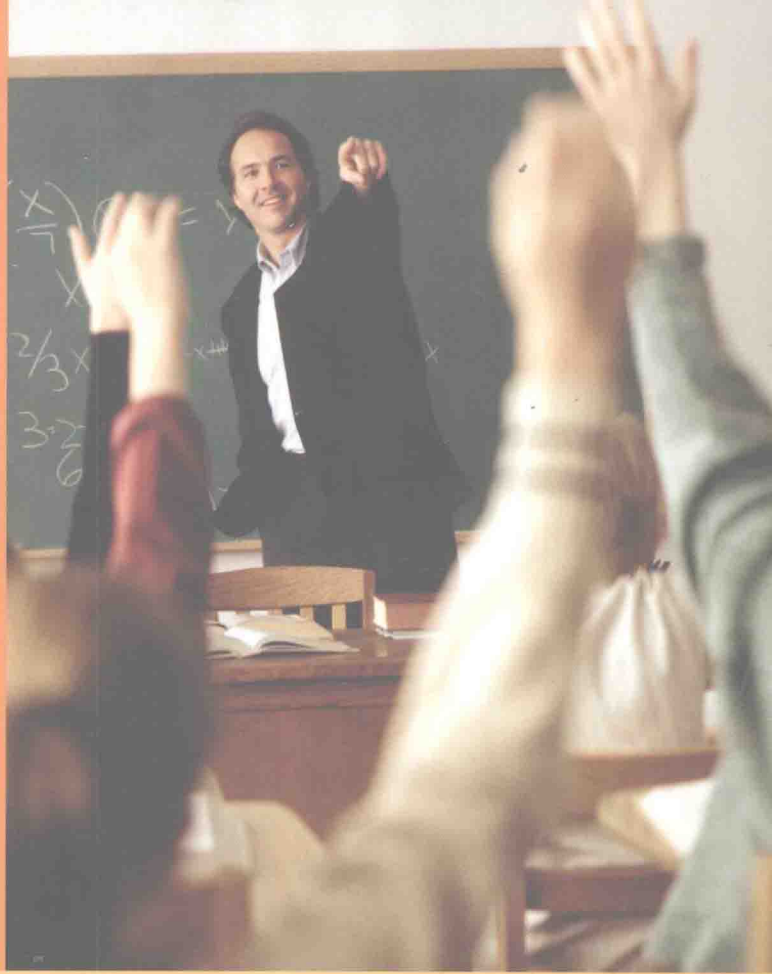
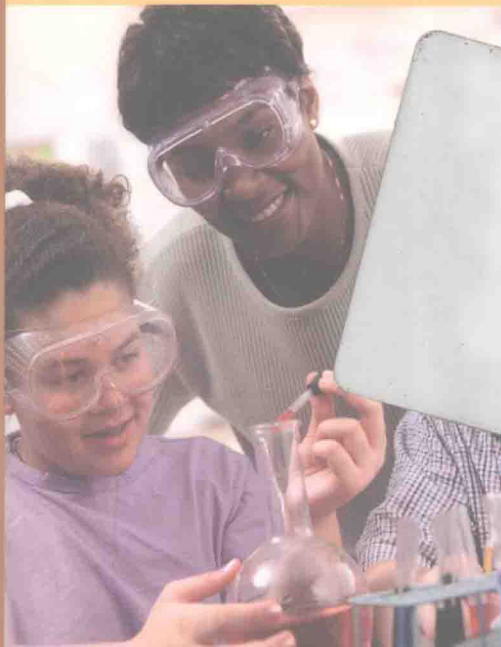


FOURTH  
EDITION



STRATEGIES FOR



# Effective Learning

Alan Weinstein  
Thomas J. Lasley II

# *Strategies for Effective Teaching*

fourth edition

*Allan C. Ornstein*  
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*University of Dayton*



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## Higher Education

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# *Dedication*

For Elizabeth Lasley who is studying to be a teacher; for Julianne Burt who is a beginning teacher; for Jennifer Hawkins who is now a veteran teacher; and, for Gina Henderson who lives to question teachers!

AND

For Stacey Ornstein who is thinking about teaching; Joel Ornstein who is now a professional student; Jason Ornstein who just graduated from F&M and is contemplating the future; and my two favorite teachers, Hans Kohn at C.C.N.Y. and Virgil Clift at N.Y.U.

# Preface

Becoming a teacher is an extraordinarily complex venture. Some of what is needed for success is learned; some is attributable to who you are as an individual. This textbook argues for the *art* and *science* of teaching. The science of educational practice is growing; several chapters document what is now known. But you can know all that science and still be ineffective; and ironically, some individuals are relatively successful without knowing any of it. Such individuals may be good teachers, but they are not, at least in a technical sense, professionals. Professionals intentionally acquire a discrete body of specialized and theoretical knowledge (the type of knowledge that is now emerging about teaching), and they use that knowledge to help students learn.

This book is intended for any general methods or specialized methods class that seeks to show prospective teachers how to plan *what* to teach (objectives), how to determine *how* to teach (methods), how to reflect on what is taught (reflection), and how to assess whether students learned the requisite concepts (assessment).

As you begin your journey toward acquiring professional knowledge, you need to understand that successful teaching is predicated on several fundamental assumptions:

1. Teachers must possess thorough disciplinary knowledge.
2. Teachers must know the academic content standards for what they teach.
3. Teachers must know how learners learn in order to design meaningful instruction.
4. Teachers must know how to present content based on context and purpose.

Assumption 1 is fulfilled if you have a good general education. Assumption 2 is already addressed if you pursued disciplinary coursework in understanding and depth—that is, you earned a disciplinary major (or selected academic minors). Assumption 3 was fulfilled through educational psychology courses that emphasize work by people such as Jean Piaget, B. F. Skinner, Edward Thorndike, and L. S. Vygotsky. Assumption 4 is the focus of this book. Specifically, this book focuses on *how* to teach: the process of communicating what you know (and is known) in ways that help students construct their own knowledge.

## Organization of This Text

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The book is organized into three parts. Part I focuses on the art and science of teaching. Part II breaks down the teaching act into specific, discrete skills. And Part III addresses issues related to ongoing professional development and suggests ways in which the

skills of teaching are part of both the art and science of what you do (or any teacher does) in the classroom.

## Features of This Text

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The book is based on six fundamental elements, making it highly useful to a prospective teacher in today's schools. It is research based, standards based, example based, reflection based, expert based, and technology based.

### Research Basis

The book intentionally draws on the growing body of literature that shows that teachers really do make a difference in the achievement of students. In the 1960s, educators were told that family socioeconomic status was so important that teachers were “secondary.” In the 1990s and 2000s, new “value-added” research suggests that teachers do dramatically influence student achievement. What students *bring* to school (the socioeconomic capital of their families) makes a difference. But what *happens* to them once they are at school is just as important. That means that you as a teacher are potentially just as important to a student's achievement as are the student's parents, and perhaps more important. What a responsibility *and* opportunity!

### Standards Basis

Many states are embracing some type of standards (or criteria) for assessing teacher competence. Some of those standards are national in nature (PRAXIS series and INTASC), and others are developed at the state or regional level (such as California's CFASST). What is presented in the text is linked with the national standards. Chapters 3–12 begin with a specific description of the Pathwise/PRAXIS III and INTASC criteria and principles determined relevant to the content of each chapter (not everyone will agree with the alignment of these criteria to content; but you will be able to see how these standards may be connected to the skills or “inputs” of teaching). If you are in an INTASC or PRAXIS series state, the provided “markers” should be very helpful. Even if you are not, you should find them useful as a way to frame and think about the content.

### Example Basis

One of the real problems with many methods texts is that they are heavy on theory and light on applications (examples). This text errs on the side of applications. Good teachers need theory, but that theory is meaningless if they do not know how to apply the knowledge. Many examples (tables, figures, charts, analogs) are provided to make certain that what is described theoretically can be applied practically. Case Studies and Tips for Teachers help connect the theory and practice. In some instances, we even illustrate specifically within the cases the connections to teaching standards criteria and principles. By doing this you should more directly see the theory-practice nexus.

## Reflection Basis

During the 1990s the whole notion of reflecting-in-action and reflection-in-action became important professional dispositions that prospective teachers were expected to acquire. This text includes Questions for Reflection to help teachers think more deeply about some of the salient topics discussed. Once you start teaching you will need to learn how to reflect on what you are doing *as* you are doing it and to reflect on what you taught *after* you complete a lesson.

## Expert Basis

Many individuals have shaped education in America. Many of their “voices” are part of this text—through Professional Viewpoints. Some of those viewpoints are written by current practicing teachers. All the writers are either those who have shaped teaching through their writing and thinking or those who are shaping it through their teaching. Both perspectives are extremely important and should help you see that many current educational issues are not new but are instead old problems that require your new thinking.

## Technology Basis

The use of technology is increasingly prevalent for America’s young people. Many of the preservice teachers who read this text are used to accessing Websites to gather information about topics of interest. Throughout the text, but especially in Chapter 7, you will find Website information that will be helpful in enhancing your effectiveness. Also added to this edition are Technology Viewpoints in each chapter to help you see how to use the technology that is now available.

## Conclusion

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We are privileged that you are reading this textbook as part of your journey to become a teacher. Our hope is that your teaching journey is a long and fruitful one and that our text stimulates you to learn even more about what it means to be a classroom teacher.

## Reviewers Who Made This Text Possible

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No textbook of this type is possible without the critical assistance of a number of very able reviewers. We are especially grateful to the following individuals for their thoughtful suggestions during the development of the fourth edition:

Caroline Diemer,  
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# To the Instructor

*Strategies for Effective Teaching*, fourth edition, is written for all who are interested in learning how to teach, improving their teaching, or teaching students how to learn. It will help prepare novice teachers for their new roles and provide seasoned teachers with new insights into *what* they are doing and *why* they are doing it.

The text focuses on the theory and practice of teaching. It attempts to blend theory with practice by reporting and analyzing important research and then presenting practical procedures and adaptive strategies for teachers to use. How do successful teachers start a lesson? How do they monitor classroom activities? How do they deal with disruptive students? How do they proceed with a student who doesn't know the answer? These are problems that teachers must deal with daily. The answers to these questions depend on how we apply the theory we have learned in our coursework to the classroom setting.

*Strategies for Effective Teaching* is also grounded in the INTASC standards and Pathwise PRAXIS criteria. Many states are using these as a means of ensuring quality teacher education and for creating a common language to discuss good teaching. Our hope is that you will be able to use this book to relate required teaching skills to defined and accepted teaching standards. And, that by using the ideas in this text, the learning of your students will be enhanced.

Prospective teachers and beginning teachers need to master theoretical concepts and principles and then *integrate* these concepts and principles into practice by developing specific methods and strategies that work on the job. The integration process, or the leap from theory to practice, is not easy. *Strategies for Effective Teaching* helps by interweaving practical strategies and methods with research. Many theories and practices are presented with the understanding that readers can pick and choose among them the ones that fit their personality and philosophy. In each chapter, look for *Tips for Teachers* and *Case Studies*. These instructional aids are designed to help the reader apply the theory to practice.

*Strategies for Effective Teaching* adopts a cognitive science approach, blending cognitive-developmental research with information-processing research. Consequently, a good deal of the subject matter is rooted in educational psychology, linguistics, and subject-related methods—and there is little that deals with the philosophy, history, or sociology of teaching.

Cognitive science focuses on how teachers teach and how learners learn, and it can be used to develop strategies that guide effective teaching and learning. This text presents research on how students process information, or what we call *learning strategies*: how to skim data, summarize information, take notes, do homework, read text material,



take tests, and so forth. Existing research can also be used to teach students to think critically and creatively; to classify, infer, interpret, extrapolate, evaluate, and predict.

Research also exists to help identify effective teaching strategies. *Strategies for Effective Teaching* uses cognitive science research to discuss how to teach by explaining, questioning, monitoring, and reviewing; how to diagnose, assess, and place students into groups for instruction; how to teach basic skills, concepts, and problem solving; how to manage the surface behavior of students on an individual and group basis; how to plan for instruction and utilize instructional technology; and how to use textbooks and improve instructional materials.

The new emphasis in cognitive science is concerned not so much with students' answers (though clearly correct answers are important), but rather with how students derive answers and what strategies teachers use to help students learn requisite material. This book informs teachers about recent research on how students process information and how teachers can modify their instruction to help students learn more effectively.

The many distinctive features of this edition of *Strategies for Effective Teaching* include the following:

- Pathwise (PRAXIS Series) criteria and INTASC standards that ground teaching skills (see Chapters 3 to 12)
- Focusing questions at the beginning of each chapter to help orient the reader, set the stage for what is to follow, and highlight the main ideas of the chapter
- Easy-to-read headings and subheadings that facilitate understanding and illustrate relationships among ideas
- Short descriptors and categories that help classify and conceptualize information
- Tables and charts organized as overviews that make learning more meaningful
- Current research findings applied to classroom teaching
- *Professional Viewpoints*, the perspectives of experts in the field, written specifically for this text, that highlight a major concept or principle and/or give advice for both the beginning and the experienced teacher
- *Technology Viewpoints*, written by a media specialist who uses various forms of technology to enhance student learning and teacher professional development
- *Case Studies* that illustrate some of the salient educational problems and help readers see the real-world nature of the problems—some are anchored specifically to the Pathwise criteria
- *Questions for Reflection* in Chapters 1–11 to help readers critically reflect on the content
- Lists of practical tips that give insights into teaching
- Chapter summaries that present short lists of main ideas, in the same sequence as the chapter's narrative

# To the Student

*Strategies for Effective Teaching*, fourth edition, has five major purposes. The first is to help beginning teachers develop an understanding of what goes on in the classroom and of what the job of teaching involves. Despite your familiarity with education from a student's point of view, you probably have limited experience with teaching from a teacher's point of view. And even if you are experienced, you can always integrate your own experiences about teaching with new information to achieve professional improvement and development.

A second purpose is to provide classroom teachers with concrete and realistic suggestions about ways of teaching—and how they can improve the teaching-learning process within their classrooms. Many teachers are unaware of their behaviors or the effects they have on students; others can sharpen their expertise in the methods and strategies that work with different students.

Another purpose is to apply theoretical and research-based data to teaching practices. Social scientists and educators have discovered many things about human behavior, and they have established many principles that can be translated into new practice in order to enhance student learning. Existing practices of the teacher can also be clarified and refined through an understanding of research. The idea is to convert “knowledge of teaching” into “knowledge of how to teach.”

A fourth purpose is to show how teachers can make a difference and how they can have a positive influence on students. The data in this text suggest that teachers affect students, and that some teachers, because of their practices, have better results than others in terms of maximizing student success.

Finally, *Strategies for Effective Teaching* deals with how teachers can teach students how to learn—that is, with learning strategies that will increase students' chances for achievement and reduce the loss of human potential so pervasive in our society today. Knowing how to learn and ground personal decisions is the goal of the learner; helping students learn how to learn is the goal of the teacher. The extent to which students learn how to learn is influenced by how well the teacher can teach.

Allan C. Ornstein  
Thomas J. Lasley II

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Many people wrote the *Professional Viewpoints* features in *Strategies for Effective Teaching*. They were kind enough to take time from their busy schedules to jot down some valuable advice or personal views about teachers and teaching. Their thoughts add a timely and unusual dimension to the text while providing useful information in an appealing manner. We appreciate their contributions to this text. And finally, I'd like to acknowledge Esther who fulfills my life, and has provided me with much needed understanding, support, and encouragement while revising this book.

*Allan C. Ornstein*

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*Thomas J. Lasley II*

# Brief Contents

## part one

### *Perspectives on Effective Teaching Performance* 1

---

- 1 THE ART OF EFFECTIVE TEACHING 2
- 2 THE EFFECTIVE TEACHER 36

## part two

### *The Technical Skills of Teaching* 89

---

- 3 INSTRUCTIONAL OBJECTIVES 94
- 4 INSTRUCTIONAL PLANNING 140
- 5 INSTRUCTIONAL STRATEGIES 194
- 6 INSTRUCTIONAL MATERIALS 244
- 7 TECHNOLOGY IN THE CLASSROOM 290
- 8 INSTRUCTIONAL GROUPING 334
- 9 CLASSROOM MANAGEMENT AND DISCIPLINE 388
- 10 ASSESSING STANDARDS AND STUDENT ASSESSMENT 432
- 11 STUDENT EVALUATION AND TEACHER ACCOUNTABILITY 492

## part three

### *Professional Growth* 547

---

- 12 PROFESSIONAL GROWTH 548

# Contents

*Tips for Teachers* xv  
*Case Studies* xvii  
*Professional Viewpoints* xix  
*Preface* xxi  
*To the Instructor* xxv  
*To the Student* xxvii  
*Acknowledgments* xxix

## part one

### ***Perspectives on Effective Teaching Performance* 1**

---

**1 The Art of Effective Teaching 2**  
    Focusing Questions 2  
    The Reasons for Teaching 2  
    The Art of Effective Teaching 5  
        Teaching Effectiveness in the Movies 6  
        Teaching Effectiveness in Literature 11  
    The Concept of Learning How to Learn 16  
        Critical Thinking 18  
        Creative Thinking 23  
        The Role of the Teacher in Fostering Creativity 27  
    The Learning Paradigm and Constructivism 29  
    A Final Note 30  
    Summary 31  
    Questions to Consider 31  
    Things to Do 32  
    Recommended Readings 32  
    Key Terms 32  
    End Notes 32

**2 The Effective Teacher 36**  
    Focusing Questions 37  
    Review of the Research on Teaching: The Science 38

Teacher Styles	41
Descriptive Models for Teaching Styles: Historical Perspectives	41
Research on Teacher Styles	44
Teaching Styles and Student Learning	46
Teacher Expectations	50
Labeling Students	53
Teacher Traits	54
Research on Teacher Traits	55
Teacher Effects	61
Rosenshine and Furst Model	61
Gage Model	62
Good and Brophy Model	63
Evertson and Emmer Model	64
Teacher Qualities and Value-Added Teaching	64
The Master Teacher	66
Cautions and Criticisms	68
The Human Factor	72
Beyond Effective Teaching: New Research, New Paradigms	75
Metaphors	76
Stories	77
Biographies and Autobiographies	78
The Expert Teacher	78
Voice	80
Theory into Practice	81
Summary	82
Questions to Consider	83
Things to Do	83
Recommended Readings	84
Key Terms	84
End Notes	84

## part two

### *The Technical Skills of Teaching* 89

---

<b>3</b>	<b>Instructional Objectives</b>	<b>94</b>
	Focusing Questions	95
	Definitions of Terms	96
	The Aims of Education	101
	Trends in Educational Goals	102
	Types of Objectives	107
	Program Objectives	107

Course Objectives	108
Classroom Objectives	110
<b>Formulating Goals and Objectives</b>	<b>115</b>
Tyler Model	115
Taxonomy of Educational Objectives	118
Cognitive Domain	121
Affective Domain	121
Psychomotor Domain	123
<b>Establishing Specific Objectives</b>	<b>124</b>
General Objectives and Specific Learning Outcomes: Gronlund Method	125
Applying Gronlund's Objectives	127
Specific Objectives: Mager Method	130
Applying Mager's Objectives	131
<b>Writing Your Own Goals and Objectives</b>	<b>132</b>
Additional Thoughts on Objectives	134
<b>Theory into Practice</b>	<b>134</b>
General Objectives	134
Precise Objectives	134
<b>Summary</b>	<b>136</b>
<b>Questions to Consider</b>	<b>136</b>
<b>Things to Do</b>	<b>136</b>
<b>Recommended Readings</b>	<b>137</b>
<b>Key Terms</b>	<b>137</b>
<b>End Notes</b>	<b>137</b>
<b>4   Instructional Planning</b>	<b>140</b>
Focusing Questions	141
How Teachers Plan	142
Planning by Level of Instruction	146
Mental Versus Formal Planning	147
Courses of Study	149
Unit Plans	150
Components of the Unit Plan	154
Approaches to Unit Planning	158
Guidelines for Developing Unit Plans	159
Lesson Plans	162
Lesson Plans by Authorities	164
Components of the Lesson Plan	165
Sample Lesson Plans	179
Guidelines for Implementing Lesson Plans	185

	Theory into Practice	188
	Unit Planning	189
	Lesson Planning	189
	Summary	190
	Questions to Consider	190
	Things to Do	190
	Recommended Readings	191
	Key Terms	191
	End Notes	191
<b>5</b>	<b>Instructional Strategies</b>	<b>194</b>
	Focusing Questions	195
	Instructional Approach I: Practice and Drill	197
	Applications of Practice and Drill	197
	Implementing Practice and Drill	204
	Instructional Approach II: Questioning	209
	Types of Questions	210
	Asking Questions Correctly	214
	Instructional Approach III: Lecture	220
	Problems of Lecturing	222
	Benefits of Lecturing and Explaining	222
	Presenting Lectures and Explanations	223
	Instructional Approach IV: Student-Centered Learning	227
	Students as Problem Solvers	229
	Students as Inquirers	231
	The Instructional Debate	234
	Theory into Practice	238
	Summary	239
	Questions to Consider	239
	Things to Do	239
	Recommended Readings	240
	Key Terms	240
	End Notes	240
<b>6</b>	<b>Instructional Materials</b>	<b>244</b>
	Focusing Questions	245
	Selecting Instructional Materials	246
	Duplicated Materials	248
	Developing Materials	248
	Copying Materials	249
	Presenting Instructional Materials	251
	Textbooks	254
	Disadvantages	254
	Advantages	257



	Stereotyping	258
	Readability	260
	Cognitive Task Demands	262
	<b>Textbook and Pedagogical Aids</b>	<b>263</b>
	Reading Across the Content Areas	264
	Metacognition and Text Structure	268
	Guidelines for Using Textbooks	273
	<b>Workbook Materials</b>	<b>275</b>
	Disadvantages	276
	Advantages	276
	Guidelines for Using Workbooks	277
	<b>Journals, Magazines, and Newspapers</b>	<b>277</b>
	Guidelines for Using Journals, Magazines, and Newspapers	279
	<b>Simulations and Games</b>	<b>279</b>
	Guidelines for Using Simulations and Games	281
	<b>Theory into Practice</b>	<b>283</b>
	<b>Summary</b>	<b>283</b>
	<b>Questions to Consider</b>	<b>284</b>
	<b>Things to Do</b>	<b>284</b>
	<b>Recommended Readings</b>	<b>285</b>
	<b>Key Terms</b>	<b>285</b>
	<b>End Notes</b>	<b>285</b>
<b>7</b>	<b>Technology in the Classroom</b>	<b>290</b>
	<b>Focusing Questions</b>	<b>291</b>
	<b>A Rationale for Using Technology</b>	<b>293</b>
	<b>Chalkboards and Display Boards</b>	<b>297</b>
	Guidelines for Using Chalkboards and Dry-Erase Boards	298
	<b>Overhead Projectors and PowerPoint</b>	<b>298</b>
	Guidelines for Using Overhead and Computer Projectors	300
	<b>Films</b>	<b>300</b>
	Guidelines for Using Films	300
	<b>Television and Videos</b>	<b>301</b>
	Television's Influence	302
	Utilizing Television	304
	Videotapes	306
	Guidelines for Using Television and Videos	307
	<b>Computers</b>	<b>307</b>
	Computer Software	312
	Computer Simulations and Virtual Reality	314
	Guidelines for Using Computers	316
	<b>Telecommunication Systems</b>	<b>317</b>
	Teleconferences and Computer Conferences	318