EFFECTIVE TEACHING

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Fourth Edition

EFFECTIVE TEACHING

Preparation and Implementation

By

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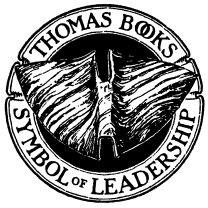

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PREFACE

Schools today have transcended from the chalkboard to the whiteboard and are populated by students who are not frightened to use the technology of this new digital age of learning. During this period of dynamic change, teachers must be ready to meet the challenges of preparing students for a global society characterized by diversity and ever-increasing expectations.

Effective teachers in the new millennium must prepare their students to function in a society that will be represented by several career changes before retirement. This societal complexity is due to the fact that knowledge is increasing, needs are changing, and opportunities sometimes seem endless for those individuals who leave school knowing how to learn on their own and solve problems in a dynamic environment.

It is little wonder that educators are held accountable for their students' learning more today than ever before in our history. Legislators, parents, and citizens in general are demanding that students be provided with a rigorous, standards-based curriculum that prepares them to function in the complex, challenging society of the twenty-first century. Because of this emphasis on high standards for student performance, which has resulted in more rigorous assessment of learning and higher accountability for teachers, one of the major issues facing teachers today is the need to provide high-level instruction in a learning environment that attends to expectations for academic rigor while remaining sensitive to all students' needs and providing each student an opportunity for success.

As professionals who have been school practitioners, who now are teacher educators, and who have evolved as students of teaching during a climate of change in public education and society, we prepared this textbook with the needs of both future and current teachers in mind. This study is organized around those teaching behaviors and instructional issues that are central to the dynamics of effective learning environments today.

We begin with a definition of effective teaching and best practice research that forms the basis for the development of the teacher as an effective practitioner. We proceed through discussions of planning for instruction, com-

municating as professionals, and research-based teaching behaviors and strategies. We complete the study with a discussion of managing student behavior and assessing student performance. Specifically, the textbook offers recommendations for planning, providing instruction, classroom management, and the evaluation and reporting of student progress.

Like teaching itself, learning to become an effective teacher must be approached on an individual though systematic basis. Successful preparation, characterized by formalized study, clinical experiences, and hours of reflection, along with an instructional philosophy which focuses on both student needs and content responsibilities, makes the possibility of becoming an effective teacher a reachable goal. We hope this textbook will guide as well as offer helpful insight in order that success in teaching becomes a reality.

Gilbert H. Hunt
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CONTENTS

EFFECTIVE TEACHING

Chapter 1

DEVELOPING A FRAMEWORK FOR EFFECTIVE TEACHING

The desire to improve the quality of education for all students has become a driving force politically, socially, and even economically in the new millennium. In fulfilling this desire, teachers must focus on the development of educational practices and programs which will provide all students with the opportunity to develop the skills and knowledge necessary to contribute to a global economy and a diverse, ever-changing, world society. In reaching this end, teachers need to create environments in their classrooms that support and encourage success for all students, not just a few. Though a daunting challenge, teachers today are expected to maintain high and relevant standards for academic success while also maintaining student-centered, achievement-oriented classroom environments.

It is not possible to determine if certain teaching behaviors are effective without knowing whether or not students learn as an end result of these behaviors. This determination rests, in part, on the clarity of identified student learning outcomes, i.e., "What does the teacher desire for the students to learn?" A framework for effective teaching cannot stand alone in that it is relational to, and dependent upon, these outcomes. While educational research has identified many instructional strategies and behaviors which have come to be referred to as effective, it is not the case that each of these strategies and behaviors produces the same outcomes with all students and in all teaching situations. The challenge for the teacher is not only to identify and develop mastery of certain instructional strategies and behaviors accepted as effective practices, but the teacher is also challenged to develop the ability to effectively match these strategies and behaviors, at the appropriate time, to individual students and student groups, in specific teaching situations as these relate to the teacher's desired student learning outcomes.

This, however, still does not fully resolve the question of just what is

desired as an end result of instruction. The answer to this question will depend on who is asking it and in what context the question is being posed. For example, "Does effective teaching result in student acquisition of a certain skill or body of subject matter knowledge?" "Does effective teaching result in students feeling good about themselves?" "Does it result in students liking, not disliking school?" "Does it result in students who obey the laws of society?" "Does it result in producing all of these possible outcomes?" While perhaps philosophical, this inquiry is important when deciding whether or not teachers are functioning in an effective manner, though it likely would be the more popular belief that effective teaching contributes in some way to each of these accomplishments.

Teachers today live and work in a world of cognitive and affective dissonance. Mixed messages abound. As an example, teachers often feel pressured to reach various desired outcomes popularly associated with effective teaching by the American public. Much of the critical attention now being given to American education has surfaced because America's teachers are expected to produce all of the desired outcomes previously mentioned, and more. Exploring the reasonableness of this expectation, however, goes well beyond the purview of this text. Though this is the case, the fact that American education and what goes on in America's schools and classrooms is of paramount interest to society should not, and cannot, be ignored.

In considering the many potential and desired outcomes associated with effective teaching, as discussed in this text, effective teaching has as its primary purpose the increased academic achievement of students which society expects of its schools and, consequently, its teachers. An effective teacher is one who is able to use certain strategies and exhibit certain behaviors which result in improved academic achievement, i.e., increased test scores, of students. Two additional points, however, are important. First, the most effective instruction associated with academic achievement also is instruction that produces positive affective ends. Second, no instructional strategy or behavior should be utilized for the purpose of achieving academic gain which results in affective loss.

A critical and difficult task facing today's teachers is the development of curricula and learning experiences that challenge students academically while remaining responsive to their individual needs. Much has been written about the importance of addressing individual learning styles, multiple intelligences, and numerous affective concerns. Each of these areas is important and needs to be considered as teachers develop their classroom learning environments. Teachers need to accept, however, that society sees the increase in academic achievement as the main purpose of schooling. Parents, school board members, legislatures, and concerned citizens hold schools and the teachers in them accountable for their students' academic achievement

gains. Any education system that does not clearly strive toward, and reach, higher academic standards will face public disapproval. It is more critical now than ever before that teachers have the ability to develop and implement instructional programs that lead to greater academic success while also supporting the individual affective needs of their students. The balancing of these two concerns will no doubt be one of the greatest challenges for teachers in the future.

Ultimately, teachers determine the quality of schooling that students receive. In order to perform this important role effectively, an understanding of best practice research on effective teaching is needed so that a framework for effective teaching can be established and for effective teaching to take place. In studying this chapter, you will learn more about best practice research as you explore the following topics:

1. the characteristics of effective teaching,
2. the research on effective teaching, and
3. the process of analyzing best practice in the classroom.

CHARACTERISTICS OF EFFECTIVE TEACHING

Classroom teachers work at the core of a dynamic profession and hold the key position of responsibility for implementing high quality instruction for children. Effective teaching involves effective planning, communicating, managing, and evaluating, as well as the actual act or process of instructing. Each of these expectations is important in the successful pursuit of increased student learning.

Educational literature is replete with research on effective teaching. Some of this literature is empirically based while some is more conceptually grounded. Some is quite valuable and some, quite frankly, is much less so. The study of research on effective teaching must be approached and focused in such a way that it is based on the identification of those desired student learning outcomes previously mentioned. Once this has been accomplished, strategies and behaviors identified then can be studied and mastered with the understanding that, if they are exhibited properly, at the right time, at the right place, and with the right students, the desired learning outcomes will result. The enormous complexity of this undertaking is not only in identifying instructional strategies and behaviors that produce academic gains, but, as can be seen, also in using them properly at the right time and the right place and with the right students. This is where the need for a critical understanding of students, effective teaching practices, learning environments, teaching contexts, and rational decision making is essential.

Reflective Teaching

It is clear that not only does effective teaching include the successful use of certain instructional strategies and behaviors related to academic achievement, it also involves the ability to determine just when, where, and with whom these strategies and behaviors should be used. With these considerations in mind, effective teaching necessitates high levels of informed and reasoned decision making. A number of research studies and other publications support the significance of teacher reflection and the important role that reflection plays in student achievement (Glickman, Gordon, & Ross-Gordon, 2007; York-Barr, Sommers, Ghere, & Montie, 2005; Ross & Regan, 1993; Colton & Sparks-Langer, 1992; Tabachnick & Zeichner, 1991; Ellwein, Graue, & Comfort, 1990).

The need for teachers to be solidly grounded reflective professionals has emerged as a dominant theme in the field of education. As a result, there exist countless definitions of *reflective teaching* and ways to characterize the nature of reflective practice. *Reflective teachers* have and use the ability to critically examine what they do and the decisions that they make. Such an examination is referred to as reflection, and the process, in its totality, is referred to as reflective teaching (Cruickshank, 1987). Reflective teachers think deeply about what they are doing and are thoughtful, analytical, self-critical, and informed decision makers. They take the time to consider the impact of their work and the potential need to change or adjust their actions. Eggen and Kauchak (2007) refer to reflective practice as the process of conducting a critical self-examination of one's teaching. Reflective practice includes a deliberate pause taken by the teacher to examine beliefs, goals, and practices in order to gain new or deeper understanding that will lead to action to improve learning for students (York-Barr et al., 2005). Richert (1990) refers to the concept of reflective teaching as a period of time in the teaching process when teachers momentarily stop to reflect on their instruction in order to make sense of it. This allows teachers to grow as professionals by influencing how successful they are at learning from their own experiences. Reflective teachers think back over their teaching to analyze what they did and why and to consider how they might improve learning for their students in the future (Woolfolk, 2008).

John Dewey (1933) stressed the importance of reflective thinking as a foundation of the learning process. It is upon the ability of the reflective practitioner that the potential for high quality instruction rests. Reflective practitioners are professionals who are characterized by considering and weighing different points of view and perspective, explaining and defending decisions which have been made, and changing decisions once made when presented with new and relevant information. Reflective practitioners recognize and

possess the skills, competencies, and knowledge essential to effective practice and recognize that they must continually seek to further develop their abilities in order to achieve and maintain high levels of effectiveness.

Because the classroom includes students of varied backgrounds, interests and motivations, ability levels and learning styles, reflective practitioners need an in-depth understanding of the principles of learning and growth and development so that they may make sound decisions regarding the selection of effective instructional strategies. Such teachers must be able to do their work with a high degree of efficiency. This often will require the use of different forms of technology and other instructional resources and aides. Teachers make virtually hundreds of learning-related decisions on a daily basis, not the least of these are those that involve the selection of effective practices for the students they have accepted the responsibility to educate.

Knowledge, Skills, and Dispositions

A clear though problematic characteristic of today's society is one that focuses on identifying quick solutions and "quick fixes" to problems. The American society has even been referred to as a "fast food" and "microwave" society. Unfortunately, some teachers take this same outlook into their classrooms with respect to finding quick solutions to the problems that they encounter there. There clearly are no quick solutions or fixes to difficult and complex problems of student learning.

Burden and Byrd (2007) suggest that, when examining effective teachers and building on the research reported, the most essential teacher characteristics may be placed into the three organizing categories of *knowledge*, *skills*, and *dispositions*.

Knowledge: To be effective, teachers must know the subjects that they teach. Although, this, in and of itself, is not sufficient to ensure effective teaching. Teachers must also have at least three other types of knowledge.

1. **Professional Knowledge:** Teachers must have knowledge about teaching in general; this includes knowledge about learning, diversity, technology, schooling and education, and the profession of teaching as a whole.
2. **Pedagogical Knowledge:** Teachers must have knowledge that includes the general concepts, theories, methods, and research about effective teaching, no matter the content area.
3. **Pedagogical Content Knowledge:** Teachers must have knowledge of teaching methods and approaches that are specific to the particular subject, or the application of certain strategies in a special way, that they teach. This includes an understanding of the content in

order to teach it in a variety of ways, drawing on the cultural backgrounds and prior knowledge and experiences of the students.

Skills: Teachers must have the necessary skills to use their knowledge effectively in making decisions about basic teaching functions such as planning for, implementing, and assessing instruction to ensure that all students are learning.

Dispositions: Teachers must have appropriate dispositions, i.e., values, commitments, and professional ethics, that influence their behaviors to promote learning for all students. Dispositions are guided by beliefs and attitudes related to values such as caring, fairness, honesty, responsibility, and social justice. While an affective concept, and in the minds of teachers, dispositions may be seen in teacher behaviors.

Many colleges, schools, and departments of teacher education are focusing on their faculty's definition of acceptable teacher dispositions. The National Council for Accreditation of Teacher Education (NCATE), one of the two national accreditation organizations for teacher education programs, has developed a disposition expectation for schools seeking NCATE accreditation. It is the position of NCATE that all candidates for teacher certification need to demonstrate behaviors consistent with the ideal of fairness and the belief that all students can learn (National Council for Accreditation of Teacher Education, 2008).

Much of what is known about best practice in teaching includes information related to *classroom planning and organization, goal setting and communication, teacher instructional strategies, time management, teacher-to-student interactions, relationships with students, and classroom management rules and procedures*. The following teacher behaviors represent a starting point to the investigation of effective teaching practices (Armstrong, Henson, & Savage, 1997). Effective teachers:

1. **play a central, dominant role in the classroom but involve students in planning and organization:** Effective teachers accept their important responsibility in classroom leadership, but also that students who are personally invested in their own learning will develop a greater sense of ownership for their learning and achieve at higher levels;
2. **set high goals and communicate these goals to their students:** It is important that teacher expectations be high though realistic; it is critical that teachers make their goals for their students clear, not only in terms of the learning experiences that they design, but also in terms of how students will be evaluated;
3. **work mostly with the entire class and less often with small groups, sometimes providing independent work for students:**

Teachers who are able to coordinate the learning of all students at the same time through large group instructional experiences develop a greater sense of community in the classroom and allow students to more clearly see their own progress, but also the work and activities of others at the same time;

4. **maintain a brisk lesson pace, requiring public and overt student participation:** Lessons that are seen by students as moving too slow, essentially only dragging along, allow for greater opportunities for students to drift away and become disengaged from the teacher; students who move forward with the lesson at a quicker pace, and who are overtly involved in the instruction, typically learn at higher levels and enjoy their learning more;
5. **use little criticism, shape student responses so that they are correct, hold students responsible for their work, and attend to students equitably:** Treating students fairly, providing uplifting rather than negative comments, and letting students know that they have responsibilities as learners, just as the teacher has responsibilities as a teacher, result in a more positive learning environment; students who feel safe in the learning environment, and who are meaningfully involved in it, are more successful in their work; and
6. **set and maintain clear rules for students' academic and social behavior:** Though perhaps not thought to be the case by some, students do desire and need clear boundaries in the classroom; students work better in environments that are well-defined in terms of the *do's* and *don'ts*, the *right's* and *wrong's*, than in settings where there is ambiguity and inconsistency as to what is acceptable and not acceptable behavior.

Five specific teacher characteristics related to teaching effectiveness have been described by Borich (2007) and organized into the broad categories of *lesson clarity*, *instructional variety*, *task orientation*, *engagement*, and *student success rate.*

Lesson Clarity

Lesson clarity refers to how well students understand the lessons of their teachers. It is not just important that teachers believe that they are clear, it is more important that their students truly understand them. Effective teachers make their points clear to their students, explain concepts in ways that help students follow along in a logical order, and have an oral delivery that is direct, audible to all students, and free from distracting mannerisms. Less effective teachers are vague, use vocabulary that students do not understand,

are generally not well organized in their work, and typically are not considered as being clear in their teaching. Teachers who teach with a high degree of clarity spend less time going over material, i.e., the material is understood the first time it is presented. When students do not understand the various communications of their teachers, they will not be able to perform to their highest potentials. Students need to understand what their teachers are saying and expect of them in order to benefit the most from their learning experiences.

Instructional Variety

Instructional variety refers to the general teaching repertoire of the teacher. For example, "Does the teacher use a number of different teaching strategies or only a very few?", "Does the teacher utilize many different resources in his or her teaching or use the same resources over and over?" Having variety in instruction contributes to the perceived "energy" of the teacher and offers students different stimuli during lesson activities to which they may respond. Using different instructional approaches makes the teacher appear more interesting and exciting to students, piques students' natural curiosity to learn, and varies the stimuli in the classroom. Most students learn best through their experiences with a variety of different stimuli. The teacher with variability in the use of instructional techniques is able to offer students a greater number of connecting points as lessons are delivered. Consequently, the teacher who is skilled in using a number of different types of strategies is more effective than the teacher who is limited to only a few approaches.

Task Orientation

Time on task is a powerful concept when analyzing the teaching-learning process. When one considers that there are only a limited number of hours in the day in which students are in school, and that a portion of the typical school day is given over to non-instructional activities (e.g., moving from class to class, recess in the lower grades, lunch, and traveling to and from the restroom), the question of time available for learning becomes critical. Having a high level of meaningful and successful time on task communicates to students that the teacher is well prepared and "in charge." It also communicates where the teacher's instruction is headed and what students will be expected to know or be able to do at the end of the instructional period. Students who are on task are much less likely to present behavioral problems for their teachers. The more time that is allocated to a task or teaching a specific topic, the greater the opportunity students will have to learn it.

Engagement

Effective teachers use their time wisely. Wasted or idle time lead to problems in student management that should and can be avoided. Student engagement in the learning process, i.e., engaged learning time, is a key behavior that refers to the amount of time students devote to learning. Suggestions for increasing learning time and student engagement during learning include:

1. set rules that let students attend to their personal needs and work routines without obtaining permission each time;
2. move around the room to monitor students' seatwork and to communicate awareness of student progress;
3. ensure that independent assignments are interesting, worthwhile, and easy enough to be completed by each student without direction;
4. minimize time-consuming activities such as giving directions and organizing the class for instruction by writing the daily schedule on the board. This will ensure that students know where to go and what to do;
5. make ample use of resources and activities that are at, or slightly above, the student's current level of understanding; and
6. avoid timing errors. Act promptly to prevent misbehaviors from occurring or increasing in severity so they do not influence others in the class.

Time in schools and classrooms is often broken down into the following four dimensions:

1. **Allocated Time:** the amount of time a particular teacher or school designates to an identified course, topic, or activity;
2. **Instructional Time:** the portion of Allocated Time that is actually devoted to learning activities;
3. **Engaged Time:** sometimes referred to as time-on-task, Engaged Time is the portion of Instructional Time that students actually spend directly involved in learning activities; and
4. **Academic Learning Time:** Academic Learning Time takes all other forms of time into account and is characterized by students not only paying attention during instructional activities, but also interacting successfully with the content that is being taught; it is that portion of the classroom time where students are successfully engaged in meaningful learning experiences.

Teachers who have greater amounts of Academic Learning Time, i.e., time when students are actively and successfully involved in the lesson's activities, have students who learn at higher levels.

Given the multifaceted nature of any school, many events take place on a regular basis that compete for time which otherwise could be available for instruction. Instructional time is lost through different disruptions, interruptions, late starts, and less than smooth transitions. Out of a typical school year only 30 to 40 percent of the time is given over to quality Academic Learning Time (Weinstein & Mignano, 1993; Karweit, 1989). Research supports that, the greater the amount of Academic Learning Time in the classroom, the greater the level of student achievement. The best use of time in the classroom is determined, to a large extent, by the degree to which the teacher is fully planned for instruction. The better planned the teacher is for instruction that is relevant to the interests and needs of the students, and responsive to their learning styles and abilities, the greater the levels of achievement that will be reached.

Student Success Rate

Not only is wise use of time an important characteristic of effective teachers, effective teachers also have higher rates of student success in their teaching. Student success rate is defined as the rate at which students understand and correctly complete their work. Students should not be involved in just "doing things" in the classroom. What they do should be meaningful, learning-related as to what the teacher has planned for instruction, and result in successful achievement and productivity. Teachers need to know the abilities and interests of their students and plan their instruction accordingly based on this knowledge. Instruction where only a few students can be successful falls short of what is desired. This type of situation serves no one well. Success breeds success, and students who are successful one day will be better able to see themselves as being successful on another day. Likewise, students who experience little or no success have far greater difficulty in seeing themselves as being successful and, in the end, in being successful. If teachers desire for their students to be successful in their learning they must plan, teach, and evaluate in ways that ensure success for them.

Student engagement is closely related to student success rate. The average student in a typical classroom spends about half of the time working on tasks that provide the opportunity for high success. Researchers have found that students who spend more than the average time on high-success activities have higher achievement, better retention, and more positive attitudes toward school.

EDUCATIONAL RESEARCH AND EFFECTIVE TEACHING PRACTICE

The Bush Administration's major education legislation, No Child Left Behind Act, has created much debate about the quality and worth of educational research since 2002. Central to the legislation is the position that federal money will not be awarded to any educational program that is not consistent with scientifically based research. Much debate has arisen over the definition of scientifically based research. As Woolfolk (2008) suggests, the Act's definition has five characteristics common to classical experimental research: (1) Researchers must use observations or experiments to gather valid, reliable data; (2) Data are analyzed using appropriate, rigorous procedures; (3) Researchers use experimental or quasi-experimental designs, hopefully with random assignment of subjects to conditions; (4) Research is replicable and easy to build upon by other researchers; and (5) The research has been blind refereed by a panel of independent experts.

In a classic article, David Berliner (2002) discusses his view on quality educational research. Berliner differs with the No Child Left Behind Act's position on the exclusive use of classical experimental or quasi-experimental design. Berliner stresses that the nature of education calls for the use of many types of data gathering and analyzing procedures; he feels there is great value in methods such as case studies, surveys and other descriptive, ethnographic research. It seems clear that educational researchers all agree about the importance of peer review and replicability, but many, including such respected researchers as Berliner, Woolfolk, and Olson (2004), to name a few, believe that education is a very different field of exploration than medicine. Because certain methods are exclusively used in medicine, it does not mean those methods should be exclusively used in education. There is little doubt that the Bush Administration took a position that education was a "weak science" and that the only way to improve the training of teachers was for educational scientists and training institutions in general to become more like the "stronger science" of medicine and the training of doctors. This debate is far from completed.

In spite of the tremendous amount of research ongoing in the field of education, Cruickshank (1990) identifies that almost all educational research suffers some shortcomings making much of it limited in its generalizability. A first limitation is the evident lack of agreement on the outcome variable used to determine effectiveness. Again, "What is the primary goal/role of the teacher?" "Is it to instruct, manage, bring about academic achievement, social change, affective change, or counsel?" These questions must be addressed when interpreting teacher effectiveness research and in determining a teacher's effectiveness. Additionally, any consideration of effective

teaching research also must take into consideration the samples used, i.e., "Who are the students and teachers involved in the research, and what do they have in common with other students and teachers?", as one considers the usefulness of any results found. Finally, the research must be analyzed in terms of the methodology used, its focus and design, its attention to variables, and its statistical soundness. All of these considerations are relevant in drawing any interpretation or conclusion from research findings.

However, teachers and prospective teachers need to be able to read and understand research reports at a level that allows for application to classrooms (Eggen & Kauchak, 2007). Teachers should know the advantage of experimental research as discussed earlier is that it can be used to determine cause and effect when replication leads to consistent findings. On the other hand, teachers must be certain that the circumstances in the experimental study are similar to the circumstances in which they teach. For example, a study showing that high school students in inner city settings who do two hours of homework each night score higher on a standardized test than classmates who do thirty minutes of homework each night would tell nothing that is applicable to elementary school settings or even rural or suburban high school settings. Teachers must remember that, to the degree that variance exists (e.g., different students, different tests, different homework assignments, or different circumstances under which the test is given) between the research and the application setting, the ability to make inferences is radically decreased.

An important publication in this area by the Phi Delta Kappa Educational Foundation brought together a review of ten major studies from the 1970s and 1980s focusing on the characteristics of effective teachers as related to increasing academic achievement (Cruickshank, 1990). The results compiled were organized into seven cluster or trait areas (Figure 1-1).

1. Teacher Character Traits
2. What the Teacher Knows
3. What the Teacher Teaches
4. How the Teacher Teaches
5. What the Teacher Expects
6. How the Teacher Reacts to Students
7. How Teachers Manage

Figure 1-1. Cruickshank's clustering of effective teacher characteristics.

1. ***Teacher Character Traits:*** are enthusiastic, stimulating, encouraging, warm, task-oriented and businesslike, tolerant-polite-tactful, trusting,

flexible-adaptable, democratic, hold high expectations for students, do not seek personal recognition, care less about being liked, are able to overcome student stereotypes, feel responsible for student learning, are able to express feelings, and have good listening skills.

2. ***What the Teacher Knows:*** are knowledgeable in their subject fields and possess a great deal of factual information.
3. ***What the Teacher Teaches:*** ensure coverage of the criterion material for which students are accountable and go beyond it to provide maximal content coverage.
4. ***How the Teacher Teaches:*** demonstrate clarity, provide variety, establish and maintain momentum, make effective use of small groups, encourage more student participation, monitor and attend to students, structure teaching and learning, take advantage of unexpected events, monitor seatwork, use both open-ended and lower-order questions, involve students in peer teaching, use large-group instruction, avoid complexity by providing information in small amounts, use less busy work, use fewer traditional materials, show students the importance of what is to be learned, demonstrate the thinking processes necessary for learning, and anticipate and correct student misconceptions.
5. ***What the Teacher Expects:*** establish expectations for students, hold them accountable, and encourage parent participation in the student's academic life.
6. ***How the Teacher Reacts to Students:*** are accepting and supportive, deal with students in a consistent manner, make little but judicious use of student criticism, demonstrate withitness, make judicious use of praise, use incentives, adjust to student developmental levels, individualize instruction, insure equitable student participation, direct questions to non-volunteers, use appropriate wait-time when asking questions, use prompting, give immediate feedback to help students, and are aware of and sensitive to learning differences among socioeconomic status or cultural groups and adjust to these differences.
7. ***How Teachers Manage:*** demonstrate expertise in planning, have strong organization from the first day of class, are prompt in starting classes, make smooth transitions, are skilled in overlapping or handling two or more classroom activities at the same time, use group alerting especially to involve students who do not volunteer, are persistent and efficient in maintaining time-on-task, minimize disruptions, are accepting of some noise in the classroom, have a repertoire of control techniques, use mild forms of punishment, maintain a relaxed atmosphere, and hold students to work and success standards.

Berliner and Casanova (1996), in *Putting Research to Work in Your School*, provide another review of research on effective teaching offering a concise and application-oriented look at selected teaching practices, skills, and behaviors related to student achievement. The following ten teaching strategies are identified as being related to increased student achievement:

1. use of reciprocal teaching strategies,
2. placing personalized and informative comments on student homework papers,
3. specifically teaching metacognitive skills and skills for remembering,
4. use of peer tutoring,
5. use of cross-age tutoring,
6. use of reading aloud experiences,
7. use of participatory learning strategies,
8. use of project-based learning strategies,
9. establishing solid relationships with parents, and
10. involving parents in the learning experiences of their children.

Early Research on Effective Teaching Practice

One of the most thorough reviews of the research in the area of teacher effectiveness was conducted over thirty-five years ago (Rosenshine & Furst, 1971) and is still considered important reading in the field today. Although considerable research has been conducted more recently, this early research provides a sound foundation for the study of effective teaching behaviors related to student achievement.

Of particular importance to this work is the understanding given to the meaning of effective teaching. While teachers are expected to accomplish many things in their work, perhaps the most important accomplishment is guiding students to achieve academically. Defining effective teaching as teaching that results in higher levels of student achievement is not to discount the importance of students developing positive feelings about themselves and the world around them, and toward learning itself. It does recognize, though, that the primary purpose of the teacher is to guide and advance students in their learning. In their early research, Rosenshine and Furst (1971) report on eleven teacher behaviors or variables related to student achievement; they are presented here in the order of the degree to which they are so related.

1. Clarity
2. Variability
3. Enthusiasm
4. Task-Oriented and/or Business-Like Behavior

5. Student Opportunity to Learn Criterion Material
6. Use of Student Ideas and General Indirectness
7. Criticism
8. Use of Structuring Comments
9. Types of Questions
10. Probing Behaviors
11. Level of Difficulty of Instruction

Clarity

Teachers who have the ability to explain concepts clearly and who are able to answer student questions so that their students understand the answers given to them are characterized by clarity in their instruction. When teachers are clear in their communications, their students feel more secure in their learning and are better able to comprehend what is expected of them. As a result, they perform at higher academic levels.

Variability

Also referred to as instructional variety, variability is represented by the teacher's diversity of information-sending techniques or strategies used during the presentation of lessons. Teachers who have variability in their teaching utilize multiple strategies to get the main ideas of their lessons across to their students. Effective teachers have the ability to utilize expository lesson delivery as well as organize students for cooperative learning activities as appropriate to the purpose of the lesson. They are capable of exhibiting many different strategies in teaching and do so regularly. Through this variety, in particular when strategies are matched to student learning styles, students remain more interested in the lessons that their teachers have planned for them and learn more in the process.

Enthusiasm

Enthusiasm has been identified as the estimation of the amount of vigor and power displayed by the teacher. It also has been associated with the teacher's level of excitement, energy, involvement, and even interest regarding the subject matter, the students, and teaching. Although an abstract concept, students definitely have their own ideas about the enthusiasm of their teachers. Students feel they know when their teachers are enjoying their work and are excited about being in the classroom and when they are not. Students draw from the enthusiasm shown by their teachers, or at least from

what they perceive as their teachers' enthusiasm, and respond accordingly. As a part of the teacher's overall attitude toward teaching, students, and student learning, teacher enthusiasm is related to the concept of teacher efficacy, i.e., the teacher's belief that he or she can be successful in bringing about increased student learning. Teachers who exhibit enthusiasm communicate that they are confident in what they are doing, not only in their own abilities, but also in the abilities of their students.

Task-Oriented and/or Business-Like Behavior

Task-oriented teachers project that they know what they expect concerning student performance and the lessons that they teach and how to attain the student performance that they desire. They are seen by their students as being in charge, knowing what they are doing, organized, and focused on what needs to be accomplished. Being task-oriented and business-like does not mean being impersonal, aloof, cold, or distant when working with students. Rather, it communicates that the teacher knows that something important needs to be done and that the teacher and students, together, will be successful in completing the task that is to be undertaken.

Student Opportunity to Learn Criterion Material

Teachers who are criterion-focused in their teaching communicate to students their expected instructional outcomes, i.e., desired student learning outcomes, prior to beginning their instruction and then teach specifically toward the students' successful attainment of these desired outcomes. What is desired is not kept secret; there is no mystery. Students know what is expected of them and how they will be evaluated (the criteria used) as to their level of success. This security of direction and understanding of the evaluation process is important to students as they engage in the teacher's planned learning activities. It also is important to the teacher in that it offers the teacher additional focus and direction with respect to teaching to stated learning objectives.

Use of Student Ideas and General Indirectness

The use of student ideas by teachers during instruction and, in so doing, communicating to students that their ideas and input are important enhances student achievement. The use of student ideas is a good way to personalize the instruction and is an important part of indirect teaching. Students have higher levels of meaningful participation and interest in their learning when

their ideas are regularly incorporated into the learning process; they also have greater academic success as they believe their teachers value their ideas as well as them as individuals.

Criticism

A negative relationship exists between student achievement and the teacher's use of criticism. Teachers characterized by using criticism in their teaching, often seen by students as an attempt to justify their authority, typically have students who achieve less in most subject areas. Teachers who use frequent criticism are perceived by their students as being less prepared for their work and less sure of themselves. The use of criticism can create a threatening environment for some students, push students away, and detract from the learning process resulting in lower student achievement.

Use of Structuring Comments

The teacher's use of structuring comments in communicating with students, i.e., alerting students to the important instructional events which are to follow in the lesson, or important points to be made, is recommended. The use of structuring comments is appropriate at the start of lessons and at the start of different parts of lessons. Such comments help students focus on and attend to what will be taking place during the teacher's instruction. The use of structuring comments also projects to students that the teacher is well planned and clear as to where the learning activity is headed.

Types of Questions

Effective teachers are skilled at asking higher and lower level questions of cognition, and the use of both types is related to student achievement. This concept is vital to all levels and types of teaching. Some teachers consider the ability to ask good questions as the most significant teaching skill of all. This is particularly the case as question asking has the potential for great diagnostic value for the teacher as well the potential to advance intellectual thought for the student. The use of high and low level questions is discussed in detail in Chapter 4.

Probing Behaviors

Probing behaviors occur when the teacher requests students to go deeper into their thinking or to elaborate on comments made or positions taken.