



# INFORMATION CAPSULE

## Research Services

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### RESEARCH-BASED QUALITIES OF EFFECTIVE TEACHERS AND INSTRUCTIONAL STRATEGIES

#### AT A GLANCE

*The purpose of this Information Capsule is to summarize recent research findings regarding effective teaching and effective teaching strategies. This capsule addresses the question, how can teachers promote high levels of academic achievement in their students? Dr. James Stronge, a noted Heritage Professor of Educational Policy, Planning, and Leadership at the College of William and Mary, has summarized these areas in his book, "Qualities of Effective Teachers." The background, personal qualities, social and organizational skills, and instructional practices of effective teachers are reviewed and specific teacher behaviors that contribute to higher levels of student performance are identified.*

Although some of the instructional techniques presented here are already well known and utilized by teachers, this Information Capsule serves as a refresher on instructional strategies designed to increase student achievement and may be of particular assistance to beginning teachers.

Effective teaching is the result of many factors, including a teacher's background, the way he or she interacts with students, and the implementation of specific teaching strategies. Dr. James Stronge provides a comprehensive review and synthesis of the educational research that defines the preparation and practices of effective teachers in his book, *Qualities of Effective Teachers*. A summary of the attributes shared by effective teachers, as identified by Dr. Stronge, is presented below.

#### TEACHER PREPARATION

Extensive research on teacher backgrounds has been conducted to determine the preparation that is most likely to enhance classroom teaching skills.

- **Verbal Ability.** Research does not support a link between teachers' intellectual aptitude and student success; however, studies have found a connection between effective teachers' verbal skills and their students' academic success. Teachers with higher verbal skills are better able to communicate clearly and convey ideas to their students.

- **Educational Coursework.** The amount of coursework in education completed by a teacher is a strong predictor of his or her teaching performance. Studies have consistently found that teachers' formal education training has a positive impact on student learning. Research indicates that teachers with little or no coursework in education consistently have difficulties in the areas of curriculum development, teaching strategies, classroom management, and student motivation.
- **Teacher Certification.** Research shows that certified teachers have a greater impact on student learning than uncertified teachers, especially with minority populations in urban and rural settings. In addition, studies have found that the students of certified teachers working within their own field have significantly higher achievement rates than the students of teachers who are working out-of-field.
- **Content Knowledge.** Research has found that teachers' content area preparation is positively related to student achievement. Studies indicate that students perform at higher levels when their teachers majored or minored in the subject area they are teaching. Several studies have suggested that teachers with greater subject matter knowledge ask higher level questions, involve students in lessons to a greater extent, and incorporate more student-directed activities into lessons.
- **Teaching Experience.** Research shows that it takes teachers between five to eight years to move from novice to master. Teachers with more than three years of experience have been found to be more effective than those with three years or less, but these differences appear to level off after five to eight years. Studies indicate that teachers with more experience have better planning skills, are more likely to implement a broad range of instructional strategies, and practice better classroom management skills.

## THE TEACHER AS A PERSON

Many studies suggest that teachers' affective characteristics, or social and emotional behaviors, influence student achievement.

- **Caring.** Studies show effective teachers care for their students and bring out the best in them through affirmation and encouragement. Characteristics of caring teachers include patience, honesty, knowledge of individuals, and warmth and encouragement.
- **Fairness and Respect.** Research indicates that effective teachers practice gender, racial, and ethnic fairness and offer all students opportunities to participate and succeed. Effective teachers establish rapport and credibility with students by emphasizing and modeling fairness and respect.
- **Social Interactions.** Studies have found that a teacher's ability to relate to students and make positive connections with them plays a significant role in promoting student achievement and cultivating an environment that is conducive to learning.
- **Promotion of Enthusiasm and Motivation for Learning.** Research shows that teachers' enthusiasm for teaching, learning, and the subject matter being taught is closely related to high levels of student achievement.
- **Attitude Toward the Teaching Profession.** Studies indicate that effective teachers are dedicated to their students and to the job of teaching and are committed to both student learning and personal learning. They demonstrate to their students that education and learning are important by investing in their own education (taking classes, working collaboratively with other teachers, and participating in professional development activities, for example).
- **Reflective Practice.** Studies show that reflective practice, or careful review of

one's own teaching, is an important element of effective teaching. Research has found that effective teachers reflect on their work formally and informally in an effort to improve their teaching (for example, by keeping a journal, reading professional publications, meeting with colleagues, or studying a videotaped recording of their teaching).

### **THE TEACHER AS A CLASSROOM MANAGER**

Research indicates that effective teachers create an environment that is conducive to learning by planning and preparing for the organization of the classroom.

- **Classroom Management.** Classroom management is a key component of effective teaching. Effective classroom managers are prepared for students on a daily basis. They use consistent and proactive discipline, establish daily rules and routines, and involve students in the establishment and maintenance of these rules and routines.
- **Organization.** Studies have found that teachers who are organized in terms of their routines, behaviors, and materials are better prepared for class. These teachers handle routine tasks promptly and efficiently. They prepare classroom materials in advance and organize classroom space to optimize their proximity to materials and students.
- **Disciplining Students.** Effective teachers are able to minimize, and often prevent, negative behavior. More time is available for instruction and learning when less classroom disciplining is required. Effective teachers set and reinforce clear expectations for student behavior; respond to inappropriate behavior promptly; establish credibility with students through the fair and consistent implementation of discipline; and handle discipline problems on an individual basis, instead of imposing classwide consequences for the actions of a few students.

### **ORGANIZING FOR INSTRUCTION**

Research has identified four elements of organizing for instruction that are utilized by effective teachers.

- **Focusing on Instruction.** Effective teachers ensure that the classroom is focused on teaching and learning. Studies indicate that teachers who focus on instruction communicate an enthusiasm and dedication to learning that transfer to students' classroom behaviors.
- **Maximizing Instructional Time.** Research suggests that student achievement is higher when teachers maximize instructional time; however, time is one of the biggest limitations teachers face as they try to meet the learning needs of all students while also completing their many required administrative duties. Studies have identified the following strategies that teachers can implement to maximize instructional time:
  - Follow a consistent schedule and maintain the rules and procedures established at the beginning of the year.
  - Handle administrative tasks as quickly and efficiently as possible.
  - Prepare classroom materials in advance.
  - Maintain momentum within and across lessons.
  - Limit disruptions through appropriate classroom management techniques.
- **Expecting Students to Achieve.** Studies have found that teacher expectations are positively related to student success. Effective teachers believe in their students and expect all students to learn, regardless of their skill levels and starting points. Studies show that effective teachers not only set high expectations, but also emphasize that students have a responsibility to try to meet those expectations.

Studies on teacher expectations have found that, in many cases, students in the bottom third of the class receive significantly less encouragement from teachers, while

students in the top third receive the most teacher attention and encouragement. Research suggests that this pattern of behavior can be eliminated through self-observation (videotaped or audiotaped lessons) and self-awareness.

- **Planning and Preparing for Instruction.** Careful planning and preparation maximize the amount of content a teacher is able to cover. Preparation for instruction involves both short term planning for individual lessons and long term planning for coverage of the curriculum. Research has found that effective teachers use the following methods to plan for the delivery of instruction:
  - Identifying clear learning objectives and linking them to classroom activities.
  - Organizing content for effective presentation.
  - Considering student learning styles and attention spans when designing lessons.
  - Developing objectives and activities that reflect both higher and lower level cognitive skills, as appropriate to the content and the students.
  - Planning academic enrichment and remediation opportunities for students.
  - Recognizing the importance of relating instruction to real life situations.

## IMPLEMENTING INSTRUCTION

Although teachers' preparation, relationships with students, and classroom management skills are all important components of classroom success, the actual practice of teaching has the greatest impact on student performance. It is not possible to create a single list of effective instructional strategies, but an overview of some of the instructional practices used by effective teachers is provided below.

- **Using a Broad Range of Instructional Strategies.** Studies indicate that teachers who use a broad range of instructional strategies have a greater impact on student performance because they are able to reach students with different learning styles and interests. Effective teachers recognize that no single instructional strategy should

be used in all situations and have the ability to select from a range of strategies in order to find the best match to the content.

- **Communicating With Students.** Effective teachers are able to communicate with students by providing them with clear and focused explanations of the subject matter and clarifying expectations for achievement. Teachers can enhance student learning by clearly explaining the content, giving specific directions on how students should complete activities, providing students with examples and guided practice, and communicating their expectations for student performance.
- **Understanding the Complexities of Teaching.** The effective teacher has a sufficient knowledge of the subject matter and learning process to appreciate the complexity of teaching. He or she understands that each student is unique and brings many different experiences into the classroom. Research on the cognitive complexity of classroom tasks has determined that effective teachers focus instruction on meaningful conceptualizations that build on students' knowledge of the world, instead of requiring students to simply memorize facts or events.
- **Using Questioning Techniques.** The question and answer process increases student involvement and enables teachers to monitor student learning. Good questioning reflects the content being taught, the goals of the lesson, and the students involved. Some studies support the benefits of lower-level, concrete questions, while other studies support the benefits of higher-level questions. This variability in results suggests the importance of a variety of question types to meet the learning needs of all students.
- **Supporting Student Engagement in Learning.** The amount of time students spend involved in the learning process has a positive impact on their performance. Effective teachers use a variety of

instructional strategies, assignments, and activities to increase student involvement. Research has found that student engagement tends to be higher when activities are led by the teacher and is lowest during presentations by other students. Providing detailed directions for procedures to be followed during classroom activities has also been shown to encourage high levels of student participation.

## **MONITORING STUDENT PROGRESS AND POTENTIAL**

There are many ways to monitor and assess student understanding. Studies show that effective teachers use all methods available to positively impact student performance.

- **Assigning Homework.** Effective teachers use homework to assess the learning needs of their students. Research shows that homework improves student performance when it is clearly explained and directly related to the content being studied. Effective teachers check and review homework and provide students with supportive feedback. Research shows that homework has a greater effect on student achievement when it is graded, commented on, and discussed in class. Studies have found that teachers who do not provide regular feedback on homework realize only one-third of the gain made by teachers who do provide feedback.
- **Administering student assessments.** Effective teachers use a variety of assessments to monitor student progress and to plan instruction. Assessments provide information to teachers about what strategies are working, what content should be revisited, and which students need more assistance. Teachers can look for patterns in the types of questions students answered incorrectly and can group questions by concept to determine if an entire concept should be retaught using a different instructional approach.
- **Providing Feedback.** Effective teachers

provide feedback in a timely manner and make sure it relates directly to the activities students are engaged in. Research shows that the less time that elapses between the activity and the feedback, the more the feedback benefits students. Studies have also found that feedback is more useful when teachers provide specific explanations of what students did correctly or incorrectly, rather than simply indicating right or wrong answers.

- **Responding to Student Needs and Abilities.** Studies show that students' performance improves when instruction is appropriately suited to their achievement levels. Effective teachers know and understand their students' abilities and learning styles and are able to improvise while teaching in order to adapt instruction to meet their students' needs.

## **ON A LOCAL NOTE**

While Dr. Stronge's book summarizes research findings regarding effective teaching strategies, the reader should be reminded that a "one size fits all" approach to instruction will not succeed in districts with diverse student populations. Miami-Dade County Public Schools (M-DCPS) has one of the nation's largest immigrant student populations, representing over 170 countries worldwide. Although this information capsule identified instructional approaches that educational research has found to enhance the teaching and learning processes, teachers in M-DCPS face the additional challenge of addressing the cultural and socio-economic diversity of students from a broad array of countries. Teachers must recognize that the countries from which our students arrive have unique cultural identities. In addition to the strategies suggested in this paper, teachers might consider attending professional development training on cultural education, cultural sensitivity, and avoiding stereotyping. Instructional methods will complement unique student learning characteristics as teachers become more observant of student behavior and the strengths their students bring to the classroom.

## SUMMARY

A review of the educational research on teacher effectiveness, compiled by Dr. James Stronge in his book, *Qualities of Effective Teachers*, indicates that successful teachers share specific characteristics and behaviors. Research findings that identify commonalities in the background, personality, and classroom management skills of effective teachers were reviewed and instructional approaches that educational research has found to enhance the teaching and learning processes were identified.

## ABOUT THE AUTHOR

James H. Stronge is a Heritage Professor in Educational Policy, Planning, and Leadership at the College of William and Mary in Williamsburg, Virginia. Dr. Stronge has worked with school districts and other educational organizations to design and develop evaluation systems for teachers, administrators, and support personnel. He is the author of numerous books, articles, and technical reports on teacher, administrator, and support personnel evaluation. Dr. Stronge has served as director of the Evaluating Professional Support Personnel project conducted by the Center for Research on Educational Accountability and Teacher Evaluation. Currently, he is Associate Editor of the *Journal of Personnel Evaluation in Education*. Dr. Stronge received his doctorate in the area of educational administration and planning from the University of Alabama. He has been a teacher, counselor, and district administrator.

Source: Stronge, J.H. 2002. *Qualities of Effective Teachers*. Alexandria, VA: Association for Supervision and Curriculum Development.

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Following is a listing of selected references for readers who are interested in obtaining additional knowledge on the qualities of effective teachers.

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