RESEARCH-BASED STRATEGIES FOR IMPROVING STUDENT ACHIEVEMENT: READING AND WRITING

Educational Research Service (ERS) has published a report designed to promote research-based decision making in schools. The report, entitled *Handbook of Research on Improving Student Achievement*, provides research findings and classroom implications for each of the major disciplines taught in elementary and secondary schools. Scholars who contributed to the handbook conducted extensive searches of the literature, evaluated the quality of the research, and prepared the syntheses that are included in the handbook. The handbook contains a combination of emerging strategies and “tried and true” practices. By offering comprehensive, research-based strategies for use in the classroom, the handbook can assist educators in the selection and implementation of effective instructional practices. Although research cannot identify the best way to teach in every classroom, it can point to the instructional practices that are most likely to achieve the desired results.

This information capsule is the first in a series that will summarize research-based teaching strategies in reading and writing, mathematics, and science. Following are strategies and practices that have been successfully implemented in reading and writing.

**Extensive reading.** Research has shown that extensive reading of many different types of material, both in and out of school, results in significant growth in students’ vocabulary and comprehension abilities. Students should be given large blocks of time to read within the school day. Reading should be encouraged in all classrooms, not just in language arts classes. An atmosphere that encourages reading outside of the classroom should also be provided. This atmosphere can be created by scheduling class time for students to talk to each other about the books they have read and by engaging in shared reading. School media centers should stock books that contain varied writing styles and that cover a wide variety of topics.

**Interactive learning.** Studies have found that actively engaging students in the learning process produces more growth than passive classroom instruction. Students must be encouraged to think about, discuss, and write about what they are reading. Time spent talking about reading has been shown
to increase the amount of reading students do and to improve their reading skills. Opportunities for sharing, asking questions, and explaining can be provided to students in the classroom through reading partners, cooperative learning groups, whole class discussions, and presentations of reports.

**Extension of background knowledge.** Studies have documented that background knowledge is important to reading. The more a reader knows about a topic, the higher his or her reading comprehension will be. Teachers can supply students with background knowledge by preteaching vocabulary before it is presented in the text, giving students ample time to read, and providing books that are interesting and varied.

**Instruction in strategic reading and writing.** Activities that enable students to apply cognitive strategies to their reading and writing (such as summarizing, questioning, and interpreting) contribute to improved reading comprehension and written composition. Research has shown that students consistently demonstrate improved understanding after engaging in these activities. Additionally, good readers have been found to use a wide range of strategies when they encounter unfamiliar text, whereas poor readers are less likely to do so.

A number of cognitive strategies, designed to improve reading comprehension and writing ability, have been developed and can be taught to students, including using background knowledge, previewing text, setting goals, determining importance, evaluating content, generating questions, prediction, and summarizing. Teachers should select strategies appropriate for their students, explain how the strategies will help with learning, model these strategies for their students, and provide feedback and encouragement as students learn to use the strategies. Group activities can be used to introduce and implement cognitive strategies. Teacher-student conferences offer a way to encourage students to reflect on what they have been reading or writing.

**Interrelated activities.** Research has demonstrated that interrelated instruction in reading, writing, speaking, and listening promotes students’ understanding of the connections between activities and ideas. Thematic instruction, in which activities designed around a unifying theme build on each other, can provide a framework for helping students make the connection between reading, writing, speaking, and listening.

Reading should prepare students for discussion and writing. Discussion of that writing should lead to more reading and writing. If each day’s reading, writing, and discussion relate to previous days’ instruction, as well as to upcoming activities, students will be better prepared to make connections between ideas.

**Teaching critical reading and writing skills.** Studies have found that many children will not automatically acquire all of the basic skills needed for reading and writing and may have to be taught these skills through direct instruction. Research has pointed to the need for a balance between direct instruction in reading and writing skills and instruction in context. Whether critical reading and writing skills are embedded in a total language context or taught directly, students must be provided with ample time to learn the skills and to gain experience applying them.

**Discussion and analysis.** Studies show that instruction emphasizing discussion and analysis, instead of rote memory, contributes most effectively to the development of students’ thinking skills. In fact, students’ ability to recall information may improve when they create a context in which to remember facts. Reading and writing are so closely related that they are most effectively taught together, using structured instruction that has higher-order skills as its main focus.

Teachers should avoid over reliance on questions that require only recall. Students should be taught to think while they read. Guided questions and class discussions can be used to focus on skills such as developing inferences or analyzing content.

**Emphasis on the writing process.** Research indicates that when teachers stress the processes of composing (planning, drafting, revising, sharing, and publishing), students’
writing competence improves. Frequent classroom practice in writing is necessary to improve students’ writing skills. Writing workshops and whole class or small group discussions can provide students with the time needed to talk about their writing and to ask for feedback from other students.

**Balanced reading and writing.** Programs must provide balanced attention to both imaginative and informative reading and writing. Recent studies indicate that schools are not providing students with enough practice in the skills associated with expository writing. Literary selections can engage students’ interest as they begin to read, but experience with factual and scientific passages is also important. Teachers should clearly present the differences between types of reading passages and writings, provide instruction in a variety of writing formats, and offer assistance to students as they practice. When students are asked to produce different styles of writing, not only do they learn different modes of writing, but they gain experience with different approaches to developing a finished product.

**Early intervention.** Carefully designed early intervention for students who are having difficulty learning to read and write has been shown to produce significant long term improvement. However, pull-out programs that isolate students for remedial instruction contribute less to their learning than mainstream instruction with the provision for flexible student groupings.

Students must be provided with extensive opportunities to read for meaning and to experience success. Recent studies suggest that Reading Recovery and Success for All are effective intervention programs. These programs involve early diagnosis, one-to-one tutoring by certified teachers, use of flexible grouping in the classroom, a print-rich environment with opportunities for reading, personal instruction on word attack skills, and scheduling of students for special help in addition to, rather than as a substitute for, regular reading instruction.

**Exposure to a range of literature.** Reading and reflecting on a range of selected literary works can help students learn about the ideas and values of their own and diverse cultures. Schools should develop curricular programs that contain both traditional and nontraditional literature of high quality. Because of changing demographics, it is important for students to understand the values expressed in the literary heritages of varied cultural groups.

**Appropriate assessment.** Studies have identified a misalignment between many assessments and instructional programs. Assessments must focus on what is being taught in a school’s curriculum and on the modes of instruction used in the curriculum. When assessments don’t measure what teachers teach and students learn, the results provide little information about which instructional practices are working or about what can be done to improve instruction.

**Summary**
A review of general, research-based teaching strategies and practices in reading and writing has been provided, based on ERS’ *Handbook of Research on Improving Student Achievement*. ERS’ full report presents effective practices for improving student learning in all of the major elementary and secondary subject areas. The strategies contained in the report were developed to help educators use accurate, comprehensive research in their instructional practices. Future information capsules will examine research-based strategies that can be implemented in mathematics and science.