
MAKING EDUCATION WORK

Americans—parents, educators, and citizens—are taking a close look at their education system. They want to know why children aren't leaving school with better skills and what can be done to improve the situation. Everyone has heard about high school graduates who read poorly, who have difficulty writing intelligibly, and who cannot express themselves verbally.

A recent report, *What Works: Research About Teaching and Learning*, published by the U.S. Department of Education, emphasizes the urgency of improving the basics of education—phonics, homework, and memorization.

Education Secretary William J. Bennett points out that many of the research findings cited in this report seem like common sense.¹ Yet these methods of enhancing education were abandoned

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and even strongly criticized by educators for decades. However, at a time when graduates leave American learning centers with an education that does not prepare them for life or for an occupation, it is certainly time for a change—for improved teaching methods, materials, and curriculum.

The Department of Education report emphasizes hard work and self-discipline as keys to student success. Pupils' accomplishments depend more on the latter than upon IQ, the report states. Hard work and self-discipline provide direction to students' study programs, which ultimately provide success experiences for them.

The reports underscore the fact that teachers who have high expectations for their students obtain high academic performance. Educators must motivate and encourage their students to ever-higher achievement. Students want to improve when they know someone cares and has confidence in their abilities.

Good teachers know their subject con-

Parents are their children's first and most influential teachers. What parents do to help their children learn is more important to academic success than how well-off the family is.

tent well. A self-confident, enthusiastic teacher inspires students to become knowledgeable and to seek additional sources of information for themselves. Teachers who continually seek to improve their skills and who use appropriate and interesting teaching methods are a motivation in themselves.

Students do better in classrooms where the teacher clearly defines his or

BY LESLIE L. LEE

her expectations. They are more successful when provided tools to accomplish required tasks, and when they know how to proceed toward definite goals. Busy, directed, on-task, interested students are learning students.

Teachers can help students succeed by praising and rewarding them with words of recognition and encouragement. Students thus perceive that someone cares, is willing to provide assistance, and sees value in their efforts and achievements.

Students learn better in stimulating environments. An attractive classroom reaches out and challenges young people to learn. Bulletin boards displaying student projects and learning centers that dare students to become involved create an environment for real learning—learning that goes beyond the textbook and class presentations.

The U.S. Department of Education report accentuates the necessity of a rigorous and firmly structured curricula, rather than a "catchall" or a "do-your-own-thing" program.

Over the years education has struggled through periods when schools were besieged by numerous proponents of conflicting views, each demanding that his own ideas or concerns be implemented in the school system. Thoughtful educators will ignore such clamorings, and concentrate on defining exactly what an adult needs to know and what skills he or she requires to function in modern society as a happy and productive citizen. Christian schools, of course, have the additional responsibility of providing moral training and preparing young people for eternity.

For a number of years now, schools have been expected to teach nearly everything young people need to know to function in society. Perhaps it is time for us to decide just what knowledge and skills schools should provide, and what should be left to other agencies in society. In some cases the schools have spread themselves so thin that their basic responsibilities—teaching reading, writing, arithmetic, science, and social studies—have suffered.

Reading

We will now consider some of the important areas in which schools can make education work. Reading, of course, is basic to all other areas of the curriculum. As the U.S. Department of

When teachers explain exactly what students are expected to learn, and demonstrate the steps needed to accomplish a particular academic task, students learn more.

Education report indicates, students get a better start in reading if they have a strong phonics program, combined with other techniques. The report states: "Phonics should be taught early but not over-used. . . . Phonics helps children pronounce words approximately, a skill they can learn by the end of second grade. In the meantime, children can learn to put their new phonics skills to work by reading good stories and poems."²

Zintz and Maggart³ list the strengths of a phonics approach to teaching beginning reading:

1. aids in auditory perception
2. aids in visual discrimination and word recognition

3. aids in unlocking new, strange words
4. employs systematic system of learning sounds
5. builds confidence in word recognition
6. is useful in spelling and composition.

As with all teaching methods, phonics has its weaknesses and thus should not be overused. For example, (1) memorizing phonics rules does not assure ability to use them; (2) too many sounds are spelled alike; (3) too many rules have numerous exceptions; and (4) intensive drills can kill interest in reading. However, a well-planned and research-based reading program will enable children to learn a set of skills for phonic and structural analysis of unfamiliar words, which will help them develop better reading skills.

As they progress, children should be guided into the enjoyment of good stories and poems. This will give them a reason to read.

T

eachers can help young people develop a desire to read by providing time for reading and modeling

good reading habits. One effective method is setting aside a particular time during the day when every other activity ceases. Students, faculty, and staff alike take up a book and read for enjoyment. Children thus learn that reading is an enjoyable activity for everyone—young and old.

Teachers can help students benefit from their reading by presenting background information about the books and stories they assign. Before giving a reading assignment, teachers should describe the main ideas and characters in the selection. Students will remember the contents better if alerted in advance to look for certain special facts or ideas. After the children read the story, the

Children benefit most from reading aloud when they discuss stories, learn to identify letters and words, and talk about the meaning of words.

ness of a math center in helping students learn certain concepts. The objective of the center is to assist students in developing needed skills and to provide indi-

The Arithmetic Teacher and computer programs that teach numerical concepts and applications.

Writing

Another curriculum area that needs attention and improvement is writing. Some high school graduates and even a number of people with college degrees have difficulty expressing themselves effectively in writing. Every child needs in-school opportunities to practice a variety of writing experiences.

"The most effective way to teach writing is to teach it as a process of brainstorming, composing, revising, and editing."⁷ First the teacher presents a topic. Afterward the students write down every related idea that comes to mind. They then discuss their ideas, sorting and organizing them into usable form, after which they shape these ideas into complete sentences and paragraphs. On succeeding days the students and teacher revise and edit their work. This method teaches students to:

1. think and gather a large number of ideas
2. compose ideas in readable form
3. revise and edit written work
4. synthesize the above approaches to produce a polished, well-written composition.

With continued practice students learn to express themselves well in writing, with the added benefit of concurrently developing an expanded vocabulary. However, they need continual support and encouragement from the teacher and their peers as they work to put their ideas and words on paper. Being able to share writing orally and receive appropriate comments and praise from the teacher and classmates will boost each writer's morale.

Tiedt and Tiedt⁸ suggest a sequence of writing experiences for the most effective teaching of the subject:

1. talk about ideas and new words
2. print or write isolated letters and words
3. copy letters, words, sentences
4. dictate sentences and stories to the mature writer
5. write original sentences and stories
6. learn new forms for writing.

Writing in a variety of forms and for a number of different audiences will also

Continued on page 28

teacher can ask them about the major elements of the plot, characters, theme, or moral. Using this method the teacher can assess student understanding and highlight ideas that pupils should look for in future reading selections.⁴

Math

For effective learning to take place, students need to be actively involved in math. Numerous studies point out that children benefit when real objects are used as aids to learning in math classes. Such concrete materials are particularly important in the early stages of learning math concepts. In later work the student can mentally refer to previous concrete activities or materials.⁵

Tiedt and Tiedt⁶ emphasize the useful-

visualized study.

A number of games and activities can be kept at the math center. Tiedt and Tiedt recommend math wheels, which use circles of poster board with a number written in the center. Various numbers are written around the edge of the wheel. Students add the center number to each of the outside numbers and record the results. Their papers are saved for the teacher to review later. Similar wheels may be used for subtraction, multiplication, and division.

The Dizzy Quiz is a valuable learning device for the math center. It consists of a series of questions, each on a separate card, to which the answer is always a number.

Other helps for math may be found in

MAKING EDUCATION WORK

Continued from page 6

help students expand their writing skills. For example, writing assignments might include journals, letters, descriptive paragraphs, newspaper reports, technical articles, persuasive techniques, and creative writing.

Science

The U.S. Department of Education report stresses the need for improving science teaching by involving students in more hands-on experiments. Teachers can take advantage of students' natural curiosity to involve them in the learning of science concepts and applications.

Science classes should include opportunities for students to make observations, predict the results of experiments, work with different materials, draw conclusions about the processes involved in science, and use scientific methods to separate fact from opinion and misconception.⁹

All schools must provide for experimentation in their science classes, since students learn best by doing. Small elementary schools without a science laboratory can purchase a science cart containing the necessary materials. As the cart moves about the school each classroom becomes a small science laboratory.

Nature collections and science experiments can be fun and exciting if they are incorporated into an annual science fair. In preparing for the fair, students learn to work toward a goal and to present their investigations in an understandable, attractive manner. Such projects really involve students in learning about science and the world around them.

A young scientists' club can offer an interesting and valuable way to help students develop an interest in science and to actively involve them in investigation and experimentation. Club activities can include field trips to local industries or organizations such as NASA, planetariums, nature centers, zoos, and green-

houses, as well as films or videotapes on science subjects, guest speakers, nature hikes, and stream or field studies.¹⁰

Homework

Homework, judiciously chosen and assigned, can significantly improve the quality of student learning in every content area. When closely related to the concepts being taught in class, it enhances achievement and reinforces instruction. However, to be truly effective both student and teacher must do their part. Homework must be explained carefully, marked promptly, and counted as part of the final grade.¹¹

Frequent and systematic monitoring of students' progress helps students, parents, teachers, administrators, and policymakers identify strengths and weaknesses in learning and instruction.

Research indicates that homework can help students of high, average, or low ability levels. In one study low-ability students who did one to three hours of homework weekly achieved grades equal to those of average students who did no homework. Grades of average-ability students assigned three to five hours of homework weekly equaled grades of high-ability students who did no homework.¹²

To be a valuable learning tool homework must be perceived by students as interesting and relevant to in-school learning. LaConte¹³ identifies five reasons for assigning homework.

1. Homework teaches time management, self-direction, motivation, and responsible behavior.

2. Homework eases time constraints on the curriculum by covering part of the

content outside school hours.

3. Homework teaches independence and responsibility.

4. Homework supplements and reinforces school learning, stressing drill and practice.

5. Homework creates a bond between school and home.

To be most effective, daily homework assignments should be outlined at least a week in advance, and students should receive written descriptions of long-term course projects several months before they are due.¹⁴

Assignments should address the needs, interests, and abilities of the learners. Teachers should have a clearly established purpose for each homework assignment, relating each to instructional goals for the particular subject. One caution: excessively long homework assignments rob students of needed time for exercise and family activities and may discourage them from doing their best.

At the beginning of the school year teachers should send home with each pupil a letter outlining homework policies. Such communication enables parents to plan time each day for their children to do homework and helps them anticipate deadlines for major projects.

Parents' Role in Education

As parents keep in close contact with the school, they can ensure that their children are learning both in the classroom and at home.

Teachers enhance the home/school relationship by keeping parents informed about their children's progress, sending home newsletters about activities and events at school, and inviting parents to visit the classroom. Schools can send home pamphlets and articles with helpful suggestions about a variety of topics that relate to learning.

Teachers can help parents become aware of learning opportunities in the home that support the curriculum. Educators suggest that "parents . . . need to engage children in thoughtful discussions on all subjects—current events, nature, sports, hobbies, machines, family life and emotions—in short, on anything that interests children."¹⁵

Here are some specific suggestions for parent/child activities that will enhance various areas of the school curriculum:

1. Writing—encourage children to

Children in early grades learn mathematics more effectively when they use physical objects in their lessons.

write letters to friends and relatives, notes, grocery lists.

2. Math—have children help figure the cost of feeding the family for a week, assist in balancing the checkbook, use fractions to double recipes, measure wood for home-improvement projects, calculate the amount of gasoline needed to take a trip.

3. Reading—model the importance of reading by taking time to read books and magazines, and having reading materials available for children to peruse. Parents can set aside quiet time when everyone sits down and enjoys reading. Afterward, they can discuss what was read, and relate the story to daily life.

4. Experiences away from home—take youngsters to parks, libraries, zoos, historical sites.

5. Discipline—help children learn appropriate behavior for a variety of situations. Good behavior is learned, not intuitive.

6. Values—discuss and exhibit important values that you wish your children to develop in their lives, such as responsibility, the importance of education, hard work, persistence, and trust in God.

Conclusion

In summary, when teachers are knowledgeable about the curriculum, involve

students in their own learning through science experiments and homework assignments, use effective techniques for teaching reading and other subjects, communicate high expectations to their pupils, and work with parents; they will be compensated with improved student attitudes and enhanced achievement in the classroom.

The combined efforts of school and home will *make education work*. □

Free copies of the booklet, *What Works: Research About Teaching and Learning*, are available by writing Consumer Information Center, Pueblo, CO 81069.

FOOTNOTES

¹ Laurence Feinberg, "The 'Works' on Common Sense," *Washington Post* (March 5, 1986), D5.

² *What Works: Research About Teaching and Learning* (Washington, D.C.: U.S. Department of Education, 1986), p. 21.

³ Miles V. Zintz and Zeldia R. Maggart, *The Reading Process: The Teacher and the Learner* (Dubuque, Iowa: Wm. C. Brown Co. Publishers, 1984), p. 176.

⁴ *What Works*, p. 22.

⁵ *Ibid.*, p. 29.

⁶ Iris McClellan Tiedt and Sidney Willis Tiedt, *Elementary Teacher's New Complete Ideas Handbook* (Englewood Cliffs, N.J.: Prentice Hall, Inc., 1983), pp. 144, 145.

⁷ *What Works*, p. 27.

⁸ Tiedt and Tiedt, p. 69.

⁹ *What Works*, p. 23.

¹⁰ Tiedt and Tiedt, p. 180.

¹¹ *Ibid.*, p. 41.

¹² Feinberg.

¹³ Ronald T. LaConte, *Homework as a Learning Experience: What Research Says to the Teacher* (Washington, D.C.: National Educational Association, 1981).

¹⁴ David A. England and Joannis K. Flatley, *Homework—and Why* (Bloomington, Ind.: Phi Delta Kappa Educational Foundation, 1985).

¹⁵ *What Works*, p. 15.

Often the whole class anxiously awaits the verdict. In the cases tried to date the student judge and jurors have imposed fair sentences.

About a week after Marcus appeared in court for losing his temper, a teacher saw him walking around the playground looking very agitated. "What's wrong, Marcus?" she asked.

"I'm trying not to have a court case," Marcus replied.

After Peter had been fined for calling names, he begged, "Please don't print my court case in the newspaper. I don't want the whole world to know what I did."

"Sorry," I said. "We need to live in such a way that we are proud for our actions to be published."

As the children live in the State of Education, they realize they can really make a difference in their lives by the choices they make.

A Special-Privilege Card

Half of the children in the State of Education own an ICMM credit card. This orange plastic card identifies them as members of the I Can Manage Myself club. To get this card, they have to show excellent self-control for two weeks. They must complete all work on time, and must not have any fines or jail sentences.

Cardholders receive certain privileges. These include sitting on the couch, using the typewriter, visiting the listening center, going to the bathroom without permission, and working together with a friend.

In the State of Education I see children developing positive character traits such as self-esteem, tolerance, understanding of others' viewpoints, self-control, dependability, respect for property, the value of money, stewardship, courtesy, time management, good citizenship, economy and conservation, honesty, truthfulness, and obedience.

Isn't that what Christian education is all about? Building character and preparing children for the joy of citizenship in this life and the higher joy of citizenship in the world to come? □

STATE OF EDUCATION

Continued from page 9

control the situation by the questions I ask.

We have both civil and criminal cases in our court. Distinction is made between cases that involve a school rule and mere personal grievances. If a situation involves a school regulation, specific fines have already been designated. The judge simply assesses the fine once the defendant has been proved guilty. In cases lacking a formal rule, the judge

may use discretion in meting out punishment. Of approximately 40 cases heard in the Supreme Court of the State of Education, all but three have involved lawsuits between citizens. In the remaining cases the state initiated the trial. Litigants have occasionally settled out of court for a monetary consideration.

While cases are being tried, participants must observe courtroom decorum. The children take the process seriously.