

RESOURCES

1994 "Goals 2000"

From Northwest Regional Educational Laboratory
Portland-Oregon

Goal 1: SCHOOL READINESS

**BY THE YEAR 2000, ALL CHILDREN IN AMERICA
WILL START SCHOOL READY TO LEARN.**

Objectives:

- All children will have access to high-quality and developmentally appropriate preschool programs that help prepare children for school
- Every parent in the United States will be a child's first teacher and devote time each day to helping such parent's preschool child learn, and parents will have access to the training and support parents need
- Children will receive the nutrition, physical activity experiences, and health care needed to arrive at school with healthy minds and bodies, and to maintain the mental alertness necessary to be prepared to learn, and the number of low-birthweight babies will be significantly reduced through enhanced prenatal health systems

FOSTERING CHILDREN'S SOCIAL DEVELOPMENT

With proper training, preschool teachers can conduct a variety of day-to-day activities that foster a child's positive social development, says a report from the ERIC Clearinghouse on Elementary and Early Childhood Education.

The report describes teaching strategies that help children prosper socially. Poor social development in early childhood can cause future academic failure, juvenile delinquency, and mental health problems, the authors note. The authors say it is essential for teachers to establish credibility with children and develop a sense of justice in their ground rules for the classroom. Teachers also should motivate youngsters without putting others down; make good use of leisure time; and offer simple and straightforward explanations of problems or issues.

The publication also lists specific activities teachers can

use to help children overcome social problems while developing play and negotiating skills.

To order *The Teacher's Role in the Social Development of Young Children*, send \$10 to: ERIC Clearinghouse on Elementary and Early Childhood Education, 805 W. Pennsylvania Avenue, Urbana, IL 61801-4897. (Cite Order Number CAT-207.)

PREPARING CHILDREN FOR SCHOOL TRANSITION

In as early as a child's first three years of life, communities have an important role to play in helping parents prepare their children for the academic, social, and emotional transition to school.

"The interventions that are most productive include a comprehensive set of services for both children and parents that extend over several years," says a study from the Center on Families, Communities, Schools, and Children's Learning.

Home visitation proved to be one of the most valuable com-

ponents of many of the service programs reviewed. The most successful visits were frequent—once a week if possible—continued for a number of years, and modeled effective parenting behaviors. Home visitation programs that provided parents with skills to enhance their own educational or job opportunities, in addition to advice about parenting, were most likely to improve the overall family environment.

Unfortunately, many of the positive effects stemming from the early childhood interventions deteriorated once the children entered first grade. This is especially true for boys. The researchers speculate that academic grouping and tracking, along with low teacher expectations for these children, are partly responsible for the decline.

To order *What Does Learning Mean for Infants and Toddlers?* send \$6 to: Center on Families, Communities, Schools, and Children's Learning, Johns Hopkins University, 3505 N. Charles Street, Baltimore, MD 21218. (Cite Report Number 3.)

FAMILY-FRIENDLY POLICIES AND SUPPORT PROGRAMS

In an environment in which child-care issues are of great concern to more than half the American workforce, businesses ought to consider establishing programs and policies to support employees with children—especially young children. Supporting these employees helps businesses recruit and retain workers; reduces employee absenteeism; and improves punctuality, morale, and productivity.

A publication from the SouthEastern Regional Vision for Education provides businesses with information on how to begin or expand family-friendly policies, examples of successful child-care programs, and resources for further information.

To initiate support programs, businesses can follow an eight-step process. These include: conducting surveys and focus groups to determine employee needs; establishing a task force to make recommendations to management; developing a philosophy statement that reflects a commitment to family and work responsibilities; and training managers to be sensitive to family and work issues. To order *Supporting Family Involvement in Early Childhood Education: A Guide for Business*, send \$5 to: SouthEastern Regional Vision for Education, NEFEC/SERVE, Route 1, Box 8500, 3841 Reid Street, Palatka, FL 32177. (Cite Order Number SV-793-NW.)

FORMING POSITIVE DISPOSITIONS AMONG YOUNG CHILDREN

Cultivating positive dispositions in young children should be a fundamental goal of early childhood education, says a paper from the ERIC Clearinghouse on Elementary and Early Childhood Education.

The paper notes that just because a child has acquired certain skills and knowledge, there is no guarantee that he or she will use them. For example, having the skills needed for reading does not mean that a child will have the habit of reading or the disposition to be a reader.

Teachers are in a unique po-

Goal 5: MATHEMATICS AND SCIENCE

BY THE YEAR 2000, U.S. STUDENTS WILL BE FIRST IN THE WORLD IN MATHEMATICS AND SCIENCE ACHIEVEMENT.

Objectives:

- Mathematics and science education, including the metric system of measurement, will be strengthened throughout the system, especially in the early grades
- The number of teachers with a substantive background in mathematics and science, including the metric system of measurement, will increase by 50 percent
- The number of U.S. undergraduate and graduate students, especially women and minorities, who complete degrees in mathematics, science, and engineering will increase significantly

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CREATIVE THINKING IN TECHNOLOGY AND SCIENCE

In "Cognetics," a program of thinking skills developed by Judith Burr, Theodore Gourley, and Rebecca McDonnell and published by Research for Better Schools, students brainstorm about a problem, research it, creatively solve it with other students, and present the solution to the class. The workbook recommends specific steps for students to take in solving the problems. The teacher's edition also includes student training activities.

This volume of cognetics provides problems in inventions/technology and science. In it, students and teachers will find 14 activities including:

- "It's in the Mail," in which students design a system of delivering mail so it reaches its destination almost immediately. The system will deliver objects through the air at great speeds from one location to another.
- Musicians and actors have given their "Strike Notice" and students are asked to produce an inventive music video with-

out using live actors, musicians, or traditional instruments.

- "Witches and Wizards" develop "white magic" practices to heal mental, emotional, or physical problems by mixing chemicals to produce a reaction.

To order *Cognetics: Thinking Skills Activities in Inventions/Technology and Science*, send \$89.95 for a teacher's manual and 10 student manuals to: Research for Better Schools, 444 N. Third Street, Philadelphia, PA 19123. (Cite Order Number TS21-892-NW.)

ALTERNATIVE HIGH SCHOOL SCIENCE EDUCATION PROGRAM

The National Center for Improving Science Education notes that at least two-thirds of the nation's high school students either do not take science courses or do poorly in required science courses. The center provides a blueprint for an alternative vision of high school science education that would reverse this trend.

The program envisioned by the center would require all stu-

dents to take four years of high school science. The first two years would provide a core experience to meet the general education purposes of science education and prepare students for responsible civic and personal life. The last two years would reflect students' interests and career goals, whether they intend to enter college or junior college, technical or engineering schools, or the workplace.

The plan would fundamentally alter assessment by addressing more complex types of learning and requiring applications of scientific knowledge and skills to "real world" situations. Teachers, in the center's view, would effectively help their students "construct" new knowledge by having them design and implement investigations, propose explanations and solutions, and then apply their new science learning.

To order *The High Stakes of High School Science*, send \$25 to: The NETWORK, Inc., 300 Brickstone Square, Suite 900, Andover, MA 01810. (Cite Order Number 312-02-192-NW.)

MIDDLE SCHOOL SCIENCE CAN SPUR CREATIVITY

Schools should design challenging science programs for middle school youth that promote creativity, imagination, and thinking skills, says the National Center for Improving Science Education in a series of three new reports.

The center urges adopting a four-step "learning-teaching model" to promote student interest. In this model, teachers pose a question to students and help them explore the issue through various experiences. Students then reach their own

conclusions while teachers introduce new concepts and vocabulary into the program.

The center also calls for more alternate methods to assess science skills and recommends greater emphasis on team teaching, shared decision-making, and improved teacher education programs that focus on science.

Science and Technology Education for the Middle Years: Frameworks for Curriculum and Instruction (Order Number 307-CD-1091-NW); *Assessment in Science Education: The Middle Years* (Order Number 308-CD-1091-NW); and *Developing and Supporting Teachers for Science Education in the Middle Years* (Order Number 309-CD-1091-NW) are each \$15 and available from The NETWORK, Inc., 300 Brickstone Square, Suite 900, Andover, MA 01810.

CLASSROOM ASSESSMENT TRAINING VIDEOS

NWREL has developed four half-day video-based workshops in its Classroom Assessment Training Program on the topics of math assessment, science assessment, portfolios, and assessment trends.

Math Assessment: The workshop shows teachers how to assess students while they are working by observing them, interviewing them, asking them questions that get at the heart of understanding, and watching them while they work individually or within a group context.

Science Assessment: The workshop focuses on four of the most popular and effective approaches to science instruction: textbook approach, inquiry approach, science-