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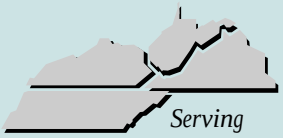
THE LINK

A PUBLICATION FOR EDUCATION PRACTITIONERS



Serving educators in Kentucky, Tennessee, Virginia, and West Virginia since 1966

AEL

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Technology in the Classroom: Evolutionary Changes

Most of today's teachers attended school when "instructional technology" meant a blackboard, chalk, paper and pencil, and maybe a film projector. Today's schools employ a wide array of technology tools, including televisions, video cameras, graphing calculators, and computers and their peripherals—digital cameras, scanners, probeware, and more.

As more teachers and students gain access to these tools, educators' concerns shift to how to integrate technology into instruction and how to tell whether their efforts are effective in helping students learn. Experience tells us this large task won't happen overnight.

Defining Effective Integration and Use

Studies of the Apple Classrooms of Tomorrow, an early computer-intensive project, defined five evolutionary stages of technology integration:

1. Entry. Teachers learn the fundamentals of new technology, including the basic configurations of hardware and software.
2. Adoption. Teachers begin to use technology to support traditional instruction.
3. Adaptation. Teachers integrate technology into existing classroom activities and emphasize productivity.
4. Appropriation. Teachers begin to develop new approaches to teaching and learning. Their skill levels allow them to take advantage of technology to create new activities.
5. Innovation. Teachers stop trying to adapt instruction to technology and reflect on the actual craft of teaching. They adjust their fundamental perception and delivery of instruction.[1]

A recent review of the research on instructional technology by staff at North Central Regional Educational Laboratory defined a similar, three-phased progression:[2]

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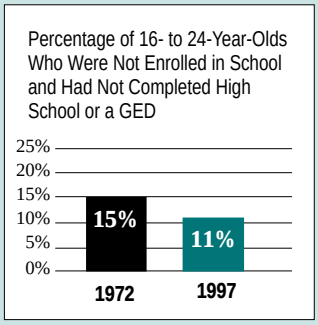
Fewer Students Are Dropping Out of School



See Page 6 for "Good News about American Education"

IN THIS ISSUE

Notes: Technology in the Classroom

1. David C. Dwyer, Cathy Ringstaff, and Judy H. Sandholtz, "Changes in Teachers' Beliefs and Practices in Technology-rich Classrooms," *Educational Leadership*, 48(8): 45-52 (1991).
2. Gilbert Valdez, Mary McNabb, Mary Foertsch, Mary Anderson, Mark Hawkes, and Lenaya Raack, *Computer-Based Technology and Learning: Evolving Uses and Expectations* (Oak Brook, IL: North Central Regional Educational Laboratory, 1999). http://www.ncrel.org/tplan/cbtl/toc.htm/ (4 February 2000).
3. Mary McNabb, Mark Hawkes, Ullik Rouk, *Critical Issues in Evaluating the Effectiveness of Technology* (Washington, DC: U.S. Department of Education, 1999). http://www.ed.gov/Technology/TechConf/1999/confsum.html/ (7 February 2000). Thirteen papers were prepared for the conference; they, the conference summary, stories from schools, and other information are available online. Visit the conference Web site at http://www.ed.gov/Technology/TechConf/1999/index.html.
4. Steve Cohen and Barbara McMullen, "Shifts in Thinking: A Primer on the Foundations of Instructional Technology Assessment," *Syllabus* 13(6): 12-14 (2000).
5. See note 4 above.
6. See note 4 above.

Technology

(continued from page 1)

1. Print Automation. Instruction is characterized by the use of software that relies heavily on drill-and-practice to teach segmented content and/or skills.
2. Expansion of Learning Opportunities. Computers become tools for learner-centered practices and help teachers move from isolated learning activities to applications that involve working in groups.
3. Data-Driven Virtual Learning. More sophisticated data-driven decision making carries the expectation of making schools more effective. Teachers and students all have access to the data and use it to meet accountability standards.

These studies reveal that, as teachers become more proficient with technology, they become more adept at helping students take control of their own learning. Problem solving and higher order thinking, information sifting and analysis, time management, and the ability to prioritize tasks—skills that can spell success in a fast-paced, information-based global society—are developed as teachers and students use technology effectively.

Evaluating Effectiveness

As more education dollars go to instructional technology, more attention is being given to evaluating its effectiveness in the classroom.

At the July 1999 U.S. secretary's conference "Evaluating the Effectiveness of Technology," seven critical issues of evaluation were identified:

- The effectiveness of technology is embedded in the effectiveness of other school improvement efforts.
- Current practices for evaluating the impact of technology in education need broadening.
- Standardized test scores offer limited information to drive the development of a school's technology program. Most

(continued on page 3)

For More About Technology Integration and Evaluation

Erik Fatemi. Technology Counts '99. Building the Digital Curriculum: Summary. *Education Week.* http://www.edweek.org/sreports/tc99/articles/summary.htm/ (27 January 2000).

Melissa Groves, Michele Jarnigan, and Kendra Eller. "But How Do We Use It?" Discovering Hidden Barriers and Unexpected Successes in Integrating Computers in a Preschool Curriculum. *Proceedings of the Families, Technology, and Education Conference*, 57-61, 1998. ERIC Document Reproduction Service No. ED 424 998.

John Schacter. The Impact of Education Technology on Student Achievement: What the Most Current Research Has to Say. *Milken Exchange on Education Technology.* http://www.milkenexchange.org/project/research/ME161.pdf (1 February 2000).

Karen Sheingold and Martha Hadley. *Accomplished Teachers: Integrating Computers into Classroom Practice.* Washington, DC: Office of Educational Research and Improvement, 1990. ERIC Document Reproduction Service No. ED 322 900.

CEO Forum on Education & Technology. http://www.ceoforum.org
See the report *Professional Development: A Link to Better Learning* (1999) at http://www.ceoforum.org/reports.cfm?RID=*2*

International Society for Technology in Education. http://www.iste.org

North Central Regional Educational Laboratory.

- Regional Technology in Education page. http://www.ncrtec.org
- Pathways to School Improvement. http://www.ncrel.org/sdrs/pathways.htm

U.S. Department of Education. Technology home page. http://www.ed.gov/Technology

Technology

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schools are looking for additional means for collecting useful data for this purpose.

- Schools must document and report their evaluation findings in ways that satisfy diverse stakeholders' need to know.
- For evaluation efforts to provide stakeholders with answers to their questions about the effectiveness of technology in education, everyone must agree on a common language and standards of practice for measuring how schools achieve that end.
- The role of teachers is crucial in evaluating the effectiveness of technology in schools, but the burden of proof is not solely theirs.
- Implementing an innovation in schools can result in practice running before policy. Some existing policies need to be "transformed" to match the new needs of schools using technology.[3]

As these critical issues suggest, educators and evaluators have yet to agree upon accurate measures for assessing the effectiveness of instructional technology. A recent article by Tufts University technology staff suggests two "shifts in thinking" to keep in mind as assessments are developed.

The first shift is "from thinking of computers as technologies to thinking of learning theories as technologies."[4] The basis for this shift is the definition of technology as a process that can be repeated to obtain the same results. Under this definition, an instructional technology is one that provides repeatable steps that lead to learning. Behaviorism and constructivism would be examples of instructional technologies; computers and other technology tools would be pieces of the delivery systems.

This leads directly to the second shift in thinking: that we must recognize "the differences between delivery systems and the overall instructional environment."[5] Some instructional technologies are more suited than others to achieving certain learning goals. When determining the effectiveness of instruction, "any assessment needs to identify the underlying instructional technology and to consider its usefulness with respect to the learning goal."[6]

One Step at a Time

Clearly, the integration and evaluation issues are challenging. To avoid setting themselves up for disappointment, teachers and administrators should acknowledge that it will take time—and probably trial and error—to arrive at a place where everyone feels relaxed and confident about technology use.

Resources from SEIR◆TEC at AEL

Three new publications can help administrators and teachers identify and evaluate effective technology use.

Principal Connections

This CD-ROM and companion Web site are designed to help school leaders recognize, promote, and evaluate effective technology use in their schools. Leaders can work at their own pace to examine their roles as technology leaders, identify barriers to integrating technology into their schools, learn strategies to help teachers become more accepting of technology, make informed decisions about allocating technology resources, and much more.

See order form/insert for more information.

Curriculum Snapshots

This publication provides glimpses into the classrooms of real teachers at various stages of technology integration. The snapshots illustrate appropriate and creative uses of technology at all grade levels and within different subject areas. Contributing teachers name useful software and hardware as well as supplementary content-related resources such as Web sites and videos. Software and video descriptions and a listing of software publishers/producers are also included.

See order form/insert for more information.

Software Use in the AEL Region

This regional survey peeks into Kentucky, Tennessee, Virginia, and West Virginia classrooms to learn how teachers in the region use software. *Educational Software Use: Results From a 1999 Regional Survey* includes a review of research on technology use in the classroom, descriptions of software types, and teachers' responses to questions about categories and frequencies of software use.

To get the report, visit AEL's Web site at http://www.ael.org/rtec/surintro.htm or contact John Ross at 800-624-9120 or rossj@ael.org.

Formative Evaluation: Keeping Comprehensive School Reform on Track

In education, considerably more resources are often devoted to developing and implementing new programs than to evaluating their success.[1] Without evaluation, however, how can it be determined that implementation is being done correctly? How can areas of strength and weakness, as well as ideas for improvements, be identified?

Program developers and researchers in many professions use an approach called formative evaluation to address such questions. Evaluation conducted during the planning and operation of a program (as compared to that conducted at the end, which is known as summative evaluation) provides information that implementers can use to improve the program's effectiveness.[2] It is often conducted more than once with the intent to regularly monitor and improve the program.[3] The audience for formative evaluation typically consists of the program planners and/or implementers—the "in-house" staff of the program.

Evaluation and School Reform

The formative evaluation approach is especially appropriate for developing or adapting programs that focus on improvement, facilitating more effective implementation, and exploring a variety of effects on a diversity of participants or stakeholders.[4] Formative data can help to channel time, money, and human and material resources in productive directions.[5] These conditions all apply to school reform and, when Congress created the Comprehensive School Reform Demonstration program, it mandated that funded schools include annual evaluations in their reform plans.[6]

Formative evaluation may be done by an internal or external evaluator, and preferably by a combination of the two.[7] Often, formative evaluation presents logistical problems for schools, where overburdened staff, lack of evaluation expertise, and, in some cases, lack of impartiality can interfere with data collection.[8]

Generally, evaluators recommend using multiple data collection methods. One such method, site visits by external evaluators with assistance from local school staff, can improve and strengthen a project by bringing an "outsider" perspective to bear. This perspective may uncover many positive aspects of a project, and information concerning these strengths can be shared.[9]

Formative evaluation demands a feedback loop, whereby the data collected and judgments made are used to improve the product.[10] Timing and feedback are particularly important when the purpose of the data is program improvement. Formative evaluation reports should reach program staff in time for them to review how the program is functioning and decide what changes might be made to improve it.[11]

A Process for Schools

The Formative Evaluation Process for School Improvement (FEPSI), developed through a partnership between AEL and the Center for Research in Educational Policy at The University of Memphis (AEL/Center), directly facilitates formative evaluation of comprehensive school reform initiatives.

More specifically, the process

- invites reflection and encourages participation by key stakeholder groups
- offers expert evaluation partners, on-site, to assist in collecting and analyzing data and drawing valid conclusions
- provides direction and builds school capacity for data-driven decision making
- results in a report that identifies strengths and weaknesses of annual program implementation, and documents imple-

(continued on page 5)

Notes: Formative Evaluation

1. Steven M. Ross, *Why Formative Evaluation?* Charleston, WV: AEL, 1999. http://www.ael.org/rel/csr/process.htm (14 February 2000).
2. Blaine R.Worthen, Walter R. Borg, and Karl Richard White, *Measurement and Evaluation in the Schools* (New York: Longman, 1993).
3. Michael Scriven, *Evaluation Thesaurus*, 4th ed. (Newbury Park, CA: Sage, 1991).
4. Michael Quinn Patton, *Qualitative Evaluation and Research Methods*, 2nd ed. (Newbury Park, CA: Sage, 1990).
5. Blaine R. Worthen, James Richard Sanders, and Jody L. Fitzpatrick, *Program Evaluation: Alternative Approaches and Practical Guidelines* (New York: Longman, 1997).
6. Public Law 105-78.
7. See note 3 above.
8. See note 1 above.
9. Blaine R. Worthen and Karl R. White, *Evaluating Educational and Social Programs* (Boston: Kluwer-Nijhoff, 1987).
10. Eva L. Baker, "Formative Evaluation of Instruction." In *Evaluation in Education: Current Applications*, edited by W. James Popham (Berkeley, CA: McCutchen, 1974).
11. See note 5 above.

Research Notes

Reforming Low-Performing Schools

From the National Institute on the Education of At-Risk Students

All schools face challenges, but those faced by low-performing schools can be substantial. Often a large majority of their students perform below grade level and live in conditions that are not conducive to healthy child development. These children are at risk of academic failure, and reform models for their schools must include elements that meet students' special needs.

Research analyst Susan Talley recently examined school reform models funded by the Institute and looked at the research associated with the models. She identified six critical components that must be present in a reform model with potential to turn around low-performing schools.

A strong research-based literacy curriculum. Understanding the basic concepts of language starts with a child's earliest experiences with oral and written language. Children who haven't developed good preliteracy skills need research-based curricula that focus on building those skills and acquiring strong reading skills.

A significant extra help component. An effective model must incorporate opportunities for students to catch up to grade level through such strategies as summer school, creative scheduling, and innovative use of technology. Regular assessments to measure progress and to identify gaps in learning are also important.

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The U.S. Department of Education's Office of Educational Research and Improvement funds research through regional laboratories, national centers, and field studies.

Evaluation

(Continued from page 4)

mentation progress and early outcomes for school, district, and state stakeholders

Steps in the Process

When a district contracts with the AEL/Center partnership, they work together to identify staff to assist with data collection. The partnership assigns a site researcher who acts as the external evaluator and helps with data collection.

The foundation for the evaluation is laid through benchmarking around the key elements of the reform program. Each school, with help from AEL and the Center, develops benchmarks that specify three phases of progress. Schools find benchmarking to be powerful, both for its ability to bring staff together and for its ability to focus attention on the goals of reform. One principal noted that working on benchmarks resulted in more staff communication and collaboration. Another principal listed school activities that were inspired by benchmarks. They include a seminar to train tutors and a summer Kid's College for *all* students, not just those at risk.

The process defines baseline data through benchmarks, principal interviews, and school observation measures. The latter are repeated several times throughout the school year, and teacher interviews and a school climate inventory are added at the end of the year. Teacher and student focus groups and parent/community interviews may also contribute to the data.

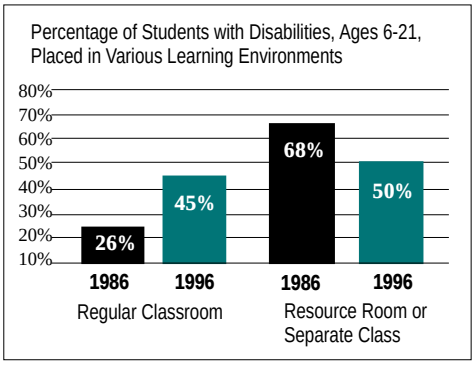
All data are processed and analyzed by the AEL/Center staff. An annual evaluation report for the school reviews progress on the implementation benchmarks and offers recommendations for improving the comprehensive school reform process. Nowhere is the emphasis on judging the staff and faculty; formative evaluation is about looking at the school as a whole to answer the question *How can we make this reform program work?*

As leaders work to balance the elements of reform in their schools, this process helps them oversee progress and fine-tune their efforts.

The Formative Evaluation Process for School Improvement created by AEL and the Center for Research in Educational Policy is being used with comprehensive school reform efforts in the AEL region and the state of Georgia. For more information, contact Steve Moats at 800-624-9120 or moatss@ael.org.

Good News about American Education

More Students with Disabilities Are in Regular Classrooms



A new report from the Center on Education Policy and the American Youth Policy Forum presents a positive picture of trends in education.

The authors of *Do You Know the Good News about American Education?* looked at data, mainly from the National Center for Education Statistics, across several years. They focused on five categories: school participation and curriculum, student achievement, educational climate, teachers, and higher education.

Findings from the report are highlighted throughout this issue of *The Link*. For the complete report, visit the Center on Education Policy Web site at http://www.ctredpol.org or phone 202-822-8065.

To contact the American Youth Policy Forum, phone 202-775-9731 or visit their Web site at http://www.aypf.org.

From *Do You Know the Good News about American Education?* Published in 2000 by the Center on Education Policy and the American Youth Policy Forum, Washington, DC.

Announcements: Training Opportunities

Equity Conference 2000

Teachers, administrators, guidance counselors, higher education personnel, preservice teachers, graduate students, parents, and others interested in race and language issues are invited to attend *Closing the Achievement Gap: Race and Language Issues*, May 17-19, 2000, at the Hyatt Regency in Lexington, Kentucky. The conference is sponsored by the Eisenhower Regional Consortium for Mathematics and Science Education and the Region IV Comprehensive Center at AEL, in collaboration with the Kentucky Department of Education's Equity Division.

Participants will receive information and resources that address the achievement gap; tools to assess the equity environment of their classrooms, schools, and districts; opportunities to create networks and partnerships to promote equity; and encouragement to develop action plans for equity implementation strategies in their classrooms, schools, and districts.

Featured speakers will include Dr. Ruth Johnson, professor at California State University, consultant, and equity advocate; Edward James Olmos, U.S. Goodwill Ambassador for UNICEF and executive director of the Lives In Hazard Educational Project, a national gang prevention program; Dr. Estela Matriano, vice president of the Cincinnati Minority Women's Network and executive director of the World Council for Curriculum and Instruction; and Dr. Barbara A. Sizemore, professor emerita at DePaul University and consultant in the areas of race and language.

Register early, as space is limited. Through April 14 the fee is $65; cost thereafter is $75; groups of three pay $130. For more information, visit AEL's Web site at http://www.ael.org/eisen, or phone Terry Foster or Angie Anderson at 800-624-9120.

QUILT Training-for-Trainers

QUILT—Questioning and Understanding to Improve Learning and Thinking—is a professional development program that increases student learning by improving teachers' classroom questioning techniques. The program works in elementary, middle, and high schools.

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Announcements

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This year's national training will be June 18-23, 2000, at the Ramada Inn and Convention Center in Lexington, Kentucky.

With QUILT, the classroom environment becomes more active, student-centered, constructivist, inquiry-based, and metacognitive. A training-for-trainers approach helps school districts prepare local teachers who then train others in their region. Typically, a local school team (two teachers and an administrator) attends and learns to facilitate QUILT with its own faculty.

Please register by May 1. The weeklong training, five group lunches, daily breaks, and materials are covered in the registration fee of $675. Minigrants are available to support Kentucky elementary, middle, and high schools. For more information, or to register, call Shirley Keene at 800-624-9120, send e-mail to keenes@ael.org, or visit AEL's Web site at http://www.ael.org/rel/quilt.

Summer Curriculum Institute

(Formerly known as Interdisciplinary Teamed Instruction)

Those who attend the Summer Curriculum Institute will learn to design interdisciplinary instruction, connect learning activities and assessments to standards, develop students' thinking skills, make curriculum maps matter, and more. Teachers, teacher educators, administrators, and curriculum mapping site leaders are all welcome.

Many schools and districts are now mapping, or aligning, connections between curricula and standards. As they do this, they often discover that interdisciplinary instruction can help them meet standards in several content areas with one instructional unit.

This year the interdisciplinary training will be modified to build on school and teacher experiences with curriculum mapping. It will be July 17-20 at Athens Junior High School in Athens, Tennessee.

Space is limited, and the registration deadline is May 1. Sessions, lunches, and materials are included in the $350 registration fee. To register, or for more information, contact Becky Burns at 800-624-9120 or burnsr@ael.org. To learn more about interdisciplinary instruction, visit AEL's Web site at http://www.ael.org/rel/iti.

Teacher Workshops to Explore Energy and More

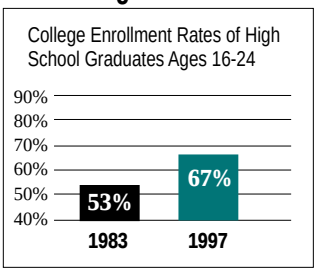
This summer, K-12 teachers can attend workshops that offer hands-on experiences; real-world perspective; and materials, technologies, and strategies they can use to improve student achievement. Course topics will include energy, environmental, economic, scientific inquiry, education technology, and community development issues. Most will feature one or more tours to such sites as coal mines and reclamation areas, an international wildlife preserve, power plants, or river transportation facilities.

Workshops will range in length from 2 to 10 days and will offer graduate credit of one to three hours. Graduate credit is free at most sessions, although a few require credit fees and some require a nominal, nonrefundable registration fee. Teachers may be eligible for housing, meal, and mileage reimbursements based on their distance from workshop sites in Indiana, Ohio, Virginia, and West Virginia.

The workshops are sponsored by American Electric Power (AEP) in conjunction with universities and other organizations. The application deadline is April 30 and first priority will be given to teachers who live and teach within AEP's service area, which includes Kentucky, Tennessee, Virginia, and West Virginia.

For applications or more information, visit the AEP Education/Community Web site at http://www.aep.com, e-mail blschumann@aep.com, or write AEP Corporate Communications Programs, 1 Riverside Plaza, Columbus, OH 43215.

More Students Are Going On to Higher Education



See "Good News about American Education" on page 6.

Grant Opportunities

More Help with Funding

Want to find more funding resources? The Internet offers everything from directories of funding sources to instruction in grant writing, evaluation, and dissemination. Here are a few places to go.

U.S. Department of Education: Funding Opportunities
http://www.ed.gov/funding.html

Notices Inviting Applications
This e-mail newsletter from the U.S. Department of Education lists funding opportunities and provides links to information and applications. To subscribe to EDInfo, address and mail message to: listproc@inet.ed.gov. Then write SUBSCRIBE EDINFO YOURFIRSTNAME YOURLASTNAME in the message (if you have a signature block, please turn it off). Then send it!

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Federal Programs

National Science Foundation: Teacher Enhancement Programs

Purpose: To improve mathematics, science, and technology education in schools through the support of professional development for teachers.

Areas of special interest include building the capacity for K-12 mathematics, professional development of middle school math teachers; professional development of secondary science teachers, and innovative high-risk projects.

Deadlines: Preliminary proposals due April 1, 2000; formal proposals due August 25, 2000

Guidelines available on-line at http://www.nsf.gov or by phone at 703-306-1613.

National Endowment for the Humanities: Schools for a New Millennium

Purpose: To help educators refresh their commitment to excellent humanities teaching and learning through intensive professional development activities that incorporate content-rich technological resources into the classroom.

Project objectives might include helping teachers explore and master innovative uses of technology; implementing schoolwide professional development that links content and pedagogy in ways that transform the curriculum; enlisting the support of the wider community in these reform activities; and supporting schools to serve as national models of excellence in humanities teaching and learning, especially through innovative uses of technology in instruction.

Grants will provide a total of up to $200,000 for up to three years. Actual amounts will vary according to project scope.

Deadline: Applications due October 1, 2000

Announcement and guidelines available on-line at http://www.neh.gov, by e-mail at education@neh.gov, or by phone at 202-606-8380.

Foundations

Candle Foundation: Education and Information Dissemination

Pupose: To fund innovative, high-impact, low-overhead projects for which beneficiaries are chosen without regard to religion, politics, or ethnicity.

Education grants may include anything from expansion of a literacy program to support for home improvement skills training for at-risk youth.

Grant awards range from $1,000 to $10,000.

Deadline: May 16, 2000

Application and guidelines available on-line at http://www.candle.com/aboutcandle/community/foundation/fundingareas.htm, by e-mail at martha_mossawir@candle.com, or by mail from The Candle Foundation, 201 N. Douglas St., El Segundo, CA 90245.

The Coca-Cola Foundation: Classroom Teaching and Learning

Purpose: To provide youth with the educational opportunities and support systems they need to become knowledgeable about the world in which they live and better able to give back to their communities.

Areas of special interest include innovative K-12 public school programs, inside and outside the classroom walls; support of teacher development programs; and smaller projects dealing with specific activities in the elementary and secondary classroom.

Grant amounts range from $5,000 to $200,000 and up.

Deadline: Open, reviewed quarterly

Application and guidelines available on-line at http://www.thecoca-colacompany.com and by mail from The Coca-Cola Foundation, Grants Administration, P.O. Drawer 1734, Atlanta, GA 30301.

Captain Planet Foundation

Purpose: To support innovative hands-on environmental projects that empower children and youth to solve environmental problems in their neighborhoods and communities.

Projects should promote understanding of environmental issues, promote interaction and cooperation within the group, develop planning and problem-solving skills, and include adult supervision.

Grants generally range from $250 to $2,500.

Deadline: Open, reviewed quarterly

Application and guidelines available on-line at http://www.turner.com/cpf, by e-mail at Captain.Planet.Foundation@turner.com, or by phone at 404-827-4130.

Ludwick Family Foundation

Purpose: To encourage new and expanded projects and programs by providing grants to nonprofit organizations for new equipment, equipment replacement and modernization, improvements to facilities, and educational materials.

Grants are made for a single year and typically range from $5,000 to $50,000.

Deadlines: Inquiry letter by March 31, 2000 (August 31, 2000) for review April/May (September/October). Full proposal (if invited) due May 30, 2000 (October 31, 2000) for October 2000 (February 2001) decision.

Guidelines available on-line at http://www.ludwick.org, by e-mail at ludwickfndn@ludwick.org, or by phone at 626-852-0092.

Mitsubishi Electric America Foundation: Starfish Grants

Purpose: Through technology, to help young people with disabilities to maximize their potential and participation in society.

Proposals should address a significant need of young people with disabilities, have potential for national scope and impact, and represent an innovative approach involving technology.

Grants may cover both projects and operating support for a maximum of three years.

Deadline: Concept paper due by July 1.

Guidelines available on-line at http://www.meaf.org and by mail from MEA Foundation, 1560 Wilson Blvd., Suite 1150, Arlington, VA 22209.

Other

The Southern Poverty Law Center: Teaching Tolerance Project

Purpose: To combat hate, intolerance, and discrimination through education.

Teaching Tolerance is looking for small-scale, student-focused, ongoing projects that promise direct and immediate impact. The project also offers free educational materials and training kits to educators.

Grants of up to $2,000 will be awarded to K-12 teachers who implement tolerance education projects in their schools and communities.

Deadline: Open

Materials and grant guidelines available at http://www.splcenter.org and by mail from Teaching Tolerance Grants, 400 Washington Ave., Montgomery, AL 36104.

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Kathy Schrock's Guide for Educators: Grant Sources
http://school.discovery.com/schrockguide/business/grants.html

Grant Seeking Primer
http://teacher.scholastic.com/professional/grants/grantprimer.htm

Creating and Sustaining Project Impact: Guidelines for Evaluation and Dissemination
http://www.meaf.org/roadmap.html

SchoolGrants Newsletter
This free electronic newsletter highlights information available on the organization's Web site (http://www.schoolgrants.org). To subscribe, send a blank e-mail to subscribe@schoolgrants.org.

Publications of Interest

Making Standards Understandable

What does systemic reform have to do with standards and assessment? Aren't standards and curriculum the same thing? How do we explain standards to parents? How do I judge my students' performance of the standards? What has been the impact of the standards movement?

Answers to these questions and more are found in *Advancing Standards for Science and Mathematics Education: Views from the Field*. Editor Kathy Comfort has collected writings by experts on education policy, equity, literacy, public opinion, technology, teacher education, and more.

Advancing Standards is the latest volume in the series This Year in School Science published by the American Association for the Advancement of Science.

The publication is available on-line at http://ehrweb.aaas.org/ehr/forum.

Making Instruction Better

Project Alliance was a professional development program conducted from 1994-1998 by a partnership between the American Association for the Advancement of Science and George Mason University, with funding from the National Science Foundation. Teacher teams from schools in the mid-Atlantic region—Virginia and West Virginia among them—designed and piloted integrated curriculum units and disseminated the team planning and teaching process in their schools.

Project Alliance recently released a report of its summative evaluation and research findings titled *Project Alliance: Enhancing Science and Technology Instruction in the Middle Grades through Interdisciplinary Team Planning and Teaching*. It states that "participation increased teachers' content knowledge and pedagogical skills in teaching environmental science. Teaching became less traditional, more hands-on, and more inquiry-based." Teachers reported more collaboration among colleagues and positive effects on student interest and performance.

Three important Project Alliance outcomes are described in the report, as are program design, narrative case studies of teams and teachers, and a summary of the impact of the program in different school contexts.

The publication is available on-line at http://ehrweb.aaas.org/ehr/projectalliance.

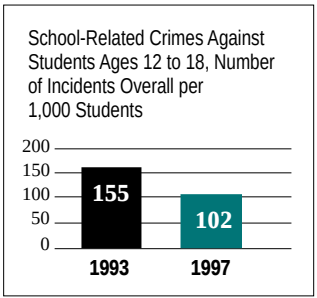
Workplace Learning

Millions of young adults hold entry-level jobs—jobs that provide both paychecks and opportunities to learn skills. The learning opportunities need to be taken advantage of, and that's the purpose of *WORKplus*, a set of work-based materials created by Public/Private Ventures and the Northwest Regional Educational Laboratory.

Designed to be used by employers, supervisors, employees, schools, community-based organizations, and workforce development agencies, *WORKplus* includes three components:

- Employee Development Workshops. These 60- to 90-minute sessions guide entry-level employees to become more thoughtful, confident, and productive.
- Supervisor Development Workshops. These sessions help supervisors understand the developmental needs of young people, build their own communication and coaching skills, and learn strategies that help their young employees gain skills and behaviors that lead to success.
- Staff Guide. This provides information and ideas for delivering the workshops and assessing outcomes, and guidelines for collaborations among organizations.

School Crime Is Declining



See "Good News about American Education" on page 6.

The full set costs $125, plus $10 shipping. Individual pieces may also be purchased. To order, write Public/Private Ventures, Publications Department, 2005 Market St., Suite 900, Philadelphia, PA 19103, or phone 215-557-4465.

Teaching Language Literacy in Diverse Settings

A new videotape from Pacific Resources for Education and Learning (PREL) takes viewers to a teleconference on teaching reading to diverse student populations. *First and Second Language Literacy: From Research to Practice* includes discussions among regional and national educators about research-based effective practices.

The hour-long video also provides examples of these practices in action as it goes into classrooms from three Pacific island communities: Kosrae, where initial reading is taught in Kosraean; American Samoa, where English is the language of instruction and Samoan is used for support; and Hawaii, where English-speaking students are taught through immersion in Hawaiian.

The videotape costs $19.95. An on-line order form is available at http://www.prel.org or you may mail your order to PREL Distribution Department, Ali'i Place, 25th Floor, 1099 Alakea St., Honolulu, HI 96813. For more information, phone 808-441-1300 or e-mail askprel@prel.org.

TQM and School Reform

What does it mean to be a good leader and manager in today's schools and districts? In answering this question, some schools, districts, and states have looked to the business community and explored their use of Total Quality Management (TQM).

In a prior publication, *Going to Scale with TQM: The Pinellas County School's Journey Toward Quality,* the SouthEastern Regional Vision for Education (SERVE) described how one Florida district used training in TQM as a foundation for its reform efforts.

Over the last few years, leaders from Pinellas County have shared their experiences with a coalition of North Carolina educators, business leaders, and policymakers. To support educators in their pursuit of quality leadership and management, SERVE encouraged the North Carolina Total Quality in Education Initiative to tell its story.

SERVE recently created *Ramping-Up Reform: Aligning Education Rhetoric, Resolve, and Results,* a publication that represents the reflections of those involved in the North Carolina Initiative. This publication can help business and education leaders explore how they might work together to create "high-performing" education organizations.

The book costs $8, plus shipping. Mail purchase orders or checks to Amy Williams, SERVE, 1203 Governor's Square Blvd., Suite 400, Tallahassee, FL 32301, or fax to 850-671-6020. For more information, send e-mail to AWILLIAM@serve.org.

classrooms@work/tools@hand

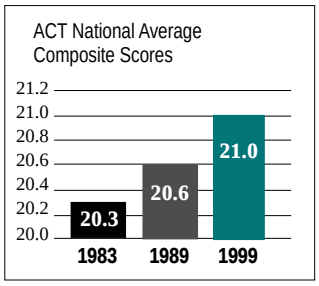
Most teachers would jump at the opportunity to visit the classroom of someone who's successfully using technology—to be able to interview the teacher, observe the teacher's practices, watch the kids in action, and get samples of classroom materials. Firsthand access to all this would be ideal professional development.

That's the premise with which Northwest Regional Educational Laboratory staff designed *classrooms@work/tools@hand.* It uses videos and Web-based multimedia material to give teachers a way to hear, see, and gain from another teacher's experience.

The Web site (http://www.netc.org/classrooms@work) currently features two classrooms and more will be added. The package is also available on CD-ROM for those without Internet access. Two 15-minute videos that introduce the classrooms make good additions to a district or regional presentation. The CD-ROM and videos cost $15 each; access to the Web site and downloadable documents is free.

Order on-line, by e-mail to bateya@nwrel.org, or phone 800-211-9435.

ACT Test Scores Are Up



See "Good News about American Education" on page 6.

Research Notes

(continued from page 5)

A focus on smallness. Size matters, in the classroom and the school. Small size encourages closer, more caring student-teacher and student-student relationships and permits teachers to use more individualized and interactive instructional strategies.

A commitment to parental outreach and community building. Because many students do not have access to adequate nutrition, health care, and social services, schools must build partnerships with parents and other strategic groups.

An ongoing, schoolwide program of social skills development. Many at-risk students lack social skills that help them adjust to the demands of the school environment. Reform models must include instruction in how to get along with others, resolve conflicts peacefully, and develop other life skills.

A comprehensive, sustained staff development program. Promising school reform models are very complex and often require much study, effort, and time to implement. These models must include intensive staff development that provides teachers with skilled trainers in school and classroom settings. Classroom-based mediated assistance for teachers is an essential ingredient.

"What Does It Take to Reform a Low-Performing School?" Susan Talley in *From At-Risk to Excellence*, 1(1) Spring 1999. Available on-line at http://www.ed.gov/offices/OERI/institute.html. Order toll-free by phone at 877-4-ED-PUBS or by e-mail at edpubs@inet.ed.gov.

AEL is a private, nonprofit corporation. AEL serves as the regional educational laboratory for Kentucky, Tennessee, Virginia, and West Virginia. For these same four states, it operates both a Regional Technology in Education Consortium and the Eisenhower Regional Consortium for Mathematics and Science Education. In addition, it serves as the Region IV Comprehensive Center and operates the ERIC Clearinghouse on Rural Education and Small Schools. AEL's primary source of funding is the Office of Educational Research and Improvement (OERI), U.S. Department of Education. This publication is produced with funds from OERI contract number RJ96006001. The contents herein do not necessarily reflect AEL or OERI policies or views.

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