



Need for Skilled Labor

In 1900, about 50 percent of America's jobs required low or unskilled labor; today, fewer than 10 percent do. And while fewer than 10 percent of jobs at the beginning of this century were professional or technical, more than half of the new jobs created between now and the year 2000 will require education beyond high school. Almost one-third will require a college degree.—From a lecture by Linda Darling-Hammond, Center for School Reform, Columbia University, at Educational Press Association Conference, June 1991.

Slim Chances for Dropouts

A male high school dropout in 1986 had only one chance in three of being employed full-time—half the odds of 20 years earlier. If employed, he earned only \$6,700 a year, about half of what a high school dropout earned in 1973.—William T. Grant Foundation, 1988.

Report Criticizes Undergraduate Programs

Undergraduate majors in the arts and sciences often fail to help students make connections between courses and synthesize what they have learned, says a comprehensive report released by the Association of American Colleges.

The two-volume report, *Liberal Learning and the Arts and Sciences Major*, recommends a series of changes to strengthen undergraduate major programs. It urges academic departments to consider how the courses in a major relate to one another and courses outside the major. And it urges departments to structure the major so students can build on their knowledge, tying it all together in a final "capstone" course or other senior-year experience.

The report discusses the principles that it says should underlie a major, and includes examples of successful programs. It also sharply criticizes many practices common at large universities, including huge lecture classes, poor student advising, a faculty-reward system that emphasizes research over teaching, and a "cafeteria" approach to choosing courses.

The report discusses the ideal arts-and-sciences major in terms of an academic "home"—a base on which students can build over time. In a properly structured major program, the report says, professors would clearly define the purpose of the major and would show how each course relates to it.

Rather than offering students a cafeteria-style menu of course requirements, the major would have a beginning, a middle, and an end. It would also provide students with more opportunities to pursue in-depth study, such as a research project, and to do more writing. And the ideal major would allow students to relate what they have learned to their general education.

Many panels representing learned societies that collaborated on the project note that the faculty-reward system, with its emphasis on scholarly publishing, has made such goals difficult to achieve. They argue that professors—especially those at large universities—don't spend enough time with undergraduates.

Some panels are also highly critical of lecture courses with large enrollments, noting that these classes are frequently taught by inexperienced graduate students, and that they make students passive rather than active learners.

Several panels make similar suggestions: capstone courses, hands-on research, and recommendations for making majors more attractive to minority students.

Copies of the two-volume report may be obtained from the Association of American Colleges, 1818 R St. NW, Washington, DC 20009. Volume 1 costs \$7; volume 2 costs \$17; both may be purchased for \$20.—Reported by *The Chronicle of Higher Education*, January 9, 1991, p. 1.

Finances Limiting Hispanic College Attendance

Rising college costs, financial aid that did not keep up with those costs, and the increasing number of Hispanics living in poverty led to a 13.7 percent decrease in the U.S. college-attendance rates of traditional-age Hispanic high school graduates between

1976 and 1988, according to an annual report issued by the Hispanic Association of Colleges and Universities.

In 1988, only 30.9 percent of Hispanic high school graduates aged 18 to 24 were enrolled in college, compared with 35.8 percent in 1976, a 13.7 percent decrease, the report states.

Moreover, it says, while the number of Hispanics in that age group rose by 70.3 percent between those years, the high school graduation rate for these students dropped slightly, from 55.6 to 55.2 percent.

Summer-School Enrollment

This past summer many colleges and universities saw a sizable jump in the number of students enrolled in summer school.

For example, Northwestern University had an increase of 18.7 percent over the previous year, while Eastern Michigan University saw a 13 percent jump, Southern Illinois, 4 percent, and the University Center at Tulsa, 18 percent. Most of the increases were at state universities, since many small liberal-arts schools do not offer summer classes.

Summer-school directors had expected enrollment to drop this year because the pool from which they traditionally draw students is shrinking. However, concerns about the economy have apparently drawn more people to summer classes where they can prepare for job changes, refine their skills, or avoid recession-plagued hometowns where few jobs are available. Others are taking classes so that they can work additional hours during the fall semester. More students are taking double majors and finding it hard to complete their coursework during the traditional school year. Classes may be easier to get into in the summer, when there are fewer students competing for each spot.

Students say that they like the smaller classes and extra attention in summer school, and that they find it easier to concentrate when they are taking only one or two classes at a time.—Reported by *The Chronicle of Higher Education*, August 7, 1991, page 47, A23.



Inspecting Playgrounds

Is your playground safe? Inspect playground equipment regularly, giving special attention to the following items, as suggested by the National Safe Kids Campaign:

- Are there pieces of broken glass, nails, or sharp rocks around the equipment?
- Is the paint on the equipment peeling? Is the wooden equipment splintery or rotten?
- Are there broken places or sharp edges on the swings, seesaws, slides, or other equipment? Are metal parts weakened because of rust or corrosion?
- Are the swing seats made of heavy metal or wood? Lightweight plastic or rubber would be safer.
- Does the equipment wobble or lift away from its anchors when someone plays on it?

There were 170,200 playground injuries in the U.S. in 1988, according to the National Safe Kids Campaign—70 percent of them on equipment designed for public use. Ninety percent of playground injuries result from falls onto hard surfaces like asphalt and concrete. Grass and soil are better but can become compacted and hard. One of the best playing surfaces is a well-maintained layer of shredded mulch 8 to 10 inches deep. However, such a surface must be regularly maintained and replaced.

For further information about efforts to prevent childhood injury, contact Safe Kids, 111 Michigan Ave. NW, Washington, DC 20010-2970, or call 202-939-4993.

Toxic Art Supplies Must Carry Labels

Because some art supplies fail to carry warning labels, millions of Americans may be exposed to dangerous chemicals that can cause cancer or other chronic diseases. According to the U.S. Public Interest Research Group, a number of manufacturers are not labeling their products as required by federal law.

In a survey of stores selling art supplies, U.S. PIRG found that 23 of 52 art products—44 percent—failed to warn buyers of the possible dangers of their ingredients. The group called for a federal crackdown on com-

panies marketing potentially toxic art supplies without proper labeling and to restrict their use in elementary schools.

Among the common toxic chemicals in art and craft supplies are solvents in rubber cements, turpentine, and markers; lead in paints, clays, and glazes; lead solder in stained-glass hobby kits; asbestos in talc and clays; and cadmium in silver solders and welding. These chemicals can cause respiratory problems, birth defects, kidney damage and several types of cancer, according to the U.S. PIRG.

More than 50 million Americans paint or draw as a hobby, 29 million make pottery or ceramics, and 15 million work with clay. Children are at higher risk than adults from exposure to hazardous chemicals because their bodies are still developing and their higher metabolic rate causes toxic chemicals to be absorbed more quickly.

Facts About Lead

- The Bush Administration is now calling lead poisoning America's No. 1 environmental threat to children.
- Seventy-four percent of all U.S. private housing built before 1980 contains some lead paint. There are 3.8 million homes with peeling lead paint or lead dust inhabited by children under the age of seven. Forty-eight percent of these families have an annual income more than \$30,000.
- Three million tons of lead line the walls and fixtures of 57 million American homes.
- One of nine children under age six has enough lead in his blood to place him at risk.
- It takes a strikingly small amount of lead for a child to be affected. A child can become severely lead poisoned by eating one milligram of lead-painted dust—equivalent to about three granules of sugar—each day during childhood. A child can become ill simply by touching a window sill regularly and then putting his fingers in his mouth.
- Children with high lead levels are six times more likely to have reading dis-

abilities. Other results of exposure to even low levels of lead include intelligence loss, hyperactivity, aggression, hearing loss, slower reaction time, reduced attentiveness, delays in development, and problems with balance.

• Paint dust and chips containing lead can be found in many locations in older buildings, particular stair trim, baseboards and trim, radiators, and exterior windows and railings.

A number of organizations offer lead-testing kits. The Consumers Union has rated as effective LeadCheck Swab, sold by HybriVet Systems Inc. (800-262-LEAD), and the Frandon Lead Alert Kit, sold by Frandon Enterprises, Inc. (800-359-9000).

If inspections reveal no cracking, peeling paint, renovations may not be necessary. Odds are that attempts to remove the lead will only increase the dust level. Scrutinize window sills, baseboards, and door frames where lead dust is most likely to form. To remove dust from leaded paint, damp-mop or wipe with a high phosphate detergent. Ask for trisodium phosphate washes (TSP) at paint or hardware stores. A HEPAvac (High Efficiency Particulate Air Filtered Vacuum) is useful for superscrubbing.

For massive removal projects, hire a qualified contractor. The safest approach is encapsulating, covering, or removing painted structures entirely. Scraping or using a heat gun can be trouble if done improperly. Power sanding and open-flame burning are almost always dangerous. Complete removal may be expensive, but the hazard may be reduced by replacing doors, window frames or contaminated carpeting, or by putting up wallpaper or paneling. Seal off rooms that are being renovated and clean up well afterward.

Be sure to test drinking water for lead if your school's water comes from a well, if water pipes have lead solder, or your water is known to be very corrosive. Ask your local water supplier for names of EPA-certified laboratories that will test your water for \$15 to \$35.—Reported by *Newsweek*, July 15, 1991, pp. 42-48. ☞