

## Closing the literacy gaps

Johnny and Jane can't read, and the schools aren't doing a very good job of teaching the basics. These have been the complaints of parents and taxpayers in recent years, based on studies showing literacy levels to be lower than expected. The National Assessment of Educational Programs now reports that the situation is improving with regard to the reading skills of nine-year-old children. A comparison of 1971 and 1975 results shows that the number of children who can correctly answer items on a reading test has increased by 1.2 percent (or 50,000 children).

While the national average has increased by 1.2 percent, more significant gains have been made by the groups that have traditionally been behind in reading skills. The number of black nine year olds answering correctly increased by 4.8 percent. Black children, however, remain 13 points behind their white counterparts in overall reading levels. Children in the Southeast showed a 2.8-point increase and are now only 3 points below the national level. Smaller but still significant gains were made by children whose parents had no high school education and those who attended schools in small towns.

## Search for the first Americans

The first humans to reach the Americas almost certainly crossed the Bering land bridge from Siberia to Alaska. But when did they make the crossing? Estimates range from 20,000 to more than 100,000 years ago. A project that may eventually find the answer as well as provide more information about the life style of the first Americans was announced last week by the National Geographic Society and the National Park Service. Each organization has pledged \$300,000 for the initial three-year search that will be directed by William R. Powers and Russell D. Guthrie of the University of Alaska. They intend to begin their search at an Alaskan site called Dry Creek. Stone artifacts dated at 12,000 years were uncovered there this summer in an exploratory dig. Cooperation with similar projects in Siberia and Canada is planned.

One Canadian site, Old Crow in the Yukon, has been worked since 1966 and has yielded artifacts (including an obviously hand-carved caribou bone) dated between 25,000 and 32,000 years (SN: 1/27/73, p. 55). William N. Irving of the University of Toronto, who was present at the announcement of the Alaskan project, reported that the Old Crow site has now produced what may be the oldest direct evidence of human habitation of the Americas. A human jawbone was found this summer and has been preliminarily dated at 22,000 years.

## Demise of the happy homemaker

"I have to work. If I'm home, I go crazy. I hit the children. When I work, I'm O.K."—one of a variety of similar responses to questions put to married women by social psychologist Myra Marx Ferree of the University of Connecticut at Storrs. While it is generally known that more and more middle-class women are going to work and finding it fulfilling, little attention has been given to the attitudes of working-class women toward work and housework. Ferree interviewed 135 women living in a working class community near Boston and reports in the September *PSYCHOLOGY TODAY* that they too generally benefit from taking on a full-time job in addition to their home jobs. Almost twice as many housewives as employed wives reported dissatisfaction with their lives. Most claimed they had not had a fair opportunity in life and wanted their daughters to be "mostly different" from themselves. Only 25 percent of the nonworking housewives reported being happy with their lives.

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## Ford and Carter on science

The October *PHYSICS TODAY* continues a minidebate on science policy between the two leading presidential candidates, based on their answers to three questions posed by the president of the American Physical Society, William A. Fowler. He asked what each candidate thought should be the proper role of a White House science adviser, what each thought about national energy needs and the nuclear power program, and how the federal government should support basic and applied science.

Both candidates said they would make the science adviser a high-level counselor and saw his importance increasing as technical issues continue to arise. Ford was more specific, saying the adviser would "participate in the formulation of my budget and legislative proposals," review existing policies and programs, and "help identify new opportunities for using science and technology to improve our understanding of national problems."

Carter emphasized what he called his own "broad scientific and technical background," based on his career in the Navy's nuclear submarine program. He said the science adviser's office "should be upgraded immediately to provide a permanent and high-level relationship between the White House decision-making process and the scientific community."

The two candidates differed most on energy policy. Ford criticized Congress for passing only 8 of his major energy proposals while leaving 15 others unpassed. He called for increased use of coal and nuclear energy and termed the safety record of nuclear power plants "outstanding." He said the United States must "maintain our role as a major supplier of nuclear fuel and equipment for peaceful purposes—so that we can influence others to accept controls to minimize the threat of proliferation."

Carter emphasized conservation, citing the need for increased mass transit, mandatory improvements in building insulation and rate structures that discourage consumption. "We must make every effort to minimize our dependence on nuclear energy," he said, though this should be accomplished through shifts in R&D funding and conservation rather than an outright moratorium on new reactors. He agreed that coal use would increase, but emphasized the need for solar energy. The breeder reactor has received "excessive emphasis," he said, which should be "severely reduced and converted to a long-term, possibly multinational, effort."

On research spending, Ford said the federal government should play a "key role" in supporting basic research but be more selective in funding applied research—leaving more of this to private industry. Federal funding of applied research should be reserved for specific government needs (such as defense) or to achieve broad national goals (such as energy). He chastized Congress for cutting his budget request for the National Science Foundation, which had included a 20 percent increase for basic research.

Carter was specific about where he thought federal money should go to address national priorities: mass transportation systems, improvement of communications systems, health care, "advancement of methods of manufacturing which are environmentally sound," energy conservation and production of new energy supplies. The government, he said, must "provide leadership and active support for basic research and application of the fruits of this research through agencies such as NASA, the National Science Foundation, the National Academy of Engineering and the National Institute of Occupational Safety and Health." [Ed. note: The National Academy of Engineering is not a government agency.]

Further analysis of science in the campaign may be found in the Aug. 6 and Sept. 3 *SCIENCE*.

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