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Holden's article on Head Start and other intensive preschool programs for disadvantaged children gives an incorrect impression of what we know about the benefits of early childhood intervention.

For 15 years into the life of Head Start, academics, pundits and decision-makers argued whether the program produced longterm positive effects. Now, however, the evidence is in: it is abundantly clear that high-quality preschool programs do indeed generate long-term effects. What we don't know is exactly which factors mediate those effects; to discover the critical factors will be the research quest of the next 10 years. One promising hypothesis is that the key is to be found in the involvement of parents, a strong program element in Head Start, the Perry Preschool, James Comer's school model, Sally Provence's Child Welfare Project, the Syracuse Project, and Missouri's Parents as Teachers program. It seems that when parents become involved in their children's early education and are in turn helped with their own pressing problems, they gain a sense of control over their lives and become better socializers of their children for years to come.

I would also like to see Head Start receive the credit it deserves for its role as a national laboratory where developmental programs for America's children and families can be tried, evaluated and, when successful, launched into the mainstream. In this vein one thinks immediately of Head Start's Parent and Child Centers, the Homestart Program, the Child Development Associates Program, Education for Parenthood, and the Child and Family Resource Program, which inspired America's family support movement.

I concur with Holden that 1 year of early intervention is not enough for disadvantaged children. To give poor children a chance for an independent, productive life, we must offer appropriate social and educational support at every stage of development. Senator Edward Kennedy (D–MA) has just introduced a bill (S. 2363) for a

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Head Start Transition Program that would help Head Start programs and local schools work together and would continue Head Start's comprehensive program elements (health, parental involvement, and home visits) through the third grade. This is the direction in which we must go to achieve the best outcomes for children.

One last point. I was identified in the article as the first director of Head Start. Julius B. Richmond of Harvard University was Head Start's first director. From 1970 through 1972, I was the first director of the Office of Child Development (now the Administration for Children, Youth and Families). In that capacity, I was the public official responsible for Head Start.

EDWARD ZIGLER Department of Psychology, Yale University, New Haven, CT 06520–7447

*Response*: My intent was certainly not to "discredit" research on preschool programs, but rather to suggest that such research is still at a preliminary stage and that some unrealistic expectations may have been generated. I gained this impression through interviews with more than two dozen people, including 17 researchers.

Indeed, Schweinhart stated in a debate with Gary Gottfiedson of Johns Hopkins University last year that "to be considered conclusive, the teen pregnancy, employment, welfare, school achievement, and arrest findings. . .need to be replicated in other studies."—CONSTANCE HOLDEN

## Early Landscape Archeology

The approach to identifying synchronous cultural and environmental events and processes through stratigraphic exposures produced by bulldozer trenching ("Paleontology by bulldozer," Research News, 23 Mar., p. 1407) is an important step in the interdisciplinary study of early hominids and their environments in Kenya. The reader should be aware, however, that similar approaches were used before 1985 on Paleo-Indian sites in the American Southwest.

In 1962 at the Tule Springs Site in the Las Vegas Valley, Clark County, Nevada, Richard Shutler, Jr., and C. Vance Haynes used two bulldozers and a large motor scraper to excavate over 7000 feet of trenches in an area measuring 700 by 2200 feet that, in Haynes' words, provided "an unusual opportunity to study the late Quaternary sediments of the valley and to determine the chronostratigraphic position of artifacts, faunas, pollen samples, and radiocarbon samples" (1). This pioneering approach has been replicated by others in recent years, but not to the same scale. We are pleased to see that Richard Potts and his colleagues have successfully transferred this approach of "landscape archeology" to their hominid studies at Olorgesailie.

> JEFFREY J. SAUNDERS R. BRUCE MCMILLAN Illinois State Museum, Springfield, IL 62706

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## Postdoc Tuition at Stanford

In a recent News & Comment article (20 Apr., p. 292), Marcia Barinaga described only one aspect of the financial burden facing those who attempt to conduct research at Stanford University. Fifteen years ago, Stanford realized a previously untapped source of income, the postdoctoral fellow. It was decided that postdocs should be classified as "students" so that tuition could be collected. At the current rate of \$2200 per postdoc, the medical school alone accrues over \$1.5 million annually. The tuition is typically paid out of the sponsor's research grant. This is in addition to the already high indirect costs (74%) at Stanford. In some cases, tuition is deducted from postdoctoral fellowship awards.

On 1 January 1990, the postdoctoral "students" became responsible for paying taxes on all monies paid for their tuition. They were informed of the situation in March 1990. In effect, a postdoc at Stanford now pays a fee for the privilege of working there. Letters have been written to all levels of administration, including the office of the president, but action is still pending.

CLINT L. MAKINO JEFFREY W. KARPEN MARKUS MEISTER Department of Neurobiology, Stanford University School of Medicine, Stanford, CA 94305

Erratum: In M. Mitchell Waldrop's Research News article "Particle physicists look to the heavens" (16 Mar., p. 1291), Raymond Davis' affiliation was incorrectly given as Brookhaven National Laboratory. Davis is Research Professor of Astronomy at the University of Pennsylvania.

Erratum: In the Briefing "Tyler Prize goes to Cornell scientists" (News & Comment, 30 Mar., p. 1539), it is incorrectly stated that the Tyler committee is based at the University of California at Los Angeles. The committee has been based for the past 10 years at the University of Southern California in Los Angeles.