

SCIENCE NEWS®

The Weekly Newsmagazine of Science

A Science Service Publication
Volume 138, No. 22, December 1, 1990

E. G. Sherburne Jr.	Publisher
Patrick Young	Editor
Laurie Jackson	Managing Editor
Janice Rickerich	Production/Design Director
Bruce Bower	Behavioral Sciences
Ivan Amato	Chemistry/ Materials Science
Richard Monastersky	Earth Sciences
Janet Raloff	Environment/Policy
Ron Cowen	General Science
Kathy A. Fackelmann, Rick Weiss	Life Sciences/ Biomedicine
Ivars Peterson	Mathematics/Physics
Jonathan Eberhart	Space Sciences
Jennifer L. Miller	Editorial Assistant
Ingfei Chen, Robert N. Langreth	Science Writer Interns
Liz Marshall	Books/Resource Manager
Donald R. Harless	Advertising/Business Manager

SCIENCE NEWS (ISSN 0036-8423) is published weekly on Saturday, except the last week in December, for \$34.50 for 1 year or \$58.00 for 2 years (foreign postage \$6.00 additional per year) by Science Service, Inc., 1719 N Street, N.W., Washington, D.C. 20036. Second-class postage paid at Washington, D.C., and additional mailing office. **POSTMASTER:** Send address changes to SCIENCE NEWS, 231 West Center Street, Marion, OH 43305. Change of address: Four to six weeks' notice is required — old and new addresses, including zip codes, must be provided.

Copyright © 1990 by Science Service, Inc. Title registered as trademark U.S. and Canadian Patent Offices. Printed in U.S.A.

Editorial and Business Offices:
1719 N St., N.W., Washington, D.C. 20036
(202-785-2255)

Republication of any portion of SCIENCE NEWS without written permission of the publisher is prohibited.

Subscription Department:
231 West Center St., Marion, OH 43305
For new subscriptions only, call 1-800-247-2160.

This Week

- 340 Soybean Lecithin May Prevent Cirrhosis
- 340 Another gap in mapping Venus
- 341 Noise at sea: Cries of infant microbubbles
- 341 New allergy vaccine brings relief to rats
- 342 Liquids that tiptoe on the edge of solidity
- 342 Genetic propensity to common cancers found
- 342 San Andreas fault may have many faces
- 343 Mother tongue may influence musical ear

Research Notes

- 347 Earth Sciences
- 347 Environment

Articles

- 344 High-Pressure Hormone
- 348 Dawn of a Big Telescope

Cover: Perched atop Mauna Kea in Hawaii, the dome of the W.M. Keck Observatory houses what will become the world's largest optical telescope when the instrument begins operation late next year. The telescope will feature a 10-meter primary mirror made of 36 hexagonal tiles. Keck's "first light" image — the first celestial photograph taken using the nine mirror tiles now in place — is scheduled for release next week. (Photo: California Association for Research in Astronomy)



Departments

- 339 Letters
- 351 Off the Beat

Science Service Institution for the public understanding of science founded 1921; a nonprofit corporation.

Board of Trustees — *Chairman*, Glenn T. Seaborg; *Vice Chairman*, Gerald F. Tape; *Treasurer*, Willis Harlow Shapley; Joseph W. Berg Jr.; Robert W. Fri; David A. Goslin; J. David Hann; Milton Harris; Leon M. Lederman; Shirley M. Malcom; Elena O. Nightingale; Ben Patrusky; H. Guyford Stever; Deborah P. Wolfe.

Honorary Trustees — Edward Bliss Jr.; Bowen C. Dees; O. W. Riegel; John Troan.

President: E. G. Sherburne Jr.; **Business Manager:** Donald R. Harless.

Letters

Fast-lane learning

Psychologist Camilla P. Benbow asks why educators are so unwilling to try academic acceleration ("Academic Acceleration Gets Social Lift," SN: 10/6/90, p.212). The answer may be simple: Shortening education might put professional educators and administrators out of work.

Professional educators have managed to establish rigid age criteria in nearly every school in the United States, so that skipping grades or starting first grade early is virtually impossible. These educators have a great deal of influence in an area where they have a clear-cut conflict of interest.

The cost of education is more than just taxpayer and parental dollars; it is also the students' time, much of which is wasted. For example, does it really take 12 years to produce high school graduates who cannot read, who cannot find the United States on a world map and who do not know when World War II was? Couldn't the same results be achieved in a lot

less time? Is it likely that better results will be achieved with longer school years and extra years in school, as many educators now advocate?

Overlong education has a price. In my own field — medicine — training lasts until age 30 or 35, which is half a lifetime. Many of my colleagues, fresh out of school, find that they are too old to start families. I have actually seen infertile physicians look at pregnant teenagers with envy.

We need to bring education back into line with the human biological clock. Academic acceleration, though bad for educators, would be good for students.

Kevin Jon Williams
Wynnewood, Pa.

Most bright students in a school that resists acceleration could tell you why: The teachers (most of whom graduated in the bottom third of their own classes) share the general population's antipathy toward intellectual ability. Underachievement is the price of the social

integration of the "popular" subgroup in the follow-up of Lewis Terman's 1947 study.

In my public school days, elementary school teachers were constantly punishing me for asking questions too advanced for my grade level (read: they don't know the answer) and for working ahead in my textbooks, even though I was doing the work correctly. One high school teacher actually told me that I ought to deliberately fail a few tests so that my classmates would like me more.

In spite of the lip service paid to intellectual achievement in this country, the actual sentiment toward it is hostility. This has spawned, among other things, the widespread icon of the "mad" or "nerdy" scientist.

Irene Newhouse
Eau Claire, Wis.

Your letter brings to mind a recent comment from a student subscriber. "I value your magazine and read each issue avidly," he wrote, but he added: "Many of my teachers find it frustrating when I correct them in class based on information from your articles." — the editors

DECEMBER 1, 1990

339