

A Science Service Publication Volume 122, No. 14, October 2, 1982

Publisher

Senior Editor/ Physical Sciences

Behavioral Sciences

Assistant Editor

Biomedicine

Earth Sciences

Policy/Technology

Assistant to the Editor

Science Writer Intern

Business Manager

Space Sciences

Art Director

Books

Life Sciences

Chemistry

Editor

E.G. Sherburne Jr. Joel Greenberg Dietrick E. Thomsen

Judy Klein Wray Herbert

Joan Arehart-Treichel Linda Garmon Cheryl Simon Julie Ann Miller Janet Raloff, Ivars Peterson Jonathan Eberhart

Joanne Silberner lleana Mendez Robert Pollie Jane M. Livermore

Donald R. Harless

Scherago Associates Advert Fred Dieffenbach, Sales Director Advertising 1515 Broadway, New York, N.Y. 10036

Editorial and Business Offices 1719 N Street, N.W., Washington, D. C. 20036

Copyright * 1982 by Science Service, Inc., 1719 N St., N.W., Washington, D.C. 20036. Republication of any portion of SCIENCE NEWS without written permission of the publisher is prohibited.

Subscription Department 231 West Center Street, Marion, Ohio 43302

Subscription rate: 1 yr., \$27.50; 2 yrs., \$47.50; 3 yrs., \$67.00. (Foreign postage \$5.00 additional per year.) Change of address: Four to six weeks' notice is required. Please state exactly how magazine is to be addressed. Include zip code. For new subscriptions only call (1) 800-247-2160. Printed in U.S.A. Second class postage paid at Washington, D.C. Title registered as trademark U.S. and Canadian Patent Offices. Published every Saturday by SCIENCE SERVICE, Inc. 1719 N St., N.W., Washington, D.C. 20036. (202-785-2255) ISSN 0036-8423

Letters

A solid education

We believe that the excellent showing of Japanese production and management (SN: 7/10/82, p. 28) is to a great extent based on the solid public school education they receive. When investigating their educational system we found an enormous number of environmental and school variables that may be contributing - see Comparative Reading and Learning Difficulties (Lexington Books, 1981)

An important factor in our falling SAT, etc. scores seems to come from the policies of our schools of education. Three factors stand outlow (or no) standards for admission to schools of education (graduate schools in California); grade inflation; the belief that ability to read, write, spell and do arithmetic are not important for school teachers.

We have tested about 500 California teachers. In arithmetic they average 9th grade, minimum grade 3.9. There is evidence that pupil performance in arithmetic is related to the teacher's level of functioning. We believe that an important factor in the relatively poor showing of **This Week**

212 New Element, 109, on the Table? Sex and the celibate fruit fly 212

213 'Petri dish' mouse embryos go halfway through normal gestation

213 Vaporizing cholesterol with lasers 214 Acyclovir counters recurrent herpes 214 'Light' cigarettes: Deadly as ever

Research Notes

216 Chemistry 216 **Behavior** 217 Biomedicine 217 Space Sciences

Articles

218 Comprehending Kidney Disease

219 A Healing Scaffold

Departments

211 Letters

220 Commentary

Cover: A quarter-century ago, children in the "radio room" of a Moscow school listen to the beeping signals of Russia's Sputnik 1, the first manmade earth satellite, whose launching on Oct. 4, 1957, inaugurated the Space Age. (Photo: Embassy of the USSR)

222 Books

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

Board of Trustees — President, Glenn T. Seaborg, University of California, Berkeley, CA; Vice President,
Gerald F. Tape, Associated Universities, Washington, DC; Treasurer, Milton Harris, Washington, DC;
Secretary, Julius Duscha, Washington Journalism Center, Washington, DC; Joseph W. Berg Jr., National
Research Council, Washington, DC; Edward Bliss Jr., Newburyport, MA; Bowen C. Dees, The Franklin
Institute (Ret.), Philadelphia, PA; David A. Goslin, National Research Council, Washington, DC; Hilleary F.
Hoskinson, National Geographic Society (Ret.), Washington, DC; Elizabeth F. Neufeld, National Institutes of
Health, Bethesda, MD; O. W. Riegel, Glasgow, VA; Willis Harlow Shapley, Washington, DC; H. Guyford
Stever, National Academy of Sciences, Washington, DC; John Troan, Pittsburgh Press, Pittsburgh, PA;
Deborah P. Wolfe, Queens College of City University of New York, Flushing, NY.

Director: E. G. Sherburne Jr.; Assistant Director: Dorothy Schriver: Business Manager: Donald R. Harless.

many of our children in arithmetic may be related to the low level of math ability of their teachers.

It is possible to enter the graduate schools of education in California without having gone beyond 8th grade arithmetic. Our high schools require one year of math in the 9th grade which may be arithmetic review. This is as far as many of our teachers have gone. In Japan the college-bound students take 4 years of high school math - which may include trigonometry, elementary calculus, probability and statistics.

Industrial managers in Japan tend to be familiar with statistics and to apply it to their work.

Because of our interest in Japanese education and industrial development our colleagues in Japan have applied for funds to permit us to enlarge and complete our research. Meanwhile, the University of Venezuela has invited us to lecture to their faculty and students and to continue our international research there.

We are especially interested in going to Venezuela because they have the only Minister of Intelligence whose job it is to improve the intelligence of the population of children entering school. This is mentioned in our book in the chapter on Venezuela

Lester & Muriel Tarnopol San Francisco, Calif.

Unpredictable people

Dr. Blau should know that people, like dice, are not completely predictable (SN: 9/14/82, p.

The very next 100 patients who threaten to do harm may very well do so — then his statistic would be that 4 out of 5 are entirely safe and society would be more the loser.

When Dr. Blau says he "can't blow the whistle on them regardless of the APA guidelines" (to warn authorities when harm is threatened), he is only making himself feel good at society's expense. Come on Dr. Blau; get with the program!

Russell Kiessig Dana Point, Calif.

Correction: The University of Missouri's research reactor is not the only commercial U.S. producer of neutron transmutation doped silicon (SN: 7/17/82, p. 45). CintiChem, Inc., also produces the material at a reactor in Tuxedo, N.Y.

OCTOBER 2, 1982 211