

the course through correspondence with local colleges.

The adaptation of "The Mechanical Universe" for high school use is being funded by a grant of \$650 000 from the National Science Foundation. The teachers and administrators selected to participate in the project at Caltech spent this summer selecting material from 26 half-hour videotapes on classical mechanics for three hours of video material consisting of 15-minute segments. The teachers also helped prepare instructional guides for the series. Upon returning to their schools this fall, each of the teachers is to start testing half the segments in cooperation with another teacher who did not take part in the production of the series. The results of this preliminary assessment will be evaluated by an educational consulting firm, and if the rating is high, the series will be revised next summer and distributed in fall 1985, just as Caltech's television series begins. According to Richard Olenick, a visiting associate at Caltech from the University of Dallas physics department, who serves as codirector of "The Mechanical Universe," the high school series will be made available to schools at the lowest possible cost.

Don Delson, a coordinator for the high-school project, reported that work was going "quite well" this summer and that "everything was on schedule." Olenick said that the teachers were particularly impressed by the video graphics, especially those illustrating mathematical concepts such as angular momentum and the universal law of gravitation.

If the high-school adaptation of the 30-program course on classical mechanics is well received, the participants hope to follow it with an adaptation of the course's second part, which covers electricity and magnetism, relativity, waves and optics, thermal physics and modern physics (PHYSICS TODAY, June 1984, page 67). The second part is to be shown on public television starting in Fall 1987.

"3-2-1 Contact," the PBS television science series for children aged 8 to 12, has received renewed support from the National Science Foundation, with the blessing of NSF's policy-making group, the National Science Board. In June, NSF announced a grant of \$8.5 million to support production of 20 more half-hour segments over a period of five years. Created by the Children's Television Workshop in New York, which also produces the popular "Sesame Street," "3-2-1 Contact" is the recipient of numerous prizes including four Emmy awards. A. C. Nielsen, the Chicago-based organization that surveys television viewership, reports that 23 million children have watched the series at home and another 3 million at

school. Some 650 000 teachers have received guides to the series. Of this number, 70 000 have attended workshops on how to use the program to best effect.

The third season of the program was produced this summer with \$1 million from the Corporation for Public Broadcasting. The additional 20 segments funded by the new NSF grant will bring the total number of episodes to more than 200.

Television science got another boost in August when the Josiah Macy Jr Foundation in New York announced a \$1.5-million grant to establish a training school for science writers at station WGBH in Boston. Six fellowships, each worth \$25 000, will be awarded each year for three years to bring writers to WGBH, the nation's largest producer of science programming for public television. According to John T. Bruer, a Macy Foundation official, each fellow will spend four months working on a radio news magazine show, one month learning television techniques, and seven months working independently on stories with a crew and television editor. Academic and research scientists are eligible for the fellowships and may apply to WGBH, which will make the selections each year.

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Education

Stanford team writes curricula on peace and violence

Arms control, once the exclusive preserve of foreign policy specialists and weapons scientists, continues to involve more people. In a program at Stanford launched last fall, study materials on conflict, violence, war and arms control have been compiled for use in classes from kindergarten through grade 12. Project participants are developing curricular materials for use in high schools, and they plan to organize training sessions for secondary school teachers.

New center studies climate trends

A new Center for Climate Research, to study long-term climate changes, has been established under the auspices of Columbia University with a seed grant of \$1 million from the G. Unger Vetlesen Foundation. The Center is to promote cooperative work between Columbia's Lamont-Doherty Geological Observatory in Palisades, New York, and NASA's Goddard Institute for Space Studies, located near the Colum-

The project is jointly administered by the Stanford Program on International and Cross-Cultural Education and the Stanford Center for International Security and Arms Control. Steven Zansberg, outgoing coordinator of the project (soon to be replaced by Rose McDermott), reports that the best known and probably the most widely used materials located by the project were prepared by several organizations in the Boston-Cambridge area—Educators for Social Responsibility and Union of Concerned Scientists, among others. Materials for young children usually focus on how conflicts break out and are resolved, Zansberg says, while the more sophisticated material on international relationships is reserved for older students. A bibliography of such materials has been prepared at Stanford, and next summer, the project coordinators hope to bring 30 to 50 Bay Area teachers to the University for an intensive residential institute on how to teach arms control at the primary and secondary level.

Last fall, the Union of Concerned Scientists and Physicians for Social Responsibility urged teachers around the country to devote up to a week of instruction to arms-control issues, but Zansberg notes that such efforts often provoke controversy locally and nationally. Zansberg says that classroom material prepared by groups that favor arms control has come under attack from organizations such as the American Security Council in Washington, D.C., and Phyllis Schlafly's Eagle Forum in Alton, Illinois. The National Education Association, on the other hand, has endorsed use of "Choices," a 10-lesson series on war and peace issues prepared by UCS.

Stanford's International Security and Arms Control Project does not specifically endorse use of the items it compiles, and because certain items are regarded as biased in some circles, participants in the project are developing new curricular materials which—they hope—will be seen as objective on all sides. They expect to have some of the material ready next summer for the pre-college teaching institute. —ws

bia campus in New York City.

The Goddard Institute, a division of the Goddard Space Flight Center in Greenbelt, Maryland, is developing models to project climate trends into the next century. The Lamont-Doherty Observatory boasts the world's largest collection of deep-sea sediment cores, which are being studied to compile a history of the world's climate changes going back more than 100 000