Undergraduate Educators Urge Broader Embrace of Innovation

Lagging science scores among incoming undergraduates have created new teaching challenges, experts gathered last month in Washington, D.C., said, sharpening the need to identify effective education strategies.

Innovative teaching is making headway on some campuses, but participants at the 2011 Transforming Undergraduate Education in Science, Technology, Engineering, and Mathematics (TUES) conference said these approaches must be more widely used.

“Teaching at the pre-college level suffers as a result, since ‘much of what we do is not available to K-12 teachers.’”

Sparse support for science teaching could leave many ill prepared to join the 21st-century workforce, said Carl E. Wieman, a former U.S. professor of the year and now associate director for science at the White House Office of Science and Technology Policy. He urged educators to evaluate new programs with an eye toward discouraging rote memorization and encouraging students to think like scientists.

“Teaching must move away from this notion of ‘I published, therefore I disseminated,’ because publications reach a very small scientific community,” Cerveny said.

Second Life for learning. Penn State educators are using Second Life’s virtual campus to teach lessons in online security. But can such innovative efforts be extended beyond the university?

The global scientific community has recommended that science diplomacy can help policy-makers learn to appreciate the scientific evidence that supports the global issue of renewable energy, climate change, or drugs for infectious diseases,” said NIAS Director V. S. Ramamurthy, a nuclear physicist and former secretary to the Indian Department of Science and Technology.

“Such things will happen when diplomats and policy-makers learn to appreciate the scientific evidence that supports the global issue of renewable energy, climate change, or drugs for infectious diseases.”

“We are living at a time when science and technology are embedded in almost all of human activity,” said AAAS Chief Executive Officer Alan I. Leshner, the executive publisher of Science. “The global scientific community has a role to play in a global way.... Bilateral scientist-to-scientist contact and collaboration are not enough to do this. There is a requirement to ‘harmonize’ global science—to make values, policies, and regulations compatible.”

The meeting was supported by the Indo-U.S. Science and Technology Forum.
Results of the 2010 Election of AAAS Officers

Following are the results of the 2010 election. Terms began on 22 February 2011.

General Election
President: William H. Press
Board of Directors: Raymond L. Orbach; Inder M. Verma
Committee on Nominations: Francisco J. Ayala; Sandra M. Faber; Jo Handelsman; Thomas D. Pollard

Section on Agriculture, Food, and Renewable Resources
Chair Elect: Donald R. Ort
Member-at-Large of the Section Committee: Cynthia Rosenzweig
Electorate Nominating Committee: Harry J. Klee; Richard T. Sayre

Section on Anthropology
Chair Elect: Leslie C. Aiello
Member-at-Large of the Section Committee: Susan Antón
Electorate Nominating Committee: Arlen F. Chase; Lynnette Leidy Sievert

Section on Astronomy
Chair Elect: Charles Alcock
Member-at-Large of the Section Committee: Amy J. Barger
Electorate Nominating Committee: Heidi B. Hammel; Scott J. Kenyon

Section on Atmospheric and Hydrospheric Sciences
Chair Elect: Susan K. Avery
Member-at-Large of the Section Committee: Michael E. Mann
Electorate Nominating Committee: Randall M. Dole; Ronald G. Prinn
Council Delegate: Lynn D. Talley

Section on Biological Sciences
Chair Elect: Gary Felsenfeld
Member-at-Large of the Section Committee: Nancy J. Cox
Electorate Nominating Committee: Deborah E. Goldberg; Anna Marie Skalka

Section on Chemistry
Chair Elect: Alison Butler
Member-at-Large of the Section Committee: Bruce A. Parkinson
Electorate Nominating Committee: Peter C. Ford; Hilary A. Godwin

Section on Dentistry and Oral Health Sciences
Chair Elect: Barbara D. Boyan
Member-at-Large of the Section Committee: Susan Kindler Haake
Electorate Nominating Committee: Susan Reisine; Bjorn Steffensen
Council Delegate: Jacques E. Nör

Section on Education
Chair Elect: Judith A. Ramaley
Member-at-Large of the Section Committee: Susan Rundell Singer
Electorate Nominating Committee: Anne E. Egger; Gerald R. Van Hecke
Council Delegate: Arthur Eisenkraft

Section on Engineering
Chair Elect: John L. Anderson
Member-at-Large of the Section Committee: J. Gary Eden
Electorate Nominating Committee: Margaret Murnane; Sarah A. Rajala

Section on General Interest in Science and Engineering
Chair Elect: Sharon Dunwoody
Member-at-Large of the Section Committee: Katarina Nordqvist
Electorate Nominating Committee: Kathleen M. B. Boomer; Kathryn E. Perez
Council Delegate: JoAnn M. Valenti

Section on Geology and Geography
Chair Elect: Glen M. MacDonald
Member-at-Large of the Section Committee: Paul H. Glaser
Electorate Nominating Committee: Kenneth P. Kodama; Ester Szttein

Section on History and Philosophy of Science
Chair Elect: Jed Z. Buchwald
Member-at-Large of the Section Committee: Sandra D. Mitchell
Electorate Nominating Committee: Hanne Andersen; Alan E. Shapiro

Section on Industrial Science and Technology
Chair Elect: Cammy R. Abernathy
Member-at-Large of the Section Committee: Daniel J. C. Herr
Electorate Nominating Committee: Richard Broglie; Gordon D. Jarvinen

Section on Information, Computing, and Communication
Chair Elect: Francine Berman
Member-at-Large of the Section Committee: Christine L. Borgman
Electorate Nominating Committee: Barbara Simons; Eugene H. Straford
Council Delegate: Michael R. Nelson

Section on Linguistics and Language Science
Chair Elect: John A. Goldsmith
Member-at-Large of the Section Committee: Joan A. Sereno
Electorate Nominating Committee: Karen Emmorey; Maria Polinsky
Council Delegate: D. Terence Langendoen

Section on Mathematics
Chair Elect: Jill P. Mesirov
Member-at-Large of the Section Committee: Joceline Lega
Electorate Nominating Committee: James Crowley; Linda Petzold

Section on Medical Sciences
Chair Elect: Ann M. Arvin
Member-at-Large of the Section Committee: Arturo Casadevall
Electorate Nominating Committee: Douglas D. Richman; Guy A. Zimmerman

Section on Neuroscience
Chair Elect: David M. Holtzman
Member-at-Large of the Section Committee: Amita Sehgal
Electorate Nominating Committee: Karen Hsiao Ashe; Jeanne M. Nerbmine

Section on Pharmaceutical Sciences
Chair Elect: Sidney D. Nelson
Member-at-Large of the Section Committee: John R. Cashman
Electorate Nominating Committee: Maria Croyle; Barbara E. Hayes
Council Delegate: Jeanette C. Roberts

Section on Physics
Chair Elect: Richard J. Davidson
Member-at-Large of the Section Committee: Janice K. Kiecolt-Glaser
Electorate Nominating Committee: Nora S. Newcombe; Michael Rugg

Section on Psychology
Chair Elect: Craig Calhoun
Member-at-Large of the Section Committee: Julia Lane
Electorate Nominating Committee: Wendy Baldwin; Cecilia L. Ridgeway

Section on Societal Impacts of Science and Engineering
Chair Elect: Peter D. Blair
Member-at-Large of the Section Committee: Anne Fitzpatrick
Electorate Nominating Committee: Christopher Hill; Dena Piemontes
Council Delegate: C. K. Gunsalus

Section on Statistics
Chair Elect: Mitchell H. Gail
Member-at-Large of the Section Committee: Alan F. Karr
Electorate Nominating Committee: Charmain Dean; Larry Wasserman
Council Delegate: Paul P. Biederman

Additions to 2010 Fellows

The following names were inadvertently left off the list of 2010 AAAS Fellows published in Science on 28 January.

Section on History and Philosophy of Science
Diana Kormos-Buchwald, California Institute of Technology

Section on Information, Computing and Communication
Abraham Silberschatz, Yale Univ.