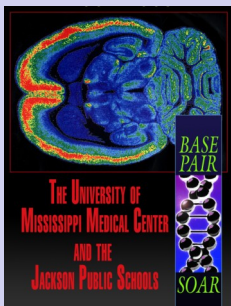


BASE  
PAIR

## More From HHMI Program Director's Meeting



Moving Forward  
Together for Science Education

The 2007 Precollege Program Director's meeting in D.C. Oct. 22-24 offered keynote talks that showcased important educational programs and outcomes data. The remaining space will highlight the most significant.

Philip M. Sadler, Ph.D., Harvard-Smithsonian Center for Astrophysics performed a major study of the effect of high school Advanced Placement (AP) scores on first year college science course performance. He found that high scores (4 and 5) on an AP exam in a discipline (eg., biology) correlated with improved scores on introductory college courses in the same discipline (eg., biology), but not any other. This was true for biology, chemistry, and physics. The only AP test that predicted higher scores on college courses outside the discipline was mathematics, which correlated with improved college scores in ALL disciplines. See -

<http://www3.interscience.wiley.com/cgi-bin/abstract/77002349/ABSTRACT?CRETRY=1&SRETRY=0>

He also reported data from a large scale study on classroom activities that aided or hindered student performance in college courses.

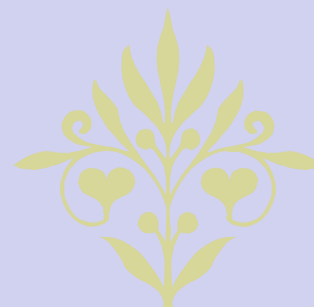
HELPED	HINDERED
-Analysis of pictures	-READING THE TEXTBOOK
-Drawing graphs, BY HAND	-Emphasis on lab procedures
-Quantitative problem solving	-Testing on labs vs. doing reports
-Labs that challenge student beliefs	-Preparation for standardized exams
-Asking student to predict outcomes	-Demonstrations w/o prediction
-Testing for facts	-Use of class time to learn facts
-Focus on foundational concepts	-Coverage of entire content domain

I can also recommend review of the work of Ron Berger, a teacher at Shutesbery Elementary School in (rural) Massachusetts. He articulates his vision of enabling superior performance from secondary school students in his book, [An Ethic of Excellence: Building a Culture of Craftsmanship with Students](#) (Heinemann, 2003). His talk described his experiences with students whom he engaged in project-related learning with striking outcomes. In one case, working with middle school students, the project entailed doing simple water analysis on the well water for every person in that small town. Students collected samples, performed analyses, compared data to national standards, wrote individual reports delivered to each town member and drafted a detailed summary report that was presented to the state Department of Environmental Quality, which took immediate notice of potential problems with the water supplies. For more details, see — <http://www.edutopia.org/node/566>.

### For Immediate Action:

Telemachian Brevis provides a means of communicating items of administrative concern to the *Base Pair*/SOAR program. It will be updated weekly for *Base Pair*/SOAR personnel, key JPSD and UMC administrators and others with a need to be aware of program activities.

- To contact us, e-mail the Program Director (Rob Rockhold, Ph.D., assistant vice chancellor for academic affairs, UMC) at: [rockhold@pharmacology.umsmed.edu](mailto:rockhold@pharmacology.umsmed.edu) or telephone 601-984-2810.
- To unsubscribe, e-mail the Program Director and put "Unsubscribe" in the subject line.



### Group of 5 Weekly Meeting:

- The next scheduled meeting will be Wednesday, November 13 at 4:00 p.m. in room U174 on the UMMC Campus. Please confirm your plans to attend or send regrets to Gail Howell ASAP.**

SOAR