

Articles

How Biology Students in Minnesota View Evolution, the Teaching of Evolution & the Evolution-Creationism Controversy

What do high school and college biology students believe about evolution & creationism?

Randy Moore Ann Marie Froehle Julie Kiernan Barry Greenwald

..... <http://www.nabt.org/sub/pdf/068-05-0007.pdf>

Abstract: Although most high school students want their biology classes to include evolution, most high school biology classes in Minnesota do not emphasize evolution. This lack of an emphasis on evolution defies state educational standards and is associated with most students (high school and college) having serious misconceptions about evolution. The evolution-related views of students in religiously-affiliated high schools are not necessarily more scientifically inaccurate than those of students at public schools. These results are discussed relative to the teaching of evolution and the problems of surveying students in public and private schools.

Structured Academic Controversy: A Peaceful Approach to Controversial Issues

Over 50% of Americans believe that creation through divine intervention accounts for human and non-human forms of life. What do you do if those Americans are planning to become science teachers?

Claudia Khourey-Bowers <http://www.nabt.org/sub/pdf/068-05-0008.pdf>

Abstract: Pre-service science teachers may hold diverse beliefs about evolution. Structured academic controversy (SAC) was used with Barbour's multiple-perspective model to: provide basis for students' involvement, situate beliefs within broader framework, and identify scientific knowledge. Results indicate SAC promoted consensus, enhanced propensity to teach evolution, avoided confrontation, and emphasized scientific thinking.

Inquiries & Investigations

Cookie-ases: Interactive Models for Teaching Genotype-Phenotype Relationships

Got genetics? Involve your students in determining phenotypes using cookies.

Rebecca L. Seipelt <http://www.nabt.org/sub/pdf/068-05-0009.pdf>

Abstract: The relationship of genotype and phenotype are abstract concepts that often require assistance to comprehend. Previous studies indicate that active role-playing exercises bring tangible aspects to abstract ideas. To this end, an exercise was developed to model effects of mutation on enzyme activity and phenotype using students as the enzyme "cookie-ase."

Inquiry, Observation & Expression Be Creative but Stay Genuine!

Poetry, prose, puzzles, and pets ... What's the common denominator?

Sandra M. Latourelle Nancy L. Elwess <http://www.nabt.org/sub/pdf/068-05-0010.pdf>

Abstract: There are many ways for students to tell you what they know. To support this, we took a six-week, multi-genre journey with our college freshman general biology students to investigate how well they could observe, generate questions, and express information gained studying the behavior of our classroom pets.

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