

Search for Extraterrestrial Intelligence (SETI) - The Next Steps (34th Symposium) (IAA.1.1)  
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SETI II - Interdisciplinary Aspects (2.)

Author Ms. Carol Oliver  
Macquarie University, Australia, COLIVER@ELS.mq.edu.au

## ASTROBIOLOGY: A PATHWAY TOWARDS ADULT SCIENTIFIC LITERACY?

### **Abstract**

Adult scientific illiteracy is widespread. In spite of high school projects designed to inspire, and new ways of teaching science, no improvement in these statistics has been detected in the past decade. This is concerning for astrobiology, including the Search for Extraterrestrial Intelligence, or indeed any other area of science in the communication of science with public audiences. Where and how does this scientific illiteracy arise in the journey to adulthood? The relationship between high school science education and the public understanding of science in adulthood is poorly understood. Do adults forget their science education, or did they never grasp it in the first place? A pilot project tested those questions by bringing 24 16-year-olds from ten high schools into contact with real science, and came out with unexpected results. These suggested that neither question is relevant, but rather the problem may lie in the lack of access to tools and context to facilitate a student's understanding of how science is really undertaken in the field and in the laboratory. That hypothesis is being tested in a new high school education project, aimed at the same age group, using authentic astrobiology cutting-edge data, NASA Learning Technologies tools and an excellent research learning facility. This time both quantitative and qualitative data will be collected from students and teachers involved in testing the project. Data will also be collected from a control group of students and teachers who do not have access to it. The trials in 2005 will involve between 500 and 1,000 students and the implementation in 2006 will make the product accessible to tens of thousands of students in Australia, the UK and possibly in a number of other countries.