STEM Inventory

Entry# 39

Program-Title SETI Institute

Non-Profit-based

Lead Voyages Through Time: An Integrated PoC Pamela Harman

High School Science Curriculum

PoC-Phone 650-961-6633 PoC-Email pharman@seti.org

Address

Org-Type

URL

Service-Region Nationwide

Type Professional Development for Teachers

Subjects General Science

Level High School (9-12th grade)

Other-Objectives

Served-per-Year Demographics

Content Voyages Through Time: A standards-based curriculum for a high school integrated science course centered on the unifying theme of

evolution. The curriculum is presented in 6 technology-based modules: Cosmic Evolution, Planetary Evolution, Origin of Life, Evolution of Life, Hominid Evolution, and Evolution of Technology. Together, they comprise a year-long course; individually, the modules can be integrated into discipline based courses such as earth and space science, biology, physics, etc. Each summer, we train 20-25 high schoot teacher-leaders in ASSET: Astrobiology Summer Science Experience for Teachers at San Francisco State University. Teachers apply, are selected, and funded. They commit to providing professional development for other educators in their home communities. We have approx. 90 mentor teachers in more than 20 states. They present workshops, mentor other teachers, and implement the curriculum at

their schools.

Outcomes Our goal is to provide excellent curriculum materials that bring cutting edge science to the classroom, support teaching the major

concepts in science in an integrated course that includes the historical sweep of science (via timeline activities), computer/data base experiences that engage students with scientific data, and inquiry-based activities. The curriculum is based upon the "5 E's" model: Engage, Explore, Explain, Elaborate, and Evaluate, a proven model of instruction. Teacher materials and student data-base activities, media, and print materials are provided on CD-ROMs. Separately, collected science articles comprise the student readers for each

module.

Started Funded-Through

Length

Primary-Funding Primary-\$

Materials

Other-Funding

How-Assessed

Best-Practice-Why

Promising-Practice

Sponsor Sponsor-Org

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Other-Orgs San Francisco State University NASA Ames Research Center NASA Astrobiology Institute California Academy of Sciences