

Third Misconceptions Seminar Proceedings (1993)

Paper Title: Perceptions of Tenth Grade Students Concerning Science Instruction in a Contextual Rich Environment and the Relationship of the Instruction to their Career Choice

Author: Sutphin, Dean

Abstract: The literature indicates that a contextually rich instructional environment may help students to acquire more meaningful learning in science. This exploratory study examines students' study environments at home and at school along with their perceptions concerning the relationship of science instruction to their career choice and work. The sample included tenth grade students in twelve high schools and technical centers geographically distributed across New York State. Data were collected Spring 1993 using a researcher validated and reliable questionnaire in opscan machine readable format. Findings show that most students have a home study environment that includes items such as calculators, printed materials and encyclopedias, along with situations that could support experiential learning. They tend to consider school a safe place, have a sense of belonging and like to attend school. On average, they spend 1 to 3 hours completing science homework in school each week and only 1 to 3 hours at home on all subjects. They see limited relationship between science instruction and their work experiences. Experiences and examples from agriculture and the environment would enhance their understanding of science and visa versa. In essence, students are engaged in the study of science, but fail to see a relationship to the world of work and perceive that more meaningful learning would result from contextual examples and experiences.

Please note that this was an oral presentation only.

Keywords:

General School Subject:

Specific School Subject:

Students:

Macintosh File Name: Sutphin - Career Choice

Release Date: 10-2-1994 I

Publisher: Misconceptions Trust

Publisher Location: Ithaca, NY

Volume Name: The Proceedings of the Third International Seminar on Misconceptions and Educational Strategies in Science and Mathematics

Publication Year: 1993

Conference Date: August 1-4, 1993

Contact Information (correct as of 12-23-2010):

Web: www.mlrg.org

Email: info@mlrg.org

A Correct Reference Format: Author, Paper Title in The Proceedings of the Third International Seminar on Misconceptions and Educational Strategies in Science and Mathematics, Misconceptions Trust: Ithaca, NY (1993).

Note Bene: This paper is part of a collection that pioneered the electronic distribution of conference proceedings. Academic livelihood depends upon each person extending integrity beyond self-interest. If you pass this paper on to a colleague, please make sure you pass it on intact. A great deal of effort has been invested in bringing you this proceedings, on the part of the many authors and conference organizers. The original publication of this proceedings was supported by a grant from the National Science Foundation, and the transformation of this collection into a modern format was supported by the Novak-Golton Fund, which is administered by the Department of Education at Cornell University. If you have found this collection to be of value in your work, consider supporting our ability to support you by purchasing a subscription to the collection or joining the Meaningful Learning Research Group.

Abstract
Perceptions of Tenth Grade Students Concerning Science Instruction in a
Contextual Rich Environment
and the Relationship of the Instruction to their Career Choice

by
Dean Sutphin
Cornell University
Ithaca, NY

The literature indicates that a contextually rich instructional environment may help students to acquire more meaningful learning in science. This exploratory study examines students' study environments at home and at school along with their perceptions concerning the relationship of science instruction to their career choice and work. The sample included tenth grade students in twelve high schools and technical centers geographically distributed across New York State. Data were collected Spring 1993 using a researcher validated and reliable questionnaire in opscan machine readable format. Findings show that most students have a home study environment that includes items such as calculators, printed materials and encyclopedias, along with situations that could support experiential learning. They tend to consider school a safe place, have a sense of belonging and like to attend school. On average, they spend 1 to 3 hours completing science homework in school each week and only 1 to 3 hours at home on all subjects. They see limited relationship between science instruction and their work experiences. Experiences and examples from agriculture and the environment would enhance their understanding of science and visa versa. In essence, students are engaged in the study of science, but fail to see a relationship to the world of work and perceive that more meaningful learning would result from contextual examples and experiences.