

1973

## How Can I Make the Students See the Relevance of This Idea? Why Do They Want? How Can I Make My Subject Come Alive?

Robert Hammon  
*Maquoketa High School*

Follow this and additional works at: <https://scholarworks.uni.edu/istj>

 Part of the Science and Mathematics Education Commons

*Let us know how access to this document benefits you*

Copyright © Copyright 1973 by the Iowa Academy of Science

---

### Recommended Citation

Hammon, Robert (1973) "How Can I Make the Students See the Relevance of This Idea? Why Do They Want? How Can I Make My Subject Come Alive?," *Iowa Science Teachers Journal*: Vol. 10: No. 4, Article 9. Available at: <https://scholarworks.uni.edu/istj/vol10/iss4/9>

This Article is brought to you for free and open access by the IAS Journals & Newsletters at UNI ScholarWorks. It has been accepted for inclusion in Iowa Science Teachers Journal by an authorized editor of UNI ScholarWorks. For more information, please contact [scholarworks@uni.edu](mailto:scholarworks@uni.edu).

**Offensive Materials Statement:** Materials located in UNI ScholarWorks come from a broad range of sources and time periods. Some of these materials may contain offensive stereotypes, ideas, visuals, or language.

Graduate credit will be offered by the University of Missouri for those attending designated sessions. Convention speakers will include Marlin Perkins of TV's Wild Kingdom, the noted ecologist Barry Comner, evolutionist Sidney Fox, Nobel laureate George Beadle, and the controversial psychobiologist Seymour Levine.

Numerous "hands-on" workshops will be conducted for all instructional levels, elementary through college. Workshops will involve use of drugs, tumor producing agents and techniques for environmental investigations.

In addition, an exhibit of science teaching supplies, apparatus, textbooks and curriculum materials will be featured.

Tours, including a look at the Mississippi River front, Missouri Botanical Garden, Monsanto Chemical world headquarters, the Zoo, etc. are scheduled for October 11. Pre-registration for tours is necessary.

Registration fees are as follows: NABT member, \$10; nonmembers, \$15; full-time students, and non-teaching spouses, \$5. One day registration is 50 percent of fees.

For further information and advance registration write Ted Stixrud, Registration Chairman, Biology Department, Kirkwood High School, 801 West Essex, Kirkwood, Missouri 63122.

HOW CAN I MAKE THE STUDENTS SEE THE RELEVANCE OF THIS IDEA? WHY DO THEY WANT? HOW CAN I MAKE MY SUBJECT COME ALIVE?

Robert Hammon, Principal  
Maquoketa High School  
Maquoketa, Iowa

These typical, and, unfortunately, all too usual queries among secondary instructors occurred simultaneously to several Maquoketa, Iowa, Senior High teachers two years ago. Out of these questions and ensuing discussions that occurred in answer to the questions, a project was born (maybe "hatched" is a better choice) that enabled the classroom to throw off its four walls and consider the banks of the Mississippi as "walls." Working from the belief that the classroom atmosphere with its four walls is stifling to student creativity and curiosity, these instructors designed a program which would be basically an ecological study, with emphasis in three areas: social science,

literature/communication, and natural sciences. These instructors included Bob Hammon, Senior High Principal; Dwight Zimmerman, Project Director; Sherman Burns; Kirk Daddow, Francis Johnston; Charles Lindgren; Bob Mejerus and Frank Strathman.

The project, known as the Upper Mississippi Valley Cultural and Educational Field Experience, slowly took shape. Funding was received through a \$60,000 federal grant for the three years of the project under Title III of the Elementary and Secondary Education Act. The specific section of the ESEA under which the funding was allocated encourages innovative instructional methodology.

The project is an interdisciplinary approach stressing the ecology of the Mississippi River as it applies to the areas of literature, science, and social studies. All sophomore and junior students of Iowa's Jackson county were encouraged to sign up. These students were subsequently screened by the county superintendent, the project director and a high school guidance counselor. Fifty students were selected according to desire, interest and rapport. Of the fifty, a fairly accurate economic and social cross-section of the county was evident. These chosen students were then divided evenly into two groups, one to spend two weeks going up river from Clinton, Iowa to Lake City, Minnesota, and the other to spend two weeks returning. Accompanying the students on the four houseboat flatilla were the eight originators of the project, two female chaperones, and a cook.

The typical day began at 6:00 A.M. and ended sixteen hours later. After a usually hearty breakfast, the project left its overnight sandbar and proceeded to complete various tasks in subject matter fields. Students spent most of their days on the area boat of their concentration - some on the science boat, others on the literature/communications boat, and still others on the social studies boat. After a full day of interviewing, observing, scientific testing, and a general awakening to the river, the boats beached approximately at 5:00 P.M. for outdoor cooking in which all took part. The remainder of the evenings was spent swimming, working on reports, playing touch football, or merely rapping.

A van accompanied the river travelers. As the boats traveled, the van, pulling a small runabout, paralleled on the highway their advancements on the river. This allowed for any emergency transportation to cities along

the way, for purchase of groceries and supplies, and to transmit the daily five-minute radio show the project prepared for the broadcast over the local Maquoketa station, KMAQ. The runabout met the flatilla at each beaching point and brought supplies and communications from nearby towns or marinas. It also served as a courier boat for any emergency.

Social studies students surveyed how changes in the Mississippi were affecting the lives of people living along the river. A series of interviews with industries, and Army Corps of Engineers, and "old timers" along the river, were included in this area. Science students made chemical analysis of the water, made a representative collection of river plants and bird life, studied siltation levels, and made bacteria studies and counts. The literature/communication students studied Mark Twain's Life on the Mississippi and wrote their own updated revision of the classic. They also developed a poster series concerning the ecology of the river. Also, among their tasks was responsibility for the daily radio show.

The findings of the month-long study will be collected and collated in the near future so that a cohesive document will ensue. It is hoped that this rather voluminous study will provide interest and motivation so that other secondary institutions might consider similar projects leading to an increase in student awareness of local cultures and ecological problems.

---

#### FREE TEACHING MATERIALS

Single copies of the following publications will be sent free to teachers upon request for a specific title.

1. The Forest. Part 1: Introduction and Part 2: A Life Partnership by Elfriede Nemetz Johnson.
2. The Forest. Part 3: Year-round Observations by Elfriede Nemetz Johnson.
3. Insects. Part 1 by Paul Dow Dawson.
4. Insects. Part 2 by Paul Dow Dawson.
5. Soil for Survival. Part 1: Physical Factors by James E. Murphy.
6. Soil for Survival: Part 2: Life Down Under by James E. Murphy.
7. Investigating Insecticides by James E. Murphy.
8. Water Pollution. Part 1: Background by James E. Murphy.

9. Water Pollution. Part 2: Field Work by James E. Murphy.
10. Water Pollution. Part 3: Physical Aspects by James E. Murphy.
11. Investigating Particulate Air Pollution by James E. Murphy.
12. A Key to the Identification of Air Pollution Particles by James E. Murphy.
13. The Investigation of Gaseous Air Pollution by James E. Murphy.
14. Exploring Old Cemeteries by Thomas J. Rillo-new title.
15. Exploring a Deserted Farm by Thomas J. Rillo-new title.
16. NOISE: Our "Quiet" Pollution by Theodore Berland-new title.
17. U.S. Geological Sales Publications that are Especially Useful to Teachers.

Submit request to: James Murphy, Science Education Center, The University of Iowa, Iowa City, Iowa 52242.

---

INDIVIDUALIZED INSTRUCTION? I TRIED IT AND IT WORKED!

Michael Gross  
Science Consultant Intern  
Joint County School System  
Cedar Rapids, Iowa 52406

Published: Information Exchange, Vol. 1, No. 1, May, 1973.

"Individualized instruction?--I tried it and it didn't work!" This is the statement that is frequently heard at professional meetings and in visiting with teachers. Upon further examination, it is usually found that the individuals making the statement only tried an individualized approach for a very short period of time. The frustrations they had experienced were usually that 1) most kids sat around doing nothing, 2) it was impossible to manage the paperwork in keeping track of where each student was, and 3) the time required to develop individualized units and materials just wasn't worth the reward in terms of better pupil achievement. With my sophomore biology class, I too had a taste of these frustrations. However, instead of scrapping the program and labeling it a failure I looked for ways that these frustrations could be alleviated.

Probably the most important lesson gained from my experience was "go slowly." Students who for years have been accustomed to having the