

Research on informal science education

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What is our impact?

- usual goals are:
 - positive attitude towards science
 - influencing career choice
 - better learning
- there is a lot of research in science education on what are best methods of teaching in terms knowledge attainment
- less of it is done in informal settings



Attitude and career choice

- Evaluation of the long-term impact of a university high school summer science program on students' interest and perceived abilities in science
DG Markowitz - Journal of Science Education and Technology, 2004
- Evaluation of short-term impact of a high school summer science program on students' perceived knowledge and skills
Knox, Moynihan, Markowitz - Journal of Science Education and Technology, 2003
- Longitudinal impact of an inquiry-based science program on middle school students' attitudes toward science
Gibson, Chase - Science Education, 2002
- Science enrichment programs for gifted high school girls and boys: Predictors of program impact on science confidence and motivation
Stake & Mares - Journal of Research in Science Teaching, 2001

Longitudinal impact of an inquiry-based science program on middle school students'

- Summer Science Exploration Program (SSEP), a 2-week inquiry-based science camp in Massachusetts, held from 1992-94
- participants chosen with a stratified random sampling method
- Science Opinion Survey and the Career Decision-Making Revised Surveys
- surveyed in 1992–1994 (pre and post SSEP) and 1996–1997



Effects?

- these projects succeed in keeping students with high attitude at the level
- they do not succeed at rising attitude
- they have a positive effect on career choice



What can we do ?

- Our research: socio-economic background of participants
- how do our camps/schools/workshops impact attitude?
- qualitative research on effectiveness of methods that we use
- can this be used as an effective measure for teacher education?



Thank you :)

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