

Assessing a pilot science literacy study group for interdisciplinary faculty who teach Freshman Inquiry

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Project description

As part of a 2002-2003 STRT grant, we articulated a working definition of science literacy for the University Studies program and developed an approach to work with interdisciplinary faculty to help them address science literacy in their Freshman Inquiry classes. For this year's grant we conducted a pilot science literacy study group with seven Freshman Inquiry faculty members whose areas of academic expertise included Architecture, English, Popular Culture, German Literature, History, Zoology, and Theater. Over the course of the academic year, we met weekly to discuss articles and book chapters related to science literacy and the study of science as a process of inquiry. In our final weeks, we discussed how the material from our discussions might be transformed into content and lesson plans for Freshman Inquiry courses.

Our main goal for this pilot effort was to assess our success in helping faculty to strengthen their understanding of science and scientific literacy. Our working hypothesis was that previous attempts to foster scientific literacy within Freshman Inquiry, for example curricular support modules on the UNST web page, have not met with great success because they focused heavily on scientific *content* that non-science faculty had difficulty adapting for use in course-specific assignments. For this project we focused on scientific *process* and, through our discussions, explored the similarities and differences in the methods of knowledge production among different disciplines.

Although at the time of this writing the data from our participant surveys had yet to be fully analyzed, our sense from a year's worth of discussions is that our original hypothesis was supported. At the beginning of the study group, when asked about perceived impediments to teaching science in their Frinq sections, faculty expressed concerns about their basic understanding of science literacy and ability to deliver science content. Through our discussions we all came to realize that although scientific inquiry has some broadly defining characteristics, there is also broad overlap with approaches to knowledge creation in other disciplines. In addition to refining our understanding of how interdisciplinary faculty might be best supported in their efforts to teach science literacy, perhaps one of the more interesting ideas to come out of the study group is the possibility of writing an interdisciplinary article comparing ways of knowing among disciplines.

Reflection

Going into this project we had little experience with the methods and approaches of qualitative research. Members of our STRT group provided invaluable assistance in figuring out the subtle art of coding responses to open-ended survey questions. They have also provided ongoing assurance that, even given the small number of participants, the data we collected over the course of this project can indeed make a worthwhile contribution to the literature.