

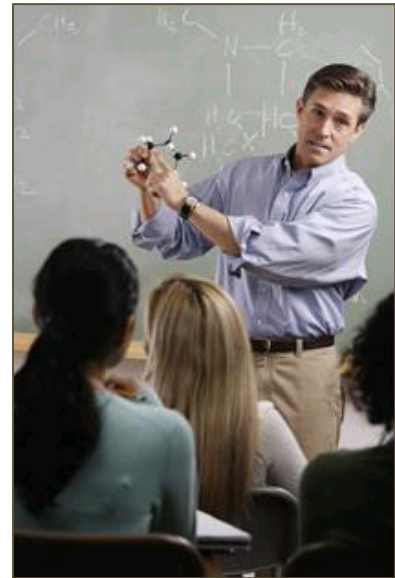
Evaluation of the National Science Foundation Advanced Technological Education (ATE) Program

Client: National Science Foundation

Project Overview

The study is to evaluate the National Science Foundation's (NSF) Advanced Technological Education (ATE) program. This program is designed to educate highly qualified science and engineering technicians in strategic advanced technology fields; improve the technical skills and the general science, technology, engineering, and math (STEM) preparation of technicians and educators; and increase the capacity of institutions for advanced technician education. To meet these goals, the program encourages partnerships between 2-year colleges with secondary schools, 4-year colleges, and businesses.

Insight has designed a mixed-methods approach to evaluate the ATE program including in-depth interviews with center and project evaluators and partners; extant data including data from NSF, Western Michigan University's Evalu-ATE Center, the National Center for Education Statistics (NCES), and the National Center for Innovation in Career and Technical Education (NCICTE); and Web surveys with industry stakeholders. The results of this work will be used to design an impact study for the ATE program; this will allow NSF to determine which programs, practices, and approaches hold the most promise for producing highly qualified science and engineering technicians and for improving the skills of the educators and technicians who train them.



The study will:

- Investigate the pattern of program investments over time.
- Outline the effects of the program activities at 2-year institutions on student outcomes in advanced technological STEM fields.
- Determine the effects of program-supported activities on enhancing faculty knowledge and skills and building the capacity of institutions to address workforce needs.
- Analyze research and R&D portfolios for their contribution to practice and to the knowledge base on technician education in STEM.

The evaluation will provide NSF stakeholders details about the expected and unintended outcomes of the expansive set of activities designed to achieve ATE program goals. The analysis will provide stakeholders with a detailed description of the entire portfolio of awards as well as recommendations for program improvement.

Core Activities

Survey Design and Implementation; Survey Research; Data Collection; Qualitative Research; Data Analysis and Simulation; Stakeholder Engagement and Coordination of Advisory Committees and Technical Expert Panels; Report Development and Presentation; Developing/Synthesizing Recommendations

Products

Interim reports will be submitted in September 2015 and September 2016; the final report and a design for an impact evaluation will be submitted in September 2017.