

Supporting Statement (3145-0136)

Request For Clearance: National Science Foundation, Directorate of Education and Human Resources, Division of Graduate Education

Distance Monitoring Data Collection in Support of the Computer & Information Science & Engineering's Pathways to a Revitalized Undergraduate Computing Education Program (CPATH)

Section B

Introduction

B.1. Respondent Universe and Sampling Methods

The sample size will be the entire universe of PIs on active CPATH awards. There are currently 60 CPATH awards. This number may change in subsequent years.

Population	Estimated Universe Size	Sample Size
PIs on CPATH awards	60	100%

B.2. Information Collection Procedures/Limitations of the Study

This collection will use a Web-based data collection form. A PI for each CPATH award will provide descriptive data annually for the duration of NSF funding. The data will be used primarily for program management, monitoring of implementation, and descriptive analysis.

NSF understands the limitations of the data collection, particularly in terms of using the data to determine program effectiveness. Data collected through the CPATH monitoring system will not be used to determine the ultimate effectiveness of its STEM educational interventions, but will be used in program planning and management, reporting on agency activities and goals, and future evaluation planning activities.

B.2.1. Statistical Methodology for Stratification and Sample Selection

The distance monitoring data collection is a census, so no sampling is required.

B.2.2. Estimation Procedure

Not Applicable.

B.2.3. Degree of Accuracy Needed for the Purpose Described in the Justification

Not Applicable.

B.2.4. Unusual Problems Requiring Specialized Sampling Procedures

Not Applicable.

B.2.5. Use of Periodic (Less Frequent Than Annual) Data Collection Cycles

Not Applicable.

B.3. Methods for Maximizing the Response Rate and Addressing Issues of Nonresponse

Data submission is required for all CPATH awards, and NSF aims to attain a 100% response rate. This will be achieved by sending email reminders every week to award sites that have not logged into the system, and by notifying all award sites still entering data when the system closing date is one week away. Examples of the emails announcing the opening of the system and reminding awardees to log in and enter data are included in appendix C.

B.4. Tests of Procedures or Methods

This distance data collection system is based on widely used open-source tools that have been tested extensively in a broad variety of environments. SRI's modifications to these tools will be tested in-house and through a series of test submission exercises with the CPATH PIs.

B.5. Names and Telephone Numbers of Individuals Consulted

Agency

Bernice T. Anderson, National Science, Foundation, 703.292.5151

Paul W. Jennings, National Science Foundation, 703.292.5307

Harriet G. Taylor, National Science Foundation, 703.292.8950

Contractors

SRI International will be responsible for data collection and analysis, under the direction of Nancy Adelman, 703.247.8434.