

3145-0226, 2016 ICR

Section B

Introduction

B.1. Respondent Universe and Sampling Methods

The EHR Program Monitoring Clearance’s goal is a portfolio of individual collections used to count and describe the universe of NSF-funded or NSF-partnered education and training projects. The statistical method employed in all 11 collections is that of a census of NSF-funded projects. Some projects have only one respondent type, typically a PI; others have several types of respondents.

Data collection for the collections involves all awardees in the programs involved. The table below shows the total universe and sample size for each of the collections.

Table 5. Respondent Universe and Sample Size of EHR Program Monitoring Clearance Collections

Attachment	Collection Title	Universe of Respondents	Sample Size
A1	Advancing Informal STEM Learning (AISL) Monitoring System	155	155
B1	Centers of Research Excellence in Science and Technology (CREST) and Historically Black Colleges and Universities Research Infrastructure for Science and Engineering (HBCU-RISE) Monitoring System	40	40
C1	Graduate STEM Fellows in K-12 Education (GK-12) Monitoring System	1,267	1,267
D1	Integrative Graduate Education and Research Traineeship Program (IGERT) Monitoring System	3,307	3,307
E1	Louis Stokes Alliances for Minority Participation (LSAMP) Monitoring System	563	563
F1	Louis Stokes Alliances for Minority Participation Bridge to the Doctorate (LSAMP-BD) Monitoring System	55	55

Attachment	Collection Title	Universe of Respondents	Sample Size
G1	Robert Noyce Teacher Scholarship Program (Noyce) Monitoring System	422	422
H1	Research in Disabilities Education (RDE) Monitoring System	12	12
I1	Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) Monitoring System	500	500
J1	Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP) Monitoring System	277	277
K1	Transforming Undergraduate Education in Science, Technology, Engineering, and Mathematics (TUES) Monitoring System	686	686

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

The data collections in this clearance use Web-based instruments. Each respondent will provide answers once a year, with the exception of respondents to the S-STEM data collection (attachments I1 and I2), who enter data each semester/quarter, for an average of two times a year.

EHR understands the limitations of the Program Monitoring Clearance, particularly in terms of using the data to determine program effectiveness. Data collected under this clearance are for monitoring purposes; evaluation studies are cleared under separate OMB requests. However, OMB 3145-0226 data are explicitly identified as a source of data for independent program evaluations. EHR Program Monitoring Clearance data are not used to determine the ultimate effectiveness of STEM educational interventions, but they are a key element in EHR's efforts to manage its program portfolio, to report on agency activities and goals, and to lay the groundwork for future evaluations.

B.2.1. Statistical Methodology for Stratification and Sample Selection

Each of the 11 collections for which clearance is requested is a census, in which the sample size is the universe. Details on the size of the universe in each collection are included in the burden estimate and in section B.1. above.

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

All collections in this clearance are a part of the reporting required of awardees, so a high response rate is expected. The table below shows the expected response rates for each of the individual collections.

Table 6. Response Rates for EHR Program Monitoring Clearance Collections

Attachments	Collection Title	Response Rate
A1-A4	Advancing Informal STEM Learning (AISL) Monitoring System	100%
B1-B2	Centers of Research Excellence in Science and Technology (CREST) and Historically Black Colleges and Universities Research Infrastructure for Science and Engineering (HBCU-RISE) Monitoring System	100%
C1-C4	Graduate STEM Fellows in K-12 Education (GK-12) Monitoring System	100% awardees and NSF-funded fellows; 85-95% lead/NSF-supported teachers
D1-D3	Integrative Graduate Education and Research Traineeship Program (IGERT) Monitoring System	100%
E1-E2	Louis Stokes Alliances for Minority Participation (LSAMP) Monitoring System	100%
F1-F2	Louis Stokes Alliances for Minority Participation Bridge to the Doctorate (LSAMP-BD) Monitoring System	90%
G1-G3	Robert Noyce Teacher Scholarship Program (Noyce) Monitoring System	100%

Attachments	Collection Title	Response Rate
H1-H2	Research in Disabilities Education (RDE) Monitoring System	100%
I1-I2	Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) Monitoring System	90%
J1-J3	Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP) Monitoring System	100%
K1-K4	Transforming Undergraduate Education in Science, Technology, Engineering, and Mathematics (TUES) Monitoring System	100%

PIs are responsible for ensuring that other individuals involved in the project submit all necessary data, and in many cases have access to status information via the Web-based systems indicating whether or not individual respondents in their projects have completed their data entry. In addition, EHR staff also have access to online monitoring sections of most of the Web-based systems and can check the status of reporting. A series of e-mail messages and phone calls are also used to follow up with respondents and ensure that all necessary data are collected.

B.4. Tests of Procedures or Methods

All of the collections for which clearance is being requested are currently in operation and have been tested both before initial implementation and throughout the data collection. The LSAMP monitoring system, for example, has been operational since 1995. Input on this system is continually received from users, and their suggestions are implemented as the system is upgraded. Other test methods used by the various collections in the EHR Program Monitoring Clearance include feedback from PIs, both as data are collected and during meetings and conferences; review by NSF staff; and testing performed by the system developers. Many systems are based on data collection methods currently used by other NSF groups, and many of the items and response categories follow formats that are already in place.

B.5. Names and Telephone Numbers of Individuals Consulted

The following individuals were consulted on the EHR Program Monitoring Clearance:

William Neufeld, Division of Research on Learning in Formal and Informal Settings, National Science Foundation, (703) 292-5148

The following table shows the individuals involved in each collection:

Table 7. Contact Information for Individuals Responsible for Collections

Attachments	Collection Title	NSF Agency Unit	Contractor or Grantee
A1-A4	Advancing Informal STEM	Ellen McCallie,	Gary Silverstein,

Attachments	Collection Title	NSF Agency Unit	Contractor or Grantee
	Learning (AISL) Monitoring System	(703) 292-5115	Westat, (301) 251-2244
B1-B2	Centers of Research Excellence in Science and Technology (CREST) and Historically Black Colleges and Universities Research Infrastructure for Science and Engineering (HBCU-RISE) Monitoring System	Victor Santiago, (703) 292-4673	Kevin Greenburg, ICF International, (301) 407-6726
C1-C4	Graduate STEM Fellows in K-12 Education (GK-12) Monitoring System	Richard Tankersley, (703) 292-5199	Kevin Greenburg, ICF International, (301) 407-6726
D1-D3	Integrative Graduate Education and Research Traineeship Program (IGERT) Monitoring System	Richard Tankersley, (703) 292-5199	Kevin Greenburg, ICF International, (301) 407-6726
E1-E2	Louis Stokes Alliances for Minority Participation (LSAMP) Monitoring System	A. James Hicks, (703) 292-4668	Kevin Greenburg, ICF International, (301) 407-6726
F1-F2	Louis Stokes Alliances for Minority Participation Bridge to the Doctorate (LSAMP-BD) Monitoring System	A. James Hicks, (703) 292-4668	Kevin Greenburg, ICF International, (301) 407-6726
G1-G3	Robert Noyce Teacher Scholarship Program (Noyce) Monitoring System	Kathleen Bergin, (703) 292-5171	Kevin Greenburg, ICF International, (301) 407-6726
H1-H2	Research in Disabilities Education (RDE) Monitoring System	Mark Leddy, (703) 292-4655	Kevin Greenburg, ICF International, (301) 407-6726
I1-I2	Scholarships in Science, Technology, Engineering, and Mathematics (S-STEM) Monitoring System	Connie Della-Piana, (703) 292-5309	Kevin Greenburg, ICF International, (301) 407-6726
J1-J3	Science, Technology, Engineering, and Mathematics Talent Expansion Program (STEP) Monitoring System	Nicole Bennett, (703) 292-5128	Kevin Greenburg, ICF International, (301) 407-6726
K1-K4	Transforming Undergraduate Education in Science,	Myles Boylan, (703) 292-4617	Kevin Greenburg, ICF

Attachments	Collection Title	NSF Agency Unit	Contractor or Grantee
	Technology, Engineering, and Mathematics (TUES) Monitoring System		International, (301) 407-6726