

Supporting Statement (3145-0164)

REQUEST FOR REINSTATEMENT

Submitted by:

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Section A

Introduction

The National Science Foundation (NSF) requests a reinstatement of the information collection for the Program for Persons with Disabilities, now called the Research in Disabilities Education (RDE) program (3145-0164). The proposed on-line project data management system will monitor the progress of RDE projects and will allow NSF to report on project and program performance.

A.1. Circumstances Requiring the Collection of Data

NSF funds research and education in science and engineering, and supplies grants, contracts, and cooperative agreements to more than 2,000 colleges, universities, and other eligible institutions, and provides graduate fellowships to individuals in all parts of the United States. The Directorate for Education and Human Resources (EHR), a unit within NSF, promotes rigor and vitality within the Nation's STEM education enterprise to further the development of the 21st century's STEM workforce and public scientific literacy. EHR does this through diverse projects and programs that support research, extension, outreach, and hands-on activities serving STEM learning and research at all institutional (e.g. pre-school through postdoctoral) levels in formal and informal settings, and serving individuals of all ages (birth and beyond). The RDE program focuses specifically on broadening the participation and achievement of secondary and post-secondary students with disabilities in all fields of STEM education and associated professional careers.

The program funds five types of awards that all work to contribute to closing the gaps occurring for people with disabilities in STEM fields: 1) alliance awards; 2) research awards; 3) enrichment awards; 4) demonstration awards; and 5) dissemination awards. Alliance projects establish innovative models of comprehensive, multidisciplinary networks of high schools, 2- and 4-year undergraduate institutions, and graduate programs designed to employ proven practices and promising interventions to broaden the participation of students with disabilities. Research and demonstration projects investigate effective practices for transitioning students with disabilities across critical academic junctures, retaining students in undergraduate and graduate STEM degree programs, and graduating students with STEM associate, baccalaureate

and graduate degrees. Research, demonstration, and enrichment project results inform the delivery of innovative, transformative and successful practices employed by the alliance projects to increase the number of students with disabilities completing associate, undergraduate and graduate degrees in STEM and to increase the number of students with disabilities entering our nation's science and engineering workforce. Dissemination projects contribute to closing the gaps occurring for people with disabilities in STEM fields by successfully disseminating findings, project evaluation results, and proven good practices and products to the public.

The original information collection, approved by OMB as 3145-0164 in 1996, surveyed three groups of students: students with disabilities in STEM fields, student with disabilities in other fields, and students without disabilities in STEM fields. These data allowed NSF to understand more fully the population of students with disabilities in STEM fields and the issues they faced. This collection submitted for reinstatement focuses more specifically on the outcomes of the RDE program, and how the alliance projects and researchers receiving NSF RDE funding have improved the academic environment for students with disabilities. This information collection will consist of an on-line data instrument that RDE awardees will use to submit annual data on their project activities and participants. RDE program staff members need these data about the awards and program performance to fulfill planning and management responsibilities, and to answer queries from Congress, OMB, and NSF management. This information is particularly required to support studies and evaluations by EHR, and studies by other NSF organizational units for project monitoring and effective administration. Data gathered through this data collection will provide essential information for assessing progress toward NSF's major performance goals, as described in NSF's Strategic Plan. (The Foundation's FY 2006-2011 Strategic Plan describes four strategic outcome goals of Discovery, Learning, Research Infrastructure, and Stewardship. See http://www.nsf.gov/publications/pub_summ.jsp?ods_key=nsf0648 for the complete strategic plan.)

NSF anticipates that a more formal evaluation of the RDE program will be proposed in the future. The data gathered in this annual data collection can serve as a baseline for the formal evaluation, which could include surveys, observations, focus-groups, interviews or site visits. Any additional data collections related to an evaluation of the program will be submitted to OMB for approval.

A.2. Purposes and Uses of the Data

This information is required for effective administration, communication, program and project monitoring and evaluation, and for measuring attainment of NSF's program, project and strategic goals, as required by the President's Management agenda as represented by the Office of Management and Budget's (OMB) Program Assessment Rating Tool (PART), by the Government Performance and Results Act (GPRA) of 1993, and by the NSF's Strategic Plan. Data collected will also be used when responding to queries from Committees of Visitors, Congress, and scientific experts.

The data can also be used as a preliminary step in more detailed future evaluation efforts, such as the sort of rigorous evaluations described in the May 2007 Report of the Academic Competitiveness Council (ACC), which was established by the Deficit Reduction Act of 2005

(P.L. 109-171) to serve as a multi-agency effort to identify Federal STEM education programs and establish their effectiveness. The full ACC report can be accessed at <http://www.ed.gov/about/inits/ed/competitiveness/acc-mathscience/index.html>. The data in this on-line data collection system can play a role in creating a foundation for the kind of evaluation the ACC requires of Federal agencies. These data can serve as baseline data for future research and evaluation studies, which could include experimental and quasi-experimental evaluation research studies with individual-level and organizational or project-level control and treatment groups or comparison groups.

In the RDE project data management system, each principal investigator (PI) of an RDE award will provide annual data using the Web-based data collection system. The following is an overview of the types of information collected:

- Award Data: includes award amount, type, and start and end date.
- Institution Data: includes data on institutional characteristics and on policies and practices relating to students with disabilities.
- Project Personnel Data: contact and demographic information for each project personnel member, in addition to data on selected project activities such as mentoring, tutoring, course development, and publication.
- Project Participants Data: contact and demographic information for each project participant, in addition to data on selected project activities such as mentoring, tutoring, academic experiences, and awards.
- Alliance Data: quantitative data on total enrolled and graduated students, and on students with disabilities.
- Enrichment and Demonstration Data: data on proposals submitted as a result of the RDE award
- Research Data: includes data on the research design and on the control and experimental group subjects.
- Dissemination Data: includes data on publications, presentations, and on-line resources offered by the awards
- NSF Highlights: a brief summary of an award activity that relates to NSF's strategic goals.

A copy of the offline data collection forms can be found in Appendix A. (The offline data collection forms are Microsoft Word documents containing the questions that will be asked in the Web-based system. The on-line version of the instrument is still being programmed; examples of how the on-line system will work can be provided upon request.)

A.3. Use of Information Technology To Reduce Burden

EHR tends to favor Web-based systems because they can facilitate respondents' data entry across computer platforms. One feature of Web systems is the thorough editing of all submitted data for completeness, validity, and consistency. Editing is performed as data are entered and questionable or incomplete entries are called to respondents' attention before they are submitted to NSF. Web-based surveys employ user-friendly features such as automated tabulation, data

entry with custom controls such as checkboxes, data verification with error messages for easy online correction, standard menus, and predefined charts and graphics. All these features facilitate the reporting process, provide useful and rapid feedback to the data providers, and reduce burden.

The RDE data collection system will follow the success of other Web-based data collection systems at NSF. Using a Web-based system facilitates respondents' data entry by ensuring more complete and correct data submissions and thus reducing the need for follow up. As annual data collection continues, RDE respondents will be able to view data submitted in previous collection cycles; this feature makes updating the previous year's data far easier and less burdensome.

Of particular note to this program, the RDE data collection system will comply with Section 508, the 1998 amendment to the Federal Rehabilitation Act, which mandates that the electronic and information technology used by Federal agencies be made accessible to all people with disabilities.

A.4. Efforts to Identify Duplication

This system does not duplicate other NSF efforts. Comparable data are not currently being collected on an annual basis for the RDE program. In addition, the collection is coordinated with the NSF FastLane Project Reports system (OMB 3145-0058) to ensure that the two collections do not collect similar data. Additionally, aggregate data are being shared with NSF-funded researchers as appropriate, thereby minimizing the possibility that other researchers will duplicate these efforts in their own future collections.

A.5. Small Business

No information is to be collected from small businesses. While it is possible that a small business could be associated with one of the RDE Alliance awards, all data will be provided by the PI of the award, so burden is not placed on the small business.

A.6. Consequences of Not Collecting the Information

Without this information, NSF will be unable to document the effectiveness or output of the RDE program. It will not be able to meet its accountability requirements or assess the degree to which projects are meeting their goals. In addition, RDE staff will be unable to disseminate information to other projects and institutions about new developments in and understanding of how to best address disability-related differences in secondary and post-secondary education. Additionally, without this feedback NSF would have no way of making systematic modifications to the RDE program (e.g., adequacy of funding amount, duration of award, institutional supports needed). Moreover, NSF would be unable to comply fully with the congressional mandate that the Foundation evaluate its STEM education programs. The ACC May 2007 report recommended that Federal support of STEM education programs not be increased until a plan for rigorous, independent evaluation of program impacts is in place, and this data collection is a cornerstone in the larger evaluation plans for the program.

A.7. Special Circumstances Justifying Inconsistencies with Guidelines in 5 CFR 1320.6

The data collection will comply with 5 CFR 1320.6.

A.8. Consultation Outside the Agency

A notice inviting comments on the reinstatement of the RDE data collection (OMB 3145-0164) was published in the Federal Register March 23, 2009, Volume 74, Number 54, pages 12153-12154. One comment came from Ms. Sachau of Florham Park, NJ who objected to the information collection. Ms. Sachau had no specific suggestions for altering the data collection plans other than to discontinue them entirely. Because the comment does not pertain to the collection of information on the required forms for which NSF is seeking OMB approval, NSF is proceeding with the clearance request.

NSF staff members routinely consult with research and evaluation experts, PIs, and educators when developing collection instruments, and request feedback from the community. During the system development, RDE staff asked for feedback on general data items from PIs and other community members. In addition, copies of the draft data elements were distributed to PIs at their annual meeting in June. ICF Macro will maintain the online data collection system and databases, and will provide technical support to respondents as needed. ICF Macro will also track user response to the system and will make improvements to the system based on feedback from the first data collection cycle.

A.9. Payments or Gifts to Respondents

No payments or gifts will be provided to respondents.

A.10. Assurance of Confidentiality

Respondents are advised that any information on specific individuals is maintained in accordance with the Privacy Act of 1974. Every data collection instrument displays both OMB and Privacy Act notices.

Respondents are told that data collected in the RDE Monitoring collection are available to NSF officials and staff, evaluation contractors, and the contractors hired to manage the data and data collection software. Data are processed according to Federal and State privacy statutes. Detailed procedures followed by EHR for making information available to various categories of users are specified in the Education and Training System of Records (63 Fed. Reg. 264, 272 January 5, 1998). That system limits access to personally identifiable information to authorized users. Data submitted are used in accordance with criteria established by NSF for monitoring research and education grants and in response to Public Law 99-383 and 42 USC 1885c.

The information requested may be disclosed to qualified researchers and contractors in order to coordinate programs and to a Federal agency, court, or party in court, or Federal administrative proceeding, if the government is a party.

A.11. Questions of a Sensitive Nature

The data monitoring collection will request data on project participants that can be considered sensitive, including name, address, Social Security number (SSN), date of birth, and grade point average. These data are collected in order to monitor the award sites and evaluate the success of the award program. Information of this nature is also used to track recipients of funding and training; participants' SSNs will be used as a tracking mechanism to permit follow-up studies that examine the long-term effect of the RDE program on individuals' success. However, SSN is a voluntary field. Indeed, all items of a sensitive nature are voluntary. Respondents may choose not to provide information that they feel is privileged, such as SSN, address, or date of birth, and the system will include instructions on how to leave those sections blank. In addition, any individualized data that are collected will be provided only to program staff and consultants conducting studies using the data as authorized by NSF. Any public reporting of data will be in aggregate form.

A.12 Estimates of Response Burden

A.12.1. Number of Respondents, Frequency of Response, and Annual Hour Burden

The estimated total number of annual respondents is 45, with an average annual response burden of 1,220 hours. The Web-based collection will be an annual activity of each award of the RDE program, and we anticipate that number of active RDE awards will remain relatively constant at this level over the course of the clearance. Respondents will be either PIs or program coordinators; one PI or program coordinator per award completes the survey. The average annual hour burden was determined using the burden reported by respondents in other similar EHR data collection systems.

The estimated annual burden is calculated below.

Respondent Type	Estimated Average Annual Number of Respondents	Estimated Average Annual Burden Hours Per Respondent	Estimated Annual Person Hour Total
PIs/Program Coordinators of RDE Alliance Awards	10	80	800
PIs/Project Coordinators of Other RDE Awards	35	12	420
Total	45		1,220

A.12.2. Hour Burden Estimates by Each Form and Aggregate Hour Burdens

As mentioned above respondents will be project PIs or program coordinators of each active RDE award. All RDE awards will provide data in the Award, Institution, Project Personnel, Project Participants, Dissemination, and NSF Highlights sections of the system. In addition, Alliance, Research, Enrichment, and Demonstration awards will each complete a specialized section that applies to the specific award type in question. Alliance awards, as the largest and most active of the RDE awards, will have the most data to compile and submit. The other four types of awards will provide very similar amounts of data through the system, so their burden is the same.

Form Type	Respondent Type	Number of Respondents	Burden Hours Per Respondent	Total Person Hours
Alliance	PI/Program Coordinator	10	80	800
Research	PI/Program Coordinator	20	12	240
Enrichment	PI/Program Coordinator	6	12	72
Demonstration	PI/Program Coordinator	6	12	72
Dissemination	PI/Program Coordinator	3	12	36
Total		45		1,220

A.12.3. Estimates of Annualized Cost to Respondents for the Hour Burdens

The overall annualized cost to the respondents is estimated to be \$48,800. The following table shows the annualized estimates of costs to respondents. The estimated hourly rate for PIs is based on a report in the April 17, 2009, edition of The Chronicle of Higher Education (2009. "What Professors Earn." The Chronicle of Higher Education, 55(32), Washington, D.C.: The Chronicle of Higher Education, Inc.). According to the report, the average salary of an associate professor across all types of doctoral-granting institutions (public, private, church-related) was \$82,958. This average annual wage was then divided by the number of standard annual work hours (2,080) to determine an average hourly rate, which is included in the table below:

The estimated annual burden is calculated below.

Respondent Type	Estimated Average Annual Number of Respondents	Estimated Average Annual Burden Hours Per Respondent	Estimated Hourly Rate	Estimated Annual Cost
PIs/Program Coordinators of RDE Alliance Awards	10	80	\$40	\$32,000
PIs/Project Coordinators of Other RDE Awards	35	12	\$40	\$16,800
Total Cost				\$48,800

A.13. Estimate of Total Capital and Startup Costs/Operation and Maintenance Costs to Respondents or Record Keepers

There is no overall annual cost burden to respondents or record keepers that results from the RDE data collection system other than the time spent responding to the online survey; survey indicators are attached as Appendix A.

It is usual and customary for individuals involved in implementing an RDE award to keep descriptive records. The information being requested is from records that are maintained as part of normal practices of RDE projects. Furthermore, respondents are active or former grantees or participants in programs or projects once funded by NSF. In order to be funded by NSF, institutions must follow the instructions in the NSF Grant Proposal Guide (GPG) that is cleared under OMB 3145-0058. The GPG requires that all applicants submit requests for NSF funding and that all active NSF awardees do administrative reporting via FastLane, an Internet-based forms system. Thus, PIs and program coordinators who are the respondents to the RDE data collection task make use of standard office equipment (e.g., computers), Internet connectivity that is already required as a startup cost and maintenance costs under OMB 3145-0058, and free software (e.g., Netscape or Microsoft Explorer) to respond. Thus, there are no capital and startup costs or operation and maintenance costs to respondents or record-keepers.

A.14. Estimates of Costs to the Federal Government

Computing the annualized cost to NSF for the RDE data collection was done by taking the budgets for 3 years and calculating the costs for each of the following operational activities involved in producing, maintaining, and conducting the RDE data collection:

Operational Activities	Cost Over 3 Years
System Development (includes initial development of the database and Web-based application, and later changes requested by the program-e.g., increased reporting tools, additional validations)	\$695,000
System Maintenance, Updates, and Tech Support (system requires updates each year before opening the collection; maintenance is required to keep the system current with technology, e.g., database servers, operating systems)	\$30,000
Data Collection Opening and Support (e.g., online and telephone support to respondents and contacting respondents to encourage completion of the questions), Reporting (as defined by DGE), and Followup activities (e.g., providing data to other consultants)	\$535,000
3-Year Total for All Operational Activities	\$1,250,000

The annualized cost was computed as one-third of the total 3-year costs; thus, the annualized cost to NSF for the RDE collection is \$416,666.

A.15. Changes in Burden

This request represents a decrease of 1630 respondents from the 1996 clearance request, and an increase in burden hours of 495 average annual hours.

A.16. Plans for Publication, Analysis, and Schedule

Data collection is scheduled to begin around December each year, and award sites will have approximately 90 days to enter data; extensions will be granted by NSF program officers as necessary. Once the data collection has been completed, agency staff can access the data through the online system as needed. The data from this collection will be used for internal review purposes and to monitor the RDE projects, as well as for reporting to Congress and OMB (e.g., the GPRA and PART reviews). Reports to NSF management, PIs, and Congress dealing with characteristics and performance of the RDE program will include statistical tables and charts generated from the database. At this time, NSF has no set timeline for publishing interim reports from this study.

Like many agencies, NSF is reducing its reliance on formal (i.e., traditional) publication methods and publication formats. NSF publishes most documents electronically only using the agency's Web site, from requests for proposals to evaluation or statistical reports using an archive called an On-Line Document System (ODS). In addition NSF runs a Custom News Service, an e-mail and Web-based alert service, that sends documents newly published in the ODS (e.g., vacancy announcements, calls for proposals, statistical reports) to subscribers. Subscribers receive electronically those NSF documents of interest and not the agency's entire publications line. ICF Macro, the contractor that manages the online data collection system and database, is forbidden contractually from publishing results unless NSF has made a specific exception. In short, all

products of the collections are the property of NSF and NSF is the exclusive publisher of the information being gathered. Often it is only after seeing the quality of the information collected that NSF decides the format (raw or analytical) and manner (in the NSF-numbered product Online Document System (ODS) or simply a page on the NSF Web site) in which to publish.

A.17. Approval to Not Display Expiration Date

Not applicable.

A.18 Exceptions to Item 19 of OMB Form 83-I

No exceptions apply.