

FY07 Grantee Performance Data

INSPIRE Focus Group Study

The Performance Knowledge Group, LLC.

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PROGRAM DESCRIPTION

The Interdisciplinary National Science Program Incorporating Research and Education Experience (INSPIRE) is a multi-tiered student pipeline program designed to bridge students' science, technology, engineering and mathematics (STEM) education experiences from post-middle school to pre-college. Students will be exposed to STEM experiences and encouraged to consider STEM academic studies and careers in fields.

The Performance Knowledge Group (PKG) was competitively selected in April 2007 to conduct up to four focus group sessions, consisting of middle school students, high school students, parents and educators at each NASA center and JPL.

The purpose of the focus group sessions was to increase NASA management and the INSPIRE team's knowledge about the needs and desires of INSPIRE's primary customers, to validate INSPIRE's design, and obtain participant feedback.

PROGRAM RELEVANCE TO NASA

The focus group sessions provided NASA with first hand input from INSPIRE's primary customers to ensure its design was valid prior to implementation. The questions were designed to understand each customer's perspective regarding best practices and barriers to preparing for a STEM education, NASA and space industry careers; how could INSPIRE's design enhance knowledge and preparation for STEM education and careers; and how best to involve families to support the student's preparation for a STEM education and career.

PROGRAM BENEFITS TO SOCIETY

With INSPIRE's validated design and input from its primary customers, the project will be poised to successfully encourage students nationally to pursue educational disciplines and careers critical to the development of the STEM workforce required for the future to ensure the Nation remains a competitor in the global economy. Through INSPIRE's On-Line Community and hands-on activities, INSPIRE engages students and families to increase Americans' science and technology literacy. INSPIRE also emphasizes family involvement, which has been shown to enhance student achievement. As INSPIRE is implemented, it will build strategic partnerships and linkages between STEM formal and informal education providers nationally.

PROGRAM GOALS

PART Measure 1. Percentage increase in number of elementary and secondary student participants in NASA instructional and enrichment activities.

PART Measure 3. Level of student learning about science and technology resulting from elementary and secondary NASA education programs.

PART Measure 4. Level of student interest in science and technology careers resulting from elementary and secondary NASA education programs.

PROGRAM ACCOMPLISHMENTS

The focus group sessions validated INSPIRE's design and provided valuable information to ensure it will meet its customers needs and supports the PART program goals listed above.

STUDENT ACCOMPLISHMENTS

Not Applicable

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INSPIRE Benchmarking Study

Policy Studies Associates, Inc.

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PROGRAM DESCRIPTION

The Interdisciplinary National Science Program Incorporating Research and Education Experience (INSPIRE) is a multi-tiered student pipeline program designed to bridge students' science, technology, engineering and mathematics (STEM) education experiences from post-middle school to pre-college. Students will be exposed to STEM experiences and encouraged to consider STEM academic studies and careers in fields.

Policy Studies Associates (PSA) was competitively selected in April 2007 to conduct an external study to benchmark and conduct literature research of national programs similar to INSPIRE. The purpose was to validate INSPIRE's design in addressing national and NASA concerns regarding the future U.S. workforce that will be required to remain competitive in a global economy in light of the declining number of students who are U.S. citizens pursuing STEM-related degrees and careers.

The study was to evaluate and recommend modifications to INSPIRE's proposed framework to:

- Ensure it engaged students with authentic first-hand opportunities to participate in NASA mission activities and to provide opportunities for family involvement.
- Identify possible synergy and partnerships nationally
- Recommend strategies to better bridge INSPIRE to other NASA projects
- Recommend tactics to broaden INSPIRE beyond a 50-mile radius of each center
- Identify best practices in creating an in-going community of practice
- Recommend an evaluation methodology
- Recommend questions to be used during focus group discussions

PROGRAM RELEVANCE TO NASA

The benchmark study of INSPIRE was required to validate its design prior to implementation to ensure it meet national and NASA needs, was not duplicative or overlapped other NASA Education projects, and is aligned with NASA's Education Strategic Coordination Framework.

INSPIRE provides a critical link in NASA's student pipeline of programs, drawing students from the 9th through 12th grades, from programs like NES and SEMAA and center-unique projects like Middle School Aerospace Scholars at JSC, and engaging them early in high school with NASA in STEM-related fields. As students exit INSPIRE, we will encourage them to expand their education and employment activity in next-level NASA programs such as Motivating Undergraduates in Science & Technology (MUST) and Undergraduate Students Research Program (USRP). Additionally, INSPIRE will

provide a public benefit by incorporating parent and community participation through project activities that inspire, engage and educate the public in NASA's Exploration Vision.

PROGRAM BENEFITS TO SOCIETY

INSPIRE encourages students nationally to pursue educational disciplines and careers critical to the development of a STEM workforce required for the future to ensure the Nation remains a competitor in the global economy. Through the On-Line Community and hands-on activities, INSPIRE engages students, educators, families, the general public, to increase Americans' science and technology literacy. INSPIRE also emphasizes family involvement, which has been shown to enhance student achievement. As INSPIRE is implemented, it will build strategic partnerships and linkages between STEM formal and informal education providers nationally.

PROGRAM GOALS

PART Measure 1. Percentage increase in number of elementary and secondary student participants in NASA instructional and enrichment activities.

PART Measure 3. Level of student learning about science and technology resulting from elementary and secondary NASA education programs.

PART Measure 4. Level of student interest in science and technology careers resulting from elementary and secondary NASA education programs.

PROGRAM ACCOMPLISHMENTS

The benchmarking study validated INSPIRE's design and provided valuable information to ensure it will support the PART program goals listed above.

STUDENT ACCOMPLISHMENTS

Not Applicable