# Guide to Interpreting 20<sup>th</sup> Year Evaluation Results

The results from the 20<sup>th</sup> year evaluation reports can be utilized to create and implement development plans leading to improvements in your consortium. The purpose of this guide is to help you digest, analyze, consider, and identify patterns and themes across the information contained in the four results reports.

#### **Overview of Results Reports**

Similar formatting was used across the results reports to facilitate interpretation. On all graphs, blue is used to indicate a state mean, while yellow is used to indicate the mean for the grant type associated with your state. The state mean represents the average of all reviewer scores for each of the respective rubrics. The grant type mean represents the average of all reviewer scores, for all consortia in the grant type noted, for each of the respective rubrics.

The Program Performance and Results Reports, and Affiliate Survey Results contain summary indicators or composites. You will find composite summary charts, which represent the mean (of all ratings for the state) of a particular grouping of statements or rubrics that are associated with an overall category. For example, the last bar chart in the Program Performance and Results Report is a Diversity Composite, which displays all of the diversity rubrics from the report in one summary chart. A detailed description of how each composite was created is available in the reports. Not all data were summarized as composites as some criteria were optional (Consortium Specific) or data only pertained to a specific subgroup. While composites provide a big picture, you will need to dig deeper into both the ratings and reviewer comments (strengths, weaknesses, or responses to open-ended questions) to get the full story. The big picture can mask important subtleties, but is helpful in identifying trends in data (see Appendix B for reference to graph interpretation).

The reports in your packet include:

#### Executive Summary:

This report displays the top-level summary results for each of the three components of the 20<sup>th</sup> Year Evaluation.

#### Program Performance and Results (PPR):

This report presents the aggregation of the reviewer ratings and comments for the Program Performance and Results Report that was submitted by your consortium.

## Network Participation and Responsiveness (NPR):

This report presents the result of the NASA Headquarters review of key elements of state-level grant management. There are summary tables as well as strengths and weaknesses. The rating scales are presented in conjunction with the associated criteria.

<u>Affiliate Survey Report</u>: This report summarizes the results of the Affiliate Survey that was administered to each of the affiliates listed in CMIS as of March 17, 2008. Survey questions were grouped into five categories to produce composite summary results (Knowledge, Satisfaction, Participation, Program Emphasis, and Program Impact). A key to items associated with each category is provided in Appendix A.

## Analyzing the Results

As you begin to analyze the results, remember to interpret the results in context. As you review reports, look for trends across sources and perspectives. Is there an area that is consistently seen as strength or a weakness? Look for consistencies instead of anomalies. Think of the reports as evidence in a case. If there is only a small piece of evidence suggesting something, and all the other evidence points in another direction, it may mean that one indicator was an anomaly. If there are six highly positive comments and one negative comment or the opposite, do not magnify the importance of a single statement.

Consider the Goal and five Objectives *(see Appendix A)* of the National Space Grant College and Fellowship Program during your review. One reference point for this information is the Objectives Composite Chart near the back of the 20<sup>th</sup> Year Evaluation Program Performance and Results Report (result of the PPR peer review process).

- □ How is your consortium contributing to these objectives?
- □ Are your programmatic investments in alignment with the guidance from the Space Grant Program Office?

Consider the NASA Office of Education Outcome during your review. *(See Appendix A)* 

□ How is your consortium contributing to the three outcomes?

- How do your activities demonstrate success toward inspiring, engaging, educating, and employment in the STEM workforce?
- Are your programmatic investments in alignment with the intent of Space Grant, as primarily contributing to Outcome I?

Other questions to consider as you review the results reports might include:

- What common themes emerge as you consider the ratings, strengths, and weaknesses in each of the three reports? For example, what themes emerge as you compare and contrast the Fellowship/ Scholarship results in the PPR with the Fellowship/Scholarship section of the Affiliate Survey Results?
- Are there other sources of information that may confirm or explain the trends you have identified?
- □ How can these data be appropriately used to improve the consortium?
- □ What changes might create more positive impact on your state and on the organizations and institutions in the consortia?
- □ What are the potential unintended consequences of the changes you are considering? For example, by choosing to focus on a particular area, might another, perhaps more important, area suffer?

After reviewing all of the reports, it may be helpful to identify the main strengths and weaknesses of the consortium so improvement plans can be made. Please list your major strengths and weaknesses below.

List the top three areas of strength:	List the top three areas of weakness:

If you have questions about this guide or the reports, please contact Katherine Pruzan at NASA headquarters (<u>katherine.m.pruzan@nasa.gov</u>).

## Appendix A. National Space Grant College and Fellowship Program

**Goal:** Contribute to the nation's science enterprise by funding education, research, and public service projects through a national network of university-based Space Grant consortia.

**Objectives** (from the legislation):

- 1. Establish and maintain a national network of universities. (Partnerships/Sustainability)
- 2. Encourage cooperative programs among universities, aerospace industry, and Federal, state, and local governments. (Relevance)
- 3. Encourage interdisciplinary education, research, and public service programs related to aerospace. (Content)
- Recruit and train U.S. citizens, especially women, underrepresented minorities, and persons with disabilities. (Diversity)
- 5. Promote a strong science, mathematics, and technology education base from elementary through secondary levels. (Pipeline)

#### **NASA Office of Education Outcomes**

The three outcomes set forth by the Office of Education are intended to align agency education activities related to inspiring, engaging, educating, and employing toward the following outcomes:

- Contribute to the development of the STEM workforce in disciplines needed to achieve NASA's strategic goals through portfolio investments
- II. Attract and retain students in STEM disciplines through a progression of educational opportunities for students, teachers, and faculty.
- III. Build strategic partnerships and linkages between STEM formal and informal education providers that promote STEM literacy and awareness of NASA's mission.

## Appendix B. Interpreting Information from the Reports

The graphs below are intended to help you visually identify differences that require a closer look. Areas that are above average are likely to be strengths, while areas below average are probably weaknesses. Looking more closely at the data will reveal information that more clearly indicates what specifically is a strength or weakness. Composites that are average may mask strengths and weakness; since a combination of very high and very low ratings would appear to be average.

