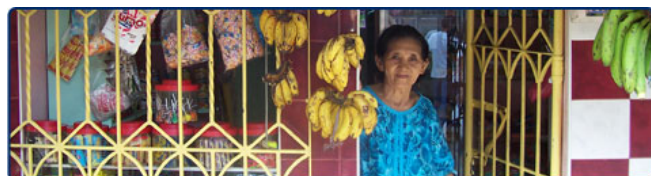


COMMITTEE OF VISITORS (COV) REPORTING SUBGROUP

Introduction

In an effort to support the outcomes assessment activities of this year's AC/GPA committee, the COV Subgroup was charged with reviewing the Committee of Visitors reports that have been submitted to and accepted by the advisory



committees of NSF's various directorates and offices over the past three years. The COV Subgroup was asked to draw from each of the COV reports any information that might provide a meaningful assessment of NSF's effectiveness in achieving its outcome goals pertaining to Discovery, Learning, and Research Infrastructure, especially if the information offered insight that complemented, rather than duplicated, insight gained from the assessment activities of the other three subgroups of our AC/GPA committee. While the COV Subgroup was free to pull information from any portion of these various

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COV reports, it paid particular attention to Part B (Results of NSF Investments) of each report because the set of questions addressed in this section was more closely aligned with the charge to the AC/GPA committee than was the set of questions addressed in the other major section of each COV report, namely, Part A (Integrity and Efficiency of the Program's Process and Management).

Process Followed and Criteria Used

The COV Subgroup focused attention on the set of 32 COV reports that spanned the three-year period, 2006-2008. Rather than ask each member of the Subgroup to read through all 32 COV reports, the reports were divided into three groups and each member of the Subgroup was responsible for reviewing one subset. The assignments were made as follows:

Group 1 – Reports from the CISE, MPS, SBE, and OD directorates;

Group 2 – Reports from the BIO and EHR directorates;

Group 3 – Reports from the ENG and GEO directorates.

Following the completion of our individual reading and review assignments, the COV Subgroup met during the AC/GPA committee meeting at NSF to determine its collective findings and then presented those findings to the AC/GPA Committee.

Results of Analysis

1. The information provided inside Part B of the various COV reports varies greatly from report to report. While a few reports provide insightful comments that are potentially of value to the AC/GPA committee, in general the material given in Part B is too sparse to be of use in our outcomes assessment efforts, or it is composed largely of “nuggets” and “highlights” and therefore duplicates more than complements material being studied by other subgroups. Summary: *Digging into Part B of COV reports provides very little return.*
2. Most COV committees put the majority of their effort into critiquing “Process and Management” issues rather than assessing “Outcomes.” If Part B information is to be more useful to the AC/GPA, the NSF should consider offering advice to each COV committee on what would be desirable in such reports. For example, cut-and-paste snippets from highlights provided by Program Officers do not add value. On the other hand, if notable accomplishments gleaned by members of the COV themselves in reading results from previous work sections were reported, this might be useful. Also, the COVs might be in an excellent position to note the awards and honors accrued by people in the field over the previous three years and this information would be useful (see item 4.a below).
3. Future “outcomes” of NSF-funded programs are likely impacted by “process and management” efforts, the main aim of Part A of COV reports. Although some issues will be specific to individual programs, many may transcend even Directorate bounds. In this context, *we recommend that the NSF management regularly conduct an overarching review of the separate COV reports.* The results of such a cross-directorate review could be used by management to effect critical changes that might not be addressed without recognition that they are needed across the Foundation.
4. Specific “outcomes” issues raised through collective review of various COV reports:
 - a. **Discovery:** Each year, it may be useful for the AC/GPA committee to highlight the professional honors and awards that have been received by various scientists and engineers who have been funded through NSF’s programs. In particular, it might be instructive to note whether or not NSF funding has contributed to the success of individuals who are awarded a Nobel Prize (or comparably prestigious prize) each year. NOTE: As a step in this direction, a table of recent Nobel Laureates and National Medal of Science Laureates has been attached to this report (Appendix V). It would be useful to highlight which “discoveries” among these awards benefited significantly from past NSF support.



b. Learning: There were some interesting comparisons across COV reports in the outcomes section for learning. For example, the Graduate Research Fellowship Program (GRFP) reports that 56 percent of their awards went to women, illustrating that gender diversity in GRFP mirrors the increase in women enrolling in universities. However, core programs in other directorates, for example DEB/BIO, report that the number of proposals from women scientists has not increased and recommends that programs do more to encourage proposals from women and other underrepresented groups. Such comparisons of trends could be useful to the NSF in assessing whether programs designed to increase participation are actually resulting in gains at the highest level of academia. Information drawn from COV reports alone did not provide the comprehensive view necessary to compare across programs. The AC/GPA committee might benefit from examining workforce numbers over a period of years. Perhaps information of this type can be drawn from the PART database and provided to the AC/GPA for review.



c. Research Infrastructure: Guidance from NSF to COVs regarding provision of infrastructure outcomes in Part B could also result in useful material for the AC/GPA. An excellent example of useful information along these lines can be found in the COV report for the BIO directorate’s Plant Genome Research Program. In their report for B.3, “Outcome Goal for Research Infrastructure,”



they listed all of the recommendations that the previous COV had made (presumably in Part A) regarding infrastructure needs, and then reported on what had been done in response, i.e., they reported a series of outcomes. If such information were available in all or most COV reports, the AC/GPA would be able not only to evaluate outcomes for a particular period, but would be able to track progress over time.