

Program Response to the 2008 ADVANCE Committee of Visitors Report

COV meeting dates: July 30, 31 and August 1, 2008
Program Response date: October 14, 2008

Introduction

The ADVANCE Program wishes to thank the COV committee members and chair for their time and effort to synthesize the constructive and thoughtful comments in the 2008 NSF COV Report for the ADVANCE Program.

The review period for the 2008 COV was October 1, 2004 to September 30, 2007, or the equivalent of fiscal years 2005, 2006 and 2007. The ADVANCE program was housed in the Office of the Assistant Director of the Directorate for Social, Behavioral and Economic Sciences (SBE) until April 2007 when it was moved to the Division of Human Resource Development (HRD) in the Directorate for Education and Human Resources (EHR). Therefore, the majority of the actions reviewed by the 2008 COV reflect the time period during which the program was still housed in SBE and managed by SBE program directors; however this response has been prepared by the EHR ADVANCE program office in consultation with the ADVANCE Implementation Committee (AIC).

The following are comments and recommendations (*italicized*) from the 2008 ADVANCE COV Report and the ADVANCE program responses.

PART A. Integrity and Efficiency of the Program's Processes and Management

Quality and Effectiveness of Merit Review Process

COV Recommendation

Panel summaries do provide proper rationale but it would be good if more detailed and more substantive review comments could be provided, especially for proposals not recommended for funding. (Template A.1.4, page 2-3)

Program Response

Agreed - The program office provides additional training for peer reviewers via web-based training sessions prior to the panel meeting, scheduled during the timeframe that most reviewers begin to write their reviews. The program office will continue to highlight the importance of providing substantial and constructive comments that include suggestions for ways in which the project may be improved if funded or revised and improved if not funded.

COV Recommendation

Program Officers could try to provide additional insights as to how a proposal might become stronger. (Template A.1.6, page 3)

Program Response

Agreed – The program office uses the “PO Comment” to provide individualized feedback to the proposers of declined proposals if there are additional issues not covered within the individual reviews or in the panel summary. The “PO Comment” will be used to indicate whether the proposal should be revised and resubmitted, or substantially redesigned and resubmitted. In addition, the proposers are encouraged to contact the program office to discuss the reviews and proposal.

COV Recommendation

Something clearly needs to be done to shorten the length of time of the review process. (Template A.1.8, page 4)

Program Response

Agreed - The ADVANCE program strives to achieve the six-month time to decision for all proposals. The time to decision data cited for the IT and Leadership proposals corresponds to a time period during which the program office had one full-time program director. It is anticipated that the program will maintain at least two ADVANCE program directors at all times in order to manage the program.

Selection of Reviewers

COV Recommendation

For the most part the different panels appear to have matched program focus to panelist expertise. One possible exception concerns the relative lack of expertise from senior administrators in the case of ADVANCE IT. It would seem that institutional perspective would be critical in judging the prospects for success regarding transformations at the institutional level. It might be worth trying to have broader coverage by including senior administrators from a broad range of institutional types. (Template A.2.1, page 4)

Program Response

Agreed – The program office will continue to invite academic leaders with institution-wide responsibilities from various types of institutions to be on review panels, particularly for reviewing the IT proposals.

COV Recommendation

Regarding the ratio of men to women, the demographics for the PAID and Leadership panels look fine (2/3 and 1/3 respectively), however, the 1/10 male-to-female ratio for the 2005 ADVANCE IT panel is of concern. ADVANCE IT is all about institutional buy-in and it is important to have insight into whether institutions have the will to invest time and political capital in carrying out transformational change. It may be appropriate to have somewhat better gender balanced panels to assist in making such evaluations given the perspective male panelists can bring to the table. (Template A.2.2, page 4)

Program Response

Agreed – The program office seeks to identify balanced panels in terms of many factors, including gender, expertise, geographic location, and type of institution, and will continue to strive to diversify

the peer review panelists for ADVANCE. The 2008 ADVANCE IT panel included 25% male reviewers.

Resulting Portfolio of Awards

COV Recommendation

Program awards have an appropriate geographical distribution, however given the small number there appear to be several states without an award from any ADVANCE program. Although it was not possible to do a definitive assessment, it appeared that some states also had virtually no proposals submitted. As the program continues to evolve, strategies designed to yield stronger applications from these states are encouraged. (Template A.3.8, page 7)

Program Response

Agreed – The program office will work to ensure geographical diversity within the proposal pool as well as among awardees. The program office has worked with the NSF Office of Legislative and Public Affairs (OLPA) to ensure that the ADVANCE program is included in the presentations on NSF-wide programs and materials are available for attendees at the NSF Day events held throughout the country. These activities will continue. In addition, several other strategies for outreach are being developed such as targeted outreach via web-based meetings for those interested in preparing a proposal for the ADVANCE program (pre-proposal technical assistance) and targeted outreach at professional conferences. These efforts will be coordinated with efforts within the EPSCoR office as feasible. The 2008 set of ADVANCE awards provided support to institutions in eight states that previously did not have ADVANCE funding.

COV Recommendation

The institutions receiving awards were primarily PhD granting institutions and the overall pool of proposals reflected the same mix. Given the much broader pool of institutions preparing and employing women in STEM fields, some consideration should be given to the efficacy of this distribution. The current distribution does not provide coverage for the institutions (community, four year, and master's) where the majority of women are employed as faculty, although it may be viewed as reaching the segment of women in STEM fields who can have the most impact.

The IT-Start program promises to begin to address the issue of inclusion, by providing an opportunity for engaging a broader range of institutional types, and their respective faculty. Without a method of engaging a broad range of institutions ADVANCE appears to be forced to choose between development of faculty who can have the most impact upon STEM fields or faculty who teach and impact the largest numbers of students. This reflects an undesirable forced choice. ADVANCE is encouraged to give consideration to the most effective combination of institutions to promote program objectives. (Template A.3.9, page 7)

Program Response

Agreed – As noted by the COV, the program added the IT-Start program component which was designed to provide an avenue for diverse institutions of higher education to participate in the ADVANCE program. Specifically, IT-Start targets institutions that do not have the institutional capacity to undertake institutional self-assessment activities without external funding. Basic data collection, faculty surveying, and policy and procedure review activities are essential foundational

work required for an institution to successfully undertake institutional transformation. During the most recent award cycle completed in FY2008, eleven IT-Start projects were awarded to predominantly undergraduate institutions, of which one has a large population of disabled students and four are Minority-Serving Institutions. In addition, the Partnerships for Adaptation, Implementation and Dissemination (PAID) program component has resulted in a more diverse group of institutions undertaking institutional transformation activities. PAID provides institutions an opportunity to adapt and implement proven strategies from other institutions to suit their campus environment, without redeveloping proven, successful strategies. The new PAID awards include support for the adaptation of institutional transformation strategies at liberal arts colleges, technical institutions, and other predominantly undergraduate institutions. Ultimately, the program office seeks to involve all institution types by offering multiple program components and strong outreach to diversify the ADVANCE portfolio.

COV Recommendation

Program data for IT and PAID submissions and awards illustrate the challenge in ADVANCE programming. Only 13 of 70+ funded IT proposals included minority group members in a leadership role, while among those rejected 20 would have provided leadership by both women and minority group members. Within PAID awards only five appear to have gone to institutions with minority involvement. It is recommended that the data be further analyzed to examine the need for pre-proposal support to institutions that have been unsuccessful through multiple proposal submissions, or where the opportunity for minority involvement is present. (Template A.3.11, page 8)

Program Response

Agreed – To address this issue, the ADVANCE program has begun holding web-based pre-proposal technical assistance workshops, targeting diverse groups and past applicants to participate in these events. In addition, the program also participates in outreach at various events, conferences and workshops that offer opportunities to reach a diverse group of potential proposers, such as underrepresented minorities and persons with disabilities.

Note on the reported data in the COV report: Unfortunately, the list of program actions that was used by the COV to make this observation was a list of all actions, including yearly increments, and thus contained multiple listings of the same proposal resulting in inaccurate numbers for minority PI involvement. In the future, this and other data subject to the same error will be aggregated and provided to ADVANCE COVs to avoid this misunderstanding. The actual breakdown of proposals with minority involvement submitted during the COV review period is as follows:

PAID proposals in 2006:

- 38 proposals submitted (with collaborative proposals counted as 1 proposal)
- 5 of 15 awarded proposals had minority involvement
- 3 of 17 declined proposals had minority involvement
- 1 of 6 returned without review had minority involvement

IT proposals in 2006:

- 72 proposals submitted
- 1 of 13 awarded proposals has minority involvement
- 19 of 58 declined proposals had minority involvement
- 1 of 1 returned without review had minority involvement

Leadership proposals:

- 47 proposals submitted (with collaborative proposals counted as 1 proposal)
- 3 of 9 awarded proposals had minority involvement
- 9 of 30 declined proposals had minority involvement
- 1 of 8 returned without review had minority involvement

Management of Program under Review

COV Recommendation

We recommend that the program be given a dedicated budget line, and/or that it be returned to the previous funding model drawing a required proportion from each directorate. (Template A.4.1, page 8-9)

Program Response

This recommendation will be forwarded to management. It is important to note that the current funding structure demonstrates the commitment of the NSF Directorates and Offices to support the ADVANCE program and the cross-Foundation interest in increasing the participation and advancement of women in STEM academic careers.

COV Recommendation

The COV encourages program staff and AIC to support continued site visits and to explore new ways of staffing the visits and making use of reports prepared in conjunction with them. The addition of first-year site visits for IT projects is a good idea. It would be unfortunate if the timing of third-year site visits from the previous round might preclude actual onsite visits to first-year projects in the upcoming year. (Template A.4.1, page 9)

Program Response

Agreed – The program office plans to continue the third-year site visits to Institutional Transformation awardees. The site-visit reports include suggestions and recommendations for improving the project, which are used by the grantees as one piece of the formative evaluation to enhance the project. The program office uses the site-visit reports and grantee's response to inform continued funding decisions. The first-year site visits to Institutional Transformation awardees were successful and will also be continued, although alternative models may be pursued. For example, the program office may use video conference or web-based technologies to reduce travel demands, or identify AIC members or qualified external consultants, such as past and current ADVANCE grantees, for on-site visits.

COV Recommendation

The COV believes that the AIC could be more proactively involved in carrying out activities in support of the program, both within and outside NSF. Representatives from the different directorates appear to be willing volunteers, but AIC activities are added to their existing workloads. (Template A.4.1, page 9)

Program Response

The program office believes that the AIC does fill the role outlined by the COV. The AIC members actively share information about the program at external conferences and workshops, as well as

internal NSF committees and meetings in which they are involved. The program office creates and maintains ADVANCE program outreach and presentation materials for the AIC to use as needed. These documents are accessible by all AIC members from their computers at any time via a shared folder. Participation on the AIC is similar to other committee assignments within NSF and they do not get "release time" for participation.

COV Recommendation

The ADVANCE PI conferences are an excellent mechanism for exchanging ideas and supporting the dissemination of proven practices. The program staff and AIC should consider opening attendance and participation in the conferences to a broader audience. If the meetings are limited to ADVANCE participants only, the result may be mainly "preaching to the choir." We recommend an effort to develop exchanges with others working in the area of academic gender equity (other conferences, other publications). (Template A.4.2, page 9)

Program Response

Agreed - The program office agrees that there is a demand and an interest to broaden the participation in the ADVANCE annual PI meeting and will investigate available options. However, there are potential implications for program workload and program funds which need to be considered and discussed with the AIC. It is important that the program maintain a major strength of the PI only ADVANCE meeting which is to create a strong community of empowered change agents who serve as mentors, advisors, and experts for each other. The program office plans to be active in submitting conference presentations on ADVANCE as the workload permits.

COV Recommendation

In terms of awards, we were not able to determine the total amount used for increments and additions to existing awards. The COV suggests that, in the future, better documentation of this total amount for the review period be provided. (Template A.4.3, page 10)

Program Response

Agreed – This information will be pulled out of the individual E-Jacket files and presented in one document for the next COV.

COV Recommendation

The presentation to the AASCU conference was a good idea; program staff and AIC members should make presentations at other institutional leadership conferences, such as ACE, AAC&U, NAICU, and also should participate in other gender equity meetings and conferences. This is especially important for encouraging proposals for IT projects, where strong support from institutional leaders is a necessity. It would be wonderful to submit articles on the program to Science or Academe or The Chronicle of Higher Education or other publications that reach a fairly broad audience. It would also be good to make the basic pre-proposal technical assistance information available online to anyone who might be considering submitting a proposal. (Template A.4.3, page 10)

Program Response

Agreed - The program office appreciates the COV's recommendations for additional outreach conferences and events; these and others will be pursued as the workload and budget permits.

The program office also plans to be active in submitting publications on ADVANCE as the workload permits. The ADVANCE program office has been and continues to be quoted in numerous articles on women and science and the ADVANCE program. It is important to note that grantees have published on the ADVANCE program in journals similar to those mentioned by the COV and the ADVANCE program believes that the impact of publications from the higher education community has been significant and important. Options for posting technical assistance materials on the web will be pursued by the program office.

COV Comment

The program has been responsive to the 2005 COV recommendations. The written response is generally good, although it would have been helpful to have the items numbered to correspond to the 2005 COV report itself (as are comments below).

Synthesis of program outcomes (A.5.4 and C.2) – This was not specifically addressed in the response to the COV recommendations. The book referenced (University of Michigan Press 2007) is great but is too large to provide a basic overview of program outcomes. It also appears to have been initiated by the grantees themselves, not by ADVANCE.

“Longer term evaluation” (C.2) – There is a plan for a program evaluation noted in the response, but this has not yet happened; we were told it is now in the contracting process. It is scheduled to be a program evaluation, but the 2005 COV noted that it would be important to document impact on institutions and on the disciplines themselves. The planned program evaluation needs to address the impact of the program within participating institutions, in the broader academic community, and even within the NSF itself. (Template A.4.4, page 10-11)

Program Response

The program office is in the process of developing an ADVANCE program brochure for various audiences which will briefly summarize the program and outcomes. The planned external program evaluation will also provide a synthesis of the program outcomes. The planned program-level evaluation will include impacts on the grantee institutions and to the extent possible, impacts on the broader academic community. The impact on NSF was not included in the scope of the program evaluation, although this recommendation will be considered in future program evaluation efforts.

COV Recommendation

Collection and dissemination of data should be a priority for the program, in order to demonstrate its impact. It should be possible to track and tabulate projects with similar components. We recommend development of a standard format for data elements in annual and end-of-project reports, to provide data and/or examples that can be generalized across projects. The “toolkit” developed by PIs in 2005 is now part of agreements in new awards; it could be used as a model for collecting and tabulating data across projects, including older projects. The COV recommends that some of the projected PAID or IT-Catalyst awards be dedicated to compilation of data from completed and ongoing IT projects. (Template A.4.5, page 11)

Program Response

Agreed – Tabulating and categorizing the ADVANCE portfolio is of interest to the program office. Some of this information may be included in the ADVANCE program brochure that is being

developed. In addition, the type of project described by the COV would be appropriate for a PAID proposal submission. The next program solicitation is expected to include a research option under which the synthesis and study of existing ADVANCE projects is encouraged. (Note that this type of work would not be appropriate within IT-Catalyst projects which are small awards for institutional self-assessment activities).

COV Recommendation

The COV recommends that the program staff and AIC develop an outreach program on behalf of Advance to the disciplinary directorates across NSF. There should be common efforts across directorates to highlight data in specific disciplines documenting successes in advancing women in science, engineering and mathematics. (Template A.4.5, page 11)

Program Response

Agreed – The program office has developed an in-reach plan which has included brown bag presentations on the ADVANCE program and distinguished speakers from ADVANCE IT sites. In addition, the first three cohorts of IT grantees have developed two page project summaries which are available to the public through the program office. Discipline specific data is routinely provided by the NSF Science Resource Statistics. The ADVANCE program office and the AIC will discuss how best to highlight this information in the context of the ADVANCE portfolio for NSF Directorates and Offices.

PART B. Results of NSF Investment

COV Comment

NSF should find creative methods (beyond a web site repository) that would allow institutions desiring to embark on change to learn and use what peer institutions have already developed, without having to submit a proposal for funding. (Template B.1, page 12)

Program Response

The ADVANCE program encourages diffusion of effective strategies for institutional change through the IT and PAID program components. In addition to recently providing supplemental support for a revision of the ADVANCE web portal hosted by an IT grantee, the PAID program supports many projects to disseminate information, materials and tools via workshops and conferences to faculty as well as institutional leaders. For example, 34 PAID and Leadership projects involved workshops or conferences, and 21 included dissemination of promising practices as a major project component. Through activities such as these, projects share information on what has already been developed. As previously mentioned, the program office will pursue the possibility of broadening the participation in the annual ADVANCE PI meeting.

COV Recommendation

The COV recommends that the program consider funding a study to determine whether or not institutions embracing the cultural change supported by IT grants develop an advantage in recruiting talented faculty members, increasing sponsored funding, accumulating prestigious prizes and honors and moving upwards in the institutional research rankings. If so, other institutions will be compelled to embrace change leading to a morphing of ADVANCE. Avenues for facilitating transformation may transition into policies that institutions would need for competitiveness.

Analysis of this hypothesis should include data disaggregated by institutional type. (Template B.1, page 12)

Program Response

Agreed – The ADVANCE program also considers this to be an important aspect of the program. This type of study would be considered for support under the existing PAID program component. The next program solicitation is expected to include a research option under which cultural change at ADVANCE IT sites can be studied. In addition, it is expected that the planned program evaluation will illuminate some of this information.

Part C. Other Topics

COV Recommendation

In evaluating statistics and data which have been presented and or gathered to date it is clear that this process needs to become more thorough, comprehensive and standardized. The tool kit document was a reasonable first step—but only that. More data is needed to allow analyses which could fairly assess progress and/or allow identification of issues which are facilitating or hindering progress towards the ADVANCE program goals. This would also allow more timely determination of questions and problems which need to be addressed by proposals during the funding process. It is recommended that a social scientist, familiar with evaluation and use of data to identify and examine causes of bias, be consulted. This person could act to determine what information should be gathered to evaluate the program in the context of its goals. The gathering of data should also be standardized. The current lack of standards limits data accessibility decreasing its value considerably. The COV recommends that electronic data reporting be initiated. For example, Excel spreadsheet templates could be developed which would allow rapid and easy manipulation of data for analysis. ... (Template C.1, page 14)

Program Response

Agreed – The program office would like to pursue options for collecting grantee data in a central electronic system. This effort would include identifying additional indicators to augment the ones currently in the toolkit, informed by consultation with the appropriate experts. The concerns raised by the COV will be considered by the program office and the AIC as options are pursued and the costs to the program are considered.

COV Review Process Comments

[Various COV review process comments] (Page 1 introduction, Template C.2 and C.5, page 15-16)

Program Response

The program office appreciates the thoughtful comments and suggestions for improving the COV process. Those within the program office's control will be addressed for the next COV and the general recommendations to NSF will be forwarded to management.