IES Institute of Education Sciences

IES Peer Review of Grant Applications February 2023

Reviewer materials for the following panels:

Early Intervention and Early Childhood Education
Reading, Writing, and Language Development
Social and Behavioral
Special Education
Special Education - Curriculum, Instruction, and Learning
Special Education - Transition

From the IES Office of Science

This document contains the following:

1. Review Notes
2. IES Guide for Grant Peer Review Panel Members for FY2021, Session 2

This document does not include the Special Education Research Grants Request for Applications (RFA; ALN 84.324A). This RFA is the guiding document for the scientific peer review of special education research grant applications, and it is critical that reviewers familiarize themselves with the RFA. The RFA can be found in the Document Repository in PRIMO.

Review Notes for the February 2023 Standing Panels

From the IES Office of Science

These notes highlight some important things to keep in mind while conducting your reviews, and supplement the **IES Guide for Grant Peer Review Panel Members** (the Guide). Please refer to the Guide for important information about confidentiality and conflicts of interest (COIs), how to review applications (critique writing and scoring), and what to expect both prior to and during the grant review panel meeting.

This panel will meet via videoconference. The processes for videoconference panels are essentially the same as for panels that meet in-person, described beginning on p. 17 of the Guide. As with in-person panels, you will have the scores of the primary reviewers visible to you during the discussion, and all other activities will be the same. If you have a COI with an application being discussed by the panel, the Review Technical Assistant will coordinate with you to leave the meeting and to bring you back when the discussion of that application has been concluded.

To ensure rigorous education research that is transparent, actionable, and focused on consequential outcomes, all applications to the FY 2023 Special Education Research Grants program are expected to follow the principles outlined in the IES-wide Standards for Excellence in Education Research (SEER; https://ies.ed.gov/seer), as applicable. These principles include
- Pre-registering studies
- Making research findings, methods, and data open
- Addressing inequities in learners' opportunities, access to resources, and outcomes
- Identifying interventions' components
- Documenting treatment implementation and contrast
- Analyzing interventions' costs
- Use of high-quality outcome measures
- Facilitating generalization of study findings
- Supporting scaling of promising interventions

New and Notable in 2023

All standing panels in 2023 will review applications submitted in response to the National Center for Special Education Research's Special Education Research Grants RFA (ALN 84.324A). The National Center for Education Research (NCER) is not running its Education Research Grants competition in 2023.

The following are changes highlighted within the 324A RFA:

Increased emphasis throughout the RFA on addressing the needs of diverse populations of students with disabilities: The RFA is now more explicit in encouraging researchers to examine questions about the impact of policies, practices, and interventions for different groups of learners with disabilities from different sociodemographic backgrounds and contexts.

Research that reflects the needs of key stakeholders: IES has added language to encourage researchers to describe how they will consider input from learners, educators, and/or other key stakeholders when conceptualizing, designing, and reporting the results of their research, and when considering issues critical for implementation and scaling of interventions.

Cost analysis clarification for Development and Innovation and Initial Efficacy grants: NCSER has provided updated guidance from prior NCSER RFAs for the cost analyses that must be proposed for Development and Innovation and Initial Efficacy projects.

New subtypes for Development and Innovation projects: The FY2023 RFA describes two different subtypes of Development and Innovations projects that NCSER intends to support:
- *Development and Pilot* – A project that focuses on iteratively developing a new or modifying an existing intervention with a pilot study that tests the promise of the intervention for improving learner outcomes.
- *Pilot Study Only* – A project that focuses only on obtaining pilot test data regarding the promise for improving learner outcomes for interventions that are fully developed. IES recognizes the impact the COVID-19 pandemic school closures and disruptions had on the ability of researchers to collect pilot data about the promise of interventions for improving learner outcomes. Although not limited to projects disrupted by COVID-19, the intent of this project subtype is to support researchers who need pilot data only as evidence of promise of an intervention to improve learner outcomes to support a later efficacy study. Pilot Study Only projects are expected to test interventions that already have evidence of usability and feasibility and are ready to be implemented. IES will allow a short time however (no more than the first 6 months of the project), for limited refinements and adjustments needed to prepare for intervention implementation.

- See the [Development and Innovation](#) project type description for project requirements and recommendations.

Primary Reviewer Assignments

Every effort has been made to assign applications to reviewers based on a match between reviewers' areas of expertise and application topics and methods. However, if you find that you have been assigned an application that you do not feel qualified to review, please let your SRO or the IES Helpdesk (IESHelp@prsmhosting.com) know so that we can discuss the situation and make a switch if necessary.

Reviewing by RFA (Competition) and Project Type

It is critically important that each application be evaluated according to the RFA, and the project type under which it was submitted. The RFA describes the requirements and recommendations for the proposed research. The table of contents in the RFA is bookmarked to help you locate the appropriate requirements and recommendations for each project type. Please be sure to familiarize yourself with these requirements and recommendations.

The RFA requires that all applicants specify a topic for their project. The topics do not have additional descriptive information beyond the title to allow for, and encourage, a broad range of research under these general topics. NCSER also strongly encourages the endorsement of a secondary topic, when appropriate, to fully describe the focus and breadth of the proposal (see p. 12 of the RFA for a list of research topics). Requirements and recommendations do not differ by topic.

As noted above, 2023 Standing Panels will review applications submitted under NCSER's **Special Education Research Grants** RFA (ALN 84.324A).

The RFA includes both *Requirements* and *Recommendations* that differ by project type.

- The *Requirements* are a limited number of things that an application must minimally include to be sent forward to peer reviewers - they generally don't speak to the quality of the application.
- **The *Recommendations* are aspects of the work that IES would like to see in applications and that, if included, would improve the quality of the application.**
- All applications that you review have been determined to meet minimum requirements for responsiveness and have been sent forward for peer review. If you wish to comment on the extent to which the application fits the requirements and recommendations found in the RFA, ***please refer to the fit of the application to the***

competition and project type to which it was submitted, rather than referring to the application as "nonresponsive."

Review Criteria

There are five review criteria for all of the Special Education Research Grants (324A) project types. These criteria are found on pp. 62-63 of the RFA.

a) **Significance.** Does the applicant address recommendations described in the Significance section for the project type under which the applicant is submitting the application?

b) **Research Plan.** Does the applicant address recommendations described in the Research Plan section for the project type under which the applicant is submitting the application?

c) **Personnel.** Does the applicant address recommendations described in the Personnel section for the project type under which the applicant is submitting the application? Do the principal investigator, project director, and other key personnel possess appropriate training and experience and will they commit sufficient time to competently implement the proposed research?

d) **Resources.** Does the applicant address the recommendations described in the Resources section for the project type under which the applicant is submitting the application? Does the applicant have the facilities, equipment, supplies, and other resources required to support the proposed activities? Do the commitments of each partner show support for the implementation and success of the project?

e) **Dissemination.** Does the application address the recommendations described in Appendix A: Dissemination History and Plan? Does the applicant present a dissemination plan that is tailored to the audiences that will benefit from the findings and reflect the purpose of the project type? Does the applicant describe a dissemination history that demonstrates past success in sharing results of education research widely and appropriately?

Scoring

- As discussed in the Peer Review Guide, each application should be evaluated and scored on its own merits, not relative to the other applications being reviewed by the panel.
- Depending on the availability of funds, the Institute hopes to fund applications that are in the Outstanding and Excellent range, which generally corresponds to an average overall score of 2.0 or better.

Resubmissions

In some cases, applications are revisions of applications that were submitted previously. When reviewing resubmissions, please take note of the previous comments and scores (if the application was scored) and take into account the extent to which the applicant appropriately responded to the previous reviews. Please include relevant comments in your written critique.

For information about determining whether an application is a resubmission, and about reviewing resubmissions, please refer to p. 13 of the Peer Review Guide.

- If you find that you have an application that appears to be a resubmission (for example, because it is identified as a resubmission on the cover sheet or because there is a response to the previous review in Appendix B), but the previous summary statement is not at the end of the current application PDF, please let the IES Helpdesk (IESHelp@prsmhosting.com) know right away so that the summary statement can be provided to you.
- Applicants who have submitted an application that they consider to be new but that is similar to a previous application should also include an explanation in Appendix B. In such cases, the summary statement from the review of the earlier application is not included. If an applicant does not include an explanation for why the application should be considered as new, we may append the previous reviewers' comments to the application

Nominations Process

Reviewers can nominate triaged applications prior to the panel meeting. Here are some tips: 1) you don't have to be a primary reviewer to nominate an application, 2) more than one reviewer can nominate an application (don't feel like you need to wait until you know if someone else plans to nominate an application), and 3) justification for your nomination only needs to be one or two sentences. The SRO will notify the panel of any triaged applications that were nominated back for panel discussion prior to the meeting, so that panel members can look at the applications, critiques, and nominator justifications. At the beginning of the panel meeting, the panel Chair will also ask if anyone would like to nominate any additional triaged applications that they believe should be discussed at the meeting, for more information see p. 19 of the Peer Review Guide.
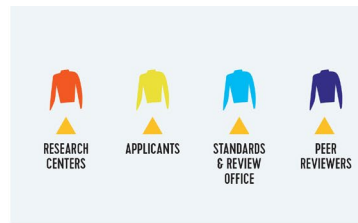
For More Information

The Office of Science has developed a series of three informational videos. The three videos provide an overview of the application process, serving as a reviewer, and participating in a peer review panel meeting (https://iesreview.ed.gov/).

THANK YOU!!

IES Guide for Grant Peer Review Panel Members

IES RESEARCH GRANT SUBMISSION AND REVIEW PROCESS

RESEARCH CENTERS

APPLICANTS

STANDARDS & REVIEW OFFICE

PEER REVIEWERS

1 COMPETITIONS ANNOUNCED

2 APPLICATION PREPARATION

3 APPLICATION SUBMISSION

4 APPLICATIONS PROCESSED

5 APPLICATIONS REVIEWED

6 PANEL MEETINGS CONVENED

7 POST-MEETING ACTIVITIES

8 PRE-AWARD ACTIVITIES

9 APPLICANT FEEDBACK & AWARDS

IES GUIDE FOR GRANT PEER REVIEW PANEL MEMBERS

Information, tips and instructions for members of IES scientific grant peer review panels

FY2023

Table of Contents

Introduction

This Guide includes information, tips and instructions for members of IES scientific review panels. It is a supplement to the Panel Member Agreement (PMA) that IES grant peer review panel members sign, and is focused on information that will be helpful to you as you review applications.

RFAs are the Guiding Documents for Peer Review

IES solicits research applications through requests for applications (RFAs). The applications being reviewed by your panel may all have been submitted to the same RFA, or to two or more RFAs. You can access the RFAs in PRIMO from your Dashboard or by clicking on "Documents" in the blue task bar at the top of any PRIMO screen. Links to the RFAs can also be found online at ies.ed.gov/funding/.

The most important thing to keep in mind throughout the review process is that **RFAs are the guiding documents for application reviews.** Your primary responsibility is to review the scientific merit of applications based on the review criteria specified in the RFA to which the application was submitted.

Consistent and Transparent Review Criteria

RFAs tell applicants the criteria that reviewers are expected to use when evaluating their applications. **These criteria differ across competitions and are tied to the specific requirements and recommendations laid out in each RFA.** For example, for the two main research competitions, NCER's Education Research Grants (CFDA 84.305A) and NCSER's Special Education Research Grants (CFDA 84.324A), reviewers are expected to assess the scientific merit of applications based on the following criteria:

- Significance
- Research Plan
- Personnel
- Resources
- Dissemination

Each criterion is explained in the form of a question or questions that refer to relevant sections of the RFA. For example, the Significance criterion for the two main research competitions is explained as follows: "Does the applicant address the recommendations

described in the Significance section for the project type under which the applicant is submitting the application?"

Importantly, ***the review criteria that applicants see in the RFA are the same criteria that you will find in your peer review materials***.

Peer Review Information Management Online (PRIMO)

PRIMO is the web-based system developed and maintained by GDIT to facilitate the grant peer review process. PRIMO is accessed at https://iesreview.ed.gov. It is primarily through PRIMO that you will:

- Provide necessary personal information (contact information, tax-related information for purposes of providing your honorarium, etc.),

- Complete and submit a Panel Member Agreement (PMA; the PRIMO Document entitled "How to Complete Your Paperwork" can give you guidance on submitting your PMA and the PMA includes contact information for someone who you can reach out to if you have additional questions),

- Receive logistical information about the panel (important dates, information about travel arrangements for in-person panels, etc.),

- Report potential conflicts of interest (COIs) with applications to be reviewed by your panel,

- Access applications to be reviewed by your panel,

- Electronically submit your review critiques and preliminary scores,

- Access reviews submitted by other panel members prior to the panel meeting,

- Receive other important information about your panel, such as information about triage and order of review for the panel meeting, and

- Access the online scoring system during the panel meeting.

Conflicts of Interest (COIs)

It is important that you report any real or apparent COIs through PRIMO's Declare COI function.

What Is a COI?

The Panel Member Agreement (PMA) describes six types of conflicts of interest that may arise: active participant on an application, personal relationship with applicant, close professional

relationship with applicant, professional relationship with applicant's institution or organization, personal financial interest in the outcome of the review, and COIs arising from other factors that might affect objectivity. The following summarizes those different types of COIs, but please refer to the PMA when you are asked to declare COIs.

The most important thing to keep in mind is that there are COIs that could prevent you from serving on a panel at all, and others that would allow you to serve on a panel but not have access to or participate in the review of a particular application.

COIs that Could Prevent You from Serving on a Panel

- *You are named on an application.* You may not serve on a panel that is reviewing an application on which you are named in any capacity (as the PI, a co-I, one of the key personnel, a consultant, or a member of an advisory board).
- *You are not named but contributed to the development of an application.* If you consulted with, advised, or provided technical assistance to an applicant in any specific way (whether or not you were paid for this work), you may not serve on a panel reviewing that application.
- *A spouse, partner, or other family member is named on an application.* With few exceptions (for example, a 2nd cousin you see once a decade or so), you may not serve on a panel reviewing an application on which a family member is named.
- *You have a personal financial interest in any application.* In addition to the situation in which you are named on an application, other possible situations involving personal financial interest may include:

  - You have been offered a possible position on the project if funded.
  - You are employed by or have a financial interest in a for-profit organization submitting an application.

IES staff make every effort to avoid these types of COIs when assigning reviewers and applications to panels; however, a few do arise every year. In many cases we can make adjustments to the assignment of applications to panels that will both ensure an appropriate review of all applications and that will allow you to remain on a panel, but it is very important that we have this information as soon as possible.

COIs that Could Prevent You from Reviewing an Application While Allowing You to Remain on the Panel

- *You have or have recently had a working relationship with someone named on the application.* This may include people with whom you are currently collaborating on research projects, people with whom you have collaborated in the recent past, or current or recent students or supervisors.

- *You have or have recently had a friendship or other personal relationship with someone named on the application.* If you consider someone a friend or a close acquaintance, this may create a COI for you with an application.
- *You have personal or professional disagreements with someone named on the application, or a general conceptual/theoretical disagreement with an application.* This could involve any sort of disagreement that may reasonably be perceived as affecting your objectivity. Examples include (but are not necessarily limited to) competing conceptual, theoretical, or philosophical perspectives, or situations in which an applicant has publicly critiqued your work (or vice versa).
- *You have or have recently had a professional connection to an organization participating in an application.* You will have a COI with an application if you are employed by an organization named on the application, regardless of whether you know the individuals involved. This does not extend across campuses in large multi-campus institutions. For example, if you work at one UC campus you would NOT automatically have a COI with an application submitted by another UC campus. You may also have a COI with an application if you recently left employment at the applicant organization or if you have been or are currently in the process of discussing future employment at that organization.

Identifying and Declaring COIs in PRIMO

Once you have completed your preliminary paperwork (your PMA, etc.), you will be asked to determine whether you have potential COIs with any application(s) to be reviewed on your panel.

In PRIMO, the "Declare/Approve COIs" module will give you a list of the applications to be reviewed by your panel that identifies the individuals and institutions involved in each proposed project. You are asked to review that list and identify any potential COIs.

There is a User Guide available to you in PRIMO to show you how to enter your declarations. The Guide is entitled "User Guide: How to Declare COIs in PRIMO." There is also a short video entitled "Video: How to Declare COIs in PRIMO." Both the document and the video can be accessed in PRIMO in several ways:

- There are links in the **Tasks and Reminders** section of your PRIMO Dashboard, or
- you can click on "Documents" in the blue task bar at the top of any PRIMO screen to access them through the Document Repository, or
- they are available at the top of the screen when you are working on your COI declarations.

Once you have declared a potential COI, IES staff will review your declaration and will either a) confirm that you have a COI with the application, b) decide that we do NOT believe that the

described relationship or situation means that you have a COI with the application, or c) ask you for more information. If IES decides that the relationship or situation you declare does not rise to the level that we would consider a COI, you may ask us to confirm it as a COI anyway if you feel that you may not be able to review the application impartially.

Tips for Declaring COIs

Some COIs are straightforward and don't require more than a word or two of explanation (for example, the organization where you are employed is involved with the application).

Others are less straightforward. **In general, it is best for you to err on the side of over-declaring potential COIs.**

In some cases, you may have a COI with an application because an organization with which you have a professional connection is named, but you don't know or work with some (or any) of the key personnel from that organization. In those cases, you do not need to declare COIs with every individual – declaring a COI with the organization is sufficient. However, if you do work with one or more of the individuals it would be helpful to declare COIs both with the organization and with those individuals.

Please provide enough information about each potential COI you declare to allow IES staff to decide whether we believe that they should or should not be considered COIs. If additional information is needed before a decision can be made, IES staff will follow up with you via a PRIMO discussion thread. You can respond directly in PRIMO.

When you declare a potential COI on the basis of a personal or professional relationship, please include information about

- How extensive the relationship is or was, and
- Whether you feel that your current or previous relationship with an individual named on an application could affect your ability to provide an impartial evaluation of that application.

The following are a few of the most common types of COI declarations that we need to follow up.

- *Relationships related to journal editorial and/or review work*
- *Relationships between book editors, associate editors, and authors*
- *Friendships.* Usually, if you indicate that you are friends with someone, we do consider this to create a COI. However, people vary considerably in how extensively they use the term "friend" so it is helpful if you provide some additional information

(for example, we do not automatically consider having a friendly but distant connection with someone to automatically create a COI)

- ***Board, panel, or committee co-membership.*** Note in particular that if you served on an IES, NSF, NIH or other grant review panel with someone named on an application, we do NOT consider this to create a COI in and of itself (although of course there may be other related factors that could result in a COI).

Examples of COI Declaration Language	
Instead of This:	*Say This:*
"I was on her dissertation committee about 5 years ago."	"I was on her dissertation committee about 5 years ago, but I haven't had any contact with her since then and I can be objective;" ***OR*** "I was on her dissertation committee about 5 years ago; I have very positive feelings about her and wouldn't be comfortable reviewing her application."
"We worked on a project together several years ago."	We worked on a project together a few years ago, and I don't think I could be objective;" ***OR*** "We worked on only one project together a few years ago - I could be objective."
"We both worked on a large project that ended a few years ago."	"We both worked on a large project that ended a few years ago, but we never worked together directly and I can be objective;" ***OR*** "We both worked on a large project that ended a few years ago; I don't think that I can be objective."
"We went to graduate school together."	"We went to graduate school together and exchange emails once or twice a year, but we're not really friends and I can be objective;" ***OR*** "We went to graduate school together; I still consider him a friend."
"We are both editors of a journal"	"We are both editors of a journal, but we only meet a couple of times a year and don't work together directly, so this won't affect my objectivity;" ***OR*** "We are both editors of a journal; we talk frequently and make joint publication decisions."
"We are professional acquaintances."	"We are professional acquaintances; however, we interact infrequently and I can be impartial;" ***OR*** "We are professional acquaintances and I consider her a friend;" ***OR*** "We are professional acquaintances and recently discussed ideas that appear to be the basis for this application" **[NOTE: this 3rd possibility may create a conflict of interest of the type that would need to be resolved by removing either the application or you from the review panel.]**

Confidentiality and Nondisclosure

The PMA discusses our confidentiality and nondisclosure policy. Please treat all application materials, panel members' comments, and panel proceedings and recommendations confidentially. Do not discuss them with applicants or anyone who is not involved in the review process before, during, or after the review panel meetings.

To avoid a situation where you may inadvertently say something about an application in the presence of someone who has a COI with that application, *please do not discuss the review of any application at any time other than when that application is being actively discussed at the panel meeting* - not while another application is being considered, not during breaks in an in-person or virtual panel meeting, not in the chat function for a virtual meeting, and not outside of the panel meeting.

Misconduct in Science

The PMA discusses policies and procedures related to potential misconduct on the part of applicants. Although rare, reviewers do sometimes raise concerns about potential plagiarism or other forms of misconduct.

Prior to the panel meeting, if you suspect misconduct on the part of an applicant please bring it to the attention of the Scientific Review Officer (SRO) for your panel; he or she will bring this information to the attention of GDIT and IES, and the potential issue(s) will be investigated. IES' general policy is that potential misconduct should be investigated separately from the peer review process. To that end,

- If you are an assigned reviewer for the application, please continue to review it on its merits; as much as possible, please try to disregard the potential misconduct in your evaluation.
- If the application goes forward for panel discussion, please do not raise issues related to potential misconduct during the panel meeting.
- If concerns about an application related to possible misconduct arise at the panel meeting, the SRO will make note of the concerns for subsequent investigation; the panel should then proceed with the evaluation of the scientific merit of the application.

The Peer Review Process Before the Panel Meeting: Getting Set Up and Reviewing Applications

APPLICATION REVIEW DETAIL

STANDARDS & REVIEW OFFICE (SRO)

PEER REVIEWERS

5a — SRO ASSIGNS APPLICATIONS TO PRIMARY REVIEWERS

5b — REVIEWERS READ APPLICATIONS, WRITE REVIEWS, AND ASSIGN SCIENTIFIC MERIT SCORES

5c — REVIEWERS SUBMIT INITIAL REVIEWS AND SCORES

5d — BASED ON AVERAGE INITIAL SCORES, SRO IDENTIFIES THE MOST COMPETITIVE APPLICATIONS FOR FULL PANEL REVIEW

5e — SRO SETS THE ORDER OF REVIEW OF APPLICATIONS AND FORWARDS THEM TO FULL PANEL FOR CONSIDERATION AT PANEL MEETINGS

This infographic serves as a companion to the *IES Research Grant Submission and Review Process* infographic, which provides an overview of all steps in the grant submission and review process. Thus, the numbering of steps in this infographic relate to placement in the companion infographic.

After you have completed your preliminary paperwork (including your PMA), the review process begins when GDIT asks you to declare any potential conflicts of interest (COIs). You must complete your COI declarations before you can begin reviewing, so it is important to do so as quickly as possible. (More information about COIs – what constitutes a COI and how to declare potential COIs – can be found in the "Conflicts of Interest (COIs)" section earlier in this Guide.)[1]

After COIs have been declared, IES staff assign primary reviewers for each application. For most panels, two or three panel members are assigned as primary reviewers for each application, although for some competitions and research topics more primary reviewers

---

[1] You can view a short view of the peer review process here: https://youtu.be/4NUkHY8GSE4.

may be assigned. Once this is done, your SRO will send out an email letting you know that the assignments and review materials are available to you in PRIMO, and you can begin reviewing your assigned applications.

In addition to this Guide, the materials that are available to you in PRIMO include:

- Requests For Applications (RFAs).
- Reviewer Materials that provide additional instructions, information, and tips for reviewing that are specific to your review panel.
- Applications. You will have access to all applications to be reviewed on your panel except those for this you have declared COIs.
- Your review assignments. A list of the applications that you are assigned to review.
- Reviewer critique templates for each of your assigned applications.

The SRO for your panel will let you know the deadline for submitting your critiques and scores. *It is very important that you submit your reviews on or before that deadline so that final decisions about the panel meeting (such as triage decisions, synthesizer assignments, and orders of review) can be made and shared with all panel members in a timely manner.*

Writing Critiques

Critiques are the most important documents created as part of the review process: they provide reviewers' evaluations of the strengths and weaknesses of each application, and they are included in the peer review panel summary statements that go back to applicants once peer review is complete.

Review Applications on Their Own Merits

Please evaluate each of your assigned applications on its own merits, and not relative to other applications you review (or to any other applications reviewed by your panel). *IES would like you to consider the elements that you would expect to see in a strong application, and to evaluate the quality of each application you review against that standard (see below for more information).*

What is a strong application? Focus on RFA Requirements and Recommendations

RFAs include "Recommendations for a Strong Application" for each of the relevant review criteria and indicate that peer reviewers are asked to consider these recommendations in their evaluations of applications. *Please carefully consider these recommendations, in conjunction with your professional judgment and expertise, as you review your assigned applications.*

Sections of Your Critique: An Overall Description, Review Criteria, and a Summary

Overall Description. Your written critique begins with an overall description of the proposed research project. This description should be a brief, non-evaluative summary written in your own words; please do not use a verbatim selection from the application itself.

Review Criteria. The next sections of the critique template are where you provide your evaluation of the major strengths and weaknesses of the application with respect to each of the review criteria. For each criterion, and for both strengths and weaknesses, your comments should include enough information for readers (including other panel members and the applicants themselves) to understand the aspects of the application that you found to be particularly strong, or particularly weak.

As noted earlier, your panel may review applications submitted to one RFA, or to multiple RFAs. ***Please make sure that you know which RFA is relevant for each application you review, and evaluate it according to the requirements and recommendations contained in that RFA.***

Where can I find information about application competition, topic, and project type in PRIMO?

- o Click on "Peer Review" in the blue task bar, and then on "Critiques" in the drop-down menu. You should see competition, topic, and (where relevant) project type information for all your assigned applications.
- o Each critique template includes a header that identifies the competition, topic, and project type for the application.
- o Applications should also include topic and project type information in several locations; unfortunately, not all applications are clear about their intended topic and/or project type. In such cases, GDIT follows up with applicants and assigns application topics and project types based on this follow-up communication; so, the topic and project type information that you see in PRIMO should be accurate.
- o If you can't find topic or project type information or if you find conflicting information (for example, the critique form indicates one topic while the application mentions a different topic), please contact your SRO for clarification before you proceed with your review.

Summary. The last section of the critique template asks you to provide an integrated summary of your overall assessment of the scientific merit of the application.

Applications That Are Resubmissions

Most panels review some applications that are resubmissions (revisions of applications that were submitted previously).

If an application is a resubmission, the applicant is required to include an Appendix B in which they describe how they responded to the previous review. In addition, the review summary statement (including the previous reviewers' critiques and, if the application went to a full review panel for discussion, a summary of the panel discussion and the final average criterion and overall scores from the prior review) will be attached at the end of the application pdf.

If you are assigned to review a resubmitted application, please address whether - and how successfully - the applicant responded to prior reviewers' comments. This does not mean, however, that you cannot raise new or additional concerns about the application you are reviewing.

How can I tell whether an application is a resubmission?

- o Resubmitted applications are flagged in PRIMO with an icon (the letters RE in a yellow circle) next to the application number.
- o Each critique template indicates whether the application is a resubmission.
- o Resubmissions are required to include a statement in Appendix B describing how the applicant responded to the previous critiques.
- o If an application is a resubmission, the review summary statement from the prior review will be appended at the end of the application pdf.
- o If you have questions about a particular application, please contact your SRO for clarification before you proceed with your review.

Additional Tips and Recommendations for Review Critiques

What you write should clearly and constructively present your overall evaluation of the merit of an application, along with the elements of the application that led you to reach that evaluation. Your critique will become part of the feedback that goes to applicants, and it will also be viewed by your fellow panel members. Particularly for applications that are not recommended for funding, applicants may choose to revise and resubmit their applications; having descriptive, clear, and constructive feedback can be helpful in the process of revision.

- *Use complete sentences that clearly convey your thinking.* Single-sentences or phrases are usually inadequate. For example, unless you truly have no concerns, please do

not describe your evaluation of the weaknesses related to a review criterion with a statement such as "no major weaknesses," or "the resources appear adequate."

- *Be specific.* Your comments should refer to relevant, specific aspects of the application.
- *Avoid using derogatory or offensive language.* Please avoid unnecessarily harsh or personal language. If you would be personally offended by a comment, it is reasonable to expect that the applicant whose work you are evaluating would also be offended.
- *Avoid saying that an application is "nonresponsive" to the RFA.* IES reserves the use of the term "nonresponsive" to refer to applications that do not meet the minimum *requirements* laid out in the RFA. All applications that you are assigned to review have made it through an initial screening and have been deemed to be at least minimally responsive to those requirements. Instead of referring to an application as "nonresponsive," it would be helpful if you would express your concerns in terms of how well or poorly the application fits, or clearly addresses, the RFAs requirements and recommendations.
- *Please avoid making specific recommendations to applicants that they resubmit to a different competition, topic and/or project type.* For example, please do not suggest that an Exploration project should be revised and resubmitted as a Development and Innovation project. Instead, it would be more helpful to talk about the lack of fit to the topic or project type under which the application was submitted, or to suggest that the applicants need to clarify how the project fits the intended topic or type.
- *Please comment on the strengths and weaknesses of applications as they are submitted and avoid trying to rewrite applications.* Please avoid making overly specific recommendations for changes in the research questions, research design, data analysis plan, personnel, etc. It is up to the applicant to decide if and how to revise an application for resubmission based on the feedback they receive.

Scoring Applications

In addition to writing a critique of each application to which you are assigned as a primary reviewer, you are asked to provide two different types of scores for each application: *Criterion Scores* for each of the Review Criteria, and an *Overall Score.*

Criterion Scores

Prior to the panel meeting, you will rate each application for which you are a primary reviewer on each of the review criteria. These **Criterion Scores** are on a scale of 1 to 7, using whole numbers. **Higher scores are more positive: 7 is the most positive score, while 1 is the most negative.** Intermediate values on the scale should be treated as equal steps along the scale. When considering your criterion scores, please make sure that they are well-aligned with the narrative critique you have provided for each criterion.

Criterion Score Range	Narrative Review Comments
6 or 7	Your evaluation with respect to a criterion (significance, research plan, personnel, resources, etc.) is very positive; your critique includes numerous major strengths and few or no major weaknesses
3, 4, or 5	Your evaluation with respect to a criterion is mixed; your critique includes both some major strengths and some major weaknesses
1 or 2	Your evaluation with respect to a criterion is generally negative; your critique includes many major weaknesses and few if any major strengths

Overall Scores

You are also asked to provide an **Overall Score** for each application that you review. This score summarizes your overall view of the quality of the application. Overall Scores are on a scale of 1.0 to 5.0. Unlike the Criterion Scores, Overall Scores are available in tenths (1.0, 1.1, 1.2…4.9, 5.0).

In contrast to the Criterion Scores, please note that numerically lower scores are more positive: 1.0 is the most positive score, while 5.0 is the most negative score.   The following chart shows the relationship between the numeric overall scores and their adjectival equivalents.

Overall Score Range	Adjectival Equivalent
1.0 to 1.5	Outstanding
1.6 to 2.0	Excellent
2.1 to 2.5	Very Good
2.6 to 3.0	Good
3.1 to 4.0	Fair
4.1 to 5.0	Poor

How do the Criterion and Overall Scores Relate to Each Other?

The Overall Score that you give to an application should reflect your evaluation of the application as a whole. It is very important that your overall score for an application is well-aligned with both your narrative review and the criterion scores that you provided for that application.

This does not mean, however, that there is a one-to-one correspondence between criterion scores and overall scores. Criterion scores are not averaged or mathematically manipulated to determine an overall score. Rather, IES asks you as a reviewer to please carefully consider the strengths and weaknesses of the application as reflected in your criterion scores and narrative review when assigning an overall score to each application.

Submitting Reviews and Final Steps Before the Meeting

As mentioned earlier, your scores and written reviews will be due in PRIMO prior to the panel meeting. The exact amount of time between the review submission deadline and the panel meeting varies, but for most panels is about two weeks. This allows IES and GDIT staff to work together to complete the planning for the meeting. The following activities take place during the time between the review submission date and the meeting itself:

- *Triage.* For most panels, IES staff will conduct a triage process. This involves rank ordering all of the applications reviewed by the panel based on average overall scores and identifying the most competitive applications to send forward for full panel discussion.
- *Notification of applications to be discussed.* Once triage is complete, GDIT will notify you of which applications will be discussed by the panel.
- *Order of Review.* Shortly after identifying which applications will go forward to the full panel, you will receive information about the order in which those applications will be discussed. For each application, the Order of Review will also indicate which panel member has been assigned to synthesize the panel discussion, and who has been assigned as the reader. IES staff members make these determinations. Once you receive the Order of Review:
  - o **What does it mean if you are assigned as a reader for an application?** Most or all panel members will be assigned as a reader to one or two applications (depending on the number of panel members and the number of applications going forward for discussion). For the application(s) to which you are assigned as a reader, please thoroughly read the application(s) and the primary reviewers' critiques, in preparation for the panel discussion. You don't need to provide written critiques or scores for the application(s) prior to the panel meeting. ***Readers are not additional primary reviewers for an application.*** If you are assigned as the reader for an application, your contributions to the discussion of that application could be very helpful to the panel; however, the way in which you contribute is up to you. (Please see p. **21, below, for some additional information about the reader role.)**
  - o **Familiarize yourself with all applications to be discussed.** In addition to the applications for which you are a primary reviewer, and the application(s) to which you are assigned as a reader, please look at all other applications to be discussed, and the primary reviewers' critiques for those applications. If you
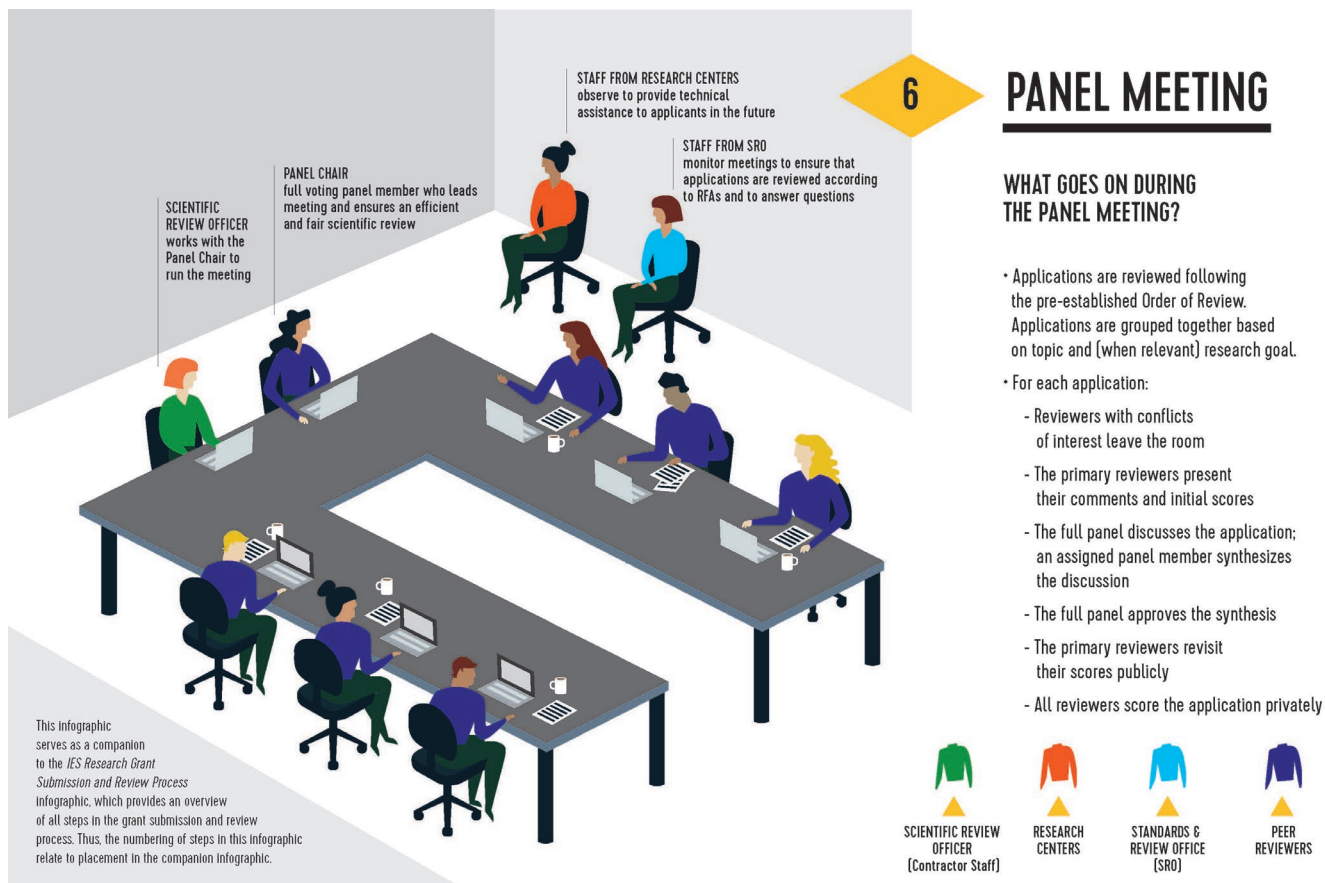
are present for the discussion of an application, you will be asked to provide criterion and overall scores for that application. You should be familiar enough with the applications that you will feel comfortable providing those scores at the conclusion of the primary reviewers' presentations and the full panel discussion.

o **Consider whether you want to nominate a triaged application back for panel discussion.** Occasionally, a reviewer notices that an application that he or she thinks has substantial scientific merit has been triaged out and is not slated to go forward for full panel discussion. If you feel strongly that a triaged application is of equal or higher scientific merit compared to those that are going forward and should be discussed by the panel, you can nominate that application back for consideration. Any panel member can nominate any application (except those with which they have COIs); you do not need to have been a primary reviewer of an application to nominate it.

Prior to the panel meeting your SRO will give you information on submitting pre-meeting nominations, along with a date by which they should be submitted. You will be asked to identify the application(s) you would like to nominate and to give a brief (1-2 sentence) explanation of why you think the application(s) should be discussed. Your SRO will then provide information about pre-meeting nominations to all panel members. We strongly encourage reviewers who want to nominate an application back for panel discussion to do so prior to the meeting if possible, so that panel members have a chance to look at those applications and critiques before the meeting.

Voting on nominated application takes place at the beginning of the panel meeting. At that time, panel members also have another opportunity to nominate additional applications.

Reviewing Applications: What Happens At the Panel Meeting?

STAFF FROM RESEARCH CENTERS observe to provide technical assistance to applicants in the future

6 ▸ **PANEL MEETING**

STAFF FROM SRO monitor meetings to ensure that applications are reviewed according to RFAs and to answer questions

PANEL CHAIR full voting panel member who leads meeting and ensures an efficient and fair scientific review

SCIENTIFIC REVIEW OFFICER works with the Panel Chair to run the meeting

This infographic serves as a companion to the *IES Research Grant Submission and Review Process* infographic, which provides an overview of all steps in the grant submission and review process. Thus, the numbering of steps in this infographic relate to placement in the companion infographic.

WHAT GOES ON DURING THE PANEL MEETING?

• Applications are reviewed following the pre-established Order of Review. Applications are grouped together based on topic and (when relevant) research goal.

• For each application:

- Reviewers with conflicts of interest leave the room

- The primary reviewers present their comments and initial scores

- The full panel discusses the application; an assigned panel member synthesizes the discussion

- The full panel approves the synthesis

- The primary reviewers revisit their scores publicly

- All reviewers score the application privately

SCIENTIFIC REVIEW OFFICER (Contractor Staff)

RESEARCH CENTERS

STANDARDS & REVIEW OFFICE (SRO)

PEER REVIEWERS

The following is a brief summary of what happens at a grant review panel meeting. Some of these activities differ for panels that meet via video teleconference, or for panels that meet (in person or virtually) off-cycle. The general format for panel meetings remains the same, however. [2]

The Panel Meeting

Your panel's SRO and the panel Chair will direct the panel meeting with assistance from a Review Technical Assistant (RTA).

---

[2] You can view a short video showing what happens at a peer review panel meeting here: https://youtu.be/42xGsGIrqJk

Calling for Nominations of Triaged Applications

After introductions and explanations of materials, technology, and procedures, the panel Chair will announce to the panel any triaged applications that were nominated back for panel discussion prior to the meeting; the Chair will also ask if anyone would like to nominate any additional triaged applications that they believe are of equal or greater scientific merit as those that are slated to be discussed and that should be discussed at the meeting.

If nominations are made either before or at the beginning of the panel meeting, the nominators will be given the opportunity to explain very briefly (no more than a couple of minutes) why they think that the application(s) should be discussed. Each nomination (if there is more than one) is handled separately and panel members are asked to leave the meeting during the nomination process for any application with which they have declared a COI. After each nomination, panel members will be asked to vote anonymously on whether to bring the application back for discussion. For each nominated application, if a simple majority of the panel votes to bring the application back it will be added to the Order of Review on the second day of a two-day panel or at the end of a one-day panel.

Discussing Each Application

Applications will be discussed following the Order of Review that you will receive prior to the panel meeting. Unforeseen circumstances do sometimes require revisions to the Order either before or during the panel meeting, so be sure to pay attention to any changes that the SRO and Chair announce at the meeting.

- *Reviewers with COIs leave the meeting.* Before discussion of an application begins, the SRO and RTA will ask reviewers with COIs to leave the meeting. Any reviewers who are out because of an earlier COI will be brought back. If you have not declared a COI with an application but realize at the time of the meeting that you are in conflict, inform the SRO immediately and the RTA will assist you to leave the meeting. *Be sure to do this as soon as you realize that you have a COI, even if it is after the discussion has begun.*
- *Scores are posted.* Once all panel members with COIs have left, the RTA posts the primary reviewers' criterion and overall scores for the application – along with the application number and an indication of whether the application is a resubmission – so that they are visible to all panel members during the discussion.
- *The Chair opens the discussion.* As the scores are being posted by the RTA, the Chair calls out the application number, competition, topic, project type, PI, and title of the application to be discussed. The Chair also alerts the panel if the application is a resubmission. The Chair then calls on the first reviewer to begin.
- *The primary reviewers present their critiques.* The first reviewer describes the proposed research and presents a summary of strengths and weaknesses noted in his

or her written critique (reviewers should not read their entire critiques to the panel). The second reviewer elaborates on areas of agreement or disagreement with the first reviewer and offers additional comments. If additional reviewers are assigned to the application, their comments follow the second reviewer.

- *The full panel discusses the application.* After all primary reviewers have presented their critiques, the discussion is opened to the full panel. Panel members can ask questions or provide additional comments on the application.
- *The synthesizer reads his or her summary of the panel discussion.* During the full panel discussion of each application, an assigned synthesizer writes a summary of the discussion, capturing elements of the discussion that are not included in the primary reviewers' written critiques. After discussion has ended, the synthesizer then reads his or her summary, the panel gives feedback, any necessary changes are made, and the synthesis is finalized. More information about synthesizing is provided below.
- *Budget and administrative notes.* If the panel recommends any budget or administrative notes to IES about an application, these are recorded by the panel SRO. The SRO will read these notes aloud for panel approval. This typically happens for only a few applications during a panel meeting.
- *The primary reviewers revisit their scores.* The primary reviewers have the opportunity to change their criterion and overall scores to reflect changes in their views of an application after full panel discussion. Primary reviewers post their revised scores and talk through their changes for the panel.
- *All panel members score the application. All panel members* present for the discussion of an application privately enter criterion scores and overall scores for the application using PRIMO's Online Scoring Module.
- *Discussion ends and the panel moves to the next application.* Once all scores have been submitted, the posted scores are removed from view, reviewers who were out of the meeting due to COIs are brought back, and the panel begins the process for the review of the next application.

Editing Critiques After Panel Discussion

If you are a primary reviewer for an application, you may revise your written critique following panel discussion. Particularly when your criterion and overall scores change, please make sure that your critique fits with your revised scores.

Generally, reviewers can edit their critiques at any time during the panel meeting. If you decide or are asked to revise your critique, it is important to remember a couple of things:

- Please do so during a time when you are on a break from the meeting (a snack break, a lunch break, out of the meeting due to a COI, or in the evening). Please DO NOT work on revising a critique when you are present and another application is being discussed.

- Please be aware of the need to maintain confidentiality as you edit your critique.

The Reader Role

Readers are assigned after triage has been completed. One reader is assigned to each application going forward for panel discussion. Most or all panel members will be assigned as a reader to one or two applications (depending on the number of panel members and the number of applications going forward). Readers will not necessarily have content expertise relevant to the application(s) to which they are assigned.

The reader for an application is asked to read the application and the primary reviewers' critiques thoroughly in preparation for the panel discussion. Readers are not asked to provide written critiques or to score applications prior to the panel meeting, and readers are not intended to serve as additional primary reviewers for applications. The intent of assigning readers is to ensure that at least one panel member in addition to the primary reviewers has done an in-depth reading of each application going forward for discussion, as well as the written critiques. If you are assigned as the reader for an application, your contributions to the discussion of that application could be very helpful to the panel; however, the way in which you contribute is up to you.

Synthesizing

For all applications discussed by the full panel, syntheses of panel discussions are included in the summary statements provided to applicants, as are the primary reviewers' narrative reviews and the final scientific merit scores (average overall and criterion scores). Syntheses are intended to provide feedback for the applicant regarding key points raised by panel members following the primary reviewers' presentations of their critiques.

Synthesizing Assignments are Distributed Among Panel Members

A synthesizer will be assigned for each application to be discussed by the panel who is not one of the primary reviewers for the application. Assignments are made after reviewers' critiques and scores have been submitted and triage has been completed.

Generally, responsibilities for synthesizing discussions of applications are distributed among panel members so that each reviewer has a small number of syntheses to complete (typically between one and three per panel member). Your panel's SRO will collect information about your interest/willingness to take on this important role.

- Some panel members enjoy doing review syntheses and are particularly good at doing so. *If you are interested in taking on additional synthesis responsibilities (anywhere*

from a few more than most reviewers to all of the syntheses for the panel), please let your SRO know. IES is happy to accommodate such requests.

- In contrast, some panel members are uncomfortable with synthesizing or may for a variety of reasons feel unable to synthesize panel discussions. *If you do not want to be assigned synthesis responsibilities, please let your SRO or the IES staff person working with your panel know and we will avoid assigning you to synthesize any application discussions.*

- Newer panel members often request not to be assigned to synthesize any discussions because of limited experience on the panel. We cannot always avoid assigning new panel members to serve as synthesizers; however, we will make every effort to place any synthesis assignments for new panel members toward the end of the Order of Review.

Synthesis Procedures

Synthesizer assignments are shown in the Order of Review available in PRIMO. Before the meeting, please take a look at the applications for which you have been assigned as synthesizer, and to the primary reviewers' critiques. This will help you to listen to the discussion and to focus your synthesis on points of discussion that may not have been raised by the primary reviewers.

Panel syntheses are submitted through PRIMO. During the meeting, GDIT staff will provide instructions on how to enter syntheses into PRIMO.

After an application is discussed, the panel Chair will ask the assigned synthesizer to read his or her summary out loud to the panel. Panel members may then suggest changes if needed to capture the key substantive points that were raised during the panel discussion. *Panel members do not need to worry about wordsmithing the synthesis (except as needed to clarify the intended meaning).*

Synthesis Content

Syntheses do not need to be long. They may include a) comments regarding both strengths and weaknesses of the application, b) major areas that an applicant should focus on in a resubmission, and c) any major points about which reviewers disagreed (if applicable).

Syntheses should focus on the full panel discussion. The synthesis does not need to include a summary of the application or points raised by the primary reviewers in their narrative reviews, except to the extent that they are discussed by the panel *and new or additional perspectives are raised regarding these points.*

- You do not need to summarize the primary reviewers' comments; rather, please focus on the discussion that follows the primary reviewers' presentations.
- It is not necessary to capture every comment or question raised by the panel.
  - Points of clarification that are asked and answered do not need to be included.
  - Comments that echo but do not expand on comments already raised by the primary reviewer do not need to be included.
- As long as what is written clearly conveys the intended meaning, you do not need to worry about writing perfect sentences or paragraphs.

Syntheses begin with a standard opening statement. To facilitate the work of the panel, IES uses a standard opening statement for all syntheses. This statement indicates that the primary reviewers presented their critiques to the panel and that the panel then discussed the application. Synthesizers should add any additional comments that are warranted by the panel discussion.

Text that Precedes Panel Syntheses in Summary Statements

"At the panel session, the primary reviewers presented their individual critiques of the application. The panel listened to the primary reviewers' discussion of the strengths and weaknesses of the research plan and to their evaluation of the significance of the proposed project, the qualifications of the research team, the adequacy of the resources, and the quality and appropriateness of the dissemination history and plan. After hearing the primary reviewers' perspectives, the panel discussed the following aspects of the application."

Note: This example reflects the review criteria for the Education Research Grants and Special Education Research Grants competitions. For other competitions and topics, this statement is modified to reflect the appropriate review criteria (such as training criteria).

Examples of Statements or Phrases That Might Be Used in Syntheses

Below are examples of stock statements or phrases that you might find useful to have on hand as you are writing your panel syntheses during the meeting.

Examples of text for a resubmission:

- Some sections of this resubmitted application were not seen as sufficiently responsive to the comments received in the previous review.
- Several panel members expressed the view that this resubmitted application was highly responsive to the comments of the previous reviewers.

Examples of statements about major areas for revision:

- The panel felt that it was not clear that there was sufficient expertise related to _____ on the project.
- The application would benefit from greater clarity about _____.
- The addition of expertise on _____ would strengthen the project team.
- The _____ was underdeveloped in the application and should be described with greater specificity.

Dealing with positive or negative points perceived as important enough to include in the synthesis by some reviewers, but where some panel members also disagreed:

- Some reviewers were concerned that _____, but others were less concerned about this because _____.
- Reviewers disagreed as to the extent to which this resubmitted application was responsive to the previous reviews. Some reviewers believed _____, while others still felt that _____.
- The use of _____ was discussed as a particular strength, although panel members disagreed on _____.

Other examples:

- A number of panel members noted _____ as a potential weakness of the project.
- The panel echoed many of the strengths of the project identified by the primary reviewers, and added _____ and _____ as particular strengths.
- Several panel members expressed enthusiasm about _____.

Panel members felt that the significance of the project may be limited because _____.

After the Panel Meeting

Once the review panel meeting has ended, your service for the review session is complete. Be sure to follow any instructions given to you by GDIT about discarding paper or electronic copies of proprietary materials.

Please feel free to contact IES or GDIT staff who you worked with during your participation if you have any questions. Thank you for participating on an IES grant peer review panel. We appreciate your service!

Appendix

Additional Information on IES' Research Application Review Process

In 2006, the National Board for Education Sciences approved procedures for the peer review of grant applications, which are described in the Procedures for Peer Review of Grant Applications document (http://ies.ed.gov/director/sro/peer_review/application_review.asp). IES' Office of Science, housed within the Office of the Director, is responsible for the scientific peer review process. In order to ensure that peer review is as objective as possible, peer review activities and staff are situated outside of the research centers that provide technical assistance to applicants, fund the research, and work with grantees. The Office of Science works with a contractor that handles logistics, develops and maintains the on-line peer review system, and produces scoring and other needed reports. The Office of Science is responsible for the major substantive activities involved in the review process, including planning regarding the number and types of panels needed, identifying and recruiting reviewers, assigning applications to panels and reviewers to applications, preparing substantive instructions and information for reviewers and panel chairs, and conducting triage after initial scores have been submitted. Office of Science staff members also attend the panel meetings to address any questions or issues that arise, and to ensure that the panels review applications according to the review criteria in the RFAs. IES program officers may attend the panel meetings as observers but are not involved in managing the review process or working with the panels.

Types of Panels

The Office of Science constitutes two types of review panels: **standing panels and single-session panels**. Standing panels are established for areas or topics that are competed on a regular basis, while single-session panels are constituted as needed to cover unique competitions or competitions that are run on a less frequent basis.

Currently, there are **eight standing review panels**:

- Basic Processes
- Early Intervention and Early Childhood Education
- Education Systems and Broad Reform
- Mathematics and Science
- Reading, Writing, and Language Development
- Social and Behavioral
- Special Education
- Statistics and Modeling

Types of Reviewers

Standing panels include principal members and may also include rotating and ad hoc members. Single-session panels include rotating members, and they may also include ad hoc members.

Principal members. Principal members are appointed to serve 5-year terms on a review panel (when a new standing panel is initially established, principal members are appointed for terms ranging from 1 to 5 years, so that there are principal panel members rotating on and off of the panel each subsequent year). Individuals are typically appointed as principal panel members following participation as rotating panel members. The Director of IES reviews and approves all appointments of principal panel members. In order to promote continuity in standards and procedures across review sessions, at least 50 percent and up to 100 percent of the members of a full standing panel are principal members (panels typically include a total of about 20 reviewers). Principal panel members are expected to serve for each meeting of the panel that is held during the member's term. However, for a particular panel review meeting, if a principal panel member has a COI or schedule conflict that prevents service on the panel, the Office of Science may assign that individual to serve on an alternate panel, as appropriate.

Rotating members. Rotating members are appointed to serve on a panel for one or two review sessions. Rotating members are recruited to supplement the expertise needed on a panel, and to allow panels to efficiently handle the number of applications received. In addition, rotating membership provides a trial opportunity for an individual to participate on a panel, allowing both the Office of Science and the reviewer to evaluate the fit of the individual on the panel prior to a potential appointment as a principal member. Both principal and rotating members serve as full members of the panel; they are assigned full loads of applications to review, attend panel review meetings, and score all applications considered by the panels on which they participate (except those for which they have conflicts of interest).

Ad hoc members. Ad hoc members are appointed as needed to serve on a panel for one review session, and are typically assigned between 1 and 4 applications to review. They have access only to their assigned applications, and participate in the full panel meeting only for the discussion and scoring of those applications for which they serve as primary reviewer (if those applications go forward to the full panel after triage). Ad hoc members typically participate in the meeting via teleconference. Ad hoc reviewers are recruited when the number of applications received is greater than what a panel can efficiently handle or when a particular area of expertise is needed for a small number of applications. Typically, no more than 3 or 4 ad hoc members are used to supplement a panel.

The Roles of Peer Review Panel Participants

Scientific Review Officer

GDIT recruits Scientific Review Officers (SROs) from an extensive resource pool of highly skilled professionals who possess years of experience in peer review procedures as well as knowledge of education and behavioral research. These scientists possess an array of expertise and experience that represents a broad range of scientific, administrative, and technical support skills related not only to peer review but also to administration and grant and contract management of Federal programs. The SRO is a nonvoting member of the peer review panel who exerts a critical leadership role in the peer review process. The SRO has the overall responsibility to ensure that the panel proceedings are accurately recorded and that the integrity of the review process is maintained.

The SRO will carry out the following specific responsibilities:

- Accept ultimate responsibility for the panel, conducting its business in accordance with established IES and GDIT policies and procedures governing scientific peer reviews.
- Ensure that apparent or actual COIs are managed appropriately.
- Serve as a liaison between the panel chairperson and panel members regarding technical and administrative issues as well as explain review policies and procedures.
- Ensure that all reviewers complete and submit preliminary scores and reviewer comments by the announced due date before the peer review session.
- Work closely with the Review Technical Assistants (RTAs) to ensure the adequacy, appropriateness, and efficiency of logistical requirements for the panel meeting.
- Open the review meeting with a clear and succinct introduction and set out the meeting agenda and IES and GDIT policies and procedures.
- Provide an overview of specific instructions, panel meeting policies, and protocols and allow for divergent points of view.
- Conduct the review meeting in concert with the panel chairperson and in accordance with IES and GDIT review policies and procedures.
- Advise the chairperson during the panel meeting on what actions the panel might take or is prohibited from taking.
- Note budgetary and administrative information that needs to be provided to IES.

Panel Chair

For each panel, IES appoints a panel chair. For standing panels, chairs are typically selected from among the principal members of the panel. Panel chairs are selected based on the following:

- Their standing in the education research community (including prior experience with leadership roles),
- Prior experience on IES grant review panels,
- Willingness to become thoroughly familiar with relevant RFAs and to ensure that the panel reviews the merits of the applications according to the criteria in the RFAs,
- Willingness and ability to provide leadership and guidance to the panel deliberations (including balancing the need for each reviewer to be able to have his or her perspective heard with the need to ensure appropriate use of time such that each application is reviewed fairly).

The panel chairperson works closely with the SRO, presides at the meeting, and provides leadership in moderating and guiding panel members in their deliberations. The chairperson plays a key role in ensuring that each application receives a fair review on the basis of its merit. The chairperson, unlike the SRO, participates fully in the scientific review of applications and votes on each application.
The panel chairperson will carry out the following specific responsibilities:

- Review the application critiques in PRIMO for applications to be reviewed in the panel meeting.
- Participate as a primary reviewer of some applications if requested by IES (e.g., in the case of discrepant preliminary scores).
- Work closely with the SRO to preside at the meeting and facilitate discussions and provide leadership in guiding the panel members in scientific deliberations and scoring.
- Play a key role in ensuring that each application receives a fair review based on merit by moving review discussions along, keeping the discussion focused on the scientific merits of the applications, seeking resolution of differences in fact or opinion, pointing out significant aspects that have been ignored, or advising the panel if it appears that members are applying inappropriate criteria.
- Manage allotted time so that all applications receive appropriate consideration.

More information and guidance for panel chairs regarding their roles and responsibilities is provided in a separate Panel Chair Supplement to this Panel Member Guide.

Reviewers

Reviewers are voting panel members who possess appropriate credentials, maintain a record of academic publications within the pertinent disciplines, and/or have specific educational, teaching, or research experience.

The primary requirement for serving as a reviewer is demonstrated competence and achievement as an independent investigator in an appropriate scientific or clinical discipline or research specialty or significant experience in the development or implementation of education interventions, policies, and practices. Among the criteria evaluated are the quality of research accomplished, publications in refereed scientific journals, and other significant activities, achievements, and honors. Other qualifying characteristics include mature judgment, balanced perspective, objectivity, the ability to work effectively in a group, commitment to work assignments, good communication skills, personal integrity to ensure the confidentiality of applications and discussions, and the avoidance of real or apparent COIs.

Review Technical Assistant (RTA)

Peer review panels are supported by RTAs. The RTAs serve as skilled administrative assistants to the SROs and are available to assist panel members with clerical or administrative needs. The RTAs will carry out the following specific responsibilities:

- Provide premeeting and onsite meeting support, including ensuring that panel members are not present during the review of applications with which they are in conflict.
- Provide instruction in the use of reviewer scoring documents.
- Display preliminary and final scores during the panel discussion of each application.
- Reproduce any materials needed by the review panel.
- Distribute and collect all meeting materials.
- Monitor the completeness of reviewer scoring documents.
- Manage all review documents generated at each panel meeting.