



# WILLIAM & MARY

CHARTERED 1693

## SCHOOL OF EDUCATION

### ***Announcing the 2023 W&M School of Education Dean's Innovation Fund (DIF) Research Competition***

This competition has two goals: (a) to advance research of consequence and impact conducted by W&M School of Education faculty and (b) to generate pilot data for larger external research grant competitions. (Note: you must identify a specific agency and competition which you are targeting with results from your DIF study). All full-time faculty (regardless of tenure or tenure track status) are eligible to apply. We strongly encourage collaborative projects among faculty within the SoE and across the university and encourage student engagement in these projects. **DIF grant applications are due Feb. 6, 2023** via the SoE submission portal. All applicants will receive feedback on their proposals.

Faculty can apply for grants to fund a project for one-three years with a maximum total budget of \$50,000. All funds must go to grant activity (e.g., buying materials, paying participants, hiring hourly student workers). Funds may not be applied to faculty compensation (i.e., buyouts, summer salary, conference travel). We welcome applications for studies using quantitative, qualitative, or mixed research methods.

For the Dean's Innovation Fund, study outcome measures *must* include an assessment of the *impact of the project* for young people and/or their families. According to the Jennings family, whose generosity has made the DIF possible, the DIF "facilitate(s) partnerships that leverage the expertise of the school to make a real impact on the lives of children and families."

The **DIF application** is comprised of four pages and an Appendix. **Page 1:** Project Title and Abstract; **Page 2:** Specific Aims; **Page 3:** Research Methods; **Page 4:** Budget, Personnel, and Project Timeline. The **Appendix** includes (a) list of references/bibliography; (b) **optional** letters of support from your research partners (e.g., schools, clinics, community organizations); (c) brief CV (4 pages) for each project investigator; (d) study measures/outcomes, or weblinks to those.

#### **Page 1: Title and Abstract**

The Title/Abstract comprises a full page and includes the following with headings: (a) the research problem/topic; (b) the gap in knowledge to be addressed and the critical need for the current study; (c) the study's long term goal, objectives, and specific aims; (d) the research methods designed to address those aims; (e) the anticipated impact of the research; (f) the external research grant application(s) targeted for this funding.

## **Page 2: Specific Aims page (1 page, single spaced), 4 paragraphs.**

Specific aims are central to your research grant proposal. Content for the specific aims is presented in three paragraphs.

### **Introductory Paragraph**

In this paragraph, introduce your readers quickly to the research topic and capture their attention. This paragraph should describe the significant gap in knowledge that directly relates to a critical need in the field. The introduction should include the following:

- *First Sentence/Hook:* Explain WHAT your research topic is and WHY it is critical that you conduct the research.
- *What is Known:* State what is currently known in the specific field (3-5 sentences). Provide the reader with only the necessary details to understand why you are proposing the work. Remember to be concise and focused on only the key points.
- *Gap in Knowledge:* Clearly state the gap in knowledge that needs to be addressed. Convey that your research will fill this gap using the funding that you are requesting. You can emphasize the most important words or phrases in your Specific Aims page by using *italics* or underline, but do so moderately. Overuse of italics or underlining can be distracting. Include key citations.
- *The Critical Need:* The critical need is the knowledge or intervention that you propose to develop. The critical need is the reason your proposal should be funded—your work will address this need. Emphasize the significance of the problem you are trying to address. Additionally, it should be clear in this paragraph that your research proposes the next logical step to advance the field.

### **The Second Paragraph**

In this paragraph, you will introduce the solution to address the gap described in the first paragraph. It is critical to convince your reviewers that you have the solution to address the gaps and the expertise to accomplish this solution. Keep your wording simple, relevant, and to the point. In this section, you will go from broad (long-term goal) to narrow and address the following:

- What do you want to do?
- Why are you doing it?
- How do you want to do it?

To do this, the second paragraph should include the following components:

*Long-Term Goal:* This is the overarching research goal for which you propose to seek external funding using data collected in this DIF grant-funded study. Keep your wording general in this sentence—you are stating your long-term plans, and the reviewers understand that the specifics may be subject to change. Be sure to address the potential impact of your project for children and/or families.

*Proposal Objectives (attainable):* Describe the specific objectives of your DIF grant proposal.

*Hypotheses:* Describe your hypotheses—the overall effectiveness of your project. What do you expect to find? Hypotheses are aligned with your objectives.

For both the objectives and your hypotheses, be specific and use clear, simple language. Describe the significance of the project--how it addresses the critical need and the long-term goal. Avoid vague hypotheses because it will be unclear to the reviewers what you expect to determine from the proposed research.

- *Rationale:* Explain how you arrived at your central hypothesis (for example, using past studies and published literature). Briefly state what your project's completion would make possible (e.g., new approaches to addressing an old problem), and tie it to the mission of the DIF grant: (a) to demonstrate evidence of impact and (b) to generate data for external research grant competitions.

### **Third paragraph: Specific Aims**

In this paragraph, you will describe (briefly) the specific aims of your study. Begin the paragraph with the primary aim. Limit your aims to 2-4. Use headings and bullets in your description of the aims.

These following tips may help you to formulate the specific aims paragraph.

- Give your aim an active title that clearly states your aim and its relationship to the hypothesis.
- Ideally, the aims should be related, but not dependent, upon each other.
- To make it easier for the reviewers to clearly read and understand each aim, it is often helpful to use headings and/or bullets to delineate each specific aim.

### **Fourth paragraph: Summary**

This final paragraph of the Specific Aims page is vital for the impact of your proposal. Think of your Specific Aims page as an hourglass, where the wide parts represent the general information and global significance, and the narrow parts are the fine details. If you end with the Aims Section (above) you will end on fine details and a narrow scope. An hourglass with a narrow base is unstable and will topple. Therefore, this final paragraph creates a firm, broad base to support your proposal.

The final paragraph should include the following important details:

*Innovation:* Plainly state what is innovative about your project. What would completion of this proposal bring to the field that is not present currently?

*Expected Outcomes:* Specifically state your expected outcomes for this project. Use plain language. What do you expect to see at the completion of each aim? Include this information here only if you have not placed it in the aims.

*Impact:* State how your project would help those who need it, both in the short term (this study) and the long term. Include a broad impact statement about how your proposal will benefit the people you mentioned in the opening paragraph.

Provide an overview statement or brief paragraph describing how the research methods you have selected are particularly appropriate to address the specific aims of your study. On this page, you will describe the following.

**Study participant characteristics:** Describe the *number and type of study participants* (e.g., children and adults) and their major demographic characteristics (e.g., age, sex, ethnicity, socioeconomic status, other relevant characteristics, such as grade level/academic level information, disability characteristics, as appropriate).

**Sampling procedures:** Describe procedures for identifying, recruiting, and selecting study participants. In an Appendix, please include letter(s) of support from partners in the research where you will recruit participants (e.g., schools, community agencies, churches, etc).

**Setting:** Describe the primary setting(s) and locations where data collection will take place, including a description of the demographic characteristics of the setting (e.g., the institution serves young people from primarily rural or urban communities from predominantly x, y, and z demographic backgrounds). If data collection will be done remotely, describe the remote location(s) where participants will engage in study procedures and data collection (e.g., home, school, community setting).

**Study outcome measures/assessments:** Describe each of the measures that you plan to use and how these measures will demonstrate the potential *impact* of your study. Please use bullets in this section. Describe who will complete each of these measures (e.g., parents, teachers, youth). Describe the basic psychometric characteristics of those data, if appropriate and available. In the Appendix, you may provide copies of the outcome measures or their weblinks.

**Data collection:** Describe methods used to collect data, along with the academic preparation and study-specific training of data collectors.

**Intervention:** If you are planning to introduce an intervention, describe the intervention in detail. Who will deliver the intervention? How long will the intervention last (e.g., length of each session over the course of xx weeks)? Describe the key features of the intervention designed to address your specific aims. Describe procedures put in place to ensure that the intervention will be implemented with fidelity.

**Data Analysis Plan:** Describe your plan for data analysis and how the methods you use to analyze the data will allow you to address your specific aims.

#### **Page 4: Budget, Personnel, and Timeline**

**Budget:** Provide a budget for the study. Allowable costs include participant stipends, supplies, software, hourly wages for student workers, local travel, etc. In order to stretch our dollars as far as possible, the DIF grants cannot be used for faculty compensation (i.e., summer salary, course buyouts).

**Personnel:** List the members of your research team and briefly state why your team (overall) is well-positioned to accomplish the research aims. You can mention factors such as your previous research findings, personnel qualifications, professional experience, etc., but it is important to keep this section concise.

**Timeline:** Provide a timeline for the study activities. An example follows.

Project Timeline (Months)	1	2	3	4	5	6	7	8	9	1	1	1	1	1	1	1	1	1	2	2	2	2	2
Activity									0	1	2	3	4	5	6	7	8	9	0	1	2	3	4
Study preparation																							
Recruitment																							
Focus group interviews																							
Transcript generation																							
First round of analysis																							
Second round of analysis																							
Final analyses; prepare and submit manuscripts and specific external grant application																							

***Sample timeline of project activities.***

### Appendix

The **Appendix** includes the following: (a) list of references/bibliography; (b) **optional** letters of support from your research partners (e.g., schools, clinics, community organizations); (c) a brief CV (4 pages each) for each project investigator; (d) study measures/outcomes, or weblinks to those.

## **Proposal Evaluation Criteria**

Proposals will be evaluated on the extent to which each of the sections: Abstract, Specific Aims, Research Methods, Budget/Personnel/Timeline meets or exceeds the criteria outlined in this proposal. Reviewers will assign a score to each section along with an overall quality score for the application. The rating scale is as follows: 1 = fair, 2 = good, 3 = very good, 4 = excellent, 5 = outstanding. Reviewers will be asked to score each application against an ideal, rather than evaluating applications against others that were submitted.

- **Specific Aims.** Do applicants make a clear case for the project, demonstrating its significance, the gap in knowledge to be addressed and the critical need for the study, along with its impact? Do applicants clearly describe the goals, objectives, and specific aims of the project?
- **Research Methods.** Do applicants make a clear case for the research methods selected, demonstrating that those methods are a best fit to address the specific aims of the study? Do applicants provide a clear and detailed description of the research methods designed to meet the study's specific aims?
- **Budget/Resources.** Do applicants provide an adequate budget to support the proposed project activities? Does the commitment of key personnel show support for the implementation and success of the project?
- **Personnel and Timeline.** Do key personnel possess the training and experience and will they commit sufficient time to implement the proposed research? Did investigators identify a specific external grant competition to which they plan to apply (name the agency and competition)?

## **Annual and Final Reports and Communication**

Investigators will submit an annual report (for multi-year projects) and final brief report for the project due on June 30 each year.

We intend to publicize the work of faculty who are funded by DIF grants on the SoE website. DIF awardees will be expected to meet with and communicate with the donor as part of stewardship efforts facilitated by Patty O'Neill's office.

**Note.** The format for this application was developed from two sources: (1) The University of Connecticut's Institute for Collaboration on Health, Intervention, and Policy (InChip) Scientific Sales pitch webinar (2 December 2020), and (2) S., Michelle. (2015). *NIH Grant Applications: The Anatomy of a Specific Aims Page.* <https://www.biosciencewriters.com/NIH-Grant-Applications-The-Anatomy-of-a-Specific-Aims-Page.aspx>