**U.S. Department of Education**
**Washington, D.C. 20202-5335**

# APPLICATION FOR GRANTS UNDER THE

**FY 2022 Javits Application Package**

**CFDA # 84.206A**

**PR/Award # S206A220015**

**Gramts.gov Tracking#: GRANT13592719**

OMB No. 1894-0006, Expiration Date: 02/29/2024

Closing Date: Apr 11, 2022

# **Table of Contents**



This application was generated using the PDF functionality. The PDF functionality automatically numbers the pages in this application. Some pages/sections of this application may contain 2 sets of page numbers, one set created by the applicant and the other set created by e-Application's PDF functionality. Page numbers created by the e-Application PDF functionality will be preceded by the letter e (for example, e1, e2, e3, etc.).

## Application for Federal Assistance SF-424

* 1. Type of Submission:
- [ ] Preapplication
- [x] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [x] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received: 04/08/2022

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier: NA

**State Use Only:**

6. Date Received by State:

7. State Application Identifier:

**8. APPLICANT INFORMATION:**

* a. Legal Name: Purdue University

* b. Employer/Taxpayer Identification Number (EIN/TIN): [redacted]

* c. UEI: [redacted]

**d. Address:**

* Street1: 2550 Northwestern Ave
Street2: Suite 1900
* City: West Lafayette
County/Parish:
* State: IN: Indiana
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 47906-1332

**e. Organizational Unit:**

Department Name:

Division Name:

**f. Name and contact information of person to be contacted on matters involving this application:**

Prefix:
* First Name: Jason
Middle Name:
* Last Name: Spall
Suffix:

Title: Assistant Director, Post-Award

Organizational Affiliation: Purdue University

* Telephone Number: [redacted]
Fax Number: [redacted]

* Email: [redacted]

## Application for Federal Assistance SF-424

*** 9. Type of Applicant 1: Select Applicant Type:**

H: Public/State Controlled Institution of Higher Education

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

Department of Education

**11. Catalog of Federal Domestic Assistance Number:**

84.206

CFDA Title:

Javits Gifted and Talented Students Education

*** 12. Funding Opportunity Number:**

ED-GRANTS-021622-001

* Title:

Office of Elementary and Secondary Education (OESE): Well-Rounded Education Programs: Jacob K. Javits Gifted and Talented Students Education (Javits) Program, Assistance Listing Number 84.206A

**13. Competition Identification Number:**

84-206A2022-2

Title:

FY 2022 Javits Competition

**14. Areas Affected by Project (Cities, Counties, States, etc.):**

1242-Additional areas affected by the proje | Add Attachment | Delete Attachment | View Attachment

*** 15. Descriptive Title of Applicant's Project:**

Having Opportunities Promotes Excellence: Developing Scholar Identities Among Underserved Youth with Gifts and Talents

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

## Application for Federal Assistance SF-424

**16. Congressional Districts Of:**

* a. Applicant: IN-004 * b. Program/Project: IN-004

Attach an additional list of Program/Project Congressional Districts if needed.

1243-Additional areas affected by the proj | Add Attachment | Delete Attachment | View Attachment

**17. Proposed Project:**

* a. Start Date: 10/01/2022 * b. End Date: 09/30/2027

**18. Estimated Funding ($):**

| | |
|---|---|
| * a. Federal | [redacted] |
| * b. Applicant | |
| * c. State | |
| * d. Local | |
| * e. Other | |
| * f. Program Income | |
| * g. TOTAL | |

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .

☒ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☐ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment | Delete Attachment | View Attachment

**21. *By signing this application, I certify (1) to the statements contained in the list of certifications** and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

**Authorized Representative:**

Prefix: * First Name: Jenny

Middle Name:

* Last Name: Siemers

Suffix:

* Title: Assistant Director, Pre-Award

* Telephone Number: [redacted] Fax Number: [redacted]

* Email: [redacted]

* Signature of Authorized Representative: Jenny Siemers * Date Signed: 04/08/2022



Tracking Number:GRANT13592719 Funding Opportunity Number:ED-GRANTS-021622-001 Received Date:Apr 08, 2022 02:10:41 PM EDT

Additional areas affected by the project/Congressional Districts

NM-003

IL-001

SD-002

MI-005

TN-001

AZ-001

Additional areas affected by the project/Congressional Districts

NM-003

IL-001

SD-002

MI-005

TN-001

AZ-001

## NOTICE TO ALL APPLICANTS

The purpose of this enclosure is to inform you about a new provision in the Department of Education's General Education Provisions Act (GEPA) that applies to applicants for new grant awards under Department programs. This provision is Section 427 of GEPA, enacted as part of the Improving America's Schools Act of 1994 (Public Law (P.L.) 103-382).

### To Whom Does This Provision Apply?

Section 427 of GEPA affects applicants for new grant awards under this program. **ALL APPLICANTS FOR NEW AWARDS MUST INCLUDE INFORMATION IN THEIR APPLICATIONS TO ADDRESS THIS NEW PROVISION IN ORDER TO RECEIVE FUNDING UNDER THIS PROGRAM.**

(If this program is a State-formula grant program, a State needs to provide this description only for projects or activities that it carries out with funds reserved for State-level uses. In addition, local school districts or other eligible applicants that apply to the State for funding need to provide this description in their applications to the State for funding. The State would be responsible for ensuring that the school district or other local entity has submitted a sufficient section 427 statement as described below.)

### What Does This Provision Require?

Section 427 requires each applicant for funds (other than an individual person) to include in its application a description of the steps the applicant proposes to take to ensure equitable access to, and participation in, its Federally-assisted program for students, teachers, and other program beneficiaries with special needs. This provision allows applicants discretion in developing the required description. The statute highlights six types of barriers that can impede equitable access or participation: gender, race, national origin, color, disability, or age. Based on local circumstances, you should determine whether these or other barriers may prevent your students, teachers, etc. from such access or participation in, the Federally-funded project or activity. The description in your application of steps to be taken to overcome these barriers need not be lengthy; you may provide a clear and succinct description of how you plan to address those barriers that are applicable to your circumstances. In addition, the information may be provided in a single narrative, or, if appropriate, may be discussed in connection with related topics in the application.

Section 427 is not intended to duplicate the requirements of civil rights statutes, but rather to ensure that, in designing their projects, applicants for Federal funds address equity concerns that may affect the ability of certain potential beneficiaries to fully participate in the project and to achieve to high standards. Consistent with program requirements and its approved application, an applicant may use the Federal funds awarded to it to eliminate barriers it identifies.

### What are Examples of How an Applicant Might Satisfy the Requirement of This Provision?

The following examples may help illustrate how an applicant may comply with Section 427.

(1) An applicant that proposes to carry out an adult literacy project serving, among others, adults with limited English proficiency, might describe in its application how it intends to distribute a brochure about the proposed project to such potential participants in their native language.

(2) An applicant that proposes to develop instructional materials for classroom use might describe how it will make the materials available on audio tape or in braille for students who are blind.

(3) An applicant that proposes to carry out a model science program for secondary students and is concerned that girls may be less likely than boys to enroll in the course, might indicate how it intends to conduct "outreach" efforts to girls, to encourage their enrollment.

(4) An applicant that proposes a project to increase school safety might describe the special efforts it will take to address concern of lesbian, gay, bisexual, and transgender students, and efforts to reach out to and involve the families of LGBT students.

We recognize that many applicants may already be implementing effective steps to ensure equity of access and participation in their grant programs, and we appreciate your cooperation in responding to the requirements of this provision.

### Estimated Burden Statement for GEPA Requirements

According to the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless such collection displays a valid OMB control number. Public reporting burden for this collection of information is estimated to average 1.5 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. The obligation to respond to this collection is required to obtain or retain benefit (Public Law 103-382). Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, 400 Maryland Ave., SW, Washington, DC 20210-4537 or email ICDocketMgr@ed.gov and reference the OMB Control Number 1894-0005.

## Optional - You may attach 1 file to this page.

1235-GEPA.MG.dox.pdf | Add Attachment | Delete Attachment | View Attachment

## GEPA Statement

Purdue has a history of attracting diverse students, staff, and faculty. In 2022, Purdue student population represented all 50 states and nearly 130 foreign countries, with a 25% minoritized domestic student population. The university and all project personnel will ensure no potential participant or employee will be impeded from participation in this project due to race, color, language or national origin, disability, age, gender, sexual orientation, or parental status. Project personnel are committed to equitable hiring and recruiting practices. Further, we are committed to recruiting and preparing individuals with disabilities and/or individuals from groups that are underrepresented in the profession.

Potential applicants will be recruited from the following list of resources:

- Campus agencies including Purdue's Cultural and Resource Centers, including but not limited to the Black Cultural Center, Latino Cultural Center, the LGBTQ Center, and Native American Educational and Cultural Center.
- Recruitment also will include use of social media outlets (e.g., Twitter, Facebook, YouTube, websites).

Potential barriers and steps taken to overcome barriers:

- Recruitment materials will be translated into native languages, as needed.
- Information sessions will be held at various times to accommodate multiple schedules.

These guidelines will be closely followed to ensure equal access and treatment to individuals who are members of traditionally under-represented groups. See Purdue's non-discriminatory employment practices statement at (http://www.purdue.edu/purdue/ea_eou_statement.html).

## CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, ''Disclosure of Lobbying Activities,'' in accordance with its instructions.

(3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

Statement for Loan Guarantees and Loan Insurance

The undersigned states, to the best of his or her knowledge and belief, that:

If any funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this commitment providing for the United States to insure or guarantee a loan, the undersigned shall complete and submit Standard Form-LLL, ''Disclosure of Lobbying Activities,'' in accordance with its instructions. Submission of this statement is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required statement shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

| | |
|---|---|
| * APPLICANT'S ORGANIZATION | Purdue University |
| * PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE | |
| Prefix: | |
| * First Name: | Jenny |
| Middle Name: | |
| * Last Name: | Siemers |
| Suffix: | |
| * Title: | Assistant Director, Pre-Award |
| * SIGNATURE: | Jenny Siemers |
| * DATE: | 04/08/2022 |

**U.S. Department of Education Supplemental Information for the SF-424**
**Application for Federal Assistance**

**1. Project Director:**

| Prefix: | * First Name: | Middle Name: | * Last Name: | Suffix: |
|---|---|---|---|---|
| Prof. | Marcia | | Gentry | |

Project Director Level of Effort (percentage of time devoted to grant): 30

Address:

* Street1: 100 North University
Street2: Beering Hall
* City: West Lafayette
County: Tippecanoe
* State: IN: Indiana
* Zip Code: 47907-2098
Country: USA: UNITED STATES

* Phone Number (give area code) [redacted]
Fax Number (give area code) [redacted]

* Email Address: [redacted]

Alternate Email Address:

**2. New Potential Grantee or Novice Applicant:**

a. Are you either a new potential grantee or novice applicant as defined in the program competition's notice inviting applications (NIA)?

☐ Yes ☒ No

**3. Qualified Opportunity Zones:**

If the NIA includes a Qualified Opportunity Zones (QOZ) Priority in which you propose to either provide services in QOZ(s) or are in a QOZ, provide the QOZ census tract number(s) below:

| | | |
|---|---|---|
| 35045000401 | 26033970200 | |
| | | |
| | | |
| | | |

**4. Human Subjects Research:**

a. Are any research activities involving human subjects planned at any time during the proposed Project Period?

☒ Yes ☐ No

b. Are ALL the research activities proposed designated to be exempt from the regulations?

☐ Yes Provide Exemption(s) #(s): ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8

☒ No Provide Assurance #(s), if available: 00001548

c. If applicable, please attach your "Exempt Research" or "Nonexempt Research" narrative to this form as indicated in the definitions page in the attached instructions.

1236-2022.javits.irb.verbiage.pdf | Add Attachment | Delete Attachment | View Attachment

## HOPE+SIM Javits Human Subjects IRB

### B. Nonexempt Research Narrative.

**(1)** *Human Subjects Involvement and Characteristics: Provide a detailed description of the proposed involvement of human subjects. Describe the characteristics of the subject population, including their anticipated number, age range, and health status. Identify the criteria for inclusion or exclusion of any subpopulation. Explain the rationale for the involvement of special classes of subjects, such as children, children with disabilities, adults with disabilities, persons with mental disabilities, pregnant women, prisoners, institutionalized individuals, or others who are likely to be vulnerable.*

This project involves aims to provide Purdue's Gifted Education Research and Resource Institute (GER$^2$I) Summer Residential programming (2-weeks each summer) to gifted and talented students from low-income families who are Black, Diné, Lakota, Latino, and Ojibwe, some with disabilities, and all typically woefully underrepresented in gifted education programming opportunities. In addition, the Scholar Identity Model will be integrated into the Summer Residential affective and academic programs (for all participants, not just those in this project). Follow-up support will be provided to participants during the academic year via an online learning community, local leadership teams, and through onsite and online visitations by project team members. Approximately 420 students in grades 5 through 12 from partner sites, namely, (1) Navajo Preparatory Academy in Farmington, New Mexico serving Diné youth; (2) McLaughlin School District, South Dakota, on the Standing Rock Reservation serving Lakota youth; (3) JKL Bahweting Anishnabe Academy, Sault Ste. Marie, Michigan, serving Ojibwe youth; (4) Murray Language Academy, Chicago Public Schools, serving Black youth; and (5) Kipp Academy Nashville, Tennessee, serving Black and Latino youth will participate over the course of this 5-year project.

Since GER$^2$I Summer Residential is an established program for youth with gifts and talents, it has qualification criteria for entrance. Students qualify for GER$^2$I Summer Residential Camp by submitting an essay or multimedia presentation and evidence of talent in their area of study. This evidence can include a recommendation a teacher or mentor; awards, certificates, or service in the talent area; GPA in talent area above 3.5; achievement or aptitude test score in the top quartile using local norms; and/or a locally-normed *HOPE Scale* (Gentry et al., 2014) score in the top quartile. Finally, we adjust criteria as needed to qualify 2e students using Baum's (2017) strength-based framework. We have successfully used multiple indicators, multiple pathways, and local norms for admission to diversify and include more students from low-income families for 15 years.

This study involves youth, as we seek to understand how having access to a high quality Summer Residential experience with integrated and academic year supports affects students' achievement, scholar identity and aspirations. We will work with the office of disability services (as we do any time we have students at GERI Summer Residential programs with special needs) to provide the appropriate accommodations to ensure success for students with disabilities.

**(2)** *Sources of Materials: Identify the sources of research material obtained from individually identifiable living human subjects in the form of specimens, records, or data. Indicate whether*

*the material or data will be obtained specifically for research purposes or whether use will be made of existing specimens, records, or data.*

Because it is a camp for gifted, creative, and talented youth with challenging, fast-paced curricula, entrance to GER$^2$I Summer Residential requires that all students submit their grade transcripts and most recent standardized test scores and a *HOPE Scale* Score. In addition they all complete pre-camp and post-camp surveys that include items addressing components of the Scholar Identity Model (SIM), among other items helpful to creating an appropriate camp experience and conducting a rich evaluation of students' experiences. Thus, we aim to use this information together with an additional administration of the SIM in the fall following Summer Residential and collection of transcripts and test scores from participants the spring following their Summer Residential experience.

(3) *Recruitment and Informed Consent: Describe plans for the recruitment of subjects and the consent procedures to be followed. Include the circumstances under which consent will be sought and obtained, who will seek it, the nature of the information to be provided to prospective subjects, and the method of documenting consent. State if the Institutional Review Board (IRB) has authorized a modification or waiver of the elements of consent or the requirement for documentation of consent.*

We will work with our contact persons as they identify students qualified to attend (Summer Residential) using the qualifications described above. We have had the partner schools since 20110, so quality procedures are in place, and the schools always identify more students than can fund with scholarships. We will then randomly select half of the qualified students in each site to attend Summer Residential in Year 1, with the other half attending in year 2. We will repeat this procedure in years 2-3 and years 4-5. We will invite all students who are qualified to attend from each site to participate in the study with a on-site visit, via skype, or via the contact persons. We will make it clear on the consent/assent forms and verbally that participating in camp is not contingent in assenting/consenting to participate in the study. On the consent and assent forms we will describe the study, its purpose, the measures, and include standard language about being able to stop at any time without penalty; we will also offer incentives for those who do assent/consent for providing answers to the post camp administration of the SIM survey as well as for providing answers to this same survey again in the spring when they also provide transcripts and test scores. This incentive will be a gift card. Consent/assent forms will be collected and scanned, stored electronically (password protected) and in a locked file cabinet in the PI's office. No waivers for consent have been submitted or approved by the Institutional Review Board.

**(4)** *Potential Risks: Describe potential risks (physical, psychological, social, legal, or other) and assess their likelihood and seriousness. Where appropriate, describe alternative treatments and procedures that might be advantageous to the subjects.*

The risks to participants are low and not outside of the everyday risks experienced in routine classroom settings. There is potential risk of breech of confidentiality in any research study and we will take steps to minimize this possibility.

If at any time the questions on the survey make the students uncomfortable, they can stop

without penalty or they can skip questions they don't want to answer.

**(5)** *Protection Against Risk: Describe the procedures for protecting against or minimizing potential risks, including risks to confidentiality, and assess their likely effectiveness. Where appropriate, discuss provisions for ensuring necessary medical or professional intervention in the event of adverse effects to the subjects. Also, where appropriate, describe the provisions for monitoring the data collected to ensure the safety of the subjects.*

To protect against risks to confidentiality, we will ask subjects to choose their own pseudonym, which will become their Unique Identifier Code (UIC), which will be used to identify all their data. A code book will be stored separately from the data to ensure confidentiality indefinitely in the PI's office. Physical records including transcripts, survey results, and test scores will be stored in a locked file cabinet or if electronic on a password protected hard drive with names replaced with UICs. No identifying information will be entered into the electronic files. Video and audio recordings will be destroyed 7 years after the conclusion of the study unless participants have provided written permission for recordings to be used for conference presentation and/or training purposes.

In the unlikely event of a participant requiring medical or psychological care while on Purdue's campus attending Summer Residential, we have protocols in place as part of the camp including use of our Campus medical facility and urgent care if it is after hours. Our camp director is a certified school counselor who handles students who may experience psychological distress during Summer Residential, in general.

**(6)** *Importance of the Knowledge to be Gained: Discuss the importance of the knowledge gained or to be gained as a result of the proposed research. Discuss why the risks to subjects are reasonable in relation to the anticipated benefits to subjects and in relation to the importance of the knowledge that may reasonably be expected to result.*

Risks to subjects in this research are minimal, and the benefits include personal benefits from attending Summer Residential, learning about SIM constructs (i.e., self-efficacy; future orientation; willingness to make sacrifices; internal locus of control; self-awareness; value achievement more than affiliation; academic self-confidence; race consciousness; and gender identity) both at camp, using online learning comunity, and back in their home schools might benefit the students in the form of increased self-understanding, increased motivation, goal setting, increased academic achievement, and increased graduation and college attendance rates (as shown in previous evaluation studies). Students may apply what they learn to improve their successes academically and affectively as well as to future post-secondary plans. Additionally, the knowledge gained by this project has the potential to provide a model for other educators concerning how to help identify, develop, and nurture talents among traditionally underserved populations as well as offering models (Summer Residential & Scholar Identity) for use with similar students and for use with general education students as well.

**(7)** *Collaborating Site(s): If research involving human subjects will take place at collaborating site(s) or other performance site(s), name the sites and briefly describe their involvement or role in the research.*

Vanderbilt University, Co-PI, Prof. Gilman W. Whiting will be developing the SIM training for leadership teams from each of our partner sites, for GERI staff, teachers, and counselors at Purdue, and creating the interactive SIM portal and online community for use by participants and their educators.

Additionally, each site named above will work with us to identify and send students to Summer Residential, to identify and send leadership team members to learn about and contribute to the SIM development, and finally to work with the project team to support the participants during the academic school year.

Finally, I should note that Project HOPE+ has current IRB approval and can be amended as this project is an extension of this work. Protocol # 1202011834.

## Abstract

An abstract is to be submitted in accordance with the following:

1. Abstract Requirements

- Abstracts must not exceed one page and should use language that will be understood by a range of audiences.
- Abstracts must include the project title, goals, and expected outcomes and contributions related to research, policy, and practice.
- Abstracts must include the population(s) to be served.
- Abstracts must include primary activities to be performed by the recipient.
- Abstracts must include subrecipient activities that are known or specified at the time of application submission.

For research applications, abstracts also include the following:

- Theoretical and conceptual background of the study (i.e., prior research that the investigation builds upon and that provides a compelling rationale for this study).
- Research issues, hypotheses and questions being addressed.
- Study design including a brief description of the sample including sample size, methods, principals, and dependent, independent, and control variables, as well as the approach to data analysis.

[Note: For a non-electronic submission, include the name and address of your organization and the name, phone number and e-mail address of the contact person for this project.]

---

## You may now Close the Form

**You have attached 1 file to this page, no more files may be added. To add a different file, you must first delete the existing file.**

* Attachment: 1241-abstract.2022.javits_JR.pdf | Add Attachment | Delete Attachment | View Attachment



Tracking Number:GRANT13592719 Funding Opportunity Number:ED-GRANTS-021622-001 Received Date:Apr 08, 2022 02:10:41 PM EDT

## ABSTRACT

### Having Opportunities Promotes Excellence:

### Developing Scholar Identities Among Underserved Youth with Gifts and Talents

Project HOPE+SIM extends Purdue's engagement work with economically-disadvantaged youth who are underidentified and underserved in gifted education programs. Namely, we will work with Diné, Lakota, Ojibwe students who come from rural reservations and with Black and Latino students who attend urban schools, including students from these groups who also have disabilities (twice exceptional). Specifically, we will implement Purdue/GER$^2$I's 2-week Summer Residential program for youth with gifts and talents adding the Scholar Identity Model (SIM) components to academic and affective experiences during summer with on-site follow up during the school year designed to help these students develop a Scholar Identity, and thus improve their confidence, abilities, performance in school, and post-secondary educational aspirations. Using a Community of Inquiry framework, an online learning community for involved educators and students will provide resources but focus on purposeful critical discourse and reflection opportunities. The project uses a randomized, delayed treatment, experimental design with replication to serve 140 students each in years 1, 3, and 5, 70 in treatment and 70 in control status, with control students receiving treatment in years 2, 4, and 6, for a total of 420 participants during this project. Academic measures include grades, *HOPE Scale scores,* standardized test scores, and affective measures including the *SIM Instrument*. Enduring outcomes include identification procedures, the findings of the experimental research, a website repository, and methods used in the project that can be used in other settings to benefit students across the country underserved in gifted education. All materials developed as part of this program will be licensed and made available to other users through a Creative Common License. In summary, our vision is that HOPE+SIM enhances success for these students and provides a model for others working with underserved populations.

## Project Narrative File(s)

*** Mandatory Project Narrative File Filename:** 1237-HOPE+SIM.Javits4.7..2022.final.with.corrections.m

Add Mandatory Project Narrative File | Delete Mandatory Project Narrative File | View Mandatory Project Narrative File

To add more Project Narrative File attachments, please use the attachment buttons below.

Add Optional Project Narrative File | Delete Optional Project Narrative File | View Optional Project Narrative File

**Having Opportunities Promotes Excellence:**

**Developing Scholar Identities Among Underserved Youth with Gifts and Talents**

PI: Marcia Gentry [redacted]

Co-PIs: Jennifer Richardson, Yukiko Maeda, Kristen Seward, Nielsen Pereira (Purdue)

Gilman W. Whiting (Vanderbilt)

TABLE OF CONTENTS

## (a) NEED FOR THE PROJECT

As evidenced by this call, our recent comprehensive report on underrepresentation (*Access Denied*, Gentry et al., 2019), and countless other sources, longstanding and pervasive inequities in gifted education threaten to end it for all students despite positive outcomes for those who are privileged enough to engage in its services (see Plucker & Callahan, 2020 for a review of evidence). Recently, Gentry et al. (2019) found only two-thirds of US students had access to be identified for gifted programs. Further, they reported among schools that identified gifted students, Title I schools identified just more than half the percentage of students with gifts and talents compared to non-Title I schools. Similar under-identification occurs for Black, Latino, and Native American youth and youth from low-income families. Even worse students with disabilities are 80% less likely to be identified. One cause of underrepresentation is the widespread, continued use of standardized tests that yield disparate results for these groups (Gentry et al., 2021). Further, students in rural and urban locales were less likely than their suburban and town counterparts to be identified. *Having Opportunities Promotes Excellence* (HOPE+) has been in place at Purdue University, successfully identifying and serving underrepresented middle- and high-school students in its programs for gifted and talented middle- and high-school youth since 2007. The Scholar Identity Model™ (SIM; Whiting, 2006b, 2014) has helped underserved adolescents see themselves as successful scholars for over two decades. This project, HOPE+SIM, combines these two models with summer and school year services, with the goals of helping students develop their knowledge, confidence, and scholar identities. Identification procedures and programming developed and implemented in this project will be made available to schools for use with all students and with the express purpose of closing the excellence and opportunity gaps, which aligns with priorities to shrink longstanding gaps and inequities in education (DOE, 2021).

## (b) QUALITY OF THE PROJECT DESIGN

**Project Design Overview.** Project HOPE+SIM extends Purdue's engagement work with economically disadvantaged youth who are underidentified and underserved in gifted education programs (Gentry 2007; 2001-present). Namely, we will work with Diné, Lakota, Ojibwe students who come from rural reservations and with Black and Latino students who attend urban schools, including students from these groups who also have disabilities, also known as twice exceptional (2e). These students face a triple threat of poverty, coming from marginalized cultures, and living in rural or urban areas where school quality and gifted programming are lacking. Almost no research has been conducted on gifted Native American youth, and even less research on these students has been funded. Further, due their small numbers (about 1% of U.S. students) they are frequently eliminated from gifted education research. Moreover, despite funding and efforts to address the serious underrepresentation of Black and Latino youth in gifted programming, the problem is persistent and pervasive with three Black and two Latino youth missing from gifted programs for every one identified (Gentry et al., 2019).

This innovative project will implement programming supported by promising evidence *and* develop new information concerning summer residential enrichment by adding a Scholar Identity component during and after the summer program. This will improve participants' confidence, abilities, and performance in school, and develop their post-secondary educational aspirations and pathways. HOPE+SIM combines GER$^2$I Summer Residential treatment, specifically Project HOPE+ (Gentry, 2011-present), which serves low-income youth in Summer Residential programs for gifted, creative, and talented youth, with the SIM to intervene in the academic and affective lives of ***rural, Diné, Lakota, Ojibwe youth*** and of ***urban, Black and Latino youth from poverty including 2e youth***, to help them actualize their potentials (hereafter referred to **HOPE+SIM Scholars**). Our five-pronged approach involves: (1) Implementing Purdue's Gifted

Education Research and Resource Institute's (GER$^2$I) Summer Residential Program for gifted, creative, and talented youth with on-site application of academic and affective curricula (SIM). (2) Working with school personnel on infusing components of the Scholar Identity Model™ (SIM, Whiting, 2014) into the school day and on recognizing, identifying, and developing gifts and talents among underserved youth with project team members conducting on-site follow-up (school year) services for educators and students. (3) Developing an active and engaging online community (of inquiry) for staff and students designed to help these students develop a Scholar Identity. (4) Using the *HOPE Scale* (Gentry et al., 2015) and multiple pathways to assist partner schools with identification, including providing training about identifying HOPE+SIM Scholars. (5) We will provide academic and affective curricula and support for implementation with **all youth** to be shared on a publicly accessible space for others who want to implement our curricula in their schools. As such, this project meets the **absolute priority** of this call: *Identification of, and Provision of Services to, Gifted and Talented Students Who May Not Be Identified through Traditional Assessment Methods*. It also addresses **Competitive Preference Priorities: CP1:** *Training Personnel in the Identification and Education of Gifted and Talented Students Who are Children with Disabilities,* by working with partner sites on effective identification of underserved youth, including those who are 2e; **CP2:** *Identification of, and Provision of Services to, Gifted and Talented Students Who are Children with Disabilities*, by including and working with 2e youth throughout the project; and **CP3:** *Promoting Equity in Student Access to Educational Resources and Opportunities* by working with schools to implement enrichment and affective curricula based on the HOPE+SIM tenant: Having Opportunities Promotes Excellence.

**Treatment, Part I, HOPE+ GER$^2$I Summer Residential Program.** GER$^2$I at Purdue University hosts the longest running university summer residential program for gifted, creative, and talented youth in the United States, now in its 45$^{th}$ year. Approximately 400 5$^{th}$ through 12$^{th}$

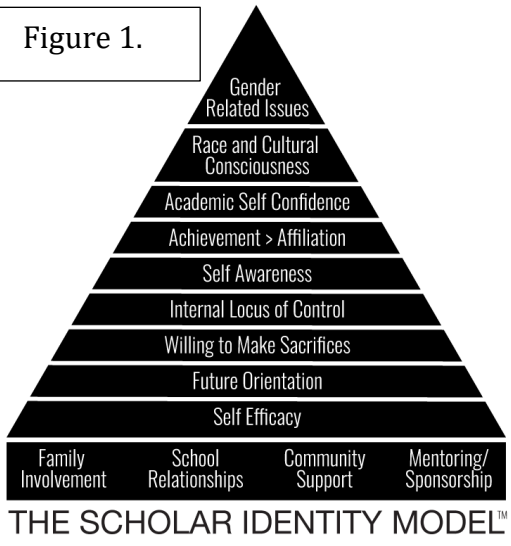
grade students from around the world and across the United States attend for two to four weeks. Students take challenging enrichment classes taught by experts, engage in social activities, go on field trips, and participate in an affective curriculum, while living on campus. Detailed information regarding GER$^2$I Summer Residential can be found at https://www.purdue.edu/geri .

Approximately one-third of students who attend GER$^2$I Summer Residential each year come from low-income families and attend with scholarships, including 40-50 Black and Latino youth and 40 to 50 Native American youth, and 5% with disabilities/2e (HOPE+SIM Scholars). We have experience and expertise working with these youth as well as strong partnerships with communities who will engage in this project. We recognize that Black, Latino, Native American and 2e students are some of the most marginalized youth in the country, and beyond race, those who live on remote reservations or in poorly funded urban areas face added challenges of poverty, poor school funding, isolation, segregation, and generational trauma (Gentry & Fugate, 2012; Nelson-Barber & Trumbull, 2015). Our work with these youth over the past 12 summers has enriched them (e.g., Hodges et al., 2017; Jen et al., 2017; Wu & Gentry, 2014), camp staff, and other participants. We will work with partner schools to identify students for participation and to develop SIM-integrated services. Students will receive GER$^2$I Summer Residential program and SIM (i.e., HOPE+SIM) services using a randomized, delayed treatment design. HOPE+SIM Scholars attending GER$^2$I programs will receive SIM services regardless of whether they consent to participate in the research.

**Treatment Part II, SIM Intervention.** How students view themselves as learners is important to consider when trying to promote their achievement and confidence in school. It is clear students who lack confidence in school become unmotivated and unengaged, and they find their identities in other areas, such as sports, entertainment, or social media/gaming (Flennagh, 2017; Barton & Cooley, 2009; Roderick, 2003; Whiting, 2006a). Students with an under-

developed sense of self-efficacy are more likely to be at risk for poor achievement (Bandura, 1977; Ford, 1998) and less likely to be resilient–to persist in school and be high achievers; thus, their being identified as gifted decreases considerably (Ford et el., 2008; Jackson & Moore, 2006). These unmotivated, underachieving, and unidentified students are disproportionately from low-income families (Wyner et al., 2009), are 2e (Baum et al, 2017); are Black, Latino, (Grantham, 2004; Sewell & Goings, 2020; Whiting, 2006b) or Native American (Gentry et al., 2014). Thus, although educators are rightfully concerned with the most effective ways to identify giftedness in students and ways to promote higher achievement and motivation, the urgency seems most apparent for these underserved students (Wyner et al., 2009), and those from urban (Kurt & Chenault, 2017) and rural areas (Haney, 2013). Whiting (2006b) developed and successfully applied the SIM to young, culturally diverse men, then he and others expanded its application to underserved youth in general (e.g., Collins, 2018; Neal, 2015; Whiting, 2014). *Whiting defines scholar identity as students viewing themselves as academicians, as studious, as competent and capable, and intelligent or talented in school settings*. Through role models and expert facilitation, young, diverse students develop *self-efficacy* (Bandura, 1977; Zimmerman, 1995); *future orientation* (Eccles & Wigfield, 2002; Grantham, 2004); *willingness to make sacrifices* (Dweck, 2000; Maehr,1984); *internal locus of control* (Rotter, 1966); *self-awareness* (Cooley & Ayres, 1988); *value for achievement more than affiliation* (McClelland, 1961); *academic self-confidence* (Hrabowski et al., 1998), *race consciousness* (Bobo, 1988; Brown, 1931; Cross, 1995); and *gender identity* (Majors & Billson, 1993; Whiting & Lewis, 2008). SIM includes four

Figure 1.



pillars: family, school, community, and mentoring, which work together to youth.

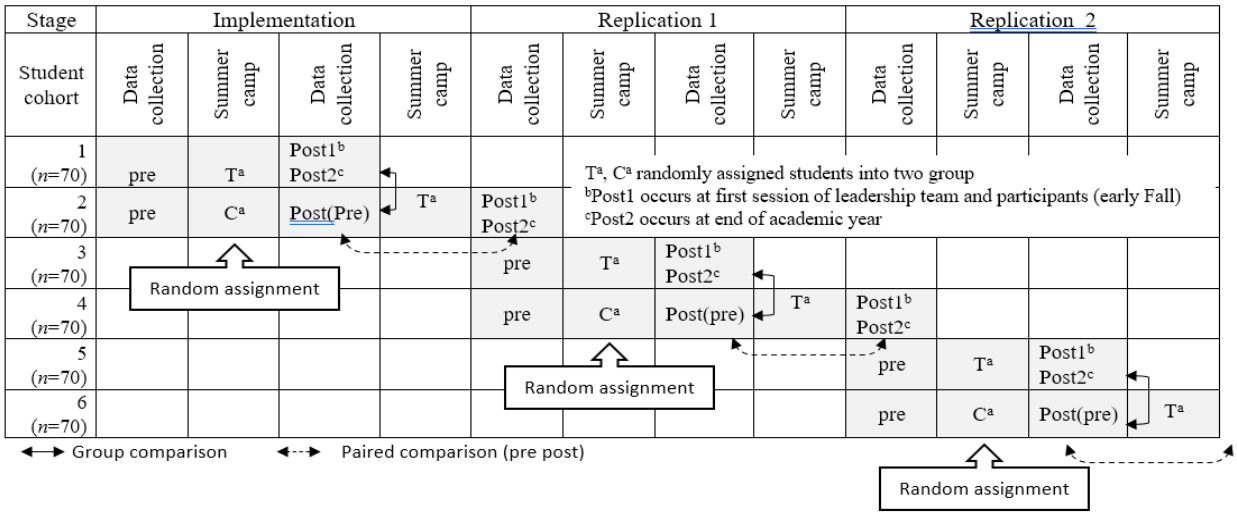
The SIM will be used with the HOPE+SIM Scholars in this project. First, a leadership team, consisting of a teacher, school counselor, social worker, and other professionals, from each partner site will a) receive training on leading and applying the model with these youth; b) work with the project team to identify culturally relevant materials to use with SIM; and c) provide input on the content and design of the online learning community (of inquiry). This work will begin with a Vanderbilt University SIM Symposium in the first year and continue with on-site and virtual professional development, partnership, and implementation. Second, SIM will be infused into Summer Residential course and counseling experiences for all students. Third, an online learning community incorporating evidence-based practices for design (see Community of Inquiry, design principles p. 13) will be developed and made available post camp to participants, their educators, and the leadership team members(Garrison et al, 2000). The online Community of Inquiry (CoI) will be two tiered with students comprising one part and educators and leaders making up the second part which includes training to discuss effective practices, resources, and strategies. Finally, project team members will conduct on-site work with partners and meet with students and leadership team members to learn from and apply feedback to the SIM integration.

**Treatment and Control, Replication, and Delayed Treatment Design.** Because we want to provide services to all participating students and implement a strong experimental design, we propose using a delayed treatment design that we replicate over the course of the 5-year project. This will enable students in control status to receive treatment. Specifically, we will use the first year to work with our sites, develop SIM training for GER$^2$I staff and for leadership teams at the participating sites, and obtain IRB approval from Purdue, Vanderbilt, and the partner sites. In the spring of Year 1, we will work with the on-site leadership teams to help them identify potential participants then, randomly select half of the qualified students for attendance in the summer of

2023, with the unselected half remaining in control status until summer of 2024, when they begin treatment. We will repeat this procedure for 2025 and 2026, and again in 2027 and using GER$^2$I scholarships in 2028 to provide services to last group control students after the grant ends. Each of our partners has more qualified students there are scholarships, a condition that supports delayed treatment. Control students not selected to attend Year 1, will attend Year 2 and enter treatment; we will repeat this procedure in Years 3 and 4; and again, in Year 5 (funding ends) and Year 6 (with GER$^2$I paying scholarships). Figure 2, below, details design, replication, and data collection occasions. After consent/assent we will work with onsite leadership to collect these student data. Specifically, each set of treatment and control students will provide transcripts, standardized test scores, *HOPE Scale* Scores, and complete a Pre SIM instrument prior to Summer Residential. Treatment students will complete the SIM instrument in the fall following camp (Post 1) and at the end of the school year (Post 2), providing three measurement occasions with which to assess effects from treatment integrated into the summer programming and after a year in school. This will give us three sets of controlled data, while also providing treatment to all students in the study. At each stage of the project (Implementation, Replication 1 & Replication 2 – cross validation with a new sample) two research designs will be spontaneously implemented to examine a treatment effect: (a) an experimental design with two randomly assigned groups ($n$=140) to examine group differences, and (b) a quasi-experimental design with three measurement occasions (pre, post, delayed post) for each cohort ($n$=70 x 3 cohorts) to explore students' variation in change. During the stage of Implementation, Post data (standardized test scores, GPA, and SIM instrument scores) will be analyzed with a type of generalized linear model depending on the distributional properties of the outcome. For example, the standardized test scores will be analyzed with an analysis of covariance (ANCOVA) with the pre-score data and student demographic information as covariates. The two sets of three time-

points data will be first analyzed with a mixed ANOVA to examine if there are any significant cohort effects between Cohort 1 (served as T in Year 1) and Cohort 2 (served as C in Year 1; T in Year 2). When no cohort effect is observed, data will be combined to increase statistical power to evaluate the change in outcomes across three occasions with a multilevel growth model to shed light on individual differences in treatment effects, specifically changes before and after the treatment and the growth/persistence of the treatment effect. Results will be integrated to understand the common treatment effect and variation in its effect among students. We will repeat this process twice to increase the statistical conclusion validity.

Figure 2.




## Literature Review and Background

**Summer Enrichment Programming.** Researchers have documented the effectiveness of summer enrichment programs (see Robinson et al., 2007, for a review). In general, students experience short- and long-term benefits from enrichment programs focused on advanced learning. Specifically, students who participated in university-based summer residential programs experienced positive peer relationships (Matthews & Mellom, 2012); gained content knowledge, self-confidence, and increased self-expectations after the programs (Ghahremani et al., 2022; Neber & Heller, 2002; Olszewski-Kubilius, 1998); reported increased self-concept

(Kolloff & Moore, 1989); improved study skills, academics, and motivation to enact behavioral changes (Matthews & Mellom, 2012); and took more advanced courses at an earlier age (Barnett & Druden, 1993). Underachieving gifted students demonstrated performance in their summer program equal to those who were high achieving in their home schools (Matthews & McBee, 2007). Students who participated in science-enrichment summer program reported increased confidence, belonging, and motivation (MacIver & MacIver, 2015; Stake & Mares, 2005). A controlled study focused on improving feelings of belonging for middle school students resulted in improved trust and belonging; increased attendance; and fewer disciplinary reports and failing grades for treatment students (Borman et al., 2019). Still, less research is available concerning the effects of enrichment programs on high-potential students from low-income families, but what does exist shows promising results. Projects like our own Project HOPE+ (Gentry, 2011-present); Upward Bound (Myers et al., 2004), *Project EXCITE* (Olszewski-Kubilius, 2006); Project Promise (Kaul et al., 2016); and Science Bound (Purdue, 2011) have shown positive effects for students. More research is needed to investigate comparative and long-term effects.

One problem for youth from low-income families is gaining access to such programs; however, when they do, the outcomes of their participation are equal to or more positive than those of their peers from higher income families. Our own research has shown the merits and benefits of GER$^2$I enrichment camps for students from low-income and culturally and linguistically diverse families descriptively (Miller & Gentry, 2010), comparatively (Wu & Gentry, 2014), and qualitatively (Jen, Wu, & Gentry, 2016; Pereira & Gentry, 2013). Recently, in a controlled study of more than 300 gifted students from low-income families who attended, Hodges et al. (2017) found sustained positive effects on students' state standard achievement scores in math ($\beta$ = 11.370, *SE* = 3.846) and Language Arts ($\beta$ = 8.294, *SE* = 3.874) when compared to similar youth who did not attend GER$^2$I youth programs. Additional research has

shown the positive effects of GER$^2$I Summer Residential experiences on Native American youth who explained that the experience was life changing, increasing their confidence, and affecting their future plans (Jen et al., 2014; Jen, Moon et al., 2016; Jen, Wu et al., 2016).

**Challenges Faced by Underserved Youth.** Nationally, students from low-income families; Black, Latino, and Native American families, and youth with disabilities are underidentified, underrepresented, and underserved in gifted and talented programs (Bernal, 2007; Gentry et al., 2019; Wyner et al. 2009). Despite attempts to develop alternative identification procedures, the problem remains severe and pervasive (Borland, 2008; Ford et al., 2008; Gentry et al., 2019; Wyner et al., 2009). High achieving youth from low-income families are less likely than their peers to persist as high achievers, improve in achievement, graduate from high school, attend college, earn a degree, or achieve at the highest levels (Wyner et al., 2009). Excellence gaps exist between higher-income, White, and Asian students, and their lower income, African American, Latino, (Plucker et al., 2010) and Native American peers (Wu, 2015). Locale also negatively affects access to gifted education programming (Haney, 2013), with fewer students identified in rural and urban areas (Gentry et al., 2019). Further exacerbating the problem are district personnel improperly implementing assessments and identification systems (Gentry et al., 2021; McBee et al., 2014), failing to assess if proportional representation occurs, and unnecessarily limiting numbers of students identified and served in gifted programs (Peters & Engerrand, 2016; Peters et al., 2019). This results in systematic exclusion from gifted programming of students who come from poverty; Black, Latino, and Native Families; urban and rural areas; or who have disabilities. Families may not have the means to send children to summer programs for gifted students or may not know such camps exist. These students need access to enriched programs; to teachers with skills in recognizing and developing their strengths; and to opportunities for academic success. Providing HOPE+SIM is a step in the right direction.

Native American students comprise about 1% of school children nationally (Gentry et al., 2019). This small number coupled with the diversity of 566 different tribes across the country results in them being excluded from research, calls for research, and from funding in general. In the past 30 years, scant research has been conducted concerning the discovery and development of talent among these populations (Gentry et al., 2014; Wu, 2015). What exists typically generalizes all Native Americans as one group, relhying on stereotypes (Gentry & Fugate, 2012) and defict viewpoint, focusing on poverty, learning deficiencies, violence, and substance abuse (Gentry & Fugate, 2012). Project HOPE+ (2011-present) is unique in the country, providing 500 scholarships to date to Diné, Lakota, and Ojibwe youth with financial need. Several studies revealed positive outcomes for the HOPE+ Scholars including positive academic, affective, social, and emotional experiences (Jen et al., 2016; Wu & Gentry, 2014). Native American youth remain underidentified in gifted programs (Gentry et al. 2021); more likely to live in poverty (DeVoe & Darling-Churchill, 2008), and less likely to graduate high school or attend college than their more affluent, non-Native peers (Aud et al., 2011; Faircloth & Tippeconnic, 2010).

Similarly, Black, Latino, and youth with disabilities are also severely underrepresented in gifted education (0.57, 0.67, and 0.20 respectively, Gentry et al., 2019), despite decades of research. These inequities have recently resulted in wholesale elimination of programs, even though when they are admitted, underserved youth benefit from gifted programs (e.g., Elsen-Rooney, 2020; Furfarro & Bazzaz, 2019; Shapiro, 2019). Rigid identification systems, systemic racism, inappropriate measures are but a few of the reasons such inequities persist (Ford et al. 2009; Gentry et al., 2021). Our work with partner schools and donors has enabled us to provide 360 scholarships to Black and Latino youth since 2011 and 10 scholarships for 2e students since 2017. Table 1 shows access, equity, and missingness by race from states where our partner schools are located (Navajo Prep serves AZ and NM).

Table 1. *Access, Equity, and Missingness in Project States by Targeted Race*

| State | Race | Access | RI | # Identified | # and % Missing |
|---|---|---|---|---|---|
| **AZ** | AIAN | 43% | 0.55 | 941 | 3,038 (76%) |
| **MI** | AIAN | 11% | 0.60 | 91 | 7091 (95%) |
| **NM** | AIAN | 89% | 0.59 | 1,015 | 3,109 (75%) |
| **SD** | AIAN | 21% | 0.26 | 56 | 1,287 (96%) |
| **IL** | Black | 19% | 0.70 | 6,121 | 48,248 (89%) |
| **TN** | Black | 45% | 0.46 | 1,305 | 11,453 (90%) |
| **TN** | Latino | 54% | 0.38 | 527 | 4,551 (90%) |

Data from *Access Denied* (Gentry et al., 2019); AIAN means American Indian Alaska Native

**Learning Communities.** The online learning community component will be based in the Community of Inquiry (CoI) model, a comprehensive framework that explains the elements of a successful online learning (Garrison et al., 2000). The CoI is a process model of online learning grounded in Dewey's work where community and practical inquiry are the core elements of the educational experiences, resulting in a collaborative-constructivist learning environment (Swan et al., 2009). The CoI framework assumes that a learning community or a community of inquiry depends largely on the three interdependent constructs of teaching (structure, leadership, and facilitation), cognitive (constructing meaning through sustained reflection and discourse), and social presence (social aspects of learning, feeling connected to others) for deep and meaningful learning. These constructs also align with the social and affective curriculum that will be the core content being offered through this project. Principles for developing a CoI include: (1) Plan for open communication and trust; (2) Plan for critical reflection and discourse; (3) Establish community and cohesion; (4) Establish purposeful inquiry; (5) Sustain respect and responsibility; (6) Sustain inquiry that moves to appropriate level of [critical thinking]; and (7) Ensure

assessment is congruent with intended processes and outcomes. Research on the CoI model has shown a significant relationship between each of the presences with students' satisfaction and perceived learning; social presence has also been shown to influence students' participation and motivation to participate (Richardson et al., 2017).

**Robust Research Plan.** HOPE+SIM combines GER$^2$I summer enrichment treatment with the SIM to intervene in the academic and affective lives of underserved youth, to help them actualize their potentials. Attendance at summer camps has positive outcomes for youth with gifts and talents and mentoring and follow-up services are best practices (Robinson et al., 2007). We have the infrastructure, experience, and expertise for delivering the HOPE+SIM with robust follow up support for participants. Once the SIM training follow-up materials and learning community are developed, and educators trained on their use, these resources can be used with all students. On-site leadership team members at partner schools will follow up with HOPE+SIM Scholars quarterly with formal activities developed in cooperation with the project team strengthening the work begun during the summer. Table 2 summarizes partners' demographics.

Table 2. *HOPE+SIM Schools Demographics*

| School | # students | Race | FARM |
|---|---|---|---|
| Navajo Prep HS, Farmington, NM | 264 | 100% Diné | 100% |
| McLaughlin HS, McLaughlin, SD | 169 | 96% Lakota | 100% |
| JKL Bahweting School MS, Sault Ste. Marie, MI | 630 | 65% Ojibwe | 58% |
| Murray Language Academy MS, Chicago, IL | 484 | 90% Black | 100% |
| Kipp Academy MS, Nashville, TN | 390 | 52% Black<br>44% Latino | 55% |

Note. FARM means eligible for Federal Meal Subsidy.

**(1) Goals, Objectives, and Outcomes, Clearly Specified and Measurable**.

To address the absolute priority of identification and service we will use the *HOPE Scale*

(Gentry et al., 2015) at all sites and document the processes each site uses to identify HOPE+SIM Scholars. GER$^2$I's admissions criteria is based on the importance of student-based, strength-based, identification from multiple sources. During the past 9 years 3 of 5 partner site have engaged in identification for GER$^2$I involving multiple pathways including use of the *HOPE Scale* (Gentry et al., 2015), which was developed by oversampling underserved youth. We will share these methods to inform others struggling with underrepresentation. We will also track the number of students at each site formally identified as gifted as the project progresses.

**GOAL 1:** To experimentally investigate the GER$^2$I Summer Residential + SIM experience enabling the use of robust methods to examine the treatment's effect on the confidence, abilities, school performance/achievement, and educational aspirations of rural, Diné, Lakota, and Ojibwe students; Urban Black and Latino students, and 2e students from low-income families.

**Objective 1A:** Randomly assign students from a pool of qualified students for scholarships to enable their attendance at camp (i.e., the treatment condition), with at least 140 of these students volunteering to participate in the study in each of the years 1-2, 3-4, and 5-6.

**Outcome 1A:** The sample contains students from low-income families from partner schools. Of those students qualified from each site, half will be assigned to treatment conditions, and half will serve as control then receive delayed treatment. **Measurable Benchmarks 1A:** Participation in the project by at least 140 students each in years 1-2, 3-4, and 5-6, 70 in treatment and 70 in control status, with control receiving treatment in years 2 and 4 (and 6 after project ends).

**GOAL 2: To integrate the SIM into GER$^2$I Summer Residential programming.**

**Objective 2A**: GER$^2$I counseling, teaching, and professional staff undergo SIM training to infuse its constructs into the affective curricula, coursework, and throughout the program.

**Outcome 2A**: Training equips staff members with knowledge and resources to implement SIM constructs in the affective curricula and the coursework. **Measurable Benchmarks 2A**:

Formal observations of Teachers and Counselors by GER$^2$I Staff and post training reflections show evidence of implementation of SIM constructs across the program (80% of coursework; 100% of counseling groups).

**GOAL 3: To develop and integrate SIM during the school year for students who have attended the GER$^2$I Summer Residential program.**

**Objective 3A**: Teams of educators from partner schools undergo SIM leadership team training (Vanderbilt Symposium), then form on-site leadership teams, and help develop culturally specific materials for each site and follow-up support for students.

**Outcome 3A**: All partner sites attend leadership training on SIM, support kids, contribute culturally specific resource ideas to SIM services. **Measurable Benchmarks 3A:** A minimum of 2 individuals from each school attend Vanderbilt University symposium and contribute culturally specific resources to integrate into the SIM learning community and follow-up activities.

**Objective 3B:** Online learning community to deliver SIM components and community development supports for ongoing activities are developed and used with/by participants.

**Outcome 3B:** Interactive SIM learning community is developed with activities and supports for participants including all developed and in-development SIM resources. Engagement is measured by tracking participation and postings by treatment participants. **Measurable Benchmarks 3B:** Beginning in Year 2, 80% of student participants engage in SIM learning community activities and 80% of leadership team members make content contributions.

**Objective 3C**: Materials are appropriate for use with all students upon project completion.

**Outcome 3C:** Learning community, SIM curricula, and summer program curricula materials are made available to treatment sites for use with all students upon study completion. This same website can be used by educators from around the country including those from public, BIE, private, not-for-profit schools, charter schools, etc. **Measurable Benchmarks 3C:** All sites use

SIM learning community resources and curricula with their students.

**GOAL 4: To increase student achievement.**

**Objective 4A**: Treatment students demonstrate greater achievement growth than do controls.

**Outcome 4A:** Achievement is assessed using repeated measures of extant, district-administered standardized achievement measures as well as with grade point averages (GPA; pre and post) from transcripts including overall GPA and subject area grades. **Measurable Benchmarks 4A:** Achievement scores (including subject and general) and GPA (including overall and subject area) indicate growth favoring treatment students.

**GOAL 5: To enhance students' scholar identities**

**Objective 5A:** Treatment students show better growth on constructs related to SIM compared to their control counterparts.

**Outcome 5A:** Growth is assessed at pre-camp, post-camp, and spring following camp occasions for treatment and control youth on the 9 SIM constructs (Figure 1). **Measurable Benchmarks 5A:** Analyses show pre, post, and delayed-post measures favor treatment over control with statistical and practical differences expected between groups on the constructs.

**GOAL 6: To provide a model for educators across the country to identify, academically enrich, and develop the scholar identities of underserved youth.**

**Objective 6A**: To create an effective plan for identifying and programming for underserved youth; then disseminating project findings via journal articles, practitioner articles, conference presentations, technical reports, and web-based information.

**Outcome 6A**: Educators have easy access to information about HOPE+SIM identification and programming models and project findings from a variety of sources. Implementing SIM for urban and rural youth, who are Black, Diné, Lakota, Latino, Ojibwe, and/or 2e provides others with a map for making similar adaptations to their populations. **Measurable Benchmarks 6A:**

Identification procedures, programming models, publications, web-based information, and technical reports exist and are readily available.

**(2) Appropriate design to successfully address the needs of the target population.**

The design delivers services, experimentally to all particiapants. GER$^2$I has engaged underserved youth in Summer Residential programming for 2 decades providing scholarships for about 1/3 of our students. We know, based on our experience and research that our summer program experience has important and positive outcomes for our youth with scholarships, and we are confident in our ability to serve and successfully integrate these students into Summer Residential. Our target populations, the HOPE+SIM Scholars, need opportunities and support to mitigate the barriers they face in education, and we have programs in place to provide them with both. Similarly, at Vanderbilt, Dr. Whiting has been working with underserved youth using the SIM since 2004, running successful SIM institutes for young men of color, and in 2012 expanding the model to other populations of underserved youth as he refined and developed this powerful intervention (Whiting, 2014; See News Vanderbilt, 2017a; 2017b for more).

We know from our work at Purdue, (1) our academic program works for students from low-income and culturally diverse families (Jen et al., 2017; Jen et al., 2016; Miller & Gentry, 2010; Pereira & Gentry, 2013; Wu & Gentry, 2014), resulting in improved academic achievement when compared with similar others (Hodges et al., 2017); and (2) our affective curriculum works with students from all backgrounds, resulting in students who attend the Summer Residential program forming close friendships and setting life changing goals (Jen et al., 2017; Jen et al., 2016). Similarly at Vanderbilt, Dr. Whiting's (2012) work with the SIM has shown that students from underrepresented groups: (1) show increased self-efficacy when facing academic challenges; (2) plan for successful futures; and (3) demonstrate healthier self-understanding.

***Identification.*** Students qualify for GER$^2$I Summer Residential Camp by submitting an essay

or multimedia presentation and evidence of talent in their area of study. This evidence can include a recommendation a teacher or mentor; awards, certificates, or service in the talent area; GPA in talent area above 3.5; achievement or aptitude test score in the top quartile using local norms; and/or a locally normed *HOPE Scale* score in the top quartile. Finally, we adjust criteria as needed to qualify 2e students using Baum's (2017) strength-based framework. We have successfully used multiple indicators, multiple pathways, and local norms for admission to diversify and include more students from low-income families for 15 years.

***Addressing the needs of the HOPE+SIM Scholars.*** Currently GER$^2$I staff and Summer Residential counselors and teachers engage in staff development modules (developed and validated in a previous Javits project) on the nature and needs of students with gifts and talents; working with and developing talents among underserved populations; and meeting their social, emotional, and affective needs. We work with personnel from our Native American, Black, and Latino Cultural centers and from the Disability Resource Center. Our camp staff routinely make site visits to our partner sites with goals of learning and understanding culture. To this expertise, we will add SIM training and refine our affective curricula. We celebrate the many different cultures of the students who attend GER$^2$I camp each summer, and our evaluations and research tell us the students feel welcomed, valued, and an important part of the camp, regardless of whether they receive scholarships, come from a reservation, or an urban area. We find no evaluation differences between students with or without scholarships on our academic and affective outcome variables (Gentry, 2011-present).

**(3) project is designed to build capacity and yield results that will extend beyond grant**

HOPE+SIM represents an exceptional approach to serving high-potential underserved students as it provides access to quality summer programming with gifted students from around the world. In this experimental study, three cohorts of underserved youth students will

experience Summer Residential Camp together with SIM—a powerful follow-up during the school year that has been successful with underserved populations. Results will change the lives of student participants and will provide a model and materials for replication by others seeking more just and equitable gifted program services and identification.

Moreover, this project will develop leadership-training materials, identify culturally specific materials to support SIM constructs, and provide a model for educators that can be used with ***all*** students. Developing this platform for wide dissemination will enable educators across the country to engage in the SIM as they support underserved youth in their schools – greatly expanding the reach of this project. Our commitment for continuation is evidenced by our prior work and infrastructure supporting this program as well as our commitment in year 6 to enable all students to receive treatment. Major strengths of this proposal are its experimental design and its focus on populations that rarely see attention in the gifted education literature (Gentry et al., 2019; Gentry et al., 2014)—an ideal match with the statutory requirements and priorities. In summary, HOPE+SIM meets the current priorities of the Javits program, and it poised to contribute meaningful and lasting results.

**(4) Project design reflects up-to-date knowledge from research and effective practice**

The project design integrates the most up-to-date knowledge with effective curricula and affective learning as described above in the literature review and as documented in the "evidence form." Because of prior and substantial evidence concerning summer youth programming, SIM outcomes, and identification/service of underserved populations, we are confident that this project will see important and impactful results with the 420 participating students it will serve directly as well as with those who benefit from its results.

**(5) Is supported by promising evidence.** (in addition, see evidence form**)**

In addition to the information and evidence of promising practices presented in the literature

review above, we know that during their time in the summer program our youth from low-income families develop confidence and achievement, they make friends, and they succeed academically alongside their non-low-income peers (Miller & Gentry, 2010: Wu & Gentry, 2014). To identify students who live in poverty as gifted, they must receive an enriched education and opportunities to demonstrate their abilities. They must have teachers who recognize their potential and who advocate for them. GER$^2$I programs helped improve HOPE+ Scholars' math and reading achievement when compared with similar others who did not attend camp (Hodges et al., 2017). Likewise, the SIM has provided the psycho/social support needed to help students be more successful. For example, when comparing graduation rates to like students in the same school district, students participating in The Scholar Identity Institute (*n*= 325) from 2004 to 2011 graduated at nearly twice the rate (49% vs. 90%) (Whiting, 2012). Combining these two services has the potential for synergistic effects and greater benefits to the students.

***(6) Performance feedback and continuous improvement are integral to HOPE+SIM***

Imbedded in this project are performance feedback loops and a continuous improvement evaluation plan. Having three cohorts and site visits each year enables all the stakeholders to work together to improve delivery of services; integrate appropriate cultural materials; improve trainings and the online learning community, and the project overall. Specifically, we will assess the project after Cohort 1, make changes as needed for Cohort 2, and so on. Formative evaluation will parallel the research plan providing feedback to ensure continuous project improvement.

## (c) QUALITY OF THE MANAGEMENT PLAN

***(1) Adequacy of plan to achieve objective of proposed project on time and within budget***

Careful planning was undertaken to ensure that objectives could be achieved at a high level and within the proposed budget. We propose a replicated treatment/control implementation of HOPE+SIM across 6 years of camp involving 3 cohorts of HOPE+SIM Scholars. Year 1 will

serve as a start-up, planning, and baseline year in which we identify and train leadership personnel in each participating treatment district and begin to develop SIM online learning community (of inquiry) in collaboration with district personnel. In the summer of Year 1 treatment students will attend two weeks of camp in 2023, with academic year support for strengthening their Scholar Identities via the learning community, site visitations, and support from leadership team members. In Year 2, control students will attend 2 weeks of camp, and this will repeat for the next two cycles. Specific project plan follows.

***Interactive HOPE+SIM Learning Community and Platform***. To broaden the reach of the work an interactive website replete with culturally relevant materials supporting the SIM constructs will be developed. We envision the platform as a national clearinghouse for data on HOPE+SIM. There will be portals for educators and students together with video and online training opportunities. This site will create a space for disseminating training units for the SIM constructs and its four Pillars and serve as a place where culturally relevant material can be uploaded and accessed from multiple partner sites. Although the development of the SIM Learning Community is a major goal of this project in its first year, several features of the platform are already conceptualized. They include the award-winning video of the first Scholar Identity Institute; the SIM's research supported constructs; and webinars on culturally specific ways in which the SIM can be used. Finally, this platform will offer college scholarship information, admission tips, and opportunities for these and other youth.

***Symposium and Leadership-team training.*** An initial 2-day leadership Vanderbilt symposium will take place during Year 1 with on-site and remote follow-up. The symposium will include SIM training with sessions by national experts on its constructs. By focusing on school leadership teams, we will encourage collaboration across sites, school-based professional development, and change (Guskey & Yoon, 2009). We will also develop and provide annotated

speaking notes, simulations, and presentations for teams to use with their staff. Data from evaluation of leadership training sessions and use of materials with school staff will help us refine materials and practices. Leadership team members will help identify culturally relevant resources and practices creating site-specific and culturally relevant applications of the SIM.

***GER$^2$I Staff, Counselor, and Teacher Training*** focusing on cultural competence using the SIM as a foundation will occur in each year with GER$^2$I teachers, and counselors. This day-long training followed by support during camp, will enable them to understand and integrate SIM into the Summer Residential affective curriculum and the academic courses. After year one, returning teachers and counselors will help mentor new staff members in integrating SIM, while refining their own efforts resulting in continuous improvement of SIM integration.

***Summer Residential Programming***. Qualified and randomly selected student participants will attend GER$^2$I Summer Residential program for two weeks each year of the program engaging in courses, recreation, and affective curricula alongside other students. Courses address all academic areas, with many courses STEM-focused.

***SIM+ Summer Residential Integration and Academic Year Treatment.*** SIM will be integrated into Summer Residential academic and affective programs, then follow-up materials will be made available via the online learning community. Formal follow-up with leadership team members conducted remotely and on site will occur four times during the year focusing on collaboratively developed content and activities. Project team members will discuss HOPE+SIM services with the leadership team and students to (1) understand how HOPE+SIM affects the students and their school environment; (2) identify resources and activities to support students and their educators; (3) gain feedback to improve HOPE+SIM efforts.

**(1a) Clearly defined responsibilities, timelines, milestones for accomplishing project tasks**

***Management, Activities, and Timeline.*** Project Director will work with the project team

members to ensure timely achievement of project objectives, within budget, resulting in quality outcomes and reliable results. She will also inform the Javits program officer about all aspects of project implementation. Table 2 displays complete project tasks, responsibilities, and timelines, and persons responsible by goals/objectives and year.

Table 2. *Project Goals, Activities, Responsible Personnel, and Timeline*

| **Obj.** | **Activity, *primary person(s) responsible*** | **Y1** | **Y2** | **Y3** | **Y4** | **Y5** |
|---|---|---|---|---|---|---|
| 1A | Finalize district leadership teams, *Gentry* | X | | | | |
| | Work with districts to identify participants, *Gentry, team* | X | | X | | X |
| | Implement *HOPE Scale*, Identify 2e students, *Pereira* | X | | X | | X |
| | Random assignment to T or C, *Maeda* | X | | X | | X |
| | Deliver Summer Residential Program, *Seward* | X | X | X | X | X |
| 2A | Develop and deliver SIM training for GER$^2$I staff, Teachers & Counselors, *Whiting, Gentry, Seward,* | X | X | X | X | X |
| | Arrange formal observations of GER$^2$I Summer Residential Teachers and Counselors, *Seward & Pereira* | X | X | X | X | X |
| 3A | Identify leadership team members for training from each site; Conduct leadership training & symposium; Gather input concerning relevant materials *Whiting, Gentry, team* | X | | | | |
| | Identify, develop, integrate culturally relevant materials, *Whiting, leadership team members, advisory board* | X | X | X | | |
| 3B | Develop and deliver SIM online community of inquiry and platform, *Whiting & Richardson* | X | X | X | | |
| 3C | Continue development, revise, update SIM online learning | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | community to be effective and engaging based on student feedback, *Whiting, Richardson, Project Leadership Teams* | | | X | X | X |
| 4A | Collect *HOPE Scale*, achievement, and grade data, *Maeda*<br>Analyze pre/post achievement/GPA outcomes, *Maeda* | X | X<br>X | X | X<br>X | X<br>X |
| 5A | Collect student perceptions of SIM constructs on Pre, Post 1, and Post 2 SIM Instrument, *Maeda & Seward*<br>Analyze Results of SIM Pre/Post 1/Post 2, *Maeda* | X | X<br>X | X<br>X | X<br>X | X<br>X |
| 6A | Plan for dissemination of ID, program, publications, presentations, publicity, and web-presence, *Team* | | | X | X | X |
| Eval | Performance feedback loop and continuous improvement plan will ensure ongoing support to meet project goals<br>*Pereira and post doc* will lead evaluation | X | X | X | X | X |

**(2) Adequacy of procedures of ensuring feedback/continuous improvement of HOPE+SIM**

This feedback and improvement evaluation plan presents thorough, feasible methods appropriate to the goals and objectives of this project. It will work in conjunction with the research plan using objective performance measures including validated instruments and student achievement data as well as qualitative data (e.g., leadership team reflections, student discussions in CoI) that together will provide feedback ensuring continuous improvement of the project.

***The formative evaluation*** focuses on continuous improvement of project implementation through a two-pronged approach. First is the creation of an ongoing feedback loop informed by project participants and members of the project team and used to address any emerging challenges to the project. Second, is fidelity of implementation (FOI) for the project team in their delivery of the scope of work and the partner sites in their implementation of the components of

the HOPE+SIM. Data collected by the project team (Teacher and Counselor observations) and from the stakeholders (activity logs, evaluations surveys) will document FOI. Additionally, leadership team members, GER$^2$I staff, Summer Residential counselors and teachers will complete yearly structured reflections on lessons learned during their participation in the project. These data will be examined for themes and patterns that can be used to make recommendations to the PI and project team for the HOPE+SIM implementers. Formative evaluation questions are:

Q1. What information gleaned from HOPE+SIM participants and project team can be used to make formative suggestions for ongoing project improvement? (Project Goals 2 & 5; *Output: Ongoing, formative, written feedback provided to PI).*

Q2. Have the project procedures and methods outlined in the project plan been implemented with fidelity? Have the benchmarks for the goals been reached? (Project Goals 1-6; *Output: Annual reports describing fidelity of project implementation)*

Q3. Has the HOPE+SIM model been implemented with fidelity within the GER$^2$I Summer Residential programming, and at each participating site? (Project Goals 2 & 3; *Output: Annual reports describing fidelity of HOPE+SIM implementation).*

Table 3. *Data Plan for Formative Evaluation with all Data Types Collected each Year*

| | ***Q1*** | ***Q2*** | ***Q3*** |
|---|---|---|---|
| Training evaluation surveys (Leadership teams, GER$^2$I staff, Summer Residential counselors, and teachers) | ***X*** | | |
| Leadership teams' engagement in identifying, developing, and integrating culturally relevant materials | | ***X*** | |
| Student evaluations; end of summer camp | ***X*** | ***X*** | |
| Open-ended survey of students completing treatment; end of school year | ***X*** | | |

| | | | |
|---|---|---|---|
| On site visits -project team and leadership teams' notes | ***X*** | ***X*** | ***X*** |
| GER$^2$I Summer Residential Teacher Observations (Form, TOF[1]). | ***X*** | | ***X*** |
| GERI Summer Residential Counselor Observation (Form, COF[1]) | ***X*** | | ***X*** |
| Structured reflections from GER$^2$I Summer Residential Counselors and Teachers; Leadership Team members | ***X*** | | ***X*** |
| Activity logs from Leadership Teams (re school-year SIM activities) | ***X*** | ***X*** | ***X*** |
| Website usability (development/refinement), feedback form from all users | | ***X*** | |
| Review of SIM materials and resources by GER$^2$I Advisory Board[2] | | ***X*** | |
| Fidelity checks, adherence to program implementation plan / benchmarks | | ***X*** | |
| Dissemination - plan in place, dissemination ongoing | ***X*** | ***X*** | |

Notes.[1]Validated instruments: TOF, Peters & Gates, (2010); and COF, (Jen, 2015); [2]22-member expert board that advises the directors and contributes to GER$^2$I mission.

***The summative evaluation*** in the final year of the project will address the following questions: (1) Did students increase confidence, abilities, school performance, and educational aspirations? (2) Did the leadership teams feel they were prepared to implement the program effectively? (3) What lessons learned by implementers and researchers of HOPE+SIM can inform successful replication of the model in other sites in the future? (4) What unexpected outcomes resulted from the program? (5) Was the dissemination plan implemented and successful in its efforts to introduce additional parties to the project's purpose, materials, outcomes, and implications?

**(3) Extent to which time commitments of PI and others are appropriate and adequate.** Project team members have adequately and consistently budgeted time throughout the project to accomplish the goals of HOPE+SIM. Each course release is equivalent to 10% of faculty time,

and adequate summertime has been budgeted throughout the project period for all involved in the various facets of the project. The Co-PIs, post doc, and graduate students provide expertise across all areas of importance to ensure a high-quality project with robust outcomes. Time dedicated to the project is described in the budget justification.

## (d) QUALITY OF THE PROJECT SERVICES

**(1) Quality and sufficiency of strategies of ensuring equal access and treatment.**

Throughout this proposal, we have addressed our plan for providing services to underserved groups of students in gifted education—Black, Latino, and Native American youth from low-income families, some with 2e, from urban and rural schools.

Because of our established partnerships, each community assists students with transportation costs to attend GER$^2$I Summer programs, and we host a teacher from each site to provide a touchstone from home. Our teachers and counselors are diverse and culturally competent; we plan cultural events throughout the camp—a favorite is the fry bread competition. Counseling groups are diverse and facilitated by residential camp counselors. We have evaluation procedures, during and after programs, to help us understand how effectively camp functions. We look for differences in evaluation among our subgroups including by race, scholarship, age, and gender and from the perspectives of the students, teachers, counselors, and evaluators. To date we have found no differences among groups regarding their camp experiences on affective and academic outcomes (Gentry, 2010-present).

Purdue and GER$^2$I are committed to equal opportunity, access, and equity. Specifically, we work to ensure our summer residential programs are accessible to students who are 2e. For example, we have interpreters for students with hearing impairements, counseling services and academic accommodations for students with ASD, ADHD, or other identified disabilities. We work closely with our Disability Resource Center and ensure our partner schools know that we

welcome and accommodate 2e students. We have non-binary and gay counselors, and we welcome LGBTQ students. We have translators for students learning English.

**(2) Likely impact of services of HOPE+SIM on the intended recipients of those services.**

***Students:*** Involvement in a high-quality summer enrichment with integrated SIM intervention throughout the year resulting in measurable increased confidence, abilities, achievement, and educational aspirations. With scholar identity comes increased confidence, work ethic, and achievement, leading to increased educational aspirations and college readiness.

***Teachers/Counselors:*** Knowledge of and implementation of SIM constructs into everyday teaching and counseling. Development of their knowledge and skills resulting in school and camp climates that reflect the components of SIM which will help students view themselves as capable, scholarly, and worthy. Openness to identify students with disabilities for gifted services and a broadening of views of giftedness to include students who are frequently underrepresented.

***Others:*** A model of identification, support, and services for underserved gifted youth in school and summer programming. Web supports for all educators and their students. Enduring outcomes include the findings of the experimental research, the website repository and methods used in the project that can be adapted and transferred to other settings to benefit students across the country underserved in gifted education due to lack of access to enriched summer programming, as well as poverty, disability, locale, and race. All materials developed as part of this program will be licensed and made available through a Creative Common License.

## (e) QUALITY OF THE PROJECT PERSONNEL

**(1) encourages employment applications from members of underrepresented groups**

Our team is diverse, and we encourage diversity in our summer staff, successfully providing a multicultural staff of teachers and counselors each summer. This diversity includes but is not limited to race, gender, and disability. Dr. Whiting is Black/ Native American; Dr. Gentry the PI

is White/ Native American; Dr. Pereira is Latino; English is his second language; our Post Doc is 2e. Five of the six team members are first-generation college graduates.

**(2.i) Qualifications, relevant training, and experience of project director**

***Marcia Gentry, Ph.D.*** (programming, research, underserved populations) Professor of Gifted Education, Director of GER$^2$I. Her work focuses on creating an equitable, socially just field. She originated and studied Projects HOPE+, providing access to Purdue's gifted programming to students from diverse, low-income families. She has received several million dollars in extramural funding, including a recently completed Javits grant, authored more than 80 journal articles, 26 chapters, 2 books, and 8 instruments, including the *HOPE Scale*.

**(2.ii) Qualifications, relevant training, and experiences of the key project personnel**

The five Co-PIs are each well-known in their fields. Each publishes in top journals and has experience with federally funded projects, including previous Javits projects. Their qualifications are detailed in their bio sketches. Briefly, **Purdue Co-PIs include**: ***Jennifer Richardson***, ***Ph.D.***, (Learning communities, Community of Inquiry, instructional strategies) Professor of Learning Design and Technology. She has been PI/Co-PI on multiple externally funded projects and is PI for the award-winning resource *PoRTAL: Purdue Repository for Online Teaching and Learning (2019).* ***Yukiko Maeda, Ph.D.,*** (Research Methods, Data Analysis) Professor of Research Methodology. She has collaborated with researchers in various disciplines as a data analyst and methodological expert conducting quantitative data analyses and overseeing implementation of the research design. ***Kristen Seward, Ph.D.,*** (Affective Curriculum, Licensed School Counselor). Clinical Associate Professor and GER$^2$I Youth Program Director. Interested in affective needs, career development, rural gifted education, and professional development. ***Nielsen Pereira, Ph.D.,*** (*HOPE Scale*, Identification, Evaluation). Associate Professor, Gifted Education; Current PI of a Javits project in its 3rd year and evaluator for previous Javits project. As co-author of the

HOPE Scale he brings expertise on identification, ELL students, and underserved populations.

**Vanderbilt Co-PI:** ***Gilman W. Whiting, Ph.D.,*** (SIM, Gifted Education, Underserved Youth, Technology) Associate Professor of African American and Diaspora Studies and Director of Graduate Studies. He created the Scholar Identity Model,™ the Scholar Identity Institute, and is founding chair of the Achievement Gap Institute at Vanderbilt.

## ADAQUACY OF THE RESOURCES

**(1) Budget is adequate to support project.** The budget enables full and quality implementation of all project activities. Noteworthy, though cost share is not required, our current Summer Programming Model, partnerships and donors provide resources to this project in addition to the requested Javits grant funds. Because this project is being placed into existing efforts, we have also committed to completing it in year 6, allowing data collection through the second replication and ensuring all control students receive services. We can deliver findings after year 5.

**(2) Costs are reasonable related to objectives, design, significance.** Budgeted personnel and support are directly aligned with the objectives and design. In this project we investigate a significant set of interventions that can help change the course of underrepresentation within the field of gifted education. We have assembled a high-quality team of experts to ensure each area and each goal of this project is well-addressed. In addition, this allowed distribution of efforts across this team. See budget justification for detailed allocations.

**(3) Costs reasonable to number served and results/benefits.** This project will serve 420 students. Its outcomes will be available to all students in participating schools (about 2000 students/year). Materials will be available across the country. Outcomes of this project will serve as a demonstration of what is possible concerning finding, serving, and supporting youth often overlooked in gifted education. Doing so benefits the individual youth, the programs in which they participate, and the society in which they will ultimately engage.

## References

Aud, S., KewalRamani, A., & Frohlich, L. (2011). *America's youth: Transitions to adulthood* (NCES 2012-026). U.S. Department of Education, National Center for Education Statistics. Washington, D.C.: U.S. Government Printing Office.

Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*(2), 191-215. https://www.doi.org/10.1037/0033-295X.84.2.191

Barnett, L. B., & Durden, W. G. (1993). Education patterns of academically talented youth. *Gifted Child Quarterly*, *37*(4), 161-168. https://doi.org/10.1177/001698629303700405

Barton, P. E., & Coley, R. J. (2009). Parsing the achievement gap II. Policy Information Report. *Educational Testing Service*.

Baum, S. M., Shader, R. M., & Owen, S. V. (2017). To be gifted & learning disabled: Strength-based strategies for helping twice-exceptional students with LD, AHDA, ASD, and more. (3rd Ed.). Routledge. https://doi.org/10.4324/9781003239147

Bernal, E.M. (2007). The plight of the culturally diverse student from poverty. In J. VanTassel-Baska & T. Stambaugh (Eds.), *Overlooked gems: A national perspective on low-income promising learners* (pp. 27-80). National Association of Gifted Children.

Bobo, L. (1988). Group conflict, prejudice, and the paradox of contemporary racial attitudes. In: Katz, P.A., Taylor, D.A. (eds) *Eliminating racism. Perspectives in social psychology*. (pp. 85–114). Springer. https://doi.org/10.1007/978-1-4899-0818-6_5

Borland, J. (2008). Identification. In J. Plucker & C. Callahan (Eds.), *Critical issues and practices in gifted education: What the research says* (pp. 261-280). Prufrock Press.

Borman, G. D., Rozek, C. S., Pyne, J., Hanselman, P. (2019). Reappraising academic and social adversity improves students' academic achievement, behavior, and well-being. *Proceedings*

*of the National Academy of Sciences, 116*(3), 16286-16291. https://doi.org/10.1073/pnas.1820317116

Brown, W. O. (1931). The Nature of Race Consciousness. *Social Forces*, *10*(1), 90–97. https://doi.org/10.2307/3006121

Collins, K. H. (2018). Confronting color-blind STEM talent development: Toward a contextual model for Black student STEM identity. *Journal of Advanced Academics*, *29*(2), 143–168. https://doi.org/10.1177/1932202X18757958

Collins, K. H., Joseph, N. M., Ford, D. Y. (2020). Missing in action: Gifted Black girls in science, technology, engineering, and mathematics. *Gifted Child Today, 43*(1), 55-63. https://doi.org/10.1177/1076217519880593

Cooley, E. J., & Ayres, R. R. (1988). Self-concept and success-failure attributions of nonhandicapped students and students with learning disabilities. *Journal of Learning Disabilities, 21*(3), 174-178. https://doi.org/10.1177/002221948802100310

Cross, W. E., Jr. (1995). The psychology of nigrescence: Revising the Cross model. In J. G. Ponterotto, J. M. Casas, L. A. Suzuki, & C. M. Alexander (Eds.), *Handbook of multicultural counseling* (pp. 93–122). Sage Publications, Inc.

Department of Education. (2021). *Proposed priorities and definitions: Secretary's supplemental priorities and definitions for discretionary grant programs*. 34 CFR Part 75. https://www.federalregister.gov/documents/2021/06/30/2021-14003/proposed-priorities-and-definitions-secretarys-supplemental-priorities-and-definitions-for

DeVoe, J. F., & Darling-Churchill, K. E. (2008). *Status and trends in the education of American Indians and Alaska Natives: 2008* (NCES 2008-084). Washington, DC: National Center for Education Statistics, Institute of Education Sciences. Retrieved from

http://nces.ed.gov/pubs2008/2008084.pdf

Dweck, C. S. (2000). *Self-theories: Their role in motivation, personality, and development*. Taylor & Francis Group.

Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology, 53,* 109-132. https://doi.org/10.1146/annurev.psych.53.100901.135153

Elsen-Rooney, M. (2020, Jan 7). *NYC Education Dept. okays Brooklyn elementary school's plan to scrap separate 'Gifted' courses.* New York Daily News. https://www.nydailynews.com/new-york/education/ny-gifted-talented-elementary-brooklyn-20200107-sik5qabkkbdehc33jekqrulgqy-story.html

Faircloth, S. C., & Tippeconnic, III, J. W. (2010). *The dropout/graduation rate crisis among American Indian and Alaska Native students: Failure to respond places the future of Native Peoples at risk*. Los Angeles, CA: The Civil Rights Project/Proyecto Derechos Civiles at UCLA. Retrieved from www.civilrightsproject.ucla.edu

Project/ProyectoDerechosCiviles at UCLA. Retrieved on September 1, 2012, from www.civilrightsproject.ucla.edu

Furfarro, H., & Bazzaz, D. (2019, October 22) *What's next for Seattle schools' gifted programs? Here's what we know so far.* The Seattle Times. https://www.seattletimes.com/

Flennaugh, T. (2017). "Life skills": A single-sex classroom intervention for Black boys transitioning from middle school to high school. *Journal of Urban Learning, Teaching, and Research, 13*, 53-62.

Ford, D. Y. (1998). The underrepresentation of minority students in gifted education: Problems and promises in recruitment and retention. *The Journal of Special Education, 32*(1), 4-14. https://doi.org/10.1177/002246699803200102

Ford, D. Y., Grantham, T. C., & Whiting, G. W. (2008). Culturally and linguistically diverse students in gifted education: Recruitment and retention issues. *Exceptional Children, 74*(3), 289-306. https://doi.org/10.1177/001440290807400302

Ford, D. Y., Whiting, G. W., & Moore, III, J. L. (2009). Gifts and talents denied: Under-representation of culturally and linguistically different students in gifted education. *Journal of Urban Education: Focus on Enrichment, 6*(1), 27-43.

Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education model. *The Internet and Higher Education*, *2*(2-3), 87-105. http://dx.doi.org/10.1016/S1096-7516(00)00016-6

Gentry, M. (2007). *Project HOPE (Having Opportunities Promotes Excellence): Expanding access to accelerated learning and enrichment programs* [Jack Kent Cooke Foundation Grant]. West Lafayette, IN: Gifted Education Research and Resource Institute.

Gentry, M. (2008). Project HOPE. Grant funded by the Jack Kent Cooke Foundation. Purdue University.

Gentry, M. (2011-present). Project HOPE+. Grants funded by the Jack Kent Cooke Foundation. Purdue University.

Gentry, M., Desmet, O. A., Karami, S., Lee, H., Green, C., Cress, A., Chowkase, A., & Gray, A. (2021). Gifted education's legacy of high stakes ability testing: Using measures for identification that perpetuate inequity. *Roeper Review, 43*(4), 242-255. https://doi.org/10.1080/02783193.2021.1967545

Gentry, M. & Fugate, C. M. (2012). Gifted Native American students: Underperforming, under-identified, and overlooked. *Psychology in the Schools. 49*(7)*,* 631-646. https://doi.org/10.1002/pits.21624

Gentry, M., Fugate, C. M., & Wu, J., & Castellano, J. (2014). Gifted Native American students: Literature, lessons, and future directions. *Gifted Child Quarterly, 58,* 98-110. https://doi.org/10.1177/0016986214521660

Gentry, M. & *Gray, A. (2021). American Indian Alaska Native youth identified as gifted: Access, equity, and Missingness. *Journal of American Indian Education, 60,* 123-161. http://dx.doi.org/10.5749/jamerindieduc.60.1-2.0123

Gentry, M., Gray, A., Whiting, G. W., Maeda, Y., & Pereira, N. (2019). Access Denied/System Failure. Gifted Education in the United States: Laws, Access, Equity, and Missingness Across the Country by Locale, Title I School Status, and Race. Report Cards, Technical Report, and Website. Purdue University: West Lafayette, IN; Jack Kent Cooke Foundation: Lansdowne, VA.

Gentry, M., Pereira, N., Peters, S. J., McIntosh, J. S., & Fugate, C. M. (2015). *HOPE Teacher Rating Scale: Involving teachers in equitable identification of gifted and talented students.* Prufrock Press.

Ghahremani, M., Pereira, N., Desmet, O. A., & Gentry, M. (2022). Students' experiences in summer enrichment engineering courses: An input-process-outcome model of collaborative creativity. *Journal of Advanced Academics, 33*(1), 69-103. https://doi.org/10.1177/1932202X211040744

Grantham, T.C. (2004). Rocky Jones: Case study of a high-achieving Black male's motivation to participate in gifted classes. *Roeper Review, 26*(4), 208-215. https://doi.org/10.1080/02783190409554271

Guskey, T. R., & Yoon, K. S. (2009). What works in professional development? *Phi delta kappan*, *90*(7), 495-500. http://dx.doi.org/10.1177/003172170909000709

Haney, P. (2013). The gifted commitment: Gifted education's unrecognized relevance in "thorough and efficient" public schools. *Case Western Reserve Law Review, 64*(1), 279-301. https://scholarlycommons.law.case.edu/caselrev/vol64/iss1/15

Hébert, Y. (2001). Identity, diversity, and education: A critical review of the literature. *Canadian Ethnic Studies, 33* (3), 135-177.

Hodges, J., McIntosh, J., & Gentry, M. (2017). The effect of an out-of-school enrichment program on the academic achievement of high-potential students from low-income families. *Journal of Advanced Academics*, *28*(3)*,* 204-224. https://doi.org/10.1177/1932202X17715304

hooks, b. (2004). *The will to change: Men, masculinity, and love.* Atria Books.

Hrabowski III, F. A., Maton, K. I., & Greif, G. L. (1998). *Beating the odds: Raising academically successful African American males.* Oxford University Press, Inc.

Jackson, J. F. L, & Moore III, J. L. (2006). African American males in education: Endangered or ignored? *Teachers College Record, 108*(2), 201-205. https://doi.org/10.1111/j.1467-9620.2006.00647.x

Jen, E. (2015). Counselor Observation Form (COF). [Instrument]. Gifted Education Research and Resource Institute, Purdue University. Retrieved from https://purduegeri.wixsite.com/instrument/counselor-observation-form

Jen, E., Gentry, M., & Moon, S. (2017). High-ability students' perspectives about an affective curriculum in a diverse, university-based summer residential enrichment program. *Gifted Child Quarterly, 61*(4), 328-342. https://doi.org/10.1177/0016986217722839

Jen, E., Wu, J., & Gentry, M. (2016). Social and affective concerns high-ability adolescents indicate they would like to discuss with a caring adult: Implications for educators. Journal of

Advanced Academics, *27*(1), 39-59. https://doi.org/10.1177/1932202X15621904

Kaul, C. R., Johnsen, S. K., Saxon, T. F., & Witte, M. M. (2016). Project promise: A long-term follow-up of low-income gifted students who participated in a summer enrichment program. *Journal for the Education of the Gifted, 39*(2), 83-102. https://doi.org/10.1177/0162353216640938

Kolloff, P. B., & Moore, A. D. (1989). Effects of summer programs on the self-concepts of gifted children. *Journal for the Education of the Gifted, 12*(4), 268-276. https://doi.org/10.1177/016235328901200403

Kurt, L. J., & Chenault, K. H. (2017). Gifted and at risk: A cross-district comparison of gifted student growth and solutions for urban schools. *Penn GSE Perspectives on Urban Education, 13*(2), 1-11.

Mac Iver, M. A., & Mac Iver, D. J. (2015). The Baltimore city schools middle school STEM summer program with VEX robotics. Baltimore Education Research Consortium. Retrieved from: https://eric.ed.gov/?id=ED570654

Maehr, M. L. (1984). Meaning and motivation: Towards a theory of personal investment. In R. Ames & C. Ames (Eds.), *Research and motivation in education: Student motivation*, *1*(4), 115-144. Academic Press.

Majors, R. & Billson, J. M. (1993) *Cool pose: The dilemmas of Black manhood in America.* Lexington Books.

Mackety, D. M. (2011, May). Collaborating with Native American parents and communities: Learning from research. Paper presented at Leading Successful School Turnarounds: Learning from Research and Practice: Central School Improvement Grant Regional Conference. Denver, CO.

Matthews, M. S., & McBee, M. T. (2007). School factors and the underachievement of gifted students in a talent search summer program. *Gifted Child Quarterly, 51(2),* 167-181. https://doi.org/10.1177/0016986207299473

Matthews, P. H., & Mellom, P. J. (2012). Shaping aspirations, awareness, academics, and action: Outcomes of summer enrichment programs for English-Learning secondary students. *Journal of Advanced Academics, 23*(2), 105-124. https://doi.org/10.1177/1932202X12439197

McBee, M. T., Peters, S. J., Morris-Miller, E., Lapham, Z. & Tan, Z. (2014, March). *The impact of nominations on gifted program identification: A psychometric analysis.* Paper presented at the Eleventh Biennial Henry B. & Jocelyn Wallace National Research & Policy Symposium on Talent Development. Washington, D.C.

McClelland, D. C. (1961). *The achieving society*. Free Press.

McCoach, D. B., & Siegle, D. (2003). The school attitude assessment survey – revised: A new instrument to identify academically able students who underachieve. *Educational and Psychological Measurement, 63*(3)*,* 414-429. https://doi.org/10.1177/0013164403063003005

Miller, R., & Gentry, M. (2010). Developing talents among high potential students from low-income families in an out-of-school enrichment program. *Journal of Advanced Academics, 21*(4), 594-627. https://doi.org/10.1177/1932202X1002100403

Myers, D., Olsen, R., Seftor, N., Young, J., & Tuttle, C. (2004). *The impacts of regular upward bound: Results from the third follow-up data collection.* Mathematica Policy Research, Inc. for the U.S. Department of Education. Retrieved from http://www.mathematica-mpr.com/~/media/publications/PDFs/upboundimpact.pdf

Neal, M. A. (2015). *New Black man: Tenth anniversary edition*. Routledge.

Neber, H., & Heller, K. A. (2002). Evaluation of a summer-school program for highly gifted

secondary-school students: The German Pupils Academy. *European Journal of Psychological Assessment, 18*(3), 214-228. https://doi.org/10.1027//1015-5759.18.3.214

Nelson-Barber, S., & Trumbull, E. (2015). *The Common Core initiative, education outcomes, and American Indian/Alaska Native students: Observations and recommendations*. WestEd, U. S. Department of Education.

Olszewski-Kubilius, P. (1998). Research evidence regarding the validity and effects of talent search educational programs. *Journal of Advanced Academics, 9*(3), 134-138. https://doi.org/10.1177/1932202X9800900306

Olszewski-Kubilius, P. (2006). Addressing the achievement gap between minority and nonminority children: Increasing access and achievement through Project EXCITE. *Gifted Child Today, 29*(2), 28–37. https://doi.org/10.4219/gct-2006-198

Olszewski-Kubilius, P., & Thomsen, D. L. (2010). Gifted programming for poor or minority urban students: Issues and lessons learned. *Gifted Child Today, 33*(4), 58-64. https://doi.org/10.1177/107621751003300413

Pereira, N. (2021). Finding talent among elementary English Learners: A validity study of the HOPE Teacher Rating Scale. *Gifted Child Quarterly, 65*(2), 153-166. https://doi.org/10.1177/0016986220985942

Pereira, N., & Gentry, M. (2013). A qualitative inquiry into the experiences of high-potential Hispanic English language learners in Midwestern schools. *Journal of Advanced Academics*, *24*(3), 164-194. https://doi.org/10.1177/1932202X13494204

Pereira, N., Jen, E., Seward, K., & Tay, J. (2016). University-based programs for gifted students. In F. Piske, T. Stoltz, S. Bahia, & J. Machado, *Altas habilidades/superdotação (AH/SD) e criatividade: Identificação e atendimento [High ability/giftedness and creativity:*

*Identification and programming options]* (pp. 121-141). Juruá Editora.

Peters, S. J., & Engerrand, K. G. (2016). Equity and excellence: Proactive efforts in the identification of underrepresented students for gifted and talented services. Gifted Child Quarterly, *60*(3), 159-171. https://doi.org/10.1177/0016986216643165

Peters, S. J., & Gates, J. C. (2010). The teacher observation form: Revisions and updates. *Gifted Child Quarterly, 54*(3), 179-188. https://doi.org/10.1177/0016986210369258

Peters, S. J., & Gentry, M. (2012). Additional validity evidence and across-group equivalency of the HOPE Teacher Rating Scale. *Gifted Child Quarterly, 57*(2), 85-100. https://doi.org/10.1177/0016986212469253

Peters, S. J., Gentry, M., Whiting, G. W., & McBee, M. T. (2019). Who gets served in gifted education? Demographic representation and a call for action. *Gifted Child Quarterly, 63*(4), 1-15. https://doi.org/10.1177/0016986219833738

Plucker, J. A., Burroughs, N., & Song, R. (2010). *Mind the (other) gap: The growing excellence gap in K-12 education.* Center for Evaluation and Education Policy, Indiana University.

Plucker, J. A., & Callahan, C. M. (2020). The evidence base for advanced learning programs. *Phi Delta Kappan*, *102*(4), 14–21. https://doi.org/10.1177/0031721720978056

Purdue University. (2011). *Science bound: The future begins today*. Retrieved from https://polytechnic.purdue.edu/purduebound

https://doi.org/10.1016/j.lindif.2009.10.012

Richardson et al., (2019, March). The Purdue Repository for online Teaching and Learning (PoRTAL) digital repository. https://www.purdue.edu/innovativelearning/supporting-instruction/portal/

Richardson, J. C., Maeda, Y., Lv, J., & Caskurlu, S. (2017). Social presence in relation to

students' satisfaction and learning in the online environment: A meta-analysis. *Computers in Human Behavior, 71*, 402-417. http://dx.doi.org/10.1016/j.chb.2017.02.001

Robinson, A., Shore, B. M., & Enersen, D. L. (2007). *Best practices in gifted education: An evidence-based guide.* Prufrock Press.

Roderick, M. (2003). What's happening to the boys?: Early high school experiences and school outcomes among African American male adolescents in Chicago. *Urban Education, 38*(5), 538-607. https://doi.org/10.1177/0042085903256221

Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs: General and Applied, 80*(1), 1-28. https://doi.org/10.1037/h0092976

Sewell, C. J. P., & Goings, R. B. (2020). "I struggled but I made it": Black gifted underachievers on transitioning to college. *Journal of Advanced Academics, 31* (2), 111-128. https://doi.org/10.1177/1932202X20901506

Shapiro, E. (2019). *Desegregation Plan: Eliminate All Gifted Programs in New York.* The New York Times. https://www.nytimes.com/2019/08/26/nyregion/gifted-programs-nyc-

Stake, J. E., & Mares, K. R. (2005). Evaluating the impact of science-enrichment programs on adolescents' science motivation and confidence: The splashdown effect. *Journal of Research in Science Teaching, 42*(4), 359-375. https://doi.org/10.1002/tea.20052

Swan, K., Garrison, D. R., & Richardson, J. C. (2009). A constructivist approach to online learning: The community of inquiry framework. In C. R. Payne (Ed.), *Information technology and constructivism in higher education: Progressive learning frameworks* (pp. 43–57). Hershey, PA: IGI Global. https://doi.org/10.4018/978-1-60566-654-9.ch004

U.S. Census Bureau. (2006). We the people: American Indians and Alaska Natives in the United

States. Retrieved from https://www.census.gov/library/publications/2006/dec/censr-28.html

U.S. Census Bureau. (2010). *Language use*. Retrieved from https://www.census.gov/topics/population/language-use.html

Vanderbilt University (2017, May). See me [Film series]. Retrieved from https://news.vanderbilt.edu/2017/05/16/i-see-me-film-seminar-to-engage-black-teen-boys/

Vanderbilt University (2017, December). Teenage boys of color. Retrieved from https://news.vanderbilt.edu/2017/12/13/teen-age-boys-of-color-invited-to-why-we-cant-wait-film-seminar/

VanTassel-Baska, J., & Brown, E. F. (2007). Toward best practice: An analysis of the efficacy of curriculum models in gifted education. *Gifted Child Quarterly, 51*(4), 342-358. https://doi.org/10.1177/0016986207306323

Whiting, G. W. (2006a). Enhancing culturally diverse males' scholar identity: Suggestions for educators of gifted students. *Gifted Child Today, 29*(3), 46-50. http://dx.doi.org/10.4219/gct-2006-2

Whiting, G. W. (2006b). From at risk to at promise: Developing a scholar identity among Black male adolescents. *Journal of Secondary Gifted Education, 17*(4), 222-229. http://doi.org/10.4219/jsge-2006-407

Whiting, G. W. (Executive Producer). (April 2008). *Scholar Identity Institute* [Motion Picture]. United States: Vanderbilt University. Retrieved from: https://www.youtube.com/watch?v=lIbd_FmBR7M

Whiting, G. W. (2009a). The Scholar Identity Institute: Guiding Darnel and other Black males. *Gifted Child Today*, *32*(4), 53-63. https://doi.org/10.1177/107621750903200413

Whiting, G. W. (2009b). Gifted Black males: Understanding and decreasing barriers to

achievement and identity. *Roeper Review, 31*(4), 224-233. https://doi.org/10.1080/02783190903177598

Whiting, G. W. (2012a). Scholar Identity Institute, evaluation report 2004-2011. Nashville: Vanderbilt University.

Whiting, G. W. (Executive Producer). (September 2012b). *Bridging the Achievement Gap* [Motion Picture]. United States: Vanderbilt University. Retrieved from: https://www.youtube.com/watch?v=zG6var7MTg4

Whiting, G. W. (2021). [Scholar Identity Model™]. [PNG Image]. All rights reserved.

Whiting, G. W. (2014). The scholar identity model: Black male success in the K-12 context. In F. A. Bonner (Ed.), *Building on resilience: Models and frameworks of Black males' success across the p-20 pipeline.* (pp. 88-106). Sterling, VA. Stylus Press.

Whiting, G. W. (2021). [Scholar Identity Model™]. [PNG Image]. All rights reserved.

Whiting, G. W. & Lewis, T. (2008). On Manliness: Black American masculinities. *AmeriQuests, 6*(1). https://doi.org/10.15695/amqst.v6i1.153

Wu, J. (2015). *A comprehensive analysis of the NAEP data from Native American youth concerning excellence gaps* (Publication No. 3734112). [Doctoral Dissertation. Purdue University]. Proquest.

Wu, J. & Gentry, M. (2014). Summer residential program experiences as perceived by gifted Diné youth. *Journal of American Indian Education, 53*(2), 66-84. https://www.jstor.org/stable/43610476

Wyner, J. S., Bridgeland, J. M., & Diiulio, J. J. (2009). The achievement trap (Rev. Ed.). Washington DC: Jack Kent Cooke Foundation.

## Other Attachment File(s)

*** Mandatory Other Attachment Filename:** 1238-Resumes.pdf

Add Mandatory Other Attachment | Delete Mandatory Other Attachment | View Mandatory Other Attachment

To add more "Other Attachment" attachments, please use the attachment buttons below.

Add Optional Other Attachment | Delete Optional Other Attachment | View Optional Other Attachment

**BIOGRAPHICAL SKETCH**

MARCIA GENTRY

**A. Professional Preparation**

| Institution | Degree | Year |
|---|---|---|
| University of Connecticut | Ph.D. | 1996 |
| Western Michigan University | M.S. | 1985 |
| Western Michigan University | B.S. | 1982 |

**B. Appointments**

| Employment Dates | Title | Institution |
|---|---|---|
| 2004-Present | Professor & GERI Director | Purdue University |
| 1996-2004 | Professor | Minnesota State University, Mankato |
| 1994-1996 | Research Assistant | University of Connecticut |

**C. Positions and Honors**

**AWARDS**

2021 ***National Association for Gifted Children's Conceptual Foundations Network****, Legacy Scholar*
2015-2020 ***Faculty Scholar Award,*** Purdue University
2020, 2012 ***Outstanding Faculty Scholarship Award,*** College of Education, Purdue University
(with department awards for scholarship in 2020, 2019, 2018, 2017, 2016, 2012, 2011, & 2010)
2020, 2017, 2009 ***Outstanding Faculty Engagement Award,*** College of Education, Purdue University
(with department awards for engagement in 2020, 2019, 2017, 2014, 2013, 2011, & 2008)
2019 ***Outstanding Faculty Graduate Mentoring Award***, College of Education, Purdue University
2018 ***Palmarium Award,*** University of Denver
2018 ***MENSA Award for Excellence in Research*** (Paper with Enyi Jen & Sidney Moon)
2015 ***Gifted and…diversity award***, Special Populations, National Association for Gifted Children
2014 ***Distinguished Scholar,*** National Association for Gifted Children, Washington, DC.
2012 ***Outstanding Higher Education Professional,*** University of Connecticut Alumni Association
2012 ***Outstanding Scholarship Award,*** University of Connecticut Alumni Association
2008 ***Leadership Award***. Indiana Association for Gifted.
2003 ***Douglas R. Moore Faculty Research Lectureship,*** Minnesota State University, Mankato.
2002 ***Early Scholar Award,*** National Association for Gifted Children, Washington, DC.
2002, 2000 ***Teaching Scholarship Award***, Minnesota State University, Mankato.
1997 ***Harris Kahn Award for Outstanding Dissertation***, University of Connecticut.
1996 ***John C. Gowan Graduate Student Award,*** National Association for Gifted Children

**ASSOCIATION INVOLVEMENT AND EDITORIAL SERVICES Current National Association Service**

| ***National Association for Gifted Children*** | |
|---|---|
| Research & Evaluation Network committee member | 2011-present |
| Diversity Committee; Diversity and Equity Committee | 2014-2015; 2019-prsnt |
| Chair SIG on Native American, Alaskan Native, and Indigenous People | 2016-2018 |
| Native Youth preconvention Co-Chair | 2015-2017, 2019 |
| ***American Educational Research Association, SIG: Research on Giftedness*** | |
| Executive Board | 2003-2016, 2018-2020 |
| Chair-Elect/Chair/Past Chair 2008-2014, Secretary 2018-2020 | 2008-2020 |
| Awards committee Chair | 2014-2018 |

**Editorial Review Board and Association Review Activities**

| ***Journal*** | **Years** |
|---|---|

| | |
|---|---|
| *Journal of Advanced Academics* | 2007-present |
| *Gifted Child Quarterly* | 2003-present |
| *Journal for the Education of the Gifted* | 2000-present |
| *Roeper Review* | 1998-present |
| *Gifted and Talented International* | 2009-present |
| *Exceptional Children* | 2013-present |
| *High Ability Studies* | 2016-present |
| ***Organization*** | **Years** |
| *National Association for Gifted Children, Research & Evaluation Network—Dissertation Award Reviewer* | 2009-present |
| *National Association for Gifted Children—Proposals reviewer* | 1995-present |
| *American Educational Research Association—Proposals Review Panel mbr* | 2002-present |

**D. Selected Peer-reviewed Publications**

**SELECTED REFERRED JOURNAL ARTICLES**

Lee, H., Seward, K., & Gentry, M (in press). Gifted identification using teacher-rating scale and achievement data: Associations, combinations, and group-specific norms. *Journal of Advanced Academics.*

Alodat, A., & Gentry, M., & Lee, H. (in press). Validity Evidence of the HOPE Teacher Rating Scale-Arabic Version for Identifying Gifted Refugee Students. *Gifted and Talented International.*

Gentry, M. (in press). Excellence, equity, and talent development: Time to retire the G-word. *Gifted Education International.*

Gentry, M., Whiting, G. W., & Gray, A., & (in press). Black youth in gifted education: Access, equity, and missingness across the U. S. status and solutions. *Urban Education.*

Alodat, A., & Gentry, M. (2022). Gifted Education of Syrian Refugee Students in Jordan: A Qualitative Analysis of SWOT Factors (Strengths, Weaknesses, Opportunities, and Threats). *Gifted and Talented International.*

Gentry, M. & Gray, A. (2021). American Indian Alaska Native youth identified as gifted: Access, equity, and Missingness. *Journal of American Indian Education, 60,* 123-161.

Ghahremani, M., Pereira, N., Desmet, O. A., & Gentry, M. (2021). Students' Experiences in summer enrichment engineering courses: An input–process–outcome model of collaborative creativity. *Journal of Advanced Academics.*

Hodges, J., & Gentry, M. (2021). Underrepresentation in Gifted Education in the Context of Rurality and Socioeconomic Status. Journal of Advanced Academics, 32(2), 135–159.

Lee, H., Gentry, M., & Maeda, Y. (2021). Validity Evidence of The HOPE Scale in Korea: Identifying Gifted Students From Low-Income and Multicultural Families. *Gifted Child Quarterly*, 65,

Lee, H., Karakis, N., Akce, B., Tuzgen, A., Karami, S., Gentry, M, & Maeda, Y. (2021). A meta-analytic evaluation of Naglieri Nonverbal Ability Test: Exploring its validity evidence and effectiveness in equitably identifying gifted students. *Gifted Child Quarterly, 65,* 199-219.

Sternberg, R., Desmet, O., Ford, D. Y., Gentry, M., Grantham, T., & Karami, S. (2021). The Legacy: Coming to Terms with the Origins and Development of the Gifted-Child Movement. *Roeper Review, 43(4),* 227-24.

Gentry, M., *Desmet, O. A., Karami, S., *Lee, H., *Green, C., *Cress, S., *Chowkase, A., & *Gray, A. (2021). Gifted Education's Legacy of High Stakes Ability Testing: Using Measures for Identification that Perpetuate Inequity. *Roeper Review. 43(4),* 242-255.

Pereira, N., Tay, J., Desmet, O., Maeda, Y., & Gentry, M. (2021). Validity Evidence for the Revised Classroom Practices Survey: An Instrument to Measure Teachers' Differentiation Practices. *Journal for the Education of the Gifted*, *44*(1), 31–55.

Peters, S. J., Gentry, M., & Whiting, G. W., & McBee, M.T. (2019). Who gets served in gifted education? Demographic proportionality and a call for action. *Gifted Child Quarterly.*

Pereira, N., Maeda, Y., & Gentry, M. (2019). Differentiation as measured by the *Classroom Practices Survey*: A validity study and update to the original instrument. *Learning Environments Research.* Online first.

Wu, J., Jen, E.Y., & Gentry, M. (2018). Examining gifted students' classroom perceptions in a university-based residential program. *Journal of Advanced Academics*, *24,* 52-70.

Hodges, J., Tay, J., Maeda, Y., & Gentry, M. (2018). A meta-analysis of gifted and talented identification practices. *Gifted Child Quarterly. 62,* 147-174.

Hodges, J. & Gentry, M. (2017). The effect of an out-of-school enrichment program on academic achievement for high-potential students from low-income families. *Journal of Advanced Academics, 28,* 204-224.
Jen, E., Gentry, M., & Moon, S. (2017). High-ability students' perspectives about an affective curriculum in a diverse, university-based summer residential enrichment program. *Gifted Child Quarterly, 61,* 328-342.
Yang, Y., Gentry, M., Wu, J., & Jen, E. (2017). Elementary students' perceptions of their Classroom activities in China: A validation study. *Gifted and Talented International.* 1-19.
Bakheit, S., Pereira, N., & Gentry M. (2017). Sudanese students' perceptions of their class activities: Psychometric properties and measurement invariance of *My Class Activities-Arabic Language Version. Journal of Advanced Academics.* 1-19.
Gentry, M. (2016). Commentary on "Does sorting improve scores? An analysis of class composition." By Collins and Gan (2013). *Journal of Advanced Academics, 27,* 124-130.
Jen, E., Wu, J., & Gentry, M. (2016). The social-affective concerns of high-ability adolescents–Lessons learned from students' perspectives. *Journal of Advanced Academics*, *27*, 39-59.
Greathouse, D., Shaughnessy, M. F., Gentry, M., & Scott Peters, S. J. (2015). A reflective interview with *M*arcia Gentry and Scott Peters: The Hope Scale, *Gifted Education International, 31(1), 34-40.*
Fugate, C. M., & Gentry, M. (2015): Understanding adolescent gifted girls with ADHD: motivated and achieving, *High Ability Studies,* DOI: 10.1080/13598139.2015.1098522
Wu, J. & Gentry, M. (2014). Perceived effects of summer residential program on gifted Diné youth from low-income families. *Journal of American Indiana Education.*
Gentry, M., Fugate, C. M., & Wu, J., & Castellano, J. (2014). Gifted Native American students—Literature, lessons, and future directions. *Gifted Child Quarterly, 58,* 98-110.
Fugate, C.M., Zentall, S. S., & Gentry, M. (2013). Creativity and working memory in gifted students with and without characteristics of attention deficit hyperactive disorder: Lifting the mask. *Gifted Child Quarterly, 57,* 234-236.
Peters, S. J. & Gentry, M. (2013) Additional validity evidence and across-group equivalency of the HOPE teacher rating scale. *Gifted Child Quarterly, 57,* 85-100.
Pereira, N. & Gentry, M, (2013). A qualitative inquiry into the experiences of gifted English language learners in Midwestern, elementary schools. *Journal for Advanced Academics, 24, 141-163.*
Gentry, M. & Fugate, C. M. (2012). Gifted, Native American students: Underperforming, under-identified, and overlooked. *Psychology in the Schools. 49,* 631-646. http://dx.doi.org/10.1002/pits.21624
Peters, S. J. & Gentry, M. (2012). Group specific norms and teacher rating scales: Implications for underrepresentation. *Journal of Advanced Academics. 23,* 125-144.
Gentry, M., Steenbergen-Hu, S., Choi, B. (2011). Student-identified exemplary teachers: Insights from talented teachers. *Gifted Child Quarterly, 55,* 111-125.
Peters, S. J., & Gentry, M. (2010). Multi-group construct validity evidence of the *HOPE Scale*: Instrumentation to identify low-income elementary students for gifted programs. *Gifted Child Quarterly*, 54, 298-313.
Miller, R., & Gentry, M., (2010). Developing talents among high-potential students from low-income families in an out-of-school enrichment program. *Journal for Advanced Academics, 21,* 594-627.
Gentry, M. (2009). A comprehensive continuum of gifted education and talent development services: Discovering, developing, and enhancing young people's gifts and talents. *Gifted Child Quarterly. 53,* 262-265.
Yoon, S. & Gentry, M. (2009). Racial and ethnic representation in gifted programs: Current status of and implications for gifted Asian American students. *Gifted Child Quarterly, 53,* 121-136.
Gentry, M. & Hu, Saiying, Peters. S., & Rizza, M.G., (2008). Talented students in an exemplary career and technical education center: A qualitative inquiry. *Gifted Child Quarterly, 52,* 183-198.
Gentry, M., & Gable, R.K. (2002). Students' perceptions of classrooms activities: Are there grade level and gender differences? *Journal of Educational Psychology, 94,* 539-544.
Gentry, M., Rizza, M.G., & Owen, S.V. (2002). Examining perceptions of challenge and choice in classrooms: The relationship between teachers and their students and comparison between gifted students and other students. *Gifted Child Quarterly, 46,* 145-155.
Gentry, M., Gable, R.K. (2001). From the students' perspective *My Class Activities:* An instrument for use in research and evaluation. *Journal for the Education of the Gifted, 24,* 322-343.
Gentry, M., Rizza, M.G., & Gable, R.K. (2001). Gifted students' perceptions of their class activities: Differences among rural, urban, and suburban student attitudes. *Gifted Child Quarterly, 45, 115-129.*

**SELECTED BOOKS & INSTRUMENTS**

Gentry, M., Gray, A., Whiting, G. W., Maeda, Y., & Pereira, N. (2019). Access Denied/System Failure. Gifted Education in the United States: Laws, Access, Equity, and Missingness Across the Country by Locale, Title I School Status, and Race. Report Cards, Technical Report, and Website. Purdue University: West Lafayette, IN; Jack Kent Cooke Foundation: Lansdowne, VA. (this report has received attention in all states, by state departments of education, schools, state organizations, and has been featured in local and regional newspapers, in *The Conversation* (8300+ reads; 16 reprints including *Business Insider* and *Houston Chronicle* and 20 more reprints on: https://muckrack.com/marcia-gentry/articles), on NPR, as the subject of 2 AP articles, reprinted 725 times, 3 pod casts, and 6 news casts.)

Gentry, M., Pereira, N., Peters, S., Fugate, C., & McIntosh, J. (2015). *The HOPE Scale.* Waco, TX: Prufrock.

Gentry, M., Paul, K. A., McIntosh, J., Fugate, C. M., & Jen, E. (2014). *Total school cluster grouping: A comprehensive, research-based plan* for *raising student achievement and improving teacher practices, 2nd Edition.* Waco, TX: Prufrock.

Renzulli, J.S., Gentry, M., & Reis, S.M. (2014) *Enrichment clusters: A practical plan for real-world, student-driven learning*, 2nd Ed. Waco, TX: Prufrock.

**BOOK CHAPTERS—**Since 2004: contributed 26 book chapters

**PRESENTATIONS—**Since 1990: 144 peer-reviewed national or international presentations; 62 invited addresses; 80 keynote addresses.
Since 1994: 180 presentations in 30 states and 6 foreign countries; consultant for more than 100 schools/school districts in 30 states.

## E. Research Support

### GRANTS AND CONTRACTS (Selected Recent External Awards)

| | |
|---|---|
| 2014-2019 | Office of Elementary and Secondary Education. *Developing Talents and Improving Student Achievement Among Traditionally Underrepresented Populations: An Experimental Investigation Scaling-up the Total School Cluster Grouping Model*. $2,243,965. Principal Investigator. |
| 2017-2019 | Jack Kent Cooke Foundation. OCR Data Equity Analyses. PI. $50,000. |
| 2012-present | Jack Kent Cooke Foundation. *Project HOPE+* funded for $1,450,000 Principal Investigator, Project Director.<br>This project serves Diné, Ojibwe, and Lakota youth in our summer programs. Research involves the effects of the program on career trajectories and educational pathways as well as validation study of the HOPE Scale for use with these populations |
| 2009-2013 | National Institutes of Health: *Fat Dogs and Coughing Horses,* 2009-2013. Funded for $1,250,000. Co-Investigator responsible for $430,946.<br>This partnership with the School of Veterinary Medicine developed science curricula for students in grade 3, 8, and 10 on issues of human and veterinary medicine (obesity/diabetes; heaves/asthma; cancer research and drug trials) |
| 2007-2010 | Jack Kent Cooke Foundation. *Project HOPE (Having Opportunities Promotes Excellence).* $598,390. Principal Investigator.<br>This project served K-5 students from low-income families in out-of-school programs at GER$^2$I/ Purdue. Outcomes included research on their experiences and development of the HOPE Scale. |

**Since 1998 – 17 internal awards in excess of $250,000**

## BIOGRAPHICAL SKETCH

Jennifer C. Richardson

### A. Professional Preparation

| Institution | Degree | Concentration | Year |
|---|---|---|---|
| University at Albany/SUNY | Ph.D. | Curriculum and Instruction | 2001 |
| University at Albany/SUNY | C.A.S. | Educational Research and Evaluation | 2001 |
| University at Albany/SUNY | M.S. | Curriculum Design & Instructional Technology | 1999 |
| University at Albany/SUNY | M.S. | Teaching English to Speakers of Other Languages | 1997 |
| University at Albany/SUNY | M.S. | Educational Administration and Policy Studies | 1996 |
| Russell Sage College | B.S. | Political Science and History | 1993 |

### B. Appointments

| Employment Dates | Title | Institution |
|---|---|---|
| 2016-Present | Professor | Purdue University |
| 2008-2016 | Associate Professor | Purdue University |
| 2002-2008 | Assistant Professor | Purdue University |
| 2000-2002 | Research Analyst | American Institutes for Research (AIR) |
| 1998-2000 | Online Teaching & Learning Specialist | Empire State College/SUNY |
| 1997-2000 | Program Evaluator | Evaluation Consortium, University at Albany/SUNY |

### C. Positions and Honors

**Awards and Honors**

- UPCEA Central Region Excellence in Instructional Design Award for PoRTAL 2 project (2021).
- *Graduate Faculty Mentor Award*, College of Education, recognizes sustained and significant contributions to graduate education (2020-2021).
- *Purdue University Faculty Scholar,* recognizes outstanding faculty members at the West Lafayette campus who are on an accelerated path for academic distinction (2019-2024).
- *Seed for Success Award,* Purdue University, given in recognition of the accomplishments of investigators for their efforts in obtaining a $1 million dollar or more external sponsored award (2015, 2018).
- Best Research Paper Award, AERA Online Teaching and Learning SIG. *A Meta-Analysis of Studies Examining the Community of Inquiry* (2017).
- OLC Fellow (Online Learning Consortium) (2016-2017).
- Best Research Paper Award, European Distance and E-Learning Network (EDEN) Conference. *How social networking experience relates to social presence and attitudes of using social networking sites in education*. (2016).
- 2015 AECT Division of Distance Learning (DDL) Journal Article Award for: York, C. & Richardson, J.C. (2012). *Interpersonal interaction in online learning: Experienced online instructors' perceptions of influencing factors. Journal of Asynchronous Learning Networks, 16*(4), 83-98.
- Dean's Award for Outstanding Faculty Scholarship, College of Education (2015).
- Curriculum & Instruction Outstanding Faculty Discovery Award (2015).
- Fellow, Study in a Second Discipline, Purdue University (2014-15).

- ❖ AECT Division of Distance Learning (DDL) Distance Education Book Award for, Online Learning: Common Misconceptions, Benefits, and Challenges (2014).
- ❖ Teaching for Tomorrow Fellowship Award, Senior Resource Faculty, Purdue University (2011-2012).
- ❖ Curriculum & Instruction Outstanding Faculty Discovery Award, Scholarship of Teaching (2010).
- ❖ AERA SIG Instructional Technology Leadership Award (2009).
- ❖ Sloan-C Effective Practices in Online Education Award for "Using the Community of Inquiry Framework Survey for Multi-Level Institutional Evaluation and Continuous Quality Improvement" (2009).
- ❖ Teaching for Tomorrow Fellowship Award, Junior Faculty, Purdue University (2007-2008).

**Editorial Review Board and Association Activities**

| ***Journal*** | **Years** |
|---|---|
| Section Editor, *Online Learning Journal* (formerly JALN) | 2015-present |
| *Educational Technology Research & Development* (ETR&D) | 2003-present |
| *The Internet and Higher Education* (IHE) | 2015-present |
| *The International Review of Research in Open and Distributed Learning* (IRRODL) | 2015-present |
| *Journal of Asynchronous Learning Networks* (JALN) | 2002-2015 |
| *International Journal on E-Learning* (IJEL) | 2002-2014 |
| *Journal of Technology and Teacher Education* (JTATE) | 2003-2008 |
| **Association Activities** | **Years** |
| Co-Editor, Special Issue, *Online Learning Journal (OLJ)*, Topic: AERA Online Teaching and Learning SIG | 2016-2019 |
| Steering Committee Member, Sloan-C International Conference on Online Learning | 2007-present |
| Proposal reviewer for American Educational Research Association (AERA) | 1999-present |
| Proposal reviewer for AECT | 2002-present |
| Reviewer for the SIG-IT Young Researcher Award, (AERA) | 2004-present |
| Reviewer for the Young Researcher Award, (AECT) | 2005 - present |
| Workshop Program Chair, Sloan-C International Conference on Online Learning | 2007-2016 |
| Co-Editor, Special Issue, *Journal of Educational Computing Research* (JECR), Topic: Technology-Meditated Feedback. | 2009-2010 |
| Program Committee, EdMedia Annual Conference | 2000-2008 |

**D. Selected Peer-reviewed Publications**


Lim, J. & Richardson, J.C. (2021). Predictive effects of undergraduate students' perceptions of social, cognitive, and teaching presence on affective learning outcomes according to disciplines. *Computers and Education. Available online at:* https://doi.org/10.1016/j.compedu.2020.104063

Caskurlu, S., Richardson, J.C., Alamri, H., Chartier, K., Farmer, T., Janakiraman, S., Strait, M., & Yang, M. (2021). Cognitive load and online course quality: Insights from instructional designers in a higher education context. *British Journal of Educational Technology, 52(2), 584-605.* http://dx.doi.org/10.1111/bjet.13043; Available online: https://onlinelibrary.wiley.com/share/author/YAP65YN8R8RUP6TDDCJK?target=10.1111/bjet.13043

Caskurlu, S. Richardson, J.C., Maeda, Y. & Kozan, K. (2021). The qualitative evidence behind the factors impacting online learning as informed by the Community of Inquiry Framework: A thematic synthesis. *Computers & Education.* https://doi.org/10.1016/j.compedu.2020.104111

Maeda, Y., Caskurlu, S., Kenney, R., Kozan, K., & Richardson, J.C. (2021). Moving qualitative synthesis research forward in education: A methodological systematic review. *Educational Research Review.* DOI: 10.1016/j.edurev.2021.100424

Fiock, H., Maeda, Y., & Richardson, J. C. (2021). Instructor impact on differences in teaching presence scores in online courses. *The International Review of Research in Open and Distributed Learning*, *22*(3), 55-76. https://doi.org/10.19173/irrodl.v22i3.5456

Richardson, J.C., Caskurlu, S., Castellanos-Reyes, D., Duan, S., Duha, M., Fiock, H., Long,Y. (2021). Faculty conceptualization, implementation, and evaluation of scaffolding in online courses. *Journal of Computing in Higher Education*. https://doi.org/10.1007/s12528-021-09300-3

Caskurlu, S., Maeda, Y., Richardson, J.C., & Lv, J. (2020). A meta-analysis addressing the relationship between teaching presence and students' satisfaction and learning. *Computers and Education, 157.* Available online at: https://doi.org/10.1016/j.compedu.2020.103966

Richardson, J.C., Ashby, I., Alshammari, A., Cheng, Z., Johnson, B., Krause, T., Lee, D., Randolph, A., Wang, H. (2019*).* Building successful collaborative relationships between faculty and instructional designers. *ETR&D.* https://doi.org/10.1007/s11423-018-9636-4

Richardson, J.C., Maeda, Y., Lv, J. & Caskurlu, S. (2017). A meta-analysis of social presence in relation to students' satisfaction and learning. *Computers and Human Behavior, 71*, 402-417. http://dx.doi.org/10.1016/j.chb.2017.02.001

Watson, S., Watson, B., Janakiraman, S., & Richardson, J.C. (2017). A team of instructors' use of Social Presence, Teaching Presence and Attitudinal Dissonance: An Animal Behaviour and Welfare MOOC. *International Review of Research in Open and Distance Learning, 18(2), 69-90.*

Lim, J. & Richardson, J.C. (2016). Effect of online learners' social networking experience and perceived social presence in online learning**.** *The Internet and Higher Education, 29*(2), 31-39. http://dx.doi.org/10.1016/j.iheduc.2015.12.001

Watson, S., Watson, B., Richardson, J.C. & Loizzo, J. (2016). Instructor's use of Social Presence, Teaching Presence and Attitudinal Dissonance: A case study of an attitudinal change MOOC. *International Review of Research in Open and Distributed Learning, 17(3), 54-74. Available online at:* http://www.irrodl.org/index.php/irrodl/article/view/2379

Richardson, J.C., Besser, E., Koehler, A., Lim, J. & Strait, M. (2016). Instructors' perceptions of instructor presence in online courses. *International Review of Research in Open and Distributed Learning, 17(4), 82-104. Available online at:* http://www.irrodl.org/index.php/irrodl/article/view/2330/3800

Kozan, K., Ercetin, G. & Richardson, J.C. (2015). Immediate and delayed effects of extraneous cognitive load and working memory capacity on second language text comprehension. *System, 55, 65-73.* doi:10.1016/j.system.2015.09.001

Yu, T & Richardson, J.C. (2015). An exploratory factor and reliability analysis of the student online learning readiness (SOLR) instrument. *Online Learning* (formerly the *Journal of Asynchronous Learning Networks*), 19(5).

Richardson, J.C., Koehler, A., Besser, E., Caskurlu, S. Lim, J. & Mueller, C. (2015). Conceptualizing and Investigating Instructor Presence in Online Learning Environments. *International Review of Research in Open and Distributed Learning, 16(3),* 256-297. Available online at: http://www.irrodl.org/index.php/irrodl/article/view/2123

Richardson, J.C. & Alsup, J. (2015). Moving from the classroom to the keyboard: How seven teachers created their online teacher identities. *International Review of Research in Open and Distributed Learning, 16(1), 142-167. Available online at:* http://www.irrodl.org/index.php/irrodl/article/view/1814

Yu, T. & Richardson, J.C. (2015). Examining the reliability and validity of a Korean version of the Community of Inquiry instrument using exploratory and confirmatory factor analysis. *The Internet and Higher Education, 25, 45-52.* http://dx.doi.org/10.1016/j.iheduc.2014.12.004

York, C. & Richardson, J.C. (2012). Interpersonal interaction in online learning: Experienced online instructors' perceptions of influencing factors. *Journal of Asynchronous Learning Networks, 16*(4), 83-98.

Yang, D., Richardson, J.C., French, B. & Lehman, J. (2011). The development of a content

analysis model for assessing students' cognitive learning in asynchronous online discussions. *Educational Technology Research & Development, 59*(1), 43-70

Chang, R., Richardson, J.C., Maier, H., Euan, L., Lovric, B., Jaksa, M., Banky, G., Coller, B. & Hamilton, E. (Winter 2011). Practitioner reflections on Engineering students' engagement with e-Learning. *Advances in Engineering Education, 9*(3). Available online: http://advances.asee.org/?publication=practitioner-reflections-on-engineering-students-engagement-with-e-learning

Belland, B. R., Glazewski, K. D., & Richardson, J. C. (2011). Problem-based learning and argumentation: Testing a scaffolding framework to support middle school students' creation of evidence-based arguments. *Instructional Science, 39*, 667-694. Available online: http://dx.doi.org/10.1007/s11251-010-9148-z

Richardson, J.C., Maeda, Y. & Swan, K. (2010). Adding a web-based perspective to the self-assessment of knowledge: Compelling reasons to utilize affective measures of learning. *Academy of Management Learning & Education, 9*(2), 321-328.

Richardson, J.C. & Ice, P. (2010). Investigating students' level of critical thinking across instructional strategies in online discussions. *The Internet and Higher Education, 13*(1-2), 52-59. https://doi.org/10.1016/j.iheduc.2009.10.009

Boston, W., Diaz, S., Gibson, A., Ice, P., Richardson, J., & Swan, K. (2009). An exploration of the relationship between indicators of the Community of Inquiry framework and retention in online programs. *Journal of Asynchronous Learning Networks, (13)*3, 67-83.

Arbaugh, B., Cleveland-Innes, M., Diaz, S. Ice, P., Garrison, D.R., Richardson, J.C, Shea, P. & Swan, K. (2008). Developing a Community of Inquiry instrument: Testing a measure of the Community of Inquiry framework using a multi-institutional sample. *The Internet and Higher Education, (11)* 3-4, 133-136. https://doi.org/10.1016/j.iheduc.2008.06.003

Swan, K., Richardson, J.C., Ice, P., Garrison, D.R., Cleveland-Innes, M. & Arbaugh, J.B. (2008). Validating a measurement tool of presence in online communities of inquiry. *E-mentor, 2*(24).

Belland, B. R., Glazewski, K. D., & Richardson, J. C. (2008). A scaffolding framework to support the construction of evidence-based arguments among middle school students. *Educational Technology Research and Development, 56*, 401-422. Available online at http://dx.doi.org/10.1007/s11423-007-9074-1

Richardson, J. C., & Newby, T. (March 2006). The role of students' cognitive engagement in online learning. *The American Journal of Distance Education, 20*(1), 23-37. http://dx.doi.org/10.1207/s15389286ajde2001_3

Schaffer, S., & Richardson, J. C. (2004). Supporting technology integration within a teacher education system. *Journal of Educational Computing Research, 31*(4), 423-435.

Richardson, J. C., & Swan, K.P. (2003). An examination of social presence in online courses in relation to student's perceived learning and satisfaction. *Journal of Asynchronous Learning, 7*(1), 68-88.

**Book Chapters --** Since 2003 contributed 17 book chapters
**Presentations --** Since 1999: 209 peer-reviewed national or international presentations

**E. Research Support (PI, CO-PI, Project evaluator, not incl. team member roles)**

- ✓ 2006-2009. National Science Foundation: Advanced Technologies strand. *Advanced Aerospace Manufacturing Education Initiative.* Role: Project evaluator
- ✓ 2007-10. U.S. Department of Education: FIPSE Comprehensive Program. *Increasing Access to Quality Learning Through Effective Use of Peer Feedback in Online Discussions.* Total amount of award: $974,273; Role: Principal Investigator, Project Director
- ✓ 2010-11. USDA (Subcontract): Land Grant University Extension System-Military Partnership Outreach. *Heartlink & Key Spouse Online Initiative*. Total amount of award: $371,000; Role: Co-PI, Project Director

- ✓ 2010-2012. Comcast Regional Indiana. *Determining the Impact of Comcast on Demand Video Supplements on Learning for 6$^{th}$ grade Science Students.* Total amount of award: $50,000 Role: PI.
- ✓ 2011-2013. US Department of Agriculture/ National Inst. of Food & Agriculture. *Developing Talents and Improving Student Achievement among Traditionally Underrepresented Populations*. Total amount of award: $1.8M; Role: CO-PI
- ✓ 2011-2013. National Science Foundation: TUES strand. *The POET Project: Investigating the Use of Visualization to Effectively Teach Optimization Modeling Skills.* Role: Project evaluator
- ✓ 2011-2014. National Science Foundation: Advanced Technologies strand. *Advanced Aerospace Manufacturing Education Initiative II.* Role: Project evaluator
- ✓ 2014-2019. USDOE/Javits. Scaling up the Total School Cluster Grouping Model: Developing Talents and Improving Student Achievement among Traditionally Underrepresented Populations. Total amount of award: $2.245M; Role: CO-PI
- ✓ 2015-2019. National Science Foundation, ITEST strand. Teachers & Researchers Advancing Innovative Lessons in STEM (TRAILS). Role: Co-PI, Project evaluator2017-2018.
- ✓ Spencer Foundation. *The Relationship between the Community of Inquiry and Student's Satisfaction and Learning: A Meta-Analysis*. Total amount of award: 50K; Role: PI with Dr. Yukiko Maeda
- ✓ 2017-2019. National Science Foundation, ITEST strand. *Troubleshooting & Safety Simulator for Wind Turbine Technician Education.* Role: Project evaluator
- ✓ 2018-2021. Institute of Education Sciences. Para-Impact: Professional Development with Teacher-as-Coach for Paraprofessionals of Elementary Students with Moderate-to-Severe Developmental Disabilities.
- ✓ Agency/Title of Grant: National Science Foundation, EHR strand. ***Production Engineering Education and Research (PEER).*** Duration of funding 2019-2024. Total amount of award: $~2M. Role: Project evaluator
- ✓ Agency/Title of Grant: National Science Foundation, RET strand. *RET SITE: Simulation and Visualization Technologies for Innovative Industrial Solutions*. Duration of funding 2019-2024. Total amount of award: $592,681. Role: Project evaluator
- ✓ Agency/Title of Grant*: Governor's Emergency Education Relief fund/CARES. Becoming an Online Teacher Even When I Didn't Sign Up For It***.** Duration of funding: 2020-2022; Total amount of award: ~$1.55M; Responsible for: 33%. Role: CO-PI with Dr. Tim Newby (PI)
- ✓ Agency/Title of Grant: National Science Foundation, Division of Undergraduate Education (DUE). *Development, Deployment, and Evaluation of Instructional Modules for Current and Future Practitioners of Model-Based Systems Engineering*. Duration of funding: 2020-2022; Total amount of award:$ 1,989,709.00; Role: CO-PI with Dr. Audeen Fentiman (PI)
- ✓ Agency/Title of Grant: National Science Foundation, Research on Emerging Technologies for Teaching and Learning (RETTL). *Productive Online Teamwork Engagement through Intelligent Mediation.* Duration of funding: 2021-2024; Total amount of award: $ 850,000; Role: CO-PI with Dr. Alejandra Magana (PI).

**Since 2002 – 14 internal awards in excess of $585,000**

## BIOGRAPHICAL SKETCH

Yukiko Maeda, Ph.D.

### A. Professional Preparation

| Institution | Degree | Year |
|---|---|---|
| Okayama University, Okayama, Japan | B.A. | 1995 |
| University of Minnesota – Twin Cities, Minneapolis | B.A. | 1998 |
| University of Minnesota – Twin Cities, Minneapolis | Ph.D. | 2007 |
| Michigan State University, East Lansing | Post-doctoral | 2007-2008 |

### B. Appointments

| Employment Dates | Title | Institution |
|---|---|---|
| 2008-2015 | Assistant Professor | Purdue University |
| 2015 – current | Associate Professor | Purdue University |

### C. Positions and Honors

**List previous and present positions**

2005 – 2007 Statistical Consultant, Office of Research Consultation, College of Education and Human Development, University of Minnesota

2007 – 2008 Research Associate, Survey/Psychometric Specialist, Teacher Education Study in Mathematics (IEA/TEDS-M) International Study Center (http://teds.educ.msu.edu/), Michigan State University

2008 – 2015 Assistant Professor, Educational Psychology, specialized in Applied Measurement and Research Methods, Department of Educational Studies, Purdue University

2015 – current Associate Professor, Educational Psychology, specialized in Applied Measurement and Research Methods, Department of Educational Studies, Purdue University

**Honors**

2004 Research Award (Graduate student), Department of Educational Psychology, University of Minnesota
2007 Leadership Award (Graduate student), Department of Educational Psychology, University of Minnesota
2012 Research Award (Assistant professor level), Department of Educational Studies, Purdue University
2013 Research Award (Assistant professor level), Department of Educational Studies, Purdue University
2014 Dean's Award for Outstanding Faculty Scholarship, College of Education, Purdue University
2016 Learning Award (Associate professor level), Department of Educational Studies, Purdue University
2016 Discovery Award (Associate professor level), Department of Educational Studies, Purdue University

**Other Experience and Professional Memberships**

1995 Teaching Certificate, Secondary School, Japanese Education, Japan,
1995 Teaching Certificate, Primary School, Japan
2001 – 2008 Member, National Council on Measurement in Education
2001 – Member, American Educational Research Association (AERA)
2001 – Member, AERA -Division D (Measurement & Research Methodology)
2005 – 2011 Member, Association of Moral Education
2011 – Member, American Society for Engineering Education
2012, 2014, 2015, 2016 NSF grant peer proposal reviewer

## E. Selected Peer-reviewed Publications

### SELECTED NATIONAL REFERRED JOURNAL ARTICLES

1. Roegman, R., Perkins-Williams, R., Maeda, Y., & Greenan, K. A. (2018). Developing Data Leadership: Contextual Influences on Administrators' Data Use. *Journal of Research on Leadership Education,* 13(4), 348-374. https://doi.org/10.1177/1942775117719452
2. Roegman, R., Maeda, Y., Samarapungavan, A., & Johns, G. (2018). Color-Neutral Disaggregation? Principals' Practices around Disaggregating Data from Three School Districts. *Educational Administration Quarterly*.54 (4). 559 -588.
3. Hodges, J., Tay, J. Maeda, Y., & Gentry, M. (2018). A Meta-Analysis of Gifted and Talented Identification Practices. *Gifted Child Quarterly. 62(2). 147-174.*
4. Yu, S., Levesque-Bristol, C., & Maeda, Y (2018). General need for autonomy and subjective well-being: A meta-analysis for studies in the US and East Asia. *Journal of Happiness Studies,* 19(6), 1863 -1882.
5. Pereira, N., Tay, J., Maeda, Y., Gentry, M.(2019). Differentiation as measured by the Classroom Practices Survey: a validity study updating the original instrument. *Learning Environments Research: An International Journal*, 22 (3), 443-460.
6. Roegman, R., Samarapungavan, A., Maeda, Y. & Johns, G. (2019). A" Color-Aware" approach to data. *Educational Leadership*, *76*(7), 74-78.
7. Lv, J. & Maeda, Y. (2020). Evaluation of the efficacy of meta-analytic structural equation modeling with missing correlations. *Structural Equation Modeling: A Multidisciplinary Journal, 27(3), 414-437*
8. Caskurlu, S., Maeda, Y., Richardson, J. C., & Lv, J. (2020). A meta-analysis addressing the relationship between teaching presence and students' satisfaction and learning. *Computers & Education*, 157, 103966.
9. Caskurlu, S. Richardson, J.C., Maeda, Y., Kozan, K. (2021). Qualitative evidence behind the factors impacting online learning experiences as informed by the community of inquiry framework: A thematic synthesis. *Computers & Education, 165, 104-111.*
10. Pereira, N., Tay, J., Desmet, O. A., Maeda, Y., & Gentry, M. (2021). Validity evidence for the revised classroom practices survey: An instrument to measure teachers' differentiation practices. *Journal for the Education of the Gifted.* 44(1), 31-55.
11. Li, Q., Cho, H., Cosso, M. J., & Maeda, Y. (2021). Relations between students' mathematics anxiety and motivation to learn mathematics: A meta-analysis. *Educational Psychology Review.33, 1017-1049*
12. Lee, H., Karakis, N., Olcay Akce, B., Azzam Tuzgen, A., Karami, S., Gentry, M., & Maeda, Y. (2021). A meta-analytic evaluation of Naglieri Nonverbal Ability Test: Exploring its validity evidence and effectiveness in equitably identifying gifted students. *Gifted Child Quarterly*, 65(3), 199-219.
13. Fiock , H., Maeda, Y., Richardson, J. C. (2021). Instructor impact on differences in teaching presence scores in online courses. *IRRODL, International Review of Research in Open and Distributed Learning,* 22(3), 55-76.
14. Roegman, R., Kenney, R., Maeda, Y. & Johns , G. (2021). When data-driven decision making becomes data-driven test taking: A case study of a Midwestern high school. *Educational Policy*, 35(4) 535-565.
15. Hurt, S. & Maeda, Y. (2021). Should students with advanced placement credit repeat coursework in college? A multilevel analysis. *NACADA Journal,* 41(2) 5-17.
16. Dongyao, T., & Maeda, Y., (2021 Perceptions of Science Teachers' Growth Mindset Practices Predict U.S. High School Students' Initial Science Identity and Its Development. *International Journal of Science Education*, 42(13) 2206-2225.
17. Maeda, Y., Caskurlu, S., Kenney, R. H., Kozan, K., & Richardson, J. C. (2022). Moving qualitative synthesis research forward in education: A methodological systematic review. *Educational Research Review*, *35*, 100424.
18. Lee, H., Gentry, M., & Maeda, Y. (2022). Validity Evidence of The HOPE Scale in Korea: Identifying Gifted Students From Low-Income and Multicultural Families. *Gifted Child Quarterly*, *66*(1), 23-40.

### PRESENTATIONS

Since 2004: 74 national or international peer-reviewed presentations.

## F. Research Support

**Ongoing research projects**

NSF Subaward(University of Montana) # PG20-66254-01Maeda (PI) 2019-2022
A Model to Advance Native American STEM Faculty, $98,766
Role: PI

U.S. Department of Education Mason (PI) 2018-2022
Para-Impact: Professional Development with Teacher-as-Coach for Paraeducators of Elementary Students with Moderate-to-Severe Developmental Disabilities. $1,308,160
Role: Co-I

**Competed externally funded research projects**

DE: Office of Elementary and Secondary Education Gentry (PI) 2015-2019
Developing Talents and Improving Student Achievement Among Traditionally Underrepresented Populations: An Experimental Investigation Scaling-up the Total School Cluster Grouping Model. $2,243,965
Role: Co-PI

Spencer Foundation Richardson (PI) 2017-2018
The Relationship between the Community of Inquiry and Student's Satisfaction and Learning: A Meta-Analysis Spencer Foundation Spencer foundation. $49,919
Role: Co-PI

NSF – DUE/TUES #1140753 Cox (PI) 2012-2014
Implementation of a Multidimensional Assessment Tool to Explore the Impacts of Pedagogy on Undergraduate Student Learning
This collaboration with Dr. Monica Cox (Engineering Education, Purdue University) aimed to develop the Global Real-time Tool for Teaching Enhancement (G-RATE) to provide graduate student instructors with pedagogical feedback.
Role: Co-PI

U.S. Department of Education Gentry (PI) 2009-2014
Developing Talents and Improving Student Achievement Among Traditionally Underrepresented Populations
The project use and evaluate the effect of Total School Cluster Grouping, a specific, research-based model focused on meeting the needs of students identified as gifted, while also improving teaching, learning, and achievement of all students.
Role: Co-PI

NSF-DRK-12 #1222853 Samarapungavan (PI) 2012-2015
Modeling in Primary Grades (MPG): Science Learning through Content Rich Inquiry
The project examines how teachers of second grade students scaffold the development of student conceptual models and their understanding of the nature of scientific models and modeling processes in physical science conceptual areas associated with the particulate nature of matter.
Role: Co-PI

NSF –REESE #1109239 Newton (PI) 2011-2015
Collaborative: Preparing To Teach Algebra: A Study of Teacher Education
The project was designed to understand how the algebra expectations in state-level policies and CCSSM are addressed in secondary mathematics teacher preparation programs. The project also seeks to understand how opportunities for developing knowledge for teaching algebra are provided in teacher preparation programs
Role: Co-PI

## BIOGRAPHICAL SKETCH

Kristen K. Seward

### A. Professional Preparation

| Institution | Degree | Concentration | Year |
|---|---|---|---|
| Purdue University | Ph.D. | Educational Studies/Gifted, Creative, and Talented Studies | 2017 |
| Purdue University | M.S. | Education/School Counseling | 1993 |
| Purdue University | B.A. | Education/English | 1987 |

### B. Appointments

| Employment Dates | Title | Institution |
|---|---|---|
| 2016-Present | Clinical Associate Professor | Purdue University |
| 2016-Present | Associate Director, Gifted Education Research & Resource Institute | Purdue University |
| 2016-Present | High Ability Certification & Licensure Adviser/Program Coordinator | Purdue University |

### C. Positions and Honors

**Awards and Honors**

- Scholarship of Engagement Fellows Program, Purdue University Office of Engagement, 2021-2022. $1500
- IMPACT Faculty Fellow Program, Purdue University Center for Instructional Excellence, Fall 2021. $10,000
- Clinical Faculty Award for Engagement, Department of Educational Studies, Purdue University, 2020.
- Texas Association for the Gifted and Talented 2018 Legacy Book Award, Scholar Category—Introduction to Gifted Education.
- National Association for Gifted Children (NAGC) Doctoral Student Award, 2017, $200
- Dean's Doctoral Student Scholarship, 2016-17, $2,500.00
- John and Hazel Feldhusen Doctoral Student Fellowship, 2016-17, $2,000
- Cecelia Zissis Graduate Student Scholarship, 2016-17, $1,000
- Texas Association of Gifted & Talented Legacy Book Award, Scholar Category—Serving Gifted Students in Rural Settings, 2015
- School Counselor of the Year, Indian Trails Career Cooperative, 2007
- American School Counselor Association Nationally Recognized Model Program (RAMP) Award, Carroll Consolidated School Corporation's K-12 school counseling program, 2007
- Indiana Gold Star School Counseling Award, Carroll Consolidated School Corporation's K-12 school counseling program, 2006
- Regional Middle School Counselor of the Year, Indiana Middle Level Education Association, 1996

**Editorial Review Board and Association Activities**

| ***Journals – Submission Reviews*** | **Years** |
|---|---|
| *Journal of Advanced Academics* | 2020-present |
| *Theory & Practice in Rural Education* | 2020-present |
| *Gifted and Talented International* | 2017-present |
| ***Association Activities*** | **Years** |
| NAGC Curriculum Studies Network Chair | 2021-present |
| Rural Education SIG Newsletter Committee, American Educational Research Association (AERA) | 2018-present |

| | |
|---|---|
| Social and Emotional Learning SIG Newsletter Committee (AERA) | 2018-present |
| Proposal reviewer for American Psychological Association (APA) | 2018-present |
| NAGC Curriculum Studies Network Chair-Elect | 2020-2021 |
| Proposal reviewer for NAGC | 2015-present |

**D. Selected Peer-reviewed Publications**

Lee, H., **Seward, K**., & Gentry, M. (in press). Equitable identification of underrepresented gifted students: The relationship between students' academic achievement and a teacher-rating scale. *Journal of Advanced Academics*.

Seward, K., & Gaesser, A. H. (2018). Career decision making with gifted rural students: Considerations for school counselors and teachers. Gifted Child Today, 41(4), 217-225. www.doi.org/10.1177/1076217518786986

Paul, K. A., & Seward, K. (2016). Place-based investment model of talent development: A proposed model for developing and reinvesting talents within the community. *Journal of Advanced Academics, 27*(4), 311-342. www.doi.org/10.1177/1932202X16669546

**Book Chapters --** Since 2015, contributed 5 book chapters.
**Presentations --** Since 2014, 24 peer-reviewed national or international presentations

**E. Research Support**

**GRANTS AND CONTRACTS**
**External Awards**

2020-present Indiana Department of Education. *High Ability Certification Grant*. Licensure Program Coordinator.
This grant for $36,300 provides tuition for eight Indiana teachers chosen by their districts to achieve high-ability licensure.

2016-present Shell Oil Company Youth Program Scholarship Grant. Youth Program Coordinator.
This grant totaling $120,000 since 2016 ($20,000 renewable annually) provides tuition for 20 students with financial need from Chicago to attend our summer residential programs.

2016-present Kappa Kappa Kappa Youth Program Scholarships. Youth Program Coordinator.
This grant totaling $7200 ($1200 renewable annually) provides tuition for students with financial to attend our summer programs.

2013-present Jack Kent Cooke Foundation. *Project HOPE+* funded for $1,350,000 Key Personnel.
This project serves Diné, Ojibwe, and Lakota youth in our summer programs. Research involves the effects of the program on career trajectories and educational pathways as well as validation study of the HOPE Scale for use with these populations.

**Internal Awards**

2018 Purdue College of Education *Undergraduate Research Trainee* (URT) *Program.* Trainer.
This program provides $1000 to support and train an undergraduate in research.

2015-2016 College of Education Synergy Grant: *The Career Counseling Laboratory: An Intervention for Rural Gifted Students.* Program Developer and Key Personnel.

This grant provided $2340 to support the planning, implementation, and follow-up for this event held on Purdue's campus for 15 rural students with gifts, creativity, and talents.

## F. Youth Programs

2016-present Associate Director of the Gifted Education Research and Resource Institute (GER2I). I provide leadership and supervision of Gifted, Creative, and Talented Program graduate students who coordinate year-round youth enrichment programming and work diligently to provide a safe and enjoyable camping experience for the graduate and undergraduate students I have employed and thousands of campers from national and international places who have attended our camps. In addition to mentoring graduate students (18 to date) and undergraduates (as camp counselors, 82 to date) in GER2I's youth programs, I also conduct oversight for program budgets and spending for the 4 youth programs—Super Saturday programs in the fall and spring, a summer daycamp in June and a residential camp in July. I provide training for youth program teachers, coordinators, and camp counselors on positive communication skills, social-emotional characteristics of gifted youth, academic enrichment, and small group discussion facilitation. During camps, I hold regular debriefing sessions for camp counselors to advise them regarding any camp or camper concerns as well as provide constructive feedback and encouragement. I also seek additional lines of funding to bring students from low-income families to camp free of charge while maintaining positive relationships with current funding partners.

**BIOGRAPHICAL SKETCH**

Nielsen Pereira

**A. Professional Preparation**

| Institution | Degree | Concentration | Year |
|---|---|---|---|
| Purdue University | Ph.D. | Gifted, Creative, and Talented Studies | 2011 |
| Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil | M.A. | Applied Linguistics | 2006 |
| Universidade Federal do Rio Grande do Sul, Porto Alegre, RS, Brazil | B.A. | English Education | 2003 |

**B. Appointments**

| Employment Dates | Title | Institution |
|---|---|---|
| 2021-Present | Associate Professor | Purdue University |
| 2015-2021 | Assistant Professor | Purdue University |
| 2011-2014 | Assistant Professor | Western Kentucky University |
| 2007-2011 | Graduate Assistant | Purdue University |

**C. Positions and Honors**

**Awards and Honors**

- *Seed for Success Award,* Purdue University, given in recognition of the accomplishments of investigators for their efforts in obtaining a $1 million dollar or more external sponsored award (2020).
- Early Scholar Award, National Association for Gifted Children (2020)
- Dean's Award for Outstanding Faculty Scholarship, College of Education, Purdue University (2020).
- Faculty Discovery Award, Department of Educational Studies, Purdue University
- Pathbreaker Award, American Educational Research Association, Research on Giftedness, Creativity, and Talent Special Interest Group (2019)
- Hollingworth Award, National Association for Gifted Children. (2018)
- Award for Excellence in Research, Mensa Education & Research Foundation (2016)
- Faculty Engagement Award, Department of Educational Studies, Purdue University (2016)
- Doctoral Student Award, National Association for Gifted Children (2012)
- Bilsland Dissertation Fellowship, College of Education, Purdue University (2010-2011)
- Feldhusen Doctoral Fellowship, Purdue University (2009)

**Editorial Review Board Activities**

| ***Journal*** | **Years** |
|---|---|
| *Journal for the Education of the Gifted* (JEG) | 2019-present |
| *Psychological Studies (Campinas)* | 2019-present |
| *Gifted Child Quarterly* (GCQ) | 2016-present |
| Associate Editor, *Gifted and Talented International* (GTI) | 2015-present |
| *Journal of Advanced Academics* (JOAA) | 2015-present |

**National Association Activities**

| ***National Association for Gifted Children*** | |
|---|---|
| Chair-Elect, Special Populations Network | 2021-present |
| Co-Chair, Awards Committee, Special Populations Network | 2018-2020 |
| Program Chair, Special Populations Network | 2014-2016 |
| Chair, Research Into Practice Committee, Research and Evaluation Network | 2014-2015 |
| Chair, Strategic Initiatives Committee, Research and Evaluation Network | 2012-2014 |
| Chair, Publications Committee, Special Populations Network | 2012-2014 |
| Treasurer, Research and Evaluation Network | 2012-2014 |
| ***American Educational Research Association*** | |
| Member, Annual Meeting Presidential Program Committee | 2022-2023 |
| Co-Chair, Division D Program Committee | 2022-2023 |
| Co-Chair, Division D: Section 4 Program Committee | 2021-2023 |
| Co-Chair, Mentoring Committee, SIG: Research on Giftedness | 2019-2021 |
| Member-at-Large, SIG: Research on Giftedness | 2019-2021 |

| | |
|---|---|
| Assistant Chair 2015; Chair 2016, Division D Membership Committee | 2015-2017 |

**D. Selected Peer-reviewed Publications**

**REFERRED JOURNAL ARTICLES**

Yi, S.G, **Pereira, N.**, Ahn, I., & Lee, S. (in press). Factor structure and longitudinal measurement invariance of Achievement Goal Questionnaire with a Korean adolescent sample. *Journal of Psychoeducational Assessment*. Advance online publication. https://doi.org/10.1177/07342829211065529

Pereira, N. (2021). Finding talent among elementary English learners: A validity study of the HOPE Teacher Rating Scale. *Gifted Child Quarterly, 65*(2), 153–66. https://doi.org/10.1177/0016986220985942

Ghahremani, M., **Pereira, N.**, Desmet, O. A., & Gentry, M. (2021). Students' experiences in summer enrichment engineering courses: An input–process–outcome model of collaborative creativity. *Journal of Advanced Academics, 33*(1), 69-103. https://doi.org/10.1177/1932202X211040744

Parra-Martinez, F. A., & **Pereira, N.** (2021). Gifted education policy in Colombia: Legislation and guidelines for learners with exceptional abilities and talents. *International Journal of Educational Research, 109,* 85-99. https://doi.org/10.1016/j.ijer.2021.101814

Pereira, N., Tay, J., Desmet, O., Maeda, Y., & Gentry, M. (2021). Validity evidence for the Revised Classroom Practices Survey: An instrument to measure teachers' differentiation practices. *Journal for the Education of the Gifted, 44(1).* https://doi.org/10.1177/0162353220978304

Desmet, O., **Pereira, N.**, & Peterson, J. (2020). Telling a tale: How underachievement develops in gifted girls. *Gifted Child Quarterly,64*(2)*,* 85-99. https://doi.org/10.1177/0016986219888633

Zhou, N., **Pereira, N.**, Chandrasegararan, S., George, T., Booth, J., Ramani, K. (2019). Examining middle school students' engineering design processes in a design workshop. *Research in Science Education, 51,* 617-646. https://doi.org/10.1007/s11165-019-09893-x

Pereira, N., Tay, J., Maeda, Y., & Gentry, M. (2019). Differentiation as measured by the Classroom Practices Survey: A validity study updating the original instrument. *Learning Environments Research,* Advance online publication. https://doi.org/10.1007/s10984-019-09284-z

Hodges, J., Tay, J., Desmet, O., Ozturk, E., & **Pereira, N.** (2018). The effect of the 2008 recessionon gifted education funding across the State of Texas. *AERA Open, 4,* 1-11. https://doi.org/10.1177/2332858418786224

Zhou, N., **Pereira, N.**, George, T., Alperovich, J., Booth, J., Chandrasegararan, … Ramani, K. (2017). The Influence of Toy Design Activities on Middle School Students' Understanding ofthe Engineering Design Processes. *Journal of Science Education and Technology, 26,* 481-493. https://doi.org/10.1007/s10956-017-9693-1

Pereira, N., Bakhiet, S. F., Gentry, M., Balhmar, T. A., & Hakami, S. M. (2017). Sudanese students' perceptions of their class activities: Psychometric properties and measurement invariance of My Class Activities–Arabic Language Version. *Journal of Advanced Academics, 28,* 101-119.

Peters, S. J., & **Pereira, N.** (2017). A replication of the internal validity structure of three major teaching rating scales. *Journal of Advanced Academics, 28,* 1-19.

Jordan, S. S., **Pereira, N.**, Dalrymple, O. (2016). The impact of design swapping on student designsketch quality*. International Journal of Engineering Education*, *32,* 1984-1998.

Pereira, N., Knots. J. D., & Roberts, J. L. (2015). Current status of twice-exceptional students: A look at legislation and policy in the United States. *Gifted and Talented International, 30,*122-134.

Pereira, N., & Gentry, M. (2013). A qualitative inquiry into the experiences of gifted English language learners in Midwestern schools. *Journal of Advanced Academics, 24,* 164-194.

Pereira, N., Peters, S. J., & Gentry, M. (2010). The My Class Activities instrument as used in Saturday enrichment program evaluation. *Journal of Advanced Academics, 21,* 568-593.

de Oliveira, L. C., & **Pereira, N.** (2008). "Sink or Swim": The challenges and needs of teachers of English language learners. *INTESOL Journal, 5*, 77-86.

**BOOK CHAPTERS & INSTRUMENTS**

Pereira, N., & de Oliveira, L. C. (2021). Culturally and linguistically sustaining practices for multilingual learners with high potential. In C. M. Fugate, W. A. Behrens, & C. Boswell (Eds.), *Culturally responsive teaching in gifted education: Building cultural competence and serving diverse student populations* (pp. 105-114). Prufrock Press.

Chamberlin, S. A., & **Pereira**, N. (2016). Differentiating Engineering Activities for Use in a Mathematics Setting. In. D. Dailey, & A. Cotabish, *Engineering instruction for high-abilitylearners in K-8 classrooms* (pp. 45-55). Prufrock Press.

Pereira, N., Jen, E., Seward, K., Tay, J. (2016). University-based programs for gifted students. In F. Piske, T. Stoltz, S. Bahia, & J. Machado, *Altas habilidades/superdotação (AH/SD) e criatividade: Identificação e atendimento [High ability/giftedness and creativity: Identification and programming options]* (pp. 121-141). Juruá Editora.

Gentry, M., **Pereira, N.**, Peters, S. J., McIntosh, J., Fugate, C. M. (2015). HOPE *Teacher Rating Scale: Administration manual*. Prufrock Press.

**SELECTED REFEREED NATIONAL AND INTERNATIONAL PRESENTATIONS**

Pereira, N., Desmet, O., Karatas, T., & Ozen, Z. (2021, November). *A holistic approach to developing talent in underserved populations.* Paper presented at the 68th Annual Convention of the National Association of Gifted Children, Denver, CO.

Gentry, M, Whiting, G., **Pereira, N.**, & Gray, A. (2019, July). *Dreams deferred: Access, equity, and missing children in gifted education across the United States*. Symposium presented at the 23rd World Conference on Gifted and Talented Children, Nashville, TN.

**Pereira, N**., Tay, J., Maeda, Y., Desmet, O. A., & Gentry, M. (April, 2019). *Representation of High-Achieving Students in Schools Implementing Cluster Grouping.* Paper presented at the Annual Meeting of the American Educational Research Association Conference, Toronto, Canada.

Pereira, N., Tay, J., & Maeda, Y. (2018, November). *Differentiation practices in regular classrooms: Updates on the classroom practices survey*. Session presented at the NationalAssociation of Gifted Children Conference, Minneapolis, MN.

Richardson, J., **Pereira, N.**, Desmet, O., Tay, J., & Kenney, R. (2018, August). *Underserved populations: Programming that works to develop talent among students often overlooked ingifted education*. Paper presented at the 16th Conference of the European Council for High Ability. Dublin, Ireland.

Tay, J., & **Pereira, N.** (2018, August). *Total School Cluster Grouping: Fidelity of Implementationand Role of School Leadership*. Paper presented at the 16th Conference of the European Council for High Ability. Dublin, Ireland.

Gentry, M., Richardson, J., Maeda, Y., **Pereira, N.**, & Tay, J. (2018, April). *Total School Cluster Grouping: Effects on identification and achievement of populations underserved in gifted education.* Poster presented at the Annual Meeting of the American Educational Research Association, New York, NY.

Pereira, N., & Parra, F. A. (2017, November). *Gifted Student experiences and role model influence in STEM career choices.* Session presented at the 64rd Annual Convention of the National Association for Gifted Children, Charlotte, NC.

Yi, S., & **Pereira, N.** (2017, August). *Developmental trajectory of mathematics self-efficacy and its association with achievement.* Paper presented at the Annual Convention of the American Psychological Association, Washington, DC.

Pereira, N., & Ghahremani, M., (2017, July). *Creative engineering and design in action: Designingand evaluating learning activities connecting engineering and creativity*. Session presented at the 22nd World Conference on Gifted and Talented Children, Sydney, Australia.

Pereira, N., Whiting, G. W., Gentry, M., Maeda, Y., Richardson, J. C., (2017, July). *Effective programming for developing talents among underserved populations.* Session presented atthe 22nd World Conference on Gifted and Talented Children, Sydney, Australia.

Zhou, N., **Pereira, N.**, George, T., & Ramani, K. (2017, April). *The influence of toy design activitieson middle school students self-efficacy in engineering design*. Paper presented at the Annual Meeting of the American Educational Research Association, San Antonio, TX.

Jordan, J., White, K., & **Pereira, N.** (2016, November). *Developing engineering talent among Navajo youth with chain-reaction machines*. Session presented at the 63rd Annual Conventionof the National Association for Gifted Children, Orlando, FL.

Yi, S., & **Pereira, N.** (2016, August). *Factor structure and longitudinal invariance of the Achievement Goals Questionnaire.* Paper presented at the Annual Convention of theAmerican Psychological Association, Denver, CO.

Pereira, N. & Gentry, M. (2014, April). *Understanding the experiences of high-potential, Hispanic English language learners in out-of-school programs.* Paper presented at the Annual Meetingof the American Educational Research Association, Philadelphia, PA.

Pereira, N. (2013, November). *Finding talent among elementary English language learners: Beyond Project HOPE.* Session presented at the 60th Annual Convention of the NationalAssociation for Gifted Children, Indianapolis, IN.

Pereira, N., Jordan, S. S., & Dalrymple, O. (2013, August). *STEAM Labs™:Using chain reaction machines to teach gifted students engineering design.* Session presented at the 20th World Conference on Gifted and Talented Children, Louisville, KY.

Jordan, S. S., Dalrymple, O., & **Pereira, N.** (2013, June). *Inspiring inventive genius in middle andhigh school students with chain-reaction STEAM Machines™.* Workshop presented at the American Society for Engineering Education K-12 Workshop on Engineering Education, Atlanta, GA.

Miller, R., & **Pereira, N.** (2012, November). *Opening traditional gifted programs to high-potential students from low-income families*. Session presented at the 59th Annual Convention of the National Association for Gifted Children, Denver, CO.

Jordan, S. S., Dalrymple, O., **Pereira, N.** (2012, October). *Teaching engineering design to middleand high-school students using STEAM Machines™*. Session presented at the Frontiers in Education Conference, Seattle, WA.

Pereira, N., Jordan, S. S., & Dalrymple, O. (2012, July). *STEAM Labs™: Inovação tecnológica no ensino de ciências* [STEAM Labs: Technological innovation in science teaching]. Session presented at the 5th Annual Meeting of the Brazilian Council for Giftedness, Rio de Janeiro,Brazil.

Jordan, S. S., Dalrymple, O., **Pereira, N.**, Astatke, Y, & Fletcher, J. D. (2012, June). *Design swapping as a method to improve design documentation.* Paper presented at the 119thAmerican Society for Engineering Education Annual Conference, San Antonio, TX.

Dalrymple, O., Jordan, S. S., Astatke, Y, **Pereira, N.**, & Fletcher, J. D. (2012, June). *Teachingengineering design to middle and high school students using Rube Goldbergineering.* Workshop presented at the 119th American Society for Engineering Education Annual Conference, San Antonio, TX.

Dalrymple, O, Jordan, S. S., & **Pereira, N.** (2012, June). *Teaching engineering design to middle andhigh school students using Rube Goldbergineering.* Workshop presented at the American Society for Engineering Education K-12 Workshop, San Antonio, TX.

**110 Peer-Reviewed National and International and 30 Local, Regional, and State Presentationssince 2003.**

**SELECTED INVITED KEYNOTE ADDRESSES AND PRESENTATIONS**

Irueste, P., Barrera, S. G. P., **Pereira, N.**, & Fleith, D. (2018, October). *Altas habilidades / superdotação nas Américas do Norte e Sul [High ability / gifted education in North and South America].* Symposium presented at the 7th Annual Meeting of the Brazilian Council forGiftedness, Campo Grande, Brazil.

Pereira, N. (2018, October). *Identifying and developing talent in science, technology, engineering, arts, and math.* Keynote address at the Segundo Congreso Internacional Inteligencias y Talentos, Medellin, Colombia.

Pereira, N. (2018, April). *Identifying and developing talent in underrepresented populations.* Session presented at The World of Gifted Conference, Zeist, The Netherlands.

Pereira, N. (2017, August). *Project HOPE: Having opportunities promotes excellence.* Keynote Address at the Soonchunhyang Exceptional Children Institute International Symposium, Seoul, South Korea (online).

Pereira, N. (2017, July). *Differentiation Strategies.* Session presented at Universidad Catolica delNorte, Antofagasta, Chile.

Pereira, N. (2017, June). *Identifying gifted and talented from underrepresented populations.* Keynote Address at the Texas Association for Gifted & Talented Gifted Plus Conference,San Antonio, Texas.

Pereira, N. (2017, April). *Identifying and developing talent in underrepresented populations.* Keynote Address at the International Congress for Gifted and Talented, Istanbul, Turkey.

**51 invited presentations since 2008.**

**E. Research Support (PI, Co-PI, Project evaluator)**

- ✓ 2019-2024. Office of Elementary and Secondary Education. The Javits Gifted and Talented Students Education Program, Closing Excellence and Opportunity Gaps for Students from Traditionally Underserved Populations in Gifted Education: A Multi-Tier Systems of Support Approach. $2,172,719. Role: PI
- ✓ 2019-2022. Synergy Grant, Purdue University, College of Education, *Developing andEvaluating an Affective Curriculum for Achievement Motivation: A Mixed Methods Study.* $2,033. Role: PI
- ✓ 2019-2021. Launch the Future Grant, Purdue University, College of Education, Supporting the STEM Interests, Efficacy, and Career Expectations of Lower-Income Black and Latinx Students Through Community-Based, Out-of-School Programming. $15,497. Role: Co-PI
- ✓ 2018-2022. American Psychological Foundation Esther Katz Rosen Fund Grant, *How Gifted Underachievement Develops According to Gifted Underachievers and theirParents*. $46,730. Role: PI
- ✓ 2016-2017. Purdue Research Foundation Year Long Research Grant, *Creative Engineering and Design in Action: Designing and Evaluating Learning ActivitiesConnecting Engineering and Creativity*. $18,111. Role: PI
- ✓ 2014-2021. Office of Elementary and Secondary Education. The Javits Gifted and Talented Students Education Program, *Developing Talents and ImprovingStudent Achievement and Identification as Gifted Among Traditionally Underrepresented Populations: An Experimental Investigation Scaling up theTotal School Cluster Grouping Model.* $2,468,241. Role: Co-PI/Project evaluator.
- ✓ 2013-2014. Faculty-Undergraduate Student Engagement (FUSE), *Effectiveness of aSTEAM Approach to Teaching Engineering Design*. $4,500. Role: PI
- ✓ 2012. Collaborative Center for Literacy Development, *Implementing Word Walls Across the Content Areas for All Learners.* $10,000. Role: Co-PI

**BIOGRAPHICAL SKETCH**

GILMAN W. WHITING

**A. Professional Preparation**

| Institution | Degree | Year |
|---|---|---|
| Purdue University | Ph.D. | 2004 |
| Rhode Island College | M.A. | 1996 |
| University of Rhode Island | B.A. | 1985 |

**B. Appointments**

| Employment Dates | Title | Vanderbilt University, Nashville, TN |
|---|---|---|
| 2002-2004 | Visiting Assistant Professor and Grinnell Fellow | Hamilton College, Clinton, NY |
| 1996-2000 | Assistant to VP of Academic Affairs & Instructor | Martin university, Indianapolis, IN |

**C. Positions and Honors**

**Awards and Honors**

2021 ***Palmarium Award.*** Gifted Education Policy Symposium and Conference, Daniel L. Ritchie Endowed Chair in Gifted Education. University of Denver, CO ($5,000

2018 ***Distinguished Alumni Award,*** Purdue University, West Lafayette, IN

2018 ***Distinguished Educator***, Recognition by State of Indiana

2017 ***Alexinia Baldwin Gifted And… Award***, National Association of Gifted Education

2012-2015 ***Scholar Identity Model Implementation,*** The Heinz Endowments, $1.5 million, Award to 2 Allegheny County Schools (Pittsburgh)

2012-2014 ***Visiting Scholar***, The Achievers Programme New Delhli -Chandigarh, India

2010 ***Visiting Faculty Fellow***, NEAG Center for Gifted Education and Talent Development (October 2010)

2008 ***Southeast Emmy Award (Nominated)*** Scholar Identity Institute Motion Picture.

2007 ***Southeast Emmy "Telly" and "Videographer" awards***. Scholar Identity Institute Motion Picture.

2006 ***Venture Grant*** for Course Development (Black Masculinity), Vanderbilt University (2006) ($2,500)

2003-2004 ***Pre-Doctoral Fellowship,*** The Grinnell Consortium for a Stronger Minority Presence in Liberal Arts Colleges

2003 ***Living Legend Award***, Fatherhood Resource Center, Wishard Hospital

2002-2004 ***Research Grant***, Fathers and Families Resource /Research Center Inc., Indianapolis, IN, in partnership with Lily Endowment ($10,000)

**Editorial Review Board and Association Activities**

| ***Journal*** | **Years** |
|---|---|
| *Roeper Review* | 2006-present |
| *Exceptional Children* | 2005-present |
| *Journal for the Education of the Gifted* | 2007-present |
| *Journal of Adolescence* | 2006-present |
| *Journal of Educational Psychology* | 2006-present |
| *Journal of Minority Achievement, Creativity, and Leadership* | 2019-present |
| *Urban Education* | 2015-present |

| Association Activities | Years |
|---|---|
| Co-Chair, Diversity and Equity Committee, National Association for Gifted Children | 2019-present |
| National Convention Planning Committee, National Association for Gfted Children | 2020-2021 |
| Association for Qualitative Research | 2002-present |
| *Association for Career and Technical Education* | 2004-present |
| *American Educational Research Association* | 2000-present |
| *American Association for Higher Hducation* | 1999 - present |

**D. Selected Peer-reviewed Publications**

1. Gentry, M., **Whiting, G. W.**, Gray, A. (in-press). Black youth in gifted education: Access, equity, and missingness across the U. S. status and solutions. *Urban Education*.

2. Gentry, M. & **Whiting, G. W**. (revising). The master's discourse: Standards of language use in gifted education, essential guidelines for researchers, scholars, reviewers, and editors to address inclusiveness, underrepresentation, subtle, and not-so-subtle biases.

3. Peters, S. J., Gentry, M., **Whiting, G. W**., & McBee, M. T. (2019). Who gets served in gifted education? Demographic representation and a call for action. *Gifted Child Quarterly, 1*, 1-15. doi:10.1177/0016986219833738

4. Ford, D. Y. & **Whiting, G. W.** (2016). Considering Fisher V. University of Texas Austin: How gifted education affects access to elite colleges for Black and under-represented students. *Gifted Child Today, 39*(2), 121-124.

5. Ford, D. Y., **Whiting, G. W.,** & Goings, R. B. (2016). Biracial and Multiracial gifted students. Like finding a grain of rice in a box of sand. In J. L. Davis & J. L. Moore III (Eds.). *Gifted children of color around the world: Diverse needs, exemplary practices, and directions for the future.* (pp. 121-135). United Kingdom: Bingley.

6. **Whiting, G. W.** (February 19, 2015). Only the puck was black: A story of race and the NHL. *The Conversation*. (https://theconversation.com/only-the-puck-was-black-a-story-of-race-and-the-nhl-37450)

7. **Whiting, G. W.** (2013). Traveling with Marion: The rise, fall, and redemption of Marion Jones. *The International Journal of Sport & Society 3*(3), 1-15. doi: 10.18848/2152-7857/CGP

8. Ford, D. Y. & **Whiting, G. W.** (2010). Beyond testing: Social and psychological considerations in recruiting and retaining gifted Black students. *Journal for the Education of the Gifted*. *34*(1), 131-155. doi: 10.1177/016235321003400106

9. Ford, D. Y., **Whiting, G. W.**, & Moore, III, J. L. (2009). Gifts and talents denied: Under-representation of culturally and linguistically different students in gifted education. *Journal of Urban Education: Focus on Enrichment, 6*(1), 27-43.

10. **Whiting, G. W.** & Ford, D.Y. (2009). Black students and Advanced Placement class Summary, concerns, and recommendations. *Gifted Child Today*, *32*(1), 23-26. doi: 10.4219/gct-2009-840 (3 citations per Google Scholar)

11. **Whiting, G. W.** (2009). The Scholar Identity Institute: Guiding Darnel and other Black males. *Gifted Child Today*, *32*(4), 53-56. doi: 10.1177/107621750903200413. (1 citation per Google Scholar)

12. **Whiting, G. W.** (2009). The scholarly identity institute: Guiding Darnel and other black males. *Gifted Child Today*, 33 (4), 53-56, 63.

13. **Whiting, G. W.** (2009). Gifted Black Males: Understanding and Decreasing Barriers to Achievement and Identity. *Roeper Review 31*(4), 224-237. doi: 10.1080/02783190903177598

14. **Whiting, G. W**., Ford, D. Y., Grantham, T. C., & Moore III, J. L. (2008). Considerations for conducting culturally responsive research in gifted education. *Gifted Child Today 31*(3), 26-29. doi: 10.4219/gct-2008-784

15. **Whiting, G. W**. & Lewis, T. (2008). On manliness: Black American masculinities. *Ameriquests 6* (1). doi: 10.15695/amqst.v6i1.153

16. Ford, D. Y., Moore III, J. J. **Whiting, G. W**., & Grantham, T. C. (2008). Conducting cross-cultural research: Cautions, concerns, and considerations. *Roeper Review 30*(1), 82-92. doi: 10.1080/02783190801954924

17. Ford, D. Y. & **Whiting, G. W.** (2008). Cultural competence: Preparing gifted students for a diverse society. *Roeper Review, 30*(2), 104-110. doi: 10.1080/02783190801955087 (4 citations Google Scholar)

18. Ford, D. Y., Grantham, T. C., & **Whiting, G. W.** (2008). Culturally and linguistically diverse students in gifted education: Recruitment and retention issues. *Exceptional Children, 74*(3), 289-308. doi: 10.1177/001440290807400302 (9 citations)

19. Ford, D. Y., Grantham, T. C., & **Whiting, G. W.** (2008). Another look at the achievement gap: Learning from the experiences of gifted Black students. *Urban Education, 43,* 216-239. doi: 10.1177/0042085907312344 (13 citations)

20. Ford, D. Y. &. **Whiting, G. W**. (2007). A mind is a terrible thing to erase: Black students' under-representation in gifted education. *Multiple Voices. 10*(1-2), 28-44. doi: 10.5555/muvo.10.1-2.6044611211051037

21. Ford, D. Y**.** & **Whiting, G. W.** (2007). Another perspective on cultural competence: Preparing students for an increasingly diverse society. *Gifted Child Today, 30*(2), 52-55. doi: 10.1080/02783190801955087 (4 citations)

22. **Whiting, G. W.** (2006). African American fathers, fatherhood initiatives and welfare reform. *The Willamette Journal* (Special Issue on African American Studies, Thabiti Lewis, Ed.).

23. **Whiting, G. W**. (2006). Enhancing culturally diverse males' scholar identity: Suggestions for educators of gifted students. *Gifted Child Today, 29*(3), 46-50. doi:10.4219/gct-2006-2 (5 citations)

24. **Whiting, G. W**. (2006). From at risk to at promise: Developing a scholar identity among Black male adolescents. *Journal of Secondary Gifted Education, 17*(4), 222-229. doi: 10.4219/jsge-2006-407 (7 citations)

25. Moore III, J. L., Ford, D. Y., Owens, D., Hall, T., Byrd, M., Henfield, M., & **Whiting, G. W**. (2006). Recruitment of African Americans in gifted education: Lessons learned from higher education. *Mid-Western Educational Research Journal, 19*(2), 3-12. (6 citations)

26. Ford, D. Y. & **Whiting, G. W**. (2006 web exclusive). Recruiting diverse students in gifted education. *Principal* 86*(3).* http://www.naesp.org/ContentLoad.do?contentId=2143.

**Book Chapters --** Since 2004 contributed 15 book chapters

**Presentations --** Since 1999: 300+ national or international presentations, 75 invited addresses; 50+ Keynotes.

**E. Research Support (PI, CO-PI, Project evaluator, not incl. team member roles)**

**Since 2004 – 5 awards in excess of $1.75 million**

# Joseph K. Lumsden Bahweting Anishnabe P.S.A.

March 23, 2022

To Whom It May Concern,

Please accept this Letter of Support on behalf of JKL Bahweting Anishnabe PSA for the application to the GER21 in the Hope+SIM project. JKL has enjoyed a strong working relationship with the GER21 administration and has served students from the program for over two years. Our students have benefited greatly from participating in the GER21 Summer Residential program, an opportunity they would not have had without the scholarships. We are interested in this new project which will add a school-based component and work with our students on developing a Scholar Identity.

JKL Bahweting Anishnabe PSA is an MDE and Tribal Grant funded school located in Sault Ste. Mari, Michigan serving 62% Native American students. Recent demographics of our students include: 56% of families are eligible to receive free/reduced lunch and more than half live on reservations.

JKL Bahweting Anishnabe PSA looks for forward to enhancing initiative on achievement and effect of students from low-income families who are Native American as part of their GER21 in the HOPE+SIM project initiatives.

We were glad to have your group visit with us and look forward to continuing to work together to support and provide opportunities for our students.

Thank you for this opportunity to support this grant application and let us know if you have any questions.

Sincerely,

Theresa Kallstrom
JKL Bahweting Anishnabe PSA Superintendent

123 Douglas Ave. | Nashville, TN 37207 | P 615 – 226 – 4484, ext. 1
| F 615 – 226 – 4401 | www.KIPPNashville.org

KIPP ACADEMY NASHVILLE

Marcia Gentry, Ph.D.

Professor, Educational Studies

Director, Gifted Education Research and Resource Institute

Purdue University

Dear Dr. Gentry:

Please accept this letter on behalf of KIPP Academy Nashville (KAN) in support of the Having Opportunities Promotes Excellence (HOPE+) and Scholar Identity Model (SIM). We are excited to partner with Purdue University in making this opportunity available for 5-8th grade KIPPSters, families, and the East Nashville community.

KIPP Academy Nashville is a charter school located in East Nashville. KAN has been serving students for over 16+ years and providing an excellent education that prepares our students with the skills and confidence to pursue the path they choose. Fifty two percent of our students are African-American and forty three percent are Latino/Hispanic. There are 368 students enrolled at KAN: 11.7% are Diverse Learners and 31% are English Language Learners. We qualify as a Title I school.

At KAN, we want to provide as many opportunities for our amazing and talented students. In reading about the HOPE and SIM program's mission, I feel our school and students are whom this program is meant for. I am excited that there are programs such as yours that truly see and empower our children to unlock their academic potential.

Thank you for this opportunity to support this grant application. Please feel free to touch base if you have any questions!

# McLaughlin Middle/High School

[redacted]

March 22, 2022

Dear Dr. Gentry,

Please accept this letter from the McLaughlin High School (and Middle School) for our support of the application to the GER$_2$I in the HOPE+SIM project. McLaughlin school has enjoyed working with GER$_2$I for the better part of the last decade. The program has served our students and given them amazing opportunities to thrive in academic settings. The Summer Residential program has allowed our children to travel and we experience a college setting out of state, which would never have been possible without the scholarships. We are interested in this new project which will add a school-based component and work with our students on developing a Scholar Identity.

McLaughlin Middle/High School is a public school located in McLaughlin, South Dakota. This school is in the middle of the Standing Rock reservation and is only a few miles from the North Dakota border. Recent demographics for our district include: 100% of our students receive free free/reduced lunch, and 99% of our students are Native American.

McLaughlin Middle/High School looks forward to enhancing initiatives on achievement and effect of students from low-income families who are Native American as part of their GER$_2$I in the HOPE+SIM project initiatives.

We are so happy to have your group's support of our students. The opportunities you provide broaden the futures of our bright students.

Thank you for this opportunity to support this grant, please feel free to reach out to me with any questions.

[redacted]

Chicago Public Schools

# Murray Language Academy

[redacted]

**Greg Mason**
Principal

**Tiffanie Burton**
Assistant Principal

March 14, 2022

Marcia Gentry, Ph.D.
Professor, Educational Studies
Director, Gifted Education Research and Resource Institute
Purdue University

Dear Dr. Gentry:

Please accept this letter on behalf of Murray Language Academy in support of the Having Opportunities Promotes Excellence (HOPE+) and Scholar Identity Model (SIM). This new venture will add so much value to our current longstanding partnership with GERI. Throughout the 8 consecutive years, our students have greatly benefitted from our involvement with the GERI summer program at Purdue University.

Murray Language Academy is a magnet school located on Chicago's southside. Murray's magnet specialty is its world language learning program, which teaches French, Japanese, Mandarin and Spanish to every student, from kindergarten through eighth grade. Eighty-eight percent of our students are African-American. There are 477 students enrolled at Murray: 60% are Low Income Students, 11.9% are Diverse Learners and 1.5% are Limited English Learners.

I am enthusiastically encouraged by all the rich educational experiences this opportunity will bring to the students at our school, Murray Language Academy.

[redacted]

NAVAJO PREPARATORY SCHOOL

Yideesk33g00 Naat'1anii:Leaders Now And Into the Future

March 20, 2022

Dear Javits Review Panel Members:

Navajo Preparatory School is grateful for the continued support and services of the GERI summer program. Our students' continued participation in GERI would support Navajo Preparatory School as we work to complete our mission to provide a college preparatory education for students across the Navajo Nation.

Navajo Preparatory School was founded in 1991 by the Navajo Nation Tribal Council to prepare leaders for the Navajo Nation. Students come from over 60 different communities and develop as independent learners seeking to find a balanced life as reflected in the Navajo Philosophy of Learning. This project will support our efforts to offer excellent academic program and cultural teachings to our students.

Navajo Preparatory School is a grant funded school located in Farmington, New Mexico serving 98% American Indian students. Recent demographics of our students include: 90% of families are eligible to receive free/reduced lunch, and 80% live directly on the reservations of their Tribal Nations. The GERI program has enriched our STEM offerings and supported our students as they seek academic enrichment out of the regular school day.

I am confident that this program will benefit our students who come from across the Navajo Nation. The GERI Summer Residential program supports student engagement in STEM and offer real-world opportunities to learn about contributing to scientific research. We look forwar to partnering with GERI in the HOPE+SIM project they propose and see exciting opportunities for growth among our kids who attend GERI Summer and for students here as GERI shares its innovations.

[redacted]

Navajo Preparatory School, Inc. • 1220 West Apache Street • Farmington, NM 87401

Phone: [redacted] • navajoprep.com

DEPARTMENT OF HEALTH & HUMAN SERVICES

Program Support Center
Financial Management Portfolio
Cost Allocation Services

[redacted]

April 17, 2017

Kathleen Thomason
Interim Comptroller
Purdue University
Kurz Purdue Technology Center
1281 Win Hentschel Blvd, STE 1100
West Lafayette, IN 47906-4182

Dear Ms. Thomason:

A copy of the indirect cost Rate Agreement is being sent to you for signature. This Agreement reflects an understanding reached between your organization and a member of my staff concerning the rate(s) that may be used to support your claim for F&A and fringe benefit costs on grants and contracts with the Federal Government.

Please have the Agreement signed by an authorized representative of your organization, email to me, retaining a copy for your files. Our email address is [redacted] We will reproduce and distribute the Agreement to the appropriate awarding organizations of the Federal Government for their use.

The Office or Management and Budget (OMB) has requested that we reach an agreement with each institution on components for the published F&A cost rates. The attached form(s) are provided for that purpose. Please sign the form(s) and return them with the agreement.

An F&A cost proposal, together with supporting information, are required to substantiate your claim for F&A costs under grants and contracts awarded by the Federal Government. Thus your next F&A cost proposal for fiscal year ending June 30, 2020 is due in our office by December 31, 2020.

[redacted]

Enclosures

PLEASE SIGN AND RETURN VIA EMAIL A COPY OF THE RATE AGREEMENT

## COLLEGES AND UNIVERSITIES RATE AGREEMENT

[redacted]

The rates approved in this agreement are for use on grants, contracts and other agreements with the Federal Government, subject to the conditions in Section III.

### SECTION I: Facilities And Administrative Cost Rates

RATE TYPES: FIXED FINAL PROV. (PROVISIONAL) PRED. (PREDETERMINED)

| | EFFECTIVE PERIOD | | | |
|---|---|---|---|---|
| **TYPE** | **FROM** | **TO** | **RATE(%) LOCATION** | **APPLICABLE TO** |
| PRED. | 07/01/2014 | 06/30/2017 | [redacted] | Organized Research |
| PRED. | 07/01/2014 | 06/30/2017 | | Instruction |
| PRED. | 07/01/2014 | 06/30/2017 | | Other Sponsored Activities |
| PRED. | 07/01/2013 | 06/30/2017 | | All Programs |
| PRED. | 07/01/2017 | 06/30/2021 | | Organized Research |
| PRED. | 07/01/2017 | 06/30/2021 | | Instruction |
| PRED. | 07/01/2017 | 06/30/2021 | | Other Sponsored Activities |
| PRED. | 07/01/2017 | 06/30/2021 | | All Programs |
| PROV. | 07/01/2021 | Until Amended | | Use same rates and conditions as those cited for fiscal year ending June 30, 2021. |

*BASE

Modified total direct costs, consisting of all direct salaries and wages, applicable fringe benefits, materials and supplies, services, travel and up to the first [redacted] of each subaward (regardless of the period of performance of the subawards under the award). Modified total direct costs shall exclude equipment, capital expenditures, charges for patient care, rental costs, tuition remission, scholarships and fellowships, participant support costs and the portion of each subaward in excess of [redacted] Other items may only be excluded when necessary to avoid a serious inequity in the distribution of indirect costs, and with the approval of the cognizant agency for indirect costs.

## SECTION II: SPECIAL REMARKS

TREATMENT OF FRINGE BENEFITS:

The fringe benefits are specifically identified to each employee and are charged individually as direct costs. The directly claimed fringe benefits are listed below.

TREATMENT OF PAID ABSENCES

Vacation, holiday, sick leave pay and other paid absences are included in salaries and wages and are claimed on grants, contracts and other agreements as part of the normal cost for salaries and wages. Separate claims are not made for the cost of these paid absences.

OFF-CAMPUS DEFINITION: For all activities performed in facilities not owned by the institution and to which rent is directly allocated to the project(s), the off-campus rate will apply. Actual costs will be apportioned between on-campus and off-campus components. Each portion will bear the appropriate rate.

EQUIPMENT DEFINITION:
Equipment means an article of nonexpendable, tangible personal property having a useful life of more than one year and an acquisition cost of [redacted] or more per unit.

FRINGE BENEFITS:
FICA
403(b) Defined Contribution Plan
Retirement
Worker's Compensation
Life Insurance
Unemployment Insurance
Health Insurance
Staff and Grad Staff Tuition Remission
Disability Insurance
Liability and Fidelity Insurance

The MTDC exclusion for rental costs relates to building/space rental costs, not equipment rental costs, unless the equipment rental cost is significantly high and may skew the distribution of indirect costs such as an item of equipment costing over [redacted] in rental costs.

Per 2 CFR 200.414(g) - A rate extension has been granted.

Next Proposal Due:

The next indirect cost proposal based on actual costs for the fiscal year ending 06/30/2020, is due by 12/31/2020.

The off campus Purdue University rates cited above apply also to the Purdue International, Inc., EIN# 31-0958507

## SECTION III: GENERAL

A. LIMITATIONS:

The rates in this Agreement are subject to any statutory or administrative limitations and apply to a given grant, contract or other agreement only to the extent that funds are available. Acceptance of the rates is subject to the following conditions: (1) Only costs incurred by the organization were included in its facilities and administrative cost pools as finally accepted: such costs are legal obligations of the organization and are allowable under the governing cost principles; (2) The same costs that have been treated as facilities and administrative costs are not claimed as direct costs; (3) Similar types of costs have been accorded consistent accounting treatment; and (4) The information provided by the organization which was used to establish the rates is not later found to be materially incomplete or inaccurate by the Federal Government. In such situations the rate(s) would be subject to renegotiation at the discretion of the Federal Government.

B. ACCOUNTING CHANGES:

This Agreement is based on the accounting system purported by the organization to be in effect during the Agreement period. Changes to the method of accounting for costs which affect the amount of reimbursement resulting from the use of this Agreement require prior approval of the authorized representative of the cognizant agency. Such changes include, but are not limited to, changes in the charging of a particular type of cost from facilities and administrative to direct. Failure to obtain approval may result in cost disallowances.

C. FIXED RATES:

If a fixed rate is in this Agreement, it is based on an estimate of the costs for the period covered by the rate. When the actual costs for this period are determined, an adjustment will be made to a rate of a future year(s) to compensate for the difference between the costs used to establish the fixed rate and actual costs.

D. USE BY OTHER FEDERAL AGENCIES:

The rates in this Agreement were approved in accordance with the authority in Title 2 of the Code of Federal Regulations, Part 200 (2 CFR 200), and should be applied to grants, contracts and other agreements covered by 2 CFR 200, subject to any limitations in A above. The organization may provide copies of the Agreement to other Federal Agencies to give them early notification of the Agreement.

E. OTHER:

If any Federal contract, grant or other agreement is reimbursing facilities and administrative costs by a means other than the approved rate(s) in this Agreement, the organization should (1) credit such costs to the affected programs, and (2) apply the approved rate(s) to the appropriate base to identify the proper amount of facilities and administrative costs allocable to these programs.

BY THE INSTITUTION:

Purdue University

[redacted]

ON BEHALF OF THE FEDERAL GOVERNMENT:

[redacted]

## COMPONENTS OF PUBLISHED F&A COST RATE

INSTITUTION: **Purdue University**

FY COVERED BY RATE: **JULY 1, 2017 through JUNE 30, 2021**

APPLICABLE TO: **ORGANIZED RESEARCH**

| RATE COMPONENT: | ON CAMPUS | OFF CAMPUS |
|---|---|---|
| Building Depreciation | 5.3 | |
| Equipment Depreciation | 5.2 | |
| Interest | 1.2 | |
| Operation & Maintenance | 15.8 | |
| Library | 1.5 | |
| Utility Cost Allowance | 0.0 | |
| Administration* | 26.0 | 26.0 |
| TOTAL | 55.0 | 26.0 |

* Reflects provisions of Appendix III to Part 200 of Uniform Guidance—Indirect (F&A) Costs Identification and Assignment, and Rate Determination for Institutions of Higher Education (IHEs), C.8. dated December 26, 2013.

[redacted]

## Budget Narrative File(s)

*** Mandatory Budget Narrative Filename:** 1234-mg.Budget Narrative.2022.HOPE.SIM_FINAL 4-6.pd

Add Mandatory Budget Narrative | Delete Mandatory Budget Narrative | View Mandatory Budget Narrative

To add more Budget Narrative attachments, please use the attachment buttons below.

Add Optional Budget Narrative | Delete Optional Budget Narrative | View Optional Budget Narrative

**Budget Narrative**
**Includes years 1-5 unless otherwise noted**

In accordance with 2 CFR 200, Uniform Administrative Requirements, Cost Principles, And Audit Requirements for Federal Awards, Purdue University tracks and reports its professional personnel on a percent of effort and not on an hourly basis. Salaries are adjusted by standard University inflation rates each fiscal year (July 1): 3% for faculty, 2.5% for professional/technical assistants, and 2% for post docs, graduate/undergraduate students, and service staff. Tenure track faculty are assigned 40% teaching, 40% research, and 20% service, so that one course release allows the faculty member to dedicate about 10% of actual time to a project. Budgeting for course release across the College of Education is standard at [redacted] per course, not as a percentage of salary.

## 1. Personnel

*Principal Investigator*, Prof. Marcia Gentry will direct the project and coordinate all aspects of the project including personnel, subcontract activities, program implementation, outreach, training, and evaluation of program outcomes. She will be assigned effort to the grant each fiscal year (FY) across the duration of the project. This includes three course releases during each academic year plus 2.5% FY time (budget request ~16.42% FY) to provide her with sufficient dedicated time to focus on this project. This is highly cost effective as the three course releases formally free up 30% of her assigned time allocation to dedicate to this project. Since she holds a fiscal year appointment as the Director of GERI, her effort dedicated to the project will be year-round. She will supervise all graduate assistants and staff associated with the project. Starting base salary is [redacted] fiscal year effective 7/1/21.

| M. Gentry | Yr 1 | Yr 2 | Yr 3 | Yr 4 | Yr 5 |
|---|---|---|---|---|---|
| Salary | [redacted] | | | | |
| Fringes 27.25% | | | | | |

*Co-Principal Investigator,* Prof. J. Richardson will work with the implementation team to design and implement the online learning and outreach. She will be assigned approximately 0.64 person months during the academic year (AY) with one course release and 4 summer weeks each year of the grant. This frees up approximately 10% of her time during the academic year and provides dedicated time in the summer to devote to this project, enabling her to actively engage in dynamic program development and implementation. Her primary responsibilities will be learning design and technology of the project; coordinating with the implementation and research team members to provide them with feedback and direction; and overseeing the graduate student assigned to the online learning and outreach. In her role as online learning and outreach director, she is integral to the continuity of the project, to its long-term connection to the students, and to design and deliver a model online system. Starting base salary is [redacted] academic year effective 7/1/21.

| J. Richardson | Yr 1 | Yr 2 | Yr 3 | Yr 4 | Yr 5 |
|---|---|---|---|---|---|
| Salary | [redacted] | | | | |
| Fringes 27.25% | | | | | |

*Co-Principal Investigator*, Prof. Yukiko Maeda will oversee data collection, entry, and analyses and will be assigned approximately 0.82 person months with one course release each year of the academic year and 4 summer weeks in year 1, followed by 8 summer weeks in the remaining years of the project. This provides her with dedicated time during the year and during the summer time in the summer to engage with this project, which is about 25% of her assigned time in total. Her experience and expertise as a research methodologist and in multilevel modeling and growth curve models make her integral to the project. Additionally, Prof. Maeda will work closely with a graduate assistant assigned to the research and evaluation aspects of the project. Starting base salary [redacted] academic year effective 7/1/21.

| Y. Maeda | Yr 1 | Yr 2 | Yr 3 | Yr 4 | Yr 5 |
|---|---|---|---|---|---|
| Salary | [redacted] | | | | |
| Fringes 27.25% | | | | | |

*Co-Principal Investigator*, Prof. Kristen Seward will focus implementation of the Summer Residential Program, infusing the Scholar Identity Model (SIM) into the affective curricula as well as into the academic program. Thus, she will be involved in training and monitoring GERI program staff, teachers, and counselors for treatment fidelity and SIM integration. In addition, she will oversee the general program and the program participants. Accordingly, in year 1 she is provided with 1 course release during the academic year, 2.5% additional AY time, and 4 weeks of summer to dedicate to the project. For the duration of the project, she will have assigned 2.5% AY time, and 8 summer weeks of time in years 2-5 for the project. In year one she will travel with the team in setting up the training and partnerships and making connections with the school counselors and educators at the partner sites. Starting base salary is expected to be [redacted] academic year effective 7/1/22.

| K. Seward | Yr 1 | Yr 2 | Yr 3 | Yr 4 | Yr 5 |
|---|---|---|---|---|---|
| Salary | [redacted] | | | | |
| Fringes 27.25% | | | | | |

*Co-Principal Investigator,* Prof. Nielsen Pereira will work with the HOPE Scale implementation at all sites as well as offer consultation and expertise pertaining to participants in the project who are ELL. He will be assigned approximately 1.1 person months with 2.5% AY time and 4 summer weeks each year of the grant giving him 2.5% time in the academic year and dedicated summer effort to attend to this project. Starting base salary is [redacted] academic year effective 7/1/21.

| N. Pereira | Yr 1 | Yr 2 | Yr 3 | Yr 4 | Yr 5 |
|---|---|---|---|---|---|
| Salary | [redacted] | | | | |
| Fringes 27.25% | | | | | |

**Postdoctoral Student**

In year 1, we will hire a fiscal year postdoctoral scholar at 100% effort to assist the PI and project team members in the program management, development of program materials, recruitment of

participants, outreach to partner sites, data collection plan, and initial training. Starting salary is expected to be [redacted] effective 7/1/22.

| Postdoc | Yr 1 | Yr 2 | Yr 3 | Yr 4 | Yr 5 |
|---|---|---|---|---|---|
| Salary | [redacted] | | | | |
| Fringes 28.45% | | | | | |

**Graduate Students.**
In year 1, we will hire two Graduate Students at 50% effort to begin on the project to assist the PI and project team members in the development of program materials, recruitment of participants, outreach to partner sites, data collection plan, and initial training. Starting base salary for all graduate students is [redacted] fiscal year effective 7/1/21. Graduate students are appointed at .50 which is 20 hours per week, a standard appointment for doctoral students who are also taking classes. Each year of the project these students will maintain their roles. They will be changes only as students finish their studies.

| Graduate Students | Yr 1 | Yr 2 | Yr 3 | Yr 4 | Yr 5 |
|---|---|---|---|---|---|
| Student 1: Salary | [redacted] | | | | |
| Fringes 8.54% | | | | | |
| Student 2: Salary | | | | | |
| Fringes 8.54% | | | | | |

**2. Fringe Benefits** are budgeted at the standard university rates: Faculty 27.25% of [redacted] budgeted effort, Postdoc 28.45% of [redacted] budgeted effort, and Grad 8.54% of [redacted] budgeted effort.

**3. Travel**
Travel is budgeted each year of the project for 3 trips between Purdue and Vanderbilt and for travel to each partner district for team members at least twice per year. Partner districts exist in South Dakota, Illinois, Michigan, Tennessee, and Arizona. Cost estimates are provided for year 1 in the following table. We did not increase cost requests, rather we requested these amounts each year of the project.

| **Destination** | **Days** | **Airfare/ car rental** | **Lodging** | | **Subsistence** | | **Transportation** (mileage, gas, parking) | **Total/Trip** (per person cost) | **# of persons** | **Total** |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | Rate | **Total** | Rate | **Total** | | | | |
| Vanderbilt Univ (drive) | 5 | [redacted] | | | | | | | | |
| SD Trip 1 (fly) | 5 | | | | | | | | | |
| SD Trip 2 (fly) | 5 | | | | | | | | | |
| IL Trip 1 (drive) | 5 | | | | | | | | | |
| IL Trip 2 (drive) | 5 | | | | | | | | | |
| NM Trip 1 (fly) | 5 | | | | | | | | | |
| NM Trip 2 (fly) | 5 | | | | | | | | | |
| TN Trip 1 (drive) | 5 | | | | | | | | | |
| TN Trip 2 (drive) | 5 | | | | | | | | | |
| MI Trip 1 (drive) | 5 | | | | | | | | | |
| MI Trip 2 (drive) | 5 | | | | | | | | | |
| Grand total per year | | | | | | | | | | |

**4. Equipment.** N/A

**5. Supplies**

*Training Materials.* In Year 1, we budgeted [redacted] to develop and provide each school and central office with a copy of materials related to HOPE+, HOPE Scale, and the SIM and this is a one-time expense.In Years 1-5 we budgeted [redacted] per district to for HOPE Scale administration ([redacted] per year).This will enable all participating districts to cover the expense of administering the HOPE Scale, as well as creating, and examining local norms.

**6. Contractual**

*Subaward* – Vanderbilt University

Budgeted each year of the project is one month of Prof. Whiting's salary with benefits, enabling him to dedicate time to this project. Additionally, in each year of the project a graduate assistant is budgeted to assist Prof. Whiting. Other budget items in the subcontract include the development of an interactive website focused on the four pillars and nine dimensions of the Scholar Identity Model (SIM, with more funds for this budgeted in year one than subsequent years); funds for training GERI staff, counselors, and teachers on the SIM, assisting the as they work to infuse SIM into affective and academic curricula; travel to partner sites to work with students and their educators and families on the SIM; travel to and from Purdue to work with the project team; and in year one an Vanderbilt University SIM institute for key personnel from partner sites to develop site-specific and culturally relevant components of SIM.

| Yr 1 | Yr 2 | Yr 3 | Yr 4 | Yr 5 |
|---|---|---|---|---|
| [redacted] | | | | |

**7. Construction.** N/A

**8. Other**

*Program Scholarships:* Funds are budgeted yearly to enable GERI to provide 50 additional scholarships to students from low-income families from partner districts. Typically, GERI provides approximately 120,000 worth of scholarships to students from low-income families to attend two weeks of residential camp. These funds will be used to add available scholarships among existing and new partner schools. These grant fund together with GERI funds will enable 70 students each year to participate in this program. The budgeted scholarships are for students who live in rural and Urban areas from our identified partner schools. All students provided with scholarships have demonstrated financial needs. Students from SD, MI, and NM are Native American, and Students from IL and TN attend schools with large populations of underrepresented racial groups including students from Black and Hispanic families.

| Yr 1 | Yr 2 | Yr 3 | Yr 4 | Yr 5 |
|---|---|---|---|---|
| [redacted] | | | | |

*Incentives:* Each year we ask students to complete our SIM survey, and for those in control status, we ask them to provide their transcripts and most recent standardized test scores. To increase responsiveness, we propose a [redacted] cash incentive upon completion of these tasks each year by each student in the cohort. This means 140 students @ [redacted] pre and @ [redacted] post resulting in [redacted] yearly in incentives.

| Yr 1 | Yr 2 | Yr 3 | Yr 4 | Yr 5 |
|---|---|---|---|---|
| [redacted] | | | | |

*Graduate Fee Remissions* are based on the standard university rate per graduate student. The rates per year for the total number of graduate assistants each year are budgeted as follows:

| Yr 1 (2 Grads) | Yr 2 (2 Grads) | Yr 3 (2 Grads) | Yr 4 (2 Grads) | Yr 5 (2 Grads) |
|---|---|---|---|---|
| [redacted] | | | | |

**9. Total Direct Costs.** [redacted]

**10. Total Indirect Costs.** [redacted]

Indirect costs are budgeted at the negotiated indirect cost rate of 38% of the modified total direct costs for other sponsored programs. This rate was approved on 04/17/2017 by the Department of Health and Human Services (POC: DHHS, Matthew Dito, 214-767-3261)

**12. Total Costs.** [redacted]

| | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Total |
|---|---|---|---|---|---|---|
| Direct cost | [redacted] | | | | | |
| *MTDC Base* | | | | | | |
| Indirect cost | | | | | | |
| Total Project | | | | | | |

**VANDERBILT UNIVERSITY**
**BUDGET JUSTIFICATION**

**SENIOR/KEY PERSONNEL**

**Dr. Gilman Whiting:**

Dr. Whiting will devote one calendar month to full time research during the summer of each project period (CAL 8.33%) as Co-Investigator and supervise the project for Vanderbilt, which includes developing a think-tank of experts and hosting leadership team members from partner schools as well as traveling to Purdue and partner schools to support implementation of the SIM. He will direct the training throughout the project including developing and delivering SIM training for GERI Staff, Counselors, and teachers as well as for partner school leadership teams. He will direct web development from conceptualization through design and delivery, overseeing content, and working with leadership team members to include culturally relevant materials and activities. He will coordinate activities with the Purdue team, including program delivery, evaluation, research, and instrument development.

**OTHER PERSONNEL**

**Graduate Student Research Assistant:** Funds are requested for one FTE Graduate Student Research Assistant (GS RA) each year. We anticipate that the student may come from Vanderbilt's Psychological Sciences or Social Sciences departments. This individual will provide support on the project in all aspects, including web development, data collection, outreach, training, and other assistance to Dr. Whiting as required.

**FRINGE BENEFITS**

The faculty fringe rate is 25.0%. This rate is in accordance with Vanderbilt University's federally negotiated fringe benefit rate agreement.

Tuition and health insurance fees for the Graduate Student Research Assistant are direct charged to the project and are budgeted as Other Direct Costs (below).

**EQUIPMENT**

The purchase of a limited amount of non-capital hardware is requested in year 1 ([redacted] and year 2 ([redacted]) to complement our existing systems. We anticipate that the budgeted purchases will include both a workstation as well as a laptop, which will be used exclusively for Dr. Whiting and his GSRA in support of the project. Video documentary is a substantive part of digital archive of these endeavors as such purchase of recording equipment (professional level video camera bundle).

**DOMESTIC TRAVEL**

***Co-Investigator and Graduate Student Research Assistant*** travel to Purdue University to plan and deliver training and programming, as well as to each partner site to follow-up with participants and the leadership team. Confirmed partner sites exist in Arizona, South Dakota, Illinois, Indiana, and Minnesota.

| | Co-I | GS RA |
|---|---|---|
| Year 1 | [redacted] | |
| Year 2 | | |
| Year 3 | | |
| Year 4 | | |
| Year 5 | | |

An estimate of [redacted] per trip is based on recent cost experience of a similar nature, including approximately [redacted] airfare, [redacted] lodging, and [redacted] meals and incidentals per trip.

***Collaborators and Visiting Speakers***

These funds are budgeted to host a symposium at VU with leadership team members, with 3 individuals coming from each partner site to attend the 2-day event. Speakers are budgeted for follow up on site with students to support their development of Scholar Identity.

| | **Collaborators** | **V.Speakers** |
|---|---|---|
| Year 1 | [redacted] | |
| Year 2 | | |
| Year 3 | | |
| Year 4 | | |
| Year 5 | | |

**OTHER DIRECT COSTS**

***Materials and supplies***

Items requested in order to provide materials and to support the SIM in partner sites, which could include books, resources, films, and other items related to developing scholarly identity, and infusing its constructs in the counseling and courses within the school. These materials will be identified in collaboration with the leadership teams at each site. Additionally, these funds will support materials for the web including license fees for audio books and appropriate films for web use.

| | |
|---|---|
| Year 1 | [redacted] |
| Year 2 | |
| Year 3 | |
| Year 4 | |
| Year 5 | |

***Meetings Expense (Symposium)***

Items requested in order to provide housing and meals to symposium participants.

| | |
|---|---|
| Year 1 | [redacted] |
| Year 2 | |
| Year 3 | |
| Year 4 | |
| Year 5 | |

***Web communication fees***

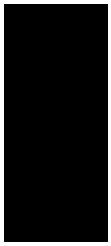
*The SIM website will be developed at VU, and as such funds have been budgeted in years 1-3 to design, create, and revise the web for use with the students. Funds allow contracting of a designer, redesign, and updating as we identify content, activities, and needs for interface and interaction Funds in years 4 and 5 enable maintenance and revisions.*

Year 1
Year 2
Year 3
Year 4
Year 5

***Software***

The following is budgeted to supplement our software needs for the project. Anticipated applications may include web design software, quantitative and qualitative data analysis software, license fees.

Year 1
Year 2
Year 3
Year 4
Year 5



***Tuition and Health Insurance for Graduate Student Research Assistant***

Tuition is assessed at 35% of the nominal Graduate School rate. We anticipate identifying a pre-doctoral student who has completed his required hours of registration, at which time only a minimal charge is required to be budgeted for tuition. Indirect costs are not assessed on graduate student tuition. The tuition charges budgeted reflect our best guess of the "seniority status" of the graduate student who will be part of the project. Graduate Research Assistants receive health insurance coverage, which is budgeted and charged in addition to tuition and subject to indirect costs.

**INDIRECT COST**

Vanderbilt Facilities and Administrative (F&A) rate for the category of "*other sponsored projects*" is 33.50%. Vanderbilt overhead is calculated on modified total direct costs, in conformity with its federally negotiated rate agreement, effective July 1, 2021.

OMB Number: 1894-0017
Expiration Date: 07/31/2023

# U.S. Department of Education
## Grant Application Form for Project Objectives and Performance Measures Information

See Instructions.

**Applicant Information**

**Legal Name:**

Purdue University

**1. Project Objective:**

Objective 1A: Randomly assign students from a pool of qualified students for scholarships to enable their attendance at camp (i.e., the treatment condition), with at least 140 of these students volunteering to participate in the study in each of the years 1/2, 3/4, and 5/6.

| 1.a. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| In years 1 3, and , newly identified students will enter the program with scholarships (GPRA 1). | GPRA | 420 | / | | |

| 1.b. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| The number of underserved students newly identified as gifted and talented under the program (GPRA 2) | GPRA | 420 | / | | |

| 1.c. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| In years 1,3, and 5 half of students entering the program will be randomly assigned to the treatment condition. | PROJECT | 210 | / | | |

| 1.d. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| In years 1, 3, and 5 half of students entering the program will be randomly assigned to serve as control condition with delayed treatment beginning in year 2. | PROJECT | 210 | / | | |



Tracking Number:GRANT13592719 Funding Opportunity Number:ED-GRANTS-021622-001 Received Date:Apr 08, 2022 02:10:41 PM EDT

| 1.e. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| In years 2, 4 (and 6) control students begin treatment condition. | PROJECT | 210 | | / | |

| 1.f. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| Percentage of students newly identified as gifted and talented under the program who were served under the program (GPRA 3). | GPRA | | 320 | / 420 | 76.19 |

| 1.g. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| Percentage of underserved students newly identified as gifted and talented under the program who were served by the program (GPRA 4). | GPRA | | 320 | / 420 | 76.19 |

**2. Project Objective:**

Objective 2A: GER2I counseling, teaching, and professional staff undergo SIM training to infuse its constructs into the affective curricula, coursework, and throughout the program.

| 2.a. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| Staff and post training reflections show evidence of implementation of SIM constructs across the program via coursework. | PROJECT | | 40 | / 50 | 80.00 |

| 2.b. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| Staff and post training reflections show evidence of implementation of SIM constructs across the program via counseling groups. | PROJECT | | 40 | / 50 | 80.00 |

**3. Project Objective:**

Objective 3A: Teams of educators from partner schools undergo SIM leadership team training (Vanderbilt Symposium), then form on-site leadership teams, and help develop culturally-specific materials for each site and follow-up support for students.

| 3.a. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| At least two individuals from each school (x5 schools) attend Vanderbilt University symposium and contribute culturally specific resources to integrate into the SIM learning community and follow-up activities | PROJECT | 10 | / | | |

| 3.b. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| The number of teachers and other educators who received services that enable them to better identify and improve instruction for gifted and talented students (GPRA 8). | GPRA | 50 | / | | |

**4. Project Objective:**

Objective 3B: Learning community for delivery of SIM components and as a repository of HOPE+ SIM materials, and follow-up activities are developed and used with/by participants.

| 4.a. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| Years 2,3,4 and 5, student participants engage in SIM learning community activities. | PROJECT | | 75 / | 100 | 75.00 |

| 4.b. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| Years 2,3,4 and 5, leadership team members make content contributions. | PROJECT | | 75 / | 100 | 75.00 |

**5. Project Objective:**

Objective 3C: Materials are appropriate for use with all students upon project completion.

| 5.a. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| All sites use SIM learning community resources and curricula with their students. | PROJECT | | 100 / | 100 | 100.00 |

**6. Project Objective:**

Objective 4A: Treatment students demonstrate greater achievement growth than do control-school students.

| 6.a. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| Achievement scores (including subject and general) and GPA (including overall and subject area) indicate growth favoring treatment students for each replication. | PROJECT | 420 | | / | |

| 6.b. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| Of the students served under the program who were in tested grades, the percentage who made gains on State assessments in mathematics (GPRA 5). | GPRA | 420 | | / | |

| 6.c. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| Of the students served under the program who were in tested grades, the percentage who made gains on State assessments in science (GPRA 6). | GPRA | 420 | | / | |

| 6.d. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| Of the students served under the program who were in tested grades, the percentage who made gains on State assessments in reading (GPRA 7). | GPRA | 420 | | / | |

**7. Project Objective:**

Objective 5A: Treatment students show better growth on constructs related to SIM compared to their control counterparts.

| 7.a. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| Analyses show pre, post, and delayed-post measures favor treatment condition over control status with statistical and practical differences expected between groups on the constructs. | PROJECT | 420 | | / | |

**8. Project Objective:**

Objective 6A: To create an effective plan for identifying and programming for underserved youth; then disseminating project findings via journal articles, practitioner articles, conferences, technical reports, and web-based information.

| 8.a. Performance Measure | Measure Type | Quantitative Data | | | |
|---|---|---|---|---|---|
| | | Target | | | |
| | | Raw Number | Ratio | | % |
| Identification procedures, programming models, publications, web-based information, and technical reports exist and are readily available. | PROJECT | | | / | |

# INSTRUCTIONS
# GRANT APPLICATION FORM FOR
# PROJECT OBJECTIVES AND PERFORMANCE MEASURES INFORMATION

## PURPOSE

Applicants must submit a **GRANT APPLICATION FORM FOR PROJECT OBJECTIVES AND PERFORMANCE MEASURES INFORMATION** via Grants.gov or in G5 when instructed to submit applications in G5. This form collects project objectives and quantitative and/or qualitative performance measures at the time of application submission for the purpose of automatically prepopulating this information into the U.S. Department of Education's (ED) automated Grant Performance Report form (ED 524B), which is completed by ED grantees prior to the awarding of continuation grants. Additionally, this information will prepopulate into ED's automated ED 524B that may be required by program offices of grant recipients that are awarded front loaded grants for their entire multi-year project up-front in a single grant award, and will also be prepopulated into ED's automated ED 524B for those grant recipients that are required to use the ED 524B to submit their final performance reports.

## GENERAL INSTRUCTIONS

### Applicant Information

- **Legal Name:** The legal name of the applicant that will undertake the assistance activity will prepopulate from the Application Form for Federal Assistance (SF 424 Form). This is the organization that has registered with the System for Award Management (SAM). Information on registering with SAM may be obtained by visiting www.Grants.gov.

### Project Objectives Information and Related Performance Measures Data

Your grant application establishes project objectives stating what you hope to achieve with your funded grant project. Generally, one or more performance measures are also established for each project objective that will serve to demonstrate whether you have met or are making progress towards meeting each project objective.

- **Project Objective:** Enter each project objective that is included in your grant application. When completing this form in Grants.gov, a maximum of 26 project objectives may be entered. Only one project objective should be entered per row. Project objectives should be numbered sequentially, i.e., 1., 2., 3., etc. If applicable, project objectives may be entered for each project year; however, the year to which the project objective applies must be clearly identified as is presented in the following examples:

  1. **Year 1.** Provide two hour training to teachers in the Boston school district that focuses on improving test scores.
  2. **Year 2.** Provide two hour training to teachers in the Washington D.C. school district that focuses on improving test scores.

- **Performance Measure:** For each project objective, enter each associated quantitative and/or qualitative performance measure. When completing this form in Grants.gov, a maximum of 26 quantitative and/or qualitative performance measures may be entered. There may be multiple quantitative and/or qualitative performance measures associated with each project objective. Enter only one quantitative or qualitative performance measure per row. Each quantitative or qualitative performance measure that is associated with a particular project objective should be labeled using an alpha indicator. Example: The first quantitative or qualitative performance measure associated with project objective "1" should be labeled "1.a.," the second quantitative or qualitative performance measure for project objective "1" should be labeled "1.b.," etc. If applicable, quantitative and/or qualitative performance measures may be entered for each project year; however, the year to which the quantitative and/or qualitative performance measures apply must be clearly identified as is presented in the following examples:

1.a. **Year 1.** By the end of year one, 125 teachers in the Boston school district will receive a two hour training program that focuses on improving test scores.
2.a. **Year 2.** By the end of year two, 125 teachers in the Washington D.C. school district will receive a two hour training program that focuses on improving test scores.

- **Measure Type:** For each performance measure, select the appropriate type of performance measure from the drop down menu. There are two types of measures that **ED** may have established for the grant program:

  1. **GPRA:** Measures established for reporting to Congress under the Government Performance and Results Act; and

  2. **PROGRAM:** Measures established by the program office for the particular grant competition.

  In addition, you will be required to report on any project-specific performance measures **(PROJECT)** that you established in your grant application to meet your project objectives.

  In the **Measure Type** field, select one (1) of the following measure types**: GPRA; PROGRAM; or PROJECT.**

- **Quantitative Target Data:** For quantitative performance measures with established quantitative targets, provide the target you established for meeting each performance measure. Only quantitative (numeric) data should be entered in the Target boxes. If the collection of quantitative data is not appropriate for a particular performance measure (i.e., for **qualitative** performance measures), please leave the target data boxes blank.

  The Target Data boxes are divided into three columns: **Raw Number; Ratio, and Percentage (%).**

  For performance measures that are stated in terms of a single number (e.g., the number of workshops that will be conducted or the number of students that will be served), the target data should be entered as a single number in the **Raw Number column** (e.g., **10** workshops or **80** students). Please leave the **Ratio and Percentage (%) columns** blank.

  For performance measures that are stated in terms of a percentage (e.g., percentage of students that attain proficiency), complete the **Ratio column,** and leave the **Raw Number and Percentage (%) columns** blank. The **Percentage (%)** will automatically calculate based on the entered ratio. In the **Ratio column** (e.g., **80/100**), the numerator represents the numerical target (e.g., the number of students that are expected to attain proficiency), and the denominator represents the universe (e.g., all students served).

# U.S. DEPARTMENT OF EDUCATION
# BUDGET INFORMATION
# NON-CONSTRUCTION PROGRAMS

OMB Number: 1894-0008
Expiration Date: 09/30/2023

Name of Institution/Organization

Purdue University

Applicants requesting funding for only one year should complete the column under "Project Year 1." Applicants requesting funding for multi-year grants should complete all applicable columns. Please read all instructions before completing form.

## SECTION A - BUDGET SUMMARY
## U.S. DEPARTMENT OF EDUCATION FUNDS

| Budget Categories | Project Year 1 (a) | Project Year 2 (b) | Project Year 3 (c) | Project Year 4 (d) | Project Year 5 (e) | Project Year 6 (f) | Project Year 7 (g) | Total (h) |
|---|---|---|---|---|---|---|---|---|
| 1. Personnel | [redacted] | | | | | | | |
| 2. Fringe Benefits | | | | | | | | |
| 3. Travel | | | | | | | | |
| 4. Equipment | | | | | | | | |
| 5. Supplies | | | | | | | | |
| 6. Contractual | | | | | | | | |
| 7. Construction | | | | | | | | |
| 8. Other | | | | | | | | |
| 9. Total Direct Costs (lines 1-8) | | | | | | | | |
| 10. Indirect Costs* | | | | | | | | |
| 11. Training Stipends | | | | | | | | |
| 12. Total Costs (lines 9-11) | | | | | | | | |

***Indirect Cost Information** ***(To Be Completed by Your Business Office):*** If you are requesting reimbursement for indirect costs on line 10, please answer the following questions:

(1) Do you have an Indirect Cost Rate Agreement approved by the Federal government? ☒ Yes ☐ No

(2) If yes, please provide the following information:

Period Covered by the Indirect Cost Rate Agreement: From: 07/01/2014 To: 06/30/2021 (mm/dd/yyyy)

Approving Federal agency: ☐ ED ☒ Other (please specify): Department of Health and Human Service

The Indirect Cost Rate is [redacted]

(3) If this is your first Federal grant, and you do not have an approved indirect cost rate agreement, are not a State, Local government or Indian Tribe, and are not funded under a training rate program or a restricted rate program, do you want to use the de minimis rate of 10% of MTDC? ☐ Yes ☐ No If yes, you must comply with the requirements of 2 CFR § 200.414(f).

(4) If you do not have an approved indirect cost rate agreement, do you want to use the temporary rate of 10% of budgeted salaries and wages?

☐ Yes ☐ No If yes, you must submit a proposed indirect cost rate agreement within 90 days after the date your grant is awarded, as required by 34 CFR § 75.560.

(5) For Restricted Rate Programs (check one) -- Are you using a restricted indirect cost rate that:

☐ Is included in your approved Indirect Cost Rate Agreement? Or, ☐ Complies with 34 CFR 76.564(c)(2)? The Restricted Indirect Cost Rate is ☐ %.

(6) For Training Rate Programs (check one) -- Are you using a rate that:

☐ Is based on the training rate of 8 percent of MTDC (See EDGAR § 75.562(c)(4))? Or, ☐ Is included in your approved Indirect Cost Rate Agreement, because it is lower than the training rate of 8 percent of MTDC (See EDGAR § 75.562(c)(4))?



ED 524

| Name of Institution/Organization | Applicants requesting funding for only one year should complete the column under "Project Year 1." Applicants requesting funding for multi-year grants should complete all applicable columns. Please read all instructions before completing form. | |
|---|---|---|
| Purdue University | | |

## SECTION B - BUDGET SUMMARY
## NON-FEDERAL FUNDS

| Budget Categories | Project Year 1 (a) | Project Year 2 (b) | Project Year 3 (c) | Project Year 4 (d) | Project Year 5 (e) | Project Year 6 (f) | Project Year 7 (g) | Total (h) |
|---|---|---|---|---|---|---|---|---|
| 1. Personnel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| 2. Fringe Benefits | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| 3. Travel | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| 4. Equipment | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| 5. Supplies | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| 6. Contractual | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| 7. Construction | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| 8. Other | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| 9. Total Direct Costs (lines 1-8) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| 10. Indirect Costs | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| 11. Training Stipends | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 |
| 12. Total Costs (lines 9-11) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | | | 0.00 |

## SECTION C - BUDGET NARRATIVE (see instructions)

ED 524

| Name of Institution/Organization | Applicants requesting funding for only one year should complete the column under "Project Year 1." Applicants requesting funding for multi-year grants should complete all applicable columns. Please read all instructions before completing form. | |
|---|---|---|
| Purdue University | | |

## IF APPLICABLE: SECTION D - LIMITATION ON ADMINISTRATIVE EXPENSES

(1) List administrative cost cap (x%): ☐

(2) What does your administrative cost cap apply to? ☐ (a) indirect and direct costs or, ☐ (b) only direct costs

| Budget Categories | Project Year 1 (a) | Project Year 2 (b) | Project Year 3 (c) | Project Year 4 (d) | Project Year 5 (e) | Project Year 6 (f) | Project Year 7 (g) | Total (h) |
|---|---|---|---|---|---|---|---|---|
| 1. Personnel Administrative | | | | | | | | |
| 2. Fringe Benefits Administrative | | | | | | | | |
| 3. Travel Administrative | | | | | | | | |
| 4. Contractual Administrative | | | | | | | | |
| 5. Construction Administrative | | | | | | | | |
| 6. Other Administrative | | | | | | | | |
| 7. Total Direct Administrative Costs (lines 1-6) | | | | | | | | |
| 8. Indirect Costs | | | | | | | | |
| 9. Total Administrative Costs | | | | | | | | |
| 10. Total Percentage of Administrative Costs | | | | | | | | |

ED 524

## 1. Level of Evidence

Select the level of evidence of effectiveness for which you are applying. See the Notice Inviting Applications for the relevant definitions and requirements.

☐ Demonstrates a Rationale ☒ Promising Evidence ☐ Moderate Evidence ☐ Strong Evidence

## 2. Citation and Relevance

Fill in the chart below with the appropriate information about the studies that support your application.

| A. Research/Citation | B. Relevant Outcome(s)/Relevant Finding(s) | C. Project Component(s)/Overlap of Populations and/or Settings |
|---|---|---|
| Hodges, J., McIntosh, J., & Gentry, M. (2017). The effect of an out-of-school enrichment program on the academic achievement of high-potential students from low-income families. Journal of Advanced Academics, 28(3), 204-224. https://doi.org/10.1177/1932202X17715304<br><br>Strength of Evidence: Demonstrates promising evidence<br>Type of research: Nonexperimental but causal, multilevel modeling analysis | Students who participated in an out-of-school enrichment program experienced a significant improvement in their standardized achievement test scores when compared with similar others who did not attend the program in both mathematics and English Language Arts. | High-potential students from low-income families participating in an out-of-school enrichment program. the program is from the same center. The population of students in this study are similar to those who will be involved in this Javits grant. |
| Jen, E., Gentry, M., & Moon, S. (2017). High-ability students' perspectives about an affective curriculum in a diverse, university-based summer residential enrichment program. Gifted Child Quarterly, 61(4), 328-342. https://doi.org/10.1177/0016986217722839<br><br>Strength of research: Demonstrates a rationale<br>Type of research: Qualitative analysis, interview data | Students from diverse cultural and economic backgrounds enjoyed the affective curriculum provided to them as part of an out-of-school enrichment program. They said it helped them create positive interactions with diverse peers, learned new things, created memories, and provided enriching and supportive experiences. | High ability middle and high school students from diverse cultural and economic backgrounds participating in a summer enrichment program. Participants in this study are of similar demographic backgrounds to those in this Javits grant, and they would be involved in similar socially enriching and developmentally-focused activities as part of the enrichment program. |
| Kaul, C. R., Johnsen, S. K., Saxon, T. F., & Witte, M. M. (2016). Project promise: A long-term follow-up of low-income gifted students who participated in a summer enrichment program. Journal for the Education of the Gifted, 39(2), 83-102. https://doi.org/10.1177/0162353216640938<br><br>Strength of research: Demonstrates a rationale<br>Type of research: Retrospective study, quantitative analysis | Students who were previously enrolled in an out-of-school enrichment program for multiple years created positive social relationships and connections with peers, instructors, and mentors. They also reported personal gains such as confidence, goal-orientation, and motivation. Expectations of generational benefits (e.g., siblings, children) were also expressed by participants as a result of participation in the program. | Adults who had previously participated in an out-of school enrichment program while they were in elementary, middle, or high school. These programs were for gifted students from low-income backgrounds, and participants in the study were enrolled in the program over multiple years. This study shows evidence of the benefits of summer enrichment, particularly for students from diverse cultural and socioeconomic backgrounds. |
| Wu, J., & Gentry, M. (2014). Summer residential program experiences as perceived by gifted Diné youth. Journal of American Indian Education, 53 (2), 66-84. https://www.jstor.org/stable/43610476 | Qualitative analysis of Native American students' experiences in an out-of-school residential enrichment program indicated the program was positive for students. Students created positive relationships with and felt supported by diverse peers and teachers, and | Gifted Native American students from the Diné tribe, who were from low-income backgrounds. These students were in 7th-9th grade in one Navajo Nation school. This study demonstrates evidence for the importance of a summer enrichment program and its effects on the lives |

| | | |
|---|---|---|
| Strength of research: Demonstrates a rationale<br>Type of research: Qualitative analysis | good academic experiences as well. They also felt the program was "life-changing" (p. 74), motivating them to participate and "excited to attend" the following year. Finally, "students met challenges that helped them better understand the world" (p. 76). | of children from Native American tribal nations. |
| Mac Iver, M. A., & Mac Iver, D. J. (2015). The Baltimore city schools middle school STEM summer program with VEX robotics. Baltimore Education Research Consortium. Retrieved from: https://eric.ed.gov/?id=ED570654<br><br>Strength of Research: Promising Research<br>Rating: Meets WWC standards with reservations (due to quasi-experimental design); No tier assigned.<br>Type of research: Quasi-experimental design | Students in this study participated in a summer program for 6th-8th graders about robotics. The program ran for five weeks, with half of the day spent on fundamental robotics curricula and the other half on enrichment-type activities. Following participation in the program, students in the treatment group showed higher average school attendance than those in the comparison group (to a statistically significant degree.) Researchers stated that through STEM-focused summer enrichment programs there is a potential to engage students of varying levels of achievement in high-level STEM disciplines, encouraging and motivating them to attend school more frequently. | This study involved 1,114 students in Grades 5-7 in a summer enrichment program featuring STEM curricula. This was done in an urban setting and 83% of participants were eligible for Free or Reduced Lunch. The population demographics of this study are similar to the demographics of those participants that would be involved in this Javits grant. Additionally, the focus of the program was on robotics and engaging in STEM environments. Students participated in athletic and arts-based enrichment activities in the remaining program time. Both of these features are similar to important elements in the Summer Residential program, in which students in this Javits grant will participate. |
| Borman, G. D., Rozek, C. S., Pyne, J., Hanselman, P. (2019). Reappraising academic and social adversity improves students' academic achievement, behavior, and well-being. Proceedings of the National Academy of Sciences, 116(3), 16286-16291. https://doi.org/10.1073/pnas.1820317116<br><br>Strength of Research: Strong Evidence<br>Type of Research: Randomized Controlled Trial | Students in the treatment group participated in an intervention designed to increase belonging, reduce behavioral challenges, and improve student well-being and academic achievement. This intervention helped participants reassess their perceptions about socioemotional concerns in middle school, including normalizing issues with belonging and academic challenges. Following implementation, students in the treatment group demonstrated higher attendance (12% higher than control group); fewer discipline issues (34% fewer disciplinary reports than the control group); and fewer failing grades (18% fewer failing grades). Results also showed an increase in student trust in the school system and social belonging. | Students (n = 1,304) in this study were from eleven urban middle schools within one district in the Midwest. Participants were from diverse racial and cultural backgrounds and ability levels with 43% being from traditionally underserved populations. Additionally, 85% were eligible for Free or Reduced Lunch, 16% were identified as English Language Learners, and 11% had some form of disability. Participants engaged in an intervention to increase feelings of belonging in their middle school, reduce feelings of social isolation, and normalize academic challenges. The demographics of study participants are similar to those who would be involved in this Javits grant, and would be engaged in an intervention with similar goals. |
| Collins, K. H. (2018). Confronting color-blind STEM talent development: Toward a contextual model for Black student STEM identity. Journal of Advanced Academics, 29 (2), 143-168. https://doi.org/10.1177/1932202X18757958<br><br>Strength of research: Demonstrates a rationale<br>Type of research: Theoretical modeling | Using the Scholar Identity Model (Whiting, 2006) and Female Achievement Model for Excellence (Ford, 2013), among other models, the author poses the Black Student STEM Identity, which is comprised of four categories: Reflective Identity, Competence/Ability, Value/Interest, and Assimilation. | This contextual model incorporates aspects of Whiting's (2006) Scholar Identity Model for Black male students, in addition to Ford's (2013) Female Achievement Model for Excellence, to explain essential components to facilitating STEM identity in Black students. |
| Lee, H., Gentry, M., & Maeda, Y. (2022). Validity evidence of The HOPE Scale in Korea: Identifying gifted students from low-income and multicultural families. Gifted Child Quarterly, 66(1), 23-40. https://doi.org/10.1177/00169862211024590<br><br>Strength of research: Demonstrates promising evidence<br>Type of research: Confirmatory Factor Analysis, Multigroup confirmatory factor analysis | Teachers in this study identified students from diverse cultural and socioeconomic backgrounds for gifted education services. Using the HOPE Scale, teachers rated students from diverse backgrounds similarly on scale items, as compared to their peers from higher-income families and dominant cultural groups. | Korean elementary school teachers, responding about their elementary school students from low-income and multicultural families. This study demonstrates evidence that the HOPE Scale can be used with populations of students from multicultural and diverse socioeconomic backgrounds. |
| Pereira, N. (2021). Finding talent among | Findings suggested the HOPE Scale could be used | Teachers of general education classrooms and |

| | | |
|---|---|---|
| elementary English Learners: A validity study of the HOPE Teacher Rating Scale. Gifted Child Quarterly, 65(2), 153-166. https://doi.org/10.1177/0016986220985942<br><br>Strength of research: Demonstrates promising evidence<br>Type of research: Confirmatory factor analysis | at the schools who participated in the study and schools with similarly large populations of ESL students. However, the scores for students who speak ESL and those who are English Proficient (EP) should not be compared to each other, as teachers may identify ESL students at a lower rate than EP students. | those focusing on students identified as speaking English as a second language (ESL) evaluated ESL students using the HOPE Scale. This shows evidence of usability for the HOPE Scale with diverse populations who are of varying levels of English proficiency. |
| Peters, S. J., & Gentry, M. (2012). Additional validity evidence and across-group equivalency of the HOPE Teacher Rating Scale. Gifted Child Quarterly, 57(2), 85-100. https://doi.org/10.1177/0016986212469253<br><br>Strength of research: Moderate evidence<br>Type of research: Multigroup confirmatory factor analysis | After evaluating the eleven items in the revised HOPE Scale, internal consistency estimates are good, and there was sufficient evidence for construct validity. "The present research indicates that teachers can effectively rate their students from various economic and racial/ethnic backgrounds, without especially high levels of error due to group membership" (p. 97). | Teachers (n = 71) evaluated 1,700 K-5 students from diverse cultural and socioeconomic backgrounds. The students evaluated in this study would be similar to the populations of students participating in t |
| Peters, S. J., & Gentry, M. (2010). Multi-group construct validity evidence of the HOPE Scale: Instrumentation to identify low-income elementary students for gifted programs. Gifted Child Quarterly, 54, 298-313. https://doi.org/10.1177/0016986210378332<br><br>Strength of the Research:  Moderate evidence<br>Type of Research: Multigroup confirmatory factor analyses, instrument design | Original validity study of HOPE Scale with 6000 ethnically and economically diverse students. MCFA showed invariace between racial and income groups. Fit statistics and alpha reliability estimates were strong. | Participants in this project are similar to the sample in this study, meaning the HOPE Scale can be used with confidence in this project. |
| Borman, G. D., Rozek, C. S., Pyne, J., Hanselman, P. (2019). Reappraising academic and social adversity improves students' academic achievement, behavior, and well-being. Proceedings of the National Academy of Sciences, 116(3), 16286-16291. https://doi.org/10.1073/pnas.1820317116<br><br>Strength of the Research: Promising Evidence<br>Type of Research: Double blind experimental study with random assignment in one district | With a sample of 1304 middle school students, researchers tested the effects of a brief intervention designed to promote belonging. Results showed a 12% increase in attendance; and decreases in disciplinary referrals (34%) and failing grades (18%) among treatment students as compared to control students. Mediatitional analysis suggested 80% of long-term intervention effects on students GPAs were due to changes in students' attitudes/behaviors. | In this project we will be working with adolescents on SIM which includes affect constructs similar to what was studied in this research. Our summer intervention is brief (2-weeks) but follow-up should result in even more robust findings on SIM constructs. |

# Instructions for Evidence Form

1. **Level of Evidence.** Check the box next to the level of evidence for which you are applying. See the Notice Inviting Applications for the evidence definitions.

2. **Citation and Relevance.** Fill in the chart for each of the studies you are submitting to meet the evidence standards. If allowable under the program you are applying for, you may add additional rows to include more than four citations. (See below for an example citation.)
   a. **Research/Citation.** For Demonstrates a Rationale, provide the citation or link for the research or evaluation findings. For Promising, Moderate, and Strong Evidence, provide the full citation for each study or WWC publication you are using as evidence. If the study has been reviewed by the WWC, please include the rating it received, the WWC review standards version, and the URL link to the description of that finding in the WWC reviewed studies database. Include a copy of the study or a URL link to the study, if available. Note that, to provide promising, moderate, or strong evidence, you must cite either a specific recommendation from a WWC practice guide, a WWC intervention report, or a publicly available, original study of the effectiveness of a component of your proposed project on a student outcome or other relevant outcome.
   b. **Relevant Outcome(s)/Relevant Finding(s).** For Demonstrates a Rationale, describe how the research or evaluation findings suggest that the project component included in the logic model is likely to improve relevant outcomes. For Promising, Moderate and Strong Evidence, describe: 1) the project component included in the study (or WWC practice guide or intervention report) that is also a component of your proposed project, 2) the student outcome(s) or other relevant outcome(s) that are included in both the study (or WWC practice guide or intervention report) and in the logic model (theory of action) for your proposed project, and 3) the study (or WWC intervention report) finding(s) or WWC practice guide recommendations supporting a favorable relationship between a project component and a relevant outcome. Cite page and table numbers from the study (or WWC practice guide or intervention report), where applicable.
   c. **Project Component(s)/Overlap of Population and/or Settings.** For Demonstrates a Rationale, explain how the project component(s) is informed by the research or evaluation findings. For Promising, Moderate, and Strong Evidence, explain how the population and/or setting in your proposed project are similar to the populations and settings included in the relevant finding(s). Cite page numbers from the study or WWC publication, where applicable.

*EXAMPLES: For Demonstration Purposes Only (the three examples are not assumed to be cited by the same applicant)*

| A. Research/Citation | B. Relevant Outcome(s)/Relevant Finding(s) | C. Project Component(s)/Overlap of Populations and/or Settings |
|---|---|---|
| *Graham, S., Bruch, J., Fitzgerald, J., Friedrich, L., Furgeson, J., Greene, K., Kim, J., Lyskawa, J., Olson, C. B., & Smither Wulsin, C. (2016). Teaching secondary students to write effectively (NCEE 2017-4002). Washington, DC: National Center for Education Evaluation and Regional Assistance (NCEE), Institute of Education Sciences, U.S. Department of Education. Retrieved from the NCEE website: https://ies.ed.gov/ncee/wwc/PracticeGuide/22. This report was prepared under Version 3.0 of the WWC Handbook (p. 72).* | *(Table 1, p. 4) Recommendation 1 ("Explicitly teach appropriate strategies using a Model – Practice – Reflect instructional cycle") is characterized as backed by "strong evidence."*<br><br>*(Appendix D, Table D.2, pp. 70-72) Studies contributing to the "strong evidence" supporting the effectiveness of Recommendation 1 reported statistically significant and positive impacts of this practice on genre elements, organization, writing output, and overall writing quality.* | *(Appendix D, Table D.2, pp. 70-72) Studies contributing to the "strong evidence" supporting the effectiveness of Recommendation 1 were conducted on students in grades 6 through 12 in urban and suburban school districts in California and in the Mid-Atlantic region of the U.S. These study samples overlap with both the populations and settings proposed for the project.* |

| A. Research/Citation | B. Relevant Outcome(s)/Relevant Finding(s) | C. Project Component(s)/Overlap of Populations and/or Settings |
|---|---|---|
| *U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2017, February). Transition to College intervention report: Dual Enrollment Programs. Retrieved from https://ies.ed.gov/ncee/wwc/Intervention/1043. This report was prepared under Version 3.0 of the WWC Handbook (p. 1).* | *(Table 1, p. 2) Dual enrollment programs were found to have positive effects on students' high school completion, general academic achievement in high school, college access and enrollment, credit accumulation in college, and degree attainment in college, and these findings were characterized by a "medium to large" extent of evidence.* | *(pp. 1, 19, 22) Studies contributing to the effectiveness rating of dual enrollment programs in the high school completion, general academic achievement in high school, college access and enrollment, credit accumulation in college, and degree attainment in college domains were conducted in high schools with minority students representing between 32 and 54 percent of the student population and first generation college students representing between 31 and 41 percent of the student population. These study samples overlap with both the populations and settings proposed for the project.* |
| *Bettinger, E.P., & Baker, R. (2011). The effects of student coaching in college: An evaluation of a randomized experiment in student mentoring. Stanford, CA: Stanford University School of Education. Available at https://ed.stanford.edu/sites/default/files/bettinger_baker_030711.pdf*<br><br>*Meets WWC Group Design Standards without Reservations under review standards 2.1 (http://ies.ed.gov/ncee/wwc/Study/72030).* | *The intervention in the study is a form of college mentoring called student coaching. Coaches helped with a number of issues, including prioritizing student activities and identifying barriers and ways to overcome them. Coaches were encouraged to contact their assignees by either phone, email, text messaging, or social networking sites (pp. 8-10). The proposed project for Alpha Beta Community College students will train professional staff and faculty coaches on the most effective way(s) to communicate with their mentees, suggest topics for mentors to talk to their mentees, and be aware of signals to prevent withdrawal or academic failure.*<br><br>*The relevant outcomes in the study are student persistence and degree completion (Table 3, p. 27), which are also included in the logic model for the proposed project.*<br><br>*This study found that students assigned to receive coaching and mentoring were significantly more likely than students in the comparison group to remain enrolled at their institutions (pp. 15-16, and Table 3, p. 27).* | *The full study sample consisted of "13,555 students across eight different higher education institutions, including two- and four-year schools and public, private not-for-profit, and proprietary colleges." (p. 10) The number of students examined for purposes of retention varied by outcome (Table 3, p. 27). The study sample overlaps with Alpha Beta Community College in terms of both postsecondary students and postsecondary settings.* |