

**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 # S206A220038**

**Grants.gov Tracking#: GRANT13594514**

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

Closing Date: Apr 11, 2022

PR/Award # S206A220038

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## Application for Federal Assistance SF-424

**\* 1. Type of Submission:**

- ☐ Preapplication  
☒ Application  
☐ Changed/Corrected Application

**\* 2. Type of Application:**

- ☒ New  
☐ Continuation  
☐ Revision

**\* If Revision, select appropriate letter(s):**

**\* Other (Specify):**

**\* 3. Date Received:**

04/11/2022

**4. Applicant Identifier:**

**5a. Federal Entity Identifier:**

**5b. Federal Award Identifier:**

**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):**

**\* c. UEI:**

**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:**

47906-1394

**e. Organizational Unit:**

**Department Name:**

Education Studies

**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:**

Post Award Assistant Director

**Organizational Affiliation:**

Purdue University

**\* Telephone Number:**

**Fax Number:**

**\* Email:**

PR/Award # S206A220038

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## 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.):

Add Attachment

Delete Attachment

View Attachment

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

Underrepresented Students in Gifted & Talented Education: Positive Psychology Identification & Service

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 \* b. Program/Project 

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

**17. Proposed Project:**\* a. Start Date: \* b. End Date: **18. Estimated Funding (\$):**\* a. Federal \* 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

**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: Middle Name: \* Last Name: Suffix: \* Title: \* Telephone Number: Fax Number: \* Email: \* Signature of Authorized Representative: \* Date Signed:

IN-004  
CA-034  
GA-002  
GA-008  
TX-018

## NOTICE TO ALL APPLICANTS

OMB Number: 1894-0005  
Expiration Date: 04/30/2020

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](mailto:ICDocketMgr@ed.gov) and reference the OMB Control Number 1894-0005.

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

1235-GEPA.pdf

Add Attachment

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## **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% minority 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, 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 project personnel 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
- The College of Education's Office of Diversity Initiatives
- Academic advisers at the undergraduate and graduate levels
- Recruitment email sent to the College's listservs and social media outlets (e.g., Twitter, Facebook, YouTube, websites)

Potential study participants (teachers, counselors, and students) will be recruited from participating schools through

- Information sessions conducted by study personnel at each school
- Informational brochure about the study
- Recruitment emails and phone calls to teachers, counselors, and parents of students from underrepresented populations in gifted education and/or of students with disabilities
- Formal letters of invitation delivered to students at school

Potential barriers and steps taken to overcome barriers, including those encountered during the project:

- Recruitment sessions and materials will be translated to families' native languages and in formats that accommodate parents/guardians and students' disabilities, as needed.
- Information sessions will be held at various times during the week to accommodate parents', students', and teachers' schedules.
- Offer incentives for participation, especially for students from underrepresented populations, including those with disabilities, to encourage their enrollment.

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](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:  Middle Name:   
\* Last Name:  Suffix:   
\* Title:

\* SIGNATURE:

\* DATE:

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

OMB Number: 1894-0007  
Expiration Date: 12/31/2023

**1. Project Director:**

Prefix:	* First Name:	Middle Name:	* Last Name:	Suffix:
Prof.	F.	Richard	Olenchak	

Project Director Level of Effort (percentage of time devoted to grant): 29

**Address:**

* Street1:	100 North University Street
Street2:	BRNG 5108D
* City:	West Lafayette
County:	Tippecanoe
* State:	IN: Indiana
* Zip Code:	4790720098
Country:	USA: UNITED STATES

\* Phone Number (give area code) Fax Number (give area code)

--	--

\* Email Address:

--

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:

13027960300		

**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:

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.

Add Attachment

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## 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.]

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## 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: 1239-PROPOSAL ABSTRACT 3.pdf

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## **PROPOSAL ABSTRACT**

Numerous attempts to ameliorate the underrepresentation of racially and ethnically diverse students, those with disabilities, and those from lower socioeconomic environments have been made, yet the underrepresentation of these groups of young people persists in gifted education. This project intends to address this continuing representation gap by using a combination of static and dynamic assessment procedures centered around positive psychology modules with middle school students. This innovative initiative is rooted in emerging research literature supporting the value of exploring giftedness through an affective lens among individuals from diverse backgrounds, including those of non-majority races and cultures, those with disabilities, and those from economically challenged environments. As such, this project will produce new evidence that can assist schools in both the identification of and provision of services for gifted and talented students – particularly those from traditionally underrepresented groups – who are often not identified and served through traditional assessment methods (Absolute Priority).

By using a comprehensive professional development program, educators will be trained in an overarching model that integrates positive psychological knowledge and skills with techniques for implementing a collection of modules for students employing a dynamic assessment approach. Information and skills acquired in these training sessions have applicability to all students (Competitive Preference Priority 3). Still, the emphasis will be on using these nontraditional, pioneering identification methods with students from underrepresented groups, particularly identifying students with disabilities (Competitive Preference Priority 1).

While baseline assessments of students across such positive psychological constructs as agency, engagement, perseverance, optimism, connectedness, happiness, and hope will be

collected, the dynamic assessment technique enables educators to teach these same concepts before another round of assessment. This test-teach-retest model is widely applied in special education programs, English-learning programs, and other instructional environments where students have unique challenges. Given the reality that traditional assessment approaches alone may overlook some students with disabilities for gifted services, the proposed procedures offer an opportunity for expanding the evaluation of underrepresented groups of students (Competitive Preference Priority 2).

In addition to the utility of this novel identification system, the project will provide training support to educators through its professional development program that will scaffold and augment curriculum and instruction in participating middle schools' existing gifted education services. Among the topics included in these sessions are strategies that are useful in building positive classroom environments, strengthening student-to-student relationships and educator-student relationships, and bolstering programmatic features such as attention to social and emotional development.

After the five-year project period, it is anticipated that: 1. the persistent problem in identification of students from underrepresented populations will be prominently reduced; 2. increased numbers of students from underrepresented populations will be identified for gifted education services; and 3. participating educators will possess knowledge and skills foundational to identifying students from underrepresented populations and providing appropriate gifted education services that optimize their individual identity, interests, and talents. Finally, the project will have left a legacy of evidence for schools everywhere to apply in adopting or adapting the project's components so that the adequacy and accuracy of identification systems for traditionally camouflaged populations in gifted education are ameliorated significantly.

## Project Narrative File(s)

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\* **Mandatory Project Narrative File Filename:**

[Add Mandatory Project Narrative File](#)

[Delete Mandatory Project Narrative File](#)

[View Mandatory Project Narrative File](#)

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

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## **Underrepresented Students in Gifted & Talented Education:**

### **Positive Psychology Identification & Services**

#### **NEED FOR THE PROJECT**

The need for alternative approaches to identify diverse students for gifted education services has been well documented for many years (Baldwin, 1977, 1985, 1987; Ford, 1995; Ford & Webb, 1994; Seward & Gentry, 2022). Despite a variety of solutions and implementation efforts to ameliorate the underrepresentation of racially, ethnically, economically, and ability diverse students, including those from rural locales (e.g., teacher nominations, universal screening, and local norms), underrepresentation of these groups persists (Gentry et al., 2019; Renzulli & Brandon, 2017; Worrell & Dixon, 2018, 2021). Peters (2019) estimates students with disabilities are underrepresented by 75%. Often, identification practices that rely heavily on norm-referenced measures in universal screening and the (mis)application of local norms fail to identify the multifaceted strengths, interests, and latent or emerging potentials of students, especially those from underrepresented groups (Renzulli, 2021; Seward & Gentry, 2022). Gifted education's historical focus on cognition for identification has left relevant affective skills understudied, contributing to the representation gap in gifted education.

The proposed project intervenes in the long-standing paradigm of cognitive development as the central tenet of gifted education and academic talent development. By shifting the focus of identification toward affective (e.g., well-being and hope) and metacognitive strengths promoted through content area curricula, this project intends to reduce the representation gap. These identification efforts are rooted in emerging, evidence-based literature supporting the affective components of giftedness among those from minoritized groups, including those with disabilities and those from economically challenged environments (hereinafter referred to collectively as

traditionally underrepresented students; Baum & Olenchak, 2022; Dixon, Worrell et al., 2017; Dixon, Keltner et al., 2018; Dixon & Stevens, 2018; Olenchak & Thomas, 2021). By focusing on well-being and observing students' performance in content-related, positive psychology tasks, educators can make identification decisions that recognize students' interests, motivations, and affective strengths as equally important and comorbid with students' intellectual abilities.

Therefore, our approach is integrated with instruction and assessment available to all students, where teachers can observe students using and applying self-regulation, perseverance, optimism, and metacognitive skills. As with Renzulli's (2021) assessment *for* learning approach to identification, teachers will create conditions and learning experiences via implementation of our positive psychology modules (see Appendix) where self-regulation and perseverance can emerge and, eventually, become manifest. In short, our project addresses the underrepresentation of students not typically identified and served through traditional assessment methods (Absolute Priority 1), with an emphasis on those who have twice or multiple exceptionalities (CPP1 & CPP2), and those from ethnically diverse and/or low-income backgrounds, thereby promoting equitable access for all students (CPP3).

Specifically, we build on foundational elements of positive psychology to modify the developmental nature of the Bull's Eye Model for Affective Development (BEM; Olenchak, 2009; Olenchak et al, 2016) into an innovative approach that promotes identification of traditionally underrepresented students. Originally intended as a lens for understanding affective development among gifted and talented persons, the BEM has become a mechanism for addressing *talent development* throughout the lifespan for individuals who present with a variety of disabilities yet also possess camouflaged gifted and talented abilities (Olenchak et al, 2016). Our proposed BEM expansion will address *talent identification* of students using a combination

of essential elements of the Engagement, Perseverance, Optimism, Connectedness; and Happiness Model (EPOCH; Kern et al., 2016), derived from Seligman's Positive Emotion, Engagement, Relationships, Meaning and Accomplishment Model (PERMA; 2011; 2018), hope as assessed by the Children's Hope Scale (CHS; 1994; 1997), and metacognition as assessed by the Junior Metacognitive Awareness Inventory, Version B (Jr. MAI-VB; Sperling et al., 2002) coupled with dynamic assessment during the implementation of our modules.

### QUALITY OF PROJECT DESIGN

**Project Design – Conceptual Framework.** Our project is based on the original BEM, a research-based theoretical perspective on affective development of students with gifts, creativity, and talents (Olenchak, 2009; Olenchak et al., 2016). In this project, we will use the expanded BEM (BEM-e) that extends its original conceptualization of affective development to the identification of gifted students using positive psychology traits (Kern et al., 2016; Seligman et al., 2009), specifically engagement, perseverance, optimism, connectedness, happiness, and hope and its subconstruct of agency through dynamic assessment (Chaffey & Bailey, 2003; Vogelaar, 2017). The BEM-e frames identification for gifted services through explicit connections to

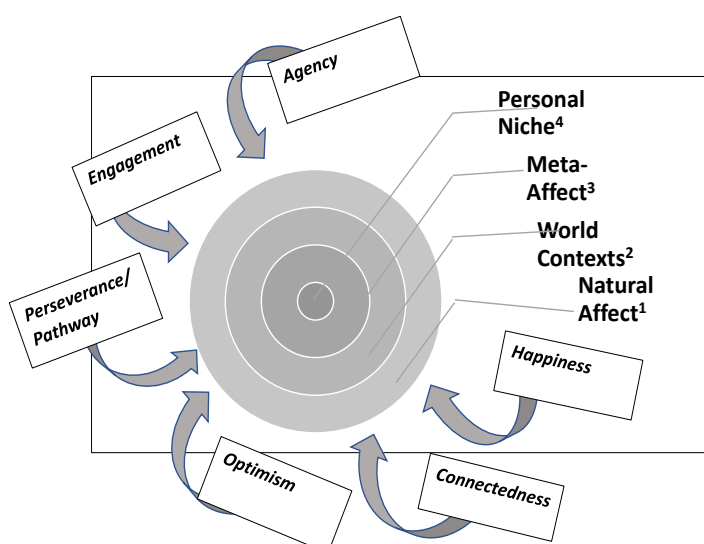


Figure 1: Expanded Bull's Eye Model for Affective Development (BEM-e)

affective studies in positive psychology, metacognition, and dynamic assessment. To support underrepresented students, identification is based on affective traits as opposed to the cognitive traits typically used for identification. Studies by Ackerman (1997), Al-

Hroub and Whitebread (2019), Dixson and colleagues (2017; 2018), Ford and Grantham (2003), Gilman et al. (2013), and VanTassel-Baska et al. (2009) demonstrate that the affective dimensions of students under-recognized for gifted programming provide critically valid insights into the talent potential of students from traditionally underrepresented groups.

Figure 1 depicts the BEM-e and its 4 basic parts. <sup>1</sup> **Natural Affect:** personality, native social proclivity, natural emotional attributes, innate abilities for handling affective information, genetic predispositions, modifiers imposed by giftedness. <sup>2</sup> **World Contexts:** home and family influences, peer pressures, school and work expectations and mores, affective norms of society, views of others about giftedness, “big world” circumstances. <sup>3</sup> **Meta-Affect:** affective self-examination, social and emotional regulation, impact of giftedness, adjusting natural affect with world contexts for self-adjustment and coping. <sup>4</sup> **Personal Niche:** affective integration (innate with world with meta) to find ways for one’s social and emotional sense to flourish.

Four of the inputs are based on Kern et al. (2016) from their work on the EPOCH, while the *Agency* input is based on work from Snyder (1994) and Snyder et al. (1997) in the development of the CHS. The *Perseverance/Pathway* input is integral in the works of both Kern et al. (2016) and Snyder et al. (1997). **Agency:** regulating one’s own behavior, resist social pressure, and follow one’s convictions, even if they conflict with the majority (Deci & Ryan, 2013; Perez et al, 2016). **Engagement:** engaging in a process of interacting with others in various contexts while developing one’s own potential, including being open to new experiences and willingness to improve over time (Ross et al., 2020; Steinmayr et al., 2019).

**Perseverance/Pathway:** setting objectives and goals and making decisions that provide meaning and guidance to one’s life (Burns et al., 2018; Paéz-Gallego et al., 2020). **Optimism:** holding positive outlook for present and future outcomes while managing the context into which

activities are placed (Aldawsari et al, 2018; Curhan et al., 2014). **Connectedness**: establishing close, trusting, and meaningful bonds with at least one other person, as well as showing concern for the well-being of others and the expression of empathy, affection, and intimacy (Bakalim & Taşdelen-Karçkay, 2017; Exner-Cortens et al., 2020). **Happiness**: holding positive attitudes and feelings of satisfaction and acceptance of oneself, others, and life in general, including both good and bad qualities (Jibeen, 2016; Thompson & Waltz, 2008)

The BEM-e, targeting developmental psychosocial attributes, allows for assessment of preexisting affective characteristics as well as the unmasking of affective strengths that can frequently be camouflaged by comorbid disabilities, racial and cultural diversity, and socioeconomic disadvantages (Baum et al., 2014; Olenchak et al., 2016; VanTassel-Baska et al., 2009; Webb et al., 2016). These affective characteristics are well documented in positive psychological literature as noted in Figure 1, and they are assessed in both EPOCH and CHS. Hence, our project will function as a positive psychology approach to identification.

The BEM-e includes developmental features that are both fixed and fluid. For example, within the original BEM (Olenchak, 2009), the construct of *Natural Affect* embraces psychosocial proclivities with which one is born, while *Meta-Affect* encompasses one's ever-growing and ever-adjusting tendencies and skills for feeling about one's own feelings (e.g., affective self-examination akin to meta-cognition or cognitive self-examination). The BEM rings that are flexible depending on time, events, and life changes, among other variables through the lifespan, encompass all constructs except *Natural Affect*.

The inputs from Kern et al (2016) are all variable and provide a contextual and temporal frame for the Bull's Eye rings themselves. Each of the inputs is dependent on events in an individual's life at any moment in time, and serve to shape the Bull's Eye rings, again, with the

exception of *Natural Affect*. The inputs are factors aligned with the EPOCH model and measure that is the adolescent application of Seligman's (2011) PERMA model described in *Flourish*, a book that established a grounded, intervention-oriented foundation for positive psychology.

**Instrument Information.** The EPOCH survey (Kern et al et al., 2016) measures 5 constructs: engagement, perseverance, optimism, connectedness, and happiness. Total score reliability coefficients ( $\alpha$ ) for the instrument, which has been validated in 10 distinct samples with over 3,500 adolescents, range between .74 and .86. The 6-item CHS (Snyder et al., 1997) produces a score measuring hope. The scale has been validated using 6 samples of children and adolescents ages 8–17 ( $n > 900$ ) with  $\alpha$  coefficients ranging from .72 to .86. The 18-item Jr. Metacognitive Assessment Inventory, Version B, designed for students in grades 6 – 9, (Jr. MAI, VB; Sperling et al., 2002, adapted from Schraw & Dennison, 1994) is widely used in psychological research. During the inventory's development, internal consistency reliability was .82 ( $n = 416$  students in grades 7 – 8), and exploratory factor analysis suggested two factors underlying the instrument's items. As advised by Sperling et al., we will use the inventory "as a measure of knowledge and regulation of cognition overall [with less reliance] on individual factor scores (p. 73). Should we find compelling evidence to further investigate the utility of metacognition in our identification model, we will pursue other measurement options that will provide specific information about metacognitive components, including domain-specific metacognitive skills.

**Phases of Project Design.** We will focus on students in Grades 6-8 in four schools (see letters) using a multi-phase mixed methods design to evaluate the utility of implementing positive psychology modules and assessments to identify students from traditionally underrepresented groups for gifted services.

Phase 1 consists of two parts. First, all students (at minimum one grade level per school) in the 4 schools will participate in universal screening using EPOCH, CHS, and Jr. MAI-VB. We will screen at least 680 students in total (see Appendix for power analysis and flowchart). Second, study personnel will examine identification assessments and procedures for each participating school, noting specific elements that prohibit or inhibit the identification of students from traditionally underrepresented populations. Using schools' identification data and results from universal screening measures, we will apply building-level norms to identify students from under-represented populations who were unidentified by the school but would benefit from gifted programming. These "students of interest" will be the focus of our intervention.

In Phase 2, we will train teachers, counselors, and/or administrators (hereafter referred to as educators) to implement 5 positive psychology modules (see Appendix) as extensions of their content area curriculum and to identify behaviors that indicate latent or emerging gifts, creativity, or talents in the students of interest using module-specific rubrics developed by study personnel. This training will increase educators' knowledge about positive psychology concepts and how these affective characteristics influence student achievement and talent development. We will also recruit a site coordinator at each school who will be trained in the implementation of the model and will assist with data collection. This will be a school staff member.

Educators' implementation of the 5 positive psychology modules in their classrooms represents Phase 3 of our study. Fidelity checks will be conducted by study personnel or site coordinators. After each module's implementation, educators will reflect on their experiences and impact on students; data will be analyzed throughout to improve modules, as needed, and to assess educators' attitudes about implementing modules. Educators will complete module-specific rubrics for each student of interest in their class. Study personnel or site coordinators

present during implementation will also complete these rubrics as a way of validating educators' assessments. After implementation, we will apply a single-case design to evaluate the efficacy of a set of positive psychology modules with dynamic assessment, implemented by trained educators, delivered through the schools' existing talent development programming. Educators will be interviewed to gather information related to implementation of the modules, their overall observations about students' participation, and their assessments of the students of interest.

Phase 4 is the formal identification of students, with an emphasis on traditionally underrepresented populations, for gifted services as determined by school personnel typically involved in identifying gifted students with input from study personnel. In this phase, we will demonstrate how positive psychology constructs can be used to identify additional students with high ability. Specifically, we will share findings about strengths and weaknesses of the school's identification assessments and procedures and the results of 1) universal screening using EPOCH, CHS and Jr. MAI-VB, 2) fidelity of implementation of positive psychology modules, 3) module-specific rubrics from educators and observers, and 4) logistic regression to compute changes in odds ratios for identification by student demographic group. We will present the list of newly identified students (i.e., students of interest identified during implementation of positive psychology modules) and facilitate discussion about whether the school will invite these students to participate in gifted programming. Ideally, schools will invite all newly identified students; if not, we will encourage schools to invite students on a trial basis for at least one grading period.

Based on continuous improvements to our model, we will also propose a revised identification process that addresses weaknesses observed in the schools' original process and includes the implementation of positive psychology modules as an additional step toward more equitable identification. We recognize that participating schools may be hesitant, even resistant



to these recommendations; however, we intend for the evidence to be so compelling that school personnel agree that students with gifted potential from traditionally underrepresented groups benefit from this additional, process-oriented, positive psychology approach to identification.

In Phase 5, our focus will shift to the newly identified students' participation in gifted programming at their schools. For this phase, study personnel will assign two schools to Option 1 and two to Option 2 interventions based on each school's level of fidelity in implementation and acceptance of alternative identification for traditionally underrepresented populations. In years 1 – 3, newly identified students in Option 1 schools will participate in their school's gifted programming without further positive psychology interventions. In years 4 – 5, Option 1 schools will participate in Option 2. In years 1 – 5, newly identified students in Option 2 will participate in their school's gifted programming with implementation of additional positive psychology modules. Additional educator training will be provided for the implementation of positive psychology modules and instruction within their existing curricula.

For all newly identified students, data collection includes: primary outcome measures (i.e., EPOCH, CHS, and Jr. MAI-VB scores), standardized test scores, a subset of interviews, and observations. The extent to which students benefit from the Option 1 and Option 2 programs will be determined using regression discontinuity models. For students in Option 2 schools, rubric scores from static, followed by dynamic assessment during positive psychology modules, will also be collected. A single-case design with individual students as the unit of analysis will be applied to the rubric scores to determine whether dynamic assessment by educators during positive psychology modules improves affective outcomes for newly-identified students.

Educator data will include reflections on positive psychology module implementation, observations, interviews, fidelity checklists applied in observations of dynamic assessment (DA),

and inter-assessor agreement about student rubric scores. Study personnel or site supervisors will observe each educator's implementation of the positive psychology modules and complete module-specific rubrics to assess students' potentials for giftedness. All of this evidence will be continually analyzed to evaluate the efficacy of the new process for identifying students with gifts and talents in the affective and conative domains across all participating schools.

### Goals, Objectives, and Outcomes

The project has definitive and measurable goals based on extant and continuing research examining positive psychology and metacognition; affective variables associated with positive psychology, and student achievement; and the influences these constructs have in the identification of traditionally underrepresented students for gifted education services.

**GOAL 1: To implement and evaluate the effectiveness of the BEM-e model in 4 schools for addressing the Javits Absolute Priority and Competitive Priority 3 - identification of and provision of services to gifted and talented students who may not be identified through traditional assessment methods and promoting equity in access to opportunities.**

**Objective 1a:** Select 4 middle schools in urban and rural communities that serve students who are traditionally underrepresented in gifted education. **Outcome 1a:** The sample contains schools with at least one-third of the student population from underrepresented groups.

School	Total # Students	% with Disabilities	% Black	% Hispanic	% Native American	% Asian	% Multi- Racial	% ELL	% FARM*
Brooks Co MS, Brooks County Schools, GA	510	13.5	56	10.4	n/a	n/a	4.7	5.9	>95%
Pershing Middle School, Houston ISD, TX	1,714	8.4	32	40.6	0.2	6.6	1.8	14	49.7
Richard Henry Dana MS, Los Angeles, CA	1,537	17	8.4	71.9	0.3	0.8	2.7	8.8	77.9
Scintilla Charter Academy, GA	600	14.5	33.2	6.2	n/a	n/a	0.06	n/a	41.7

Table 1: Demographics of participating schools \*(FARM - Free and reduced meals)

**Objective 1b:** Construct a process for assessing traditionally underrepresented students using the BEM-e and modules; train 40 educators to identify students through this positive psychology

lens for gifted education. Conduct universal screening assessment of at least 680 students across the 4 schools and 5 years of the project (see power analysis in Appendix). **Outcome 1b:** Track implementation of the model and strategies involved in each component of the assessment process annually (fidelity checklists: module-specific rubrics for student identification, EPOCH, CHS, and Jr. MAI-VB); continuously assess needs and progress among educators and students.

**Objective 1c:** Evaluate effectiveness of BEM-e identification procedure through an exploratory, mixed-methods design, including regression discontinuity analyses of identification method and single-case-based analyses of positive psychology modules for identified students. **Outcome 1c:** We find statistically significant, positive effects of participating in either existing school talent development programs or programs enhanced by addition of positive psychology modules for students identified using the BEM-e procedure. Findings are enhanced qualitatively through student observations and interviews showing how and why improvements in identification of traditionally underrepresented students took place. We find a 10% increase in odds of traditionally underserved students being identified for gifted education with BEM-e.

**Objective 1d:** To increase identified students' positive psychological traits using positive psychology modules. **Outcome 1d:** We anticipate that at least 75% of students will demonstrate growth in hope, self-perceptions, engagement, perseverance, optimism, connectedness, and happiness, after engaging in the positive psychology modules when educators also implement dynamic assessment. The effect sizes ( $g$ ) for these outcomes will be measured using multiple-baseline single case models for individual students. Data will be collected in all 5 years for ongoing evaluation of and to inform revisions to the BEM-e procedures.

**GOAL 2: To design and deliver training for educators in use of the BEM-e to identify traditionally underrepresented students, including those with disabilities, for gifted**

**education services as a means for addressing Javits Competitive Priority 1.**

**Objective 2a:** Train educators to implement modules to identify students for gifted education and services. **Outcome 2a:** Forty educators will be monitored through online engagement (e.g., completion of embedded tasks and reflection assignments). We anticipate 80% of educators (as recommended by Simonsen et al., 2008) involved in project implementation will complete the training. Those who do not complete training will not conduct DA of students.

**Objective 2b:** After completion of online training, at least 80% of participating educators will have accurate knowledge and skills for identifying traditionally underrepresented students in gifted education using BEM-e. **Outcome 2b:** Using scores from a criterion-referenced test to be developed around the constructs in the BEM-e and its positive psychology components and piloted during Year 1, we find a positive difference between pre- and post-test measures of educators' knowledge and skills in using BEM-e to identify students who are traditionally underrepresented in gifted education identification. Qualitative evaluations will be collected from educators who completed training as a means for continuously improving the BEM-e.

**Objective 2c:** Educators implement positive psychology modules with 60-80% fidelity (Swanson et al., 2013) and administer EPOCH, CHS, and Jr. MAI-VB to identify traditionally underrepresented students. **Outcome 2c:** Through observations conducted by trained project personnel, educators implement the modules and demonstrate appropriate use of identification strategies as instructed. Educator feedback will be collected after each implementation to inform continuous improvement.

**Objective 2d:** To improve educator knowledge and skills regarding affective needs of underserved students. **Outcome 2d:** Seventy-five percent of educators will have more accurate knowledge of affective needs of gifted and talented students after training. We find a statistically

significant, positive difference between pre- and post-test measures of educators' knowledge regarding affective needs and support for talent development for underserved students.

**GOAL 3: To identify and provide gifted education services to students with disabilities, who are typically overlooked in traditional identification procedures, using positive psychology traits from EPOCH and hope in a dynamic assessment approach to identification to address Javits Competitive Priority 2.**

*Objective 3a:* More students with disabilities will be identified and provided gifted education services available at their schools or new services co-developed with schools. *Outcome 3a:* As the project progresses, the chances for students with disabilities to be identified for gifted education services increases. Annual odds ratios will be calculated for each underrepresented group and students overall. A 10% increase in odds of students with disabilities being identified.

*Objective 3b:* Modules will be continuously improved/expanded. *Outcome 3b:* Data will be used annually for evaluation of BEM-e; to inform changes to procedures and materials, accessibility.

**GOAL 4: To facilitate nationwide adoption and implementation of the BEM-e through dissemination of research, support materials, training and positive psychology modules.**

*Objective 4a:* Develop, test, and distribute an effective training model for replication/adaptation of BEM-e. *Outcome 4a:* All materials associated with training, modules, and curricular materials will be available world-wide via conferences, workshops, and our website.

*Objective 4b:* Access to BEM-e and research findings about its effectiveness will be streamlined.

*Outcome 4b:* Publications, presentations, and project materials will be accessible online.

**Project designed to yield results that extend beyond the project period**

Because our project is based on training personnel in schools who will not only provide delivery of positive psychology measures but also positive psychology instructional modules, the

extension of the project will have substantial feasibility for both adoption and adaptation. All educator training will be accessible online, and all positive psychology modules, instruments, and scoring guides will be accessible online or via portable computer drives. Thus, capacity for schools anywhere is magnified by easy access with no-to-low investments of finances and time. Moreover, the proposed identification methods can be used with all middle school students.

### **Design represents up-to-date knowledge from research and effective practice**

The literature foundation that undergirds the critical value of non-cognitive assessment for students who are customarily overlooked in traditional assessment procedures for gifted and talented educational services is growing. Studies focused on the need for assessment in the affective domain continue to demonstrate 1) that many cognitive tasks are, in fact, rooted in segments of the brain governing emotions (Immordino-Yang et al., 2018; Immordino-Yang & Damasio, 2007) and 2) that students who struggle to overcome the barriers to gifted and talented identification from concomitant disabilities, racial and cultural diversity, and/or socioeconomic disadvantages can be identified via alternative means in the affective domain (Dixson et al, 2018; Esparza et al., 2014; Olenchak, 2013). Our project reflects the growing neuropsychological evidence supporting the need to broaden identification strategies, so *all* students are equitably and fairly assessed for participation in gifted and talented services.

Our project directly addresses the underrepresentation of students in gifted education by approaching/attacking the problem from a different, affectively driven perspective. Using the foundational elements of positive psychology, we combined essential elements of the Positive Emotion, Engagement, Relationships, Meaning and Accomplishment Model (PERMA; Seligman, et al, 2009; Seligman, 2011; 2018) and its subsequent application to adolescents, the Engagement, Perseverance, Optimism, Connectedness, and Happiness Model (EPOCH; Kern et

al., 2016) with an emphasis on hope and hopefulness (Snyder, 1994; Snyder et al., 1997) to modify the developmental nature of the Bull's Eye Model for Affective Development (BEM; Olenchak, 2009a; Olenchak et al, 2016) into an identification approach that promotes identification of traditionally underrepresented students.

Originally intended as a lens for understanding affective development among gifted and talented people, the BEM over time became a mechanism for addressing talent development throughout the lifespan for individuals who present with a variety of disabilities yet also possess camouflaged gifted and talented abilities (Olenchak et al, 2016). Termed twice exceptional (2E) in the literature, this population is more accurately referred to as multiply exceptional (ME) to reflect the fact that many 2E persons grapple with an array of challenges that encompass more than one disability and occasional psychosocial or other challenges related to underrepresentation (Baum & Olenchak, 2022). The proposed BEM expansion will address identification of students for gifted and talented services using a combination of a metacognitive and two positive psychology measures (EPOCH and CHS) coupled with dynamic assessment through educators' implementation of short, interactive positive psychology modules. The initial modules have been developed and field tested qualitatively with undergraduate students at Purdue University. Several of those modules have been revised and pilot tested with diverse middle school students similar to the project's target populations. Additional modules will be developed, as needed, and field tested with non-project students prior to adoption for project use.

While much of identification for gifted education concentrates on the cognitive domain, our innovative use of positive psychology measures coupled with positive psychology approaches identification from students' affective, conative, and metacognitive strengths that often support high achievements. Identification that is not restricted to cognitive assessments has focused on

behavioral ratings scales reflective of the affective domain, but attention to the conative domain, the will of an individual to purposefully act is virtually nonexistent in any current assessment procedures for gifted education identification (Olenchak & Thomas, 2021; Subotnik et.al., 2018).

### **Promising Evidence Supporting the Proposed Project**

Our project builds on promising evidence from four major lines of research: evidence in favor of (1) DA, (2) metacognitive skill development, (3) affective support and psychosocial coaching, and (4) positive psychology interventions.

**Evidence in favor of dynamic assessment.** Dynamic assessment for gifted and talented education was first introduced in the early 1990s and 2000s (Bolig & Day, 1993; Borland & Wright, 1994; Lidz & Macrine, 2001; Matthews & Foster, 2005; Passow & Frasier, 1996). Back then, DA was used to improve equitable identification of culturally and linguistically diverse students (Bolig & Day, 1993; Lidz & Macrine, 2001; Matthews & Foster, 2005). Researchers found that DA successfully identified students with gifts and talents who were not identified via traditional static tests. Researchers have recommended DA for culturally and linguistically diverse students because gifted and talented identification procedures should consider the necessity of academic support for students who have previously been disadvantaged (Lidz & Elliot, 2000). Traditional cognitive-ability and achievement tests rely on previous educational experiences and therefore discriminate against those with limited access to educational experiences (Chiu & Koo, 2005; Ritchie & Tucker-Drob, 2018; Desmet, 2022). Similarly, students with disabilities are at a disadvantage while taking traditional static tests which often do not accommodate special needs. A common alternative within gifted and talented identification procedures for traditional cognitive assessments is educator nominations, but those also may be biased against 2E and ME students. Research shows that general education teachers and special



education teachers were less likely to refer students with disabilities than students without disabilities for gifted and talented programs (Bianco & Leech, 2010). The gifted education field has long promoted a strength-based approach to talent development for all students, but those from traditionally underrepresented populations, including 2E and ME, students continue to be underrepresented (Reis et al., 2014). We argue this strength-based approach should be extended to *identification* procedures. DA approaches focus on students' strengths first, by supporting students in known areas of challenge while assessing their gifts and talents. Thus, DA may allow for more accurate assessments of gifts and talents. Research on DA for identification of 2E and ME students is limited, but researchers recently piloted a dynamic assessment of mathematical ability with a sample of 30 students and found DA to be an effective approach to assessing unidentified mathematics potential among 2E students (Al-Hroub & Whitebread, 2018).

**Evidence in favor of affective support and psychosocial coaching in general.** In 2011, Subotnik and colleagues published their thoughts on how to move the field of gifted education forward. In doing so, they highlighted the importance of psychosocial coaching for successful talent development. Thus, emphasizing the need to move away from the long-standing paradigm of cognitive development as the central and sole tenet of gifted education. Given long-standing issues of inequity in gifted and talented education, adopting an affective perspective on gifted education alongside a traditional cognitive one, has become increasingly important to promote talent development for all students, including those from traditionally underrepresented populations (Subotnik et al., 2011, 2018). Thus, creating and evaluating positive psychology identification and service procedures is an innovative and evidence-based approach to emphasizing psychosocial coaching for talent development while improving fair selection.

In general, affective interventions have been proven effective in promoting both affective and

cognitive outcomes for students with ME (Baldwin et al., 2015; Crepeau-Hobson & Blanco, 2013; Lo & Yuen, 2017; Neumeister et al., 2013; O'Brien & Giovacco-Johnson, 2007; Olenchak, 2009b). For example, research shows that counseling programs for students with ME resulted in improved social skills and self-efficacy (Foley-Nicpon et al., 2011; Olenchak, 2009b), hope and confidence (O'Brien & Giovacco-Johnson, 2007), career planning (Olenchak, 2009b), and recognition of personal strengths and limitations while identifying appropriate coping strategies (King, 2005; Thomas & Ray, 2006). Also, counseling intervention can be effective at reducing negative school experiences for students with ME (Lo & Yuen, 2015; Reis et al., 2000).

**Evidence in favor of positive psychology interventions specifically.** Historically, gifted education has mainly emphasized cognitive development (Gensley, 1973; Moon, 2009; Silverman, 1993). However, researchers have emphasized the importance of affective and conative skills in talent development as well (Bloom, 1985; Gagné, 2005, 2009; Subotnik et al., 2011, 2018; Tannenbaum, 1986, 2003). Yet, a limited amount of research exists on affective interventions with gifted and talented students. In a systematic review of the literature, Jen (2017) identified only 17 empirical studies published between 1984-2015 on this topic. Thus, there is a clear need to extend efforts to develop effective, evidence-based affective interventions for gifted and talented students. Although, to our knowledge, no other positive psychology interventions such as the one we propose have been implemented with gifted and talented students, we build on a series of existing research on similar interventions to support our hypothesis that our positive psychology intervention, targeting hope, self-efficacy and self-perception, goal valuation, mindfulness, gratitude, and metacognition, can be successful.

**Hope.** Hope is an important positive predictor of a multitude of cognitive and affective outcomes related to talent development (Dixson et al., 2018). Yet, within the gifted education field hope

has received little attention thus far, with Dixon's work being a notable exception (e.g., Dixon et al., 2017; Dixon et al., 2018). Dixon et al. (2017) found that hope was positively correlated with GPA ( $r = .24$ ), self-esteem ( $r = .52$ ), academic self-concept ( $r = .44$ ) and other school variables. Further, Dixon and his colleagues (2018) found that hope interventions may reduce the effects of socioeconomic status on achievement and Dixon and Stevens (2018) found that hope, after controlling for demographics and previous achievement, explained 17% to 30% of African American students' achievement-orientation, underscoring the importance of promoting hope in talent development programs for underserved students. Additionally, research shows that neurodiverse students report significantly lower hope ( $M = 24.8$ ,  $SD = 5.6$ ) than their neurotypical peers ( $M = 27.3$ ,  $SD = 4.9$ ), with autistic youth at the highest risk of low hope (Moody et al., 2022). Greater hope among neurodiverse youth is associated with a higher quality of life ( $\eta^2p = 0.24$ ) and fewer internalizing symptoms ( $\eta^2p = 0.07$ ), such as anxiety and depression (Moody et al., 2022). Thus, research underscores the importance of hope interventions for neurodiverse youth. To our knowledge, no hope interventions have targeted gifted neurodiverse or ME students. The BEM-e procedures involve an explicit focus on hope as one of several positive psychology traits of interest. Thus, a clear need for our proposed project exists.

***Self-Efficacy and Self-Perception.*** Academic self-concept or self-perception has been widely acknowledged as an important factor in talent development (Desmet & Pereira, 2022). Positive academic self-perceptions are required for academic success (Hussain et al., 2019) and correlate positively with academic achievement ( $r = .72$ ,  $p < 0.001$ ; Affum-Osei et al., 2014). Positive academic self-perception improves students' academic aspirations for future success. In turn, high aspirations may influence the persistence needed to achieve positive outcomes (Butler-Barnes et al., 2017). Improving gifted individuals' academic self-perception is critical for long-

term achievement and motivation (Desmet & Pereira, 2022). Interventions targeting self-efficacy and self-perception and related constructs are of particular relevance when working with underserved populations. Identity and self-perception can form barriers to achievement for Black gifted students (Whiting, 2009) and ME youth (Wang & Neihart, 2015). Researchers have argued that this should be acknowledged in recruitment and retention strategies for underserved students to be successful in gifted education (Ford et al., 2008; Ford & Whiting, 2011). Co-PI Desmet developed a positive psychology intervention involving an affective, small group discussion-based curriculum targeting positive self-perceptions, goal valuation, mastery goal-orientation, self-regulation, and metacognitive skills, the Achievement Motivation Enhancement Curriculum (AME). Students found the focus on psychosocial skills around achievement motivation helpful and reported they benefitted from sharing their experiences with peers (Desmet & Pereira, 2022). The AME curriculum successfully improved students' self-perceptions ( $d = 0.46$ ), motivation ( $d = .44$ ), and goal valuation ( $d = .16$ ; Desmet et al., 2022). Additionally, Olenchak (2009b; PI) studied a positive psychology intervention centered on metacognitive thinking and communication with 57 ME students and found significant improvements in students self-concept ( $d = 0.38$ ) for 74% of the students. These studies establish an evidence base for affective interventions targeting positive self-perceptions.

**Goal valuation.** Goal valuation also plays an essential role in talent development. Goal valuation or task value refers to the extent to which a person finds the task at hand worthwhile (Eccles & Wigfield, 2020). Both the expectancy-value theory of motivation (Eccles & Wigfield, 2020) and the achievement orientation model (Siegle et al., 2017) theorize that students are motivated by goal valuation or task value. Despite little evidence in support of goal valuation interventions with ME students specifically, there is a well-established evidence-base for these interventions to

address underachievement and achievement motivation. Rubenstein et al. (2012) found that students who participated in a goal-valuation intervention showed great academic growth (i.e., 1.5 increase in GPA). As reported above, Desmet et al. (2022) also found that participation in a discussion-based positive psychology intervention (AME) resulted in improved goal valuation. Goal valuation interventions have been well-established as effective ways to promote STEM talent development among women and minorities. For example, Miyake et al. (2010) evaluated a value-affirmation intervention with women in physics courses and found on average participants improved their course achievement by a full letter grade. Harackiewicz et al. (2016) also found that a utility-value intervention reduced the achievement gap for underrepresented students by 61%. Thus, there is strong evidence that goal valuation interventions are effective and promote talent development among traditionally underrepresented student populations.

***Mindfulness.*** This is a relatively new concept in Western research that has rarely been studied with children and not at all in gifted education. Bakosh et al. (2016) conducted a quasi-experiment to demonstrate the effectiveness of a 10-min-per-day mindfulness intervention with 191 elementary school students. They found that the mindfulness intervention significantly enhanced students' grades in reading ( $b = .15$ ) and science ( $b = .22$ ). Thus, there is some evidence that mindfulness intervention may be effective for academic talent development.

***Gratitude.*** Researchers have argued that gratitude is foundational for human development (Bono & Sender, 2018). It can motivate self-improvement and enables people to navigate their social environments more effectively to achieve personal goals (Bono & Sender, 2018). High levels of gratitude allow people to better cope with stress (Reckart et al., 2017) and demonstrate resilience when faced with adversity (Wood et al., 2007). So, it is an important positive psychological trait that may be leveraged for talent development. Research on gratitude interventions with children

is limited and the research on gratitude interventions in the context of talent development is even less present. Froh et al. (2007) were one of the first to conduct a quasi-experimental evaluation of a gratitude intervention with adolescents. They found that interventions centered around counting blessings effectively increased gratitude, optimism, and life satisfaction while decreasing negative affect. Later, Froh et al. (2009) found that gratitude interventions were particularly effective for students with low positive affect (e.g., happy, cheerful, proud, energetic).

### **Performance Feedback and Continuous Improvement as Integral Parts of the Design**

Our annual evaluation will consist of two main components: A regression discontinuity evaluation of our new identification method across the 4 schools, and a single-case-based evaluation of the BEM-e intervention that will supplement regular talent development programs for identified students in 2 of the schools. Consistent with the absolute priority, we will also calculate the change in odds of selection for each school's talent development program by demographic group annually. Results of each year's evaluation will be used to inform any modifications to the identification method (e.g., subset of instruments used, recommended criteria and thresholds for identification of individual students) or intervention method (e.g., professional development training modules, BEM-e positive psychology module content).

To evaluate descriptively whether introduction of the new identification method is associated with changes in selection ratios for students from demographic groups who are underrepresented in gifted and talented programs, we will use multinomial logistic regression models. Current data about student body and gifted and talented program composition prior to any study activities will be sought from each school, along with historical data, to compute initial (unadjusted) selection odds ratios for demographic groups, which can serve as a benchmark for general comparison. During each year, we will fit a multinomial regression model to individual data from all students

who were screened that year using our new identification method and/or identification methods traditionally used by each school. The outcome variable will be whether the student was identified for participation in the school's talent development program based on the school's traditional screening method, identified for participation in the school's talent development program by our new identification method, or not identified for participation that year. Student demographic variables, including disability status, and school binary indicators will function as predictors. At the end of the study, we will extend the model to include time (year) as a predictor variable and apply it to individual student data from all five years to examine any changes in the selection odds ratios while the new identification method was being implemented.

To evaluate the extent to which newly identified students can benefit from their experiences in the program, we will use a regression discontinuity (RD) design. We will compare students just above and just below the threshold for identification on each of the instrument scores that will contribute to identification decisions using our process. Because the identification process involves multiple instruments, we will apply separate RD models, each with a different "forcing variable" to the data from each instrument (WWC, 2020). Total scores from EPOCH will be the outcome variable on which the two groups are compared.

In 2 participating schools, the intervention that follows students' identification will be their existing talent development program in Years 1-3. In the other 2 schools, an intervention consisting of the school's existing program and the BEM-e modules will follow students' identification in all 5 years. Thus, our RD analyses will answer 2 different questions: To what extent can students identified for talent development programs by our new method benefit from the existing programs, or benefit from existing programs supplemented by the BEM-e modules? In Years 4 and 5, the BEM-e modules will be introduced into the talent development program in

the first 2 schools to replicate and extend the evaluation of the modules and accompanying educator training. Qualitative data from annual interviews of participating educators will allow us to judge the extent to which the new identification process is being consistently applied (as required for the integrity of the forcing variable). We will test both linear and nonlinear functional forms of the model. Results from at least 3 bandwidths will be reported for each RD model (e.g., Imbens & Lemieux, 2008). We will compute baseline equivalence and overall and differential attrition statistics within the optimal bandwidth that is determined for each model.

To evaluate the efficacy of the BEM-e modules in the 2 schools where educators are trained to provide ongoing feedback to students during the module tasks, we will use a single-case multiple baseline design (e.g., Gast, Lloyd, & Ledford, 2018). We expect identified students will begin the positive psychology modules at different times, depending on the availability of trained assessors. However, each cohort of students engaged concurrently in the modules will include at least four students to provide a basis for comparison of the results. In each of Years 2-5, we will recruit 10 newly identified students from a range of middle-school grades for the evaluation of the BEM-e modules. Each participating student will be encouraged to join between 6 and 8 training sessions using different BEM-e modules. The baseline phase will consist of between three and five sessions for each participating student (with the number of sessions randomly assigned to participant numbers), while the intervention phase will consist of three sessions. During each assessment module, as described in their training, the assessor (educator) will record at least three sets of rubric ratings on positive psychology criteria as the student proceeds through the module task. The total score from the rubric at each assessment occasion will be the outcome variable tracked in each student's single-case model. During the baseline sessions, students will work through the module content independently; during the intervention sessions, educators will



provide ongoing feedback based on each student's previous responses to the task components.

One baseline and one intervention session will be randomly drawn for each participating student, videorecorded, and scored by a second assessor to monitor inter-assessor agreement. We will compute Scott's  $\pi$  inter-rater agreement coefficient and compare it to the WWC recommended threshold of 0.60. To test whether there is an increase in the positive psychology scores of participating students during the intervention phase, when educators provide ongoing feedback during the module tasks, we will compute the  $g$  effect size measure for single-case experiments proposed by Shadish et al. (2008) to evaluate the treatment effect on each outcome. We will present graphical results for each student case to allow visual analysis.

### **(c) MANAGEMENT PLAN**

#### **Adequacy of management plan to achieve objectives on time/within budget; timeline**

This proposal relies on a 5-year period of implementation to permit evidence-based adjustments to BEM-e, the associated modules, DA procedures, personnel training components, and to enable formative evaluation to lead toward the summative evaluation of the overall project. Year 1 will serve as a start-up phase during which we: work with partner schools to recruit site coordinators and educators; assist educators in understanding the project and its components; involve educators in the online training elements to prepare for implementation in Year 2; develop needed surveys and materials to scaffold implementation; and revise modules and procedures. Beginning in Year 2, we will implement the BEM-e intervention and its components, and both quantitative (EPOCH and the CHS) and qualitative (surveys, observations, review of student products) data will be collected from students. Quantitative (surveys) and qualitative (observations and journals) data will be collected from educators to assess perceptions and needs. As stated earlier, we will evaluate and update the model and procedures formatively at three

different times at the end of Years 2, 3, and 4 for consistent improvement of the projects, the model, and all components and procedures. Project team members will meet at least monthly.

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

Timeline, Milestones, and Responsible Persons			Lead	Y 1	Y 2	Y 3	Y 4	Y 5
Obj.	Overall management, coordination, communications		Olenchak	x	x	x	x	x
Goal 1	1a	Identify school contacts, recruit teachers	Olenchak	x	x	x	x	x
	1b	Construct process for assessments; develop rubrics for modules	Olen./Desmet/Seward	x				
		Construct process for interfacing DA with BEM-e	Olen./Desmet/Seward	x				
		Train teachers/counselors to ID students	Olen./Desmet/Seward	x	x	x	x	x
		Conduct universal screening assessment of students	Traynor	x	x	x	x	x
	1c	Evaluate effectiveness of BEM-e	Traynor	x	x	x	x	x
		Conduct student observations and interviews	Desmet/Olen./Seward	x	x	x	x	x
	1d	Administer student Pos.Psychology modules	Olen./Desmet/Seward	x	x	x	x	x
Goal 2	2a	Design/revise PD for online sessions for teachers	Olen./Desmet/Seward	x	x	x	x	x
		Train educators to implement modules	Seward/Olen./Desmet	x	x	x	x	x
	2b	Educators pre/post-test knowledge/skills re BEM-e	Traynor	x	x	x	x	x
	2c	Educators admin EPOCH, Ch.HopeScale as pre/post-tests						
		before Pos.Psychology modules, after DA procedures	Olenchak	x	x	x	x	x
Goal 3	3a	Newly identified students receive gifted services	Olenchak	x	x	x	x	x
		Evaluate improvement in identification via odds ratios	Traynor	x	x	x	x	x
	3b	Use of quan/qual data for ongoing evaluation of procedures	Traynor		x	x	x	
Goal 4	4a	Develop and test training model to replicate/adapt BEM-e	Seward/Olen./Desmet				x	x
		Distribute training model	Desmet/Olen./Seward				x	x
	4b	Dissemination of project results and materials	Olenchak/All			x	x	x

**Procedures for ensuring feedback and continuous improvement.** As described above, performance feedback and continuous improvement are integral to the project design. An advisory board, consisting of external experts in positive psychology, gifted education, ME, diversity, affective development, and neuropsychology will meet annually with the project team and provide regular feedback, as needed, to help improve development and implementation of modules and assessments and online sessions for educators, and for overall evaluation of project goals and objectives. Collected data will inform *formative* adjustments in all aspects of the study,

and those coalesced data will yield the *summative* evaluations.

**Time commitment.** Project personnel have sufficient and appropriate time budgeted throughout the project period to accomplish the project goals. See budget justification for details. The PI and Co-PIs are all exceptionally qualified to ensure a high-quality project with robust outcomes.

#### **(d) PROJECT SERVICES**

##### **Quality and sufficiency of strategies for ensuring equal access.**

There are 3 major ways in which our project promotes equal access. First, through positive psychology, which promotes fairer selection of gifted and talented students and has the potential to identify students from traditionally underrepresented populations and students with ME more accurately because it allows for support and a focus on potential rather than static achievement only. Second, through universal screening of *all* students, which increases the representation of traditionally underserved students. Third, through targeting affective development supports we provide the necessary support for traditionally underrepresented students to be successful.

##### **Impact of the services on the intended recipients.**

Given the extensive body of empirical research our innovative approach to gifted identification and services builds upon, we hypothesize 2 major changes from implementing our model: (1) an increase in traditionally underrepresented students, particularly ME students, for gifted and talented services, and (2) improved self-acceptance, purpose, positive relationships, personal growth, environmental mastery, and developmental autonomy for *all* students, regardless of their gifted and talented identification. The latter is made possible via our dynamic approach to identification which involves exposure to a positive psychology curriculum designed around BEM-e components that will be accessible to all students. Therefore, our project has the potential to positively impact the affective development of *all* students, thus increasing

successful talent development for anyone involved in the proposed identification procedures, including students who may not meet the state requirements for gifted and talented services.

### **(e) PROJECT PERSONNEL**

#### **Applicant encourages employment from members of underrepresented groups.**

Purdue has a history of attracting diverse students and faculty. Nearly 25% of students and more than 4000 faculty and staff represent over 120 countries. In accordance with Purdue University's nondiscrimination statement, we will ensure no potential participant or employee will be impeded from project participation due to race, color, language or national origin, disability, age, sexual orientation, or parental status.

#### **2i./ii. Qualifications, relevant training, and experience of project director and Co-PIs**

*F. Richard Olenchak, PhD* (Positive Psychology, Multi-Exceptionality, Gifted Education, Counseling Psychology). Dr. Olenchak is Professor of Gifted, Creative, and Talented Studies and of Educational Psychology and Research Methodology at Purdue University. His research interests encompass identification and accommodating students with multi-exceptionality (twice-exceptionality plus consideration for additional complexities confronting individuals such as multiple comorbidity, racial and cultural diversity, and socioeconomic challenges); talent development across the lifespan; positive affective development that scaffolds individual success academically, socially, and emotionally; and enhancing understanding of strategies for schools and homes to propel children and youth toward the psychological contentment necessary for cognitive growth. He has developed several innovations targeting talent development among faculty and has served as President of the National Association for Gifted Children (NAGC) and President of the Association for the Education of Gifted Underachieving Students. He has over 100 publications, including the award-winning books, *Social-Emotional Curriculum with Gifted*

(2009) and *Misdiagnosis and Dual Diagnoses of Gifted Children and Adults* (2005 and 2016), each of which relates directly to the goals of this project proposal. He will have primary responsibility for overseeing all aspects of the development and implementation activities, manage project budget, develop and submit project reports, and coordinate dissemination.

*Co-PI Ophélie Desmet, PhD* (Multi-Exceptionality, Affective Development/Social Emotional Needs, Gifted Education). Dr. Desmet is an Assistant Professor of educational psychology and gifted and talented education at Valdosta State University, where she also serves as the Director of the Center for Gifted Studies. Her research focuses on social, emotional, and motivational aspects of talent development to better serve students from historically excluded populations, including ME students. Her research has been supported by 3 federal grants, totaling just under \$2.5 million. She will be responsible for developing the modules and DA intervention from the perspective of ME/accessibility. She will train educators and evaluate implementation in GA schools. She will contribute to evaluation and improvement of identification procedures.

*Co-PI Kristen Seward, PhD* (School Counseling, Affective Development/Social Emotional Needs, Gifted Education). Dr. Seward is a clinical professor with expertise in school counseling and gifted, creative, and talented studies. Her 17+ years of experience in K-12 inform her teaching and research, and her nationally recognized excellence in creating comprehensive, K-12 counseling programs is notable. Dr. Seward will be responsible for developing the positive psychology modules and DA interventions, training educators, and evaluating implementation.

*Co-PI Anne Traynor, PhD* (Research and Evaluation). Dr. Traynor is a research methodologist with expertise in experimental and quasi-experimental design, and educational measurement. She has served as lead methodologist or consultant on 3 federally funded studies in STEM education. Dr. Traynor will be responsible for the regression discontinuity and single-

subject modeling, including reporting of effect sizes, and graduate student supervision.

#### **(f) ADEQUACY OF RESOURCES**

##### **Budget is adequate to support the proposed project.**

The project budget was developed with support from the Offices of Sponsored Program Services and business offices from both Purdue University and Valdosta State University to ensure that costs were both appropriate and adequate for project completion. The budget includes sufficient efforts for monitoring activities, advice from external experts for evaluation, and incentives for participants. See budget and justification.

##### **Costs are reasonable in relation to objectives, design, and potential significance.**

Purdue is a major research university with an outstanding record of support for research projects and more than adequate resources to support the successful execution of our project goals and activities. Likewise, Valdosta State University and our partner schools also have adequate facilities, computer infrastructures, and staffing to successfully carry out their roles on the project. As such, the narrative and budget of our proposal are directly aligned with project objectives and demonstrate the cost-effective nature of the project, working within existing infrastructures and partnerships to keep costs as low as possible. This innovative identification method has potential to improve access and equity for traditionally underrepresented students.

##### **Costs are reasonable in relation to number served and anticipated results and benefits.**

The project will serve 40 educators and at least 680 students in universal screening. Project outcomes will be made available to additional educators within the partner school districts, as well as nationally via publications, presentations, and distribution of project training models. As such, the full impact of the project is likely to extend well beyond the numbers in the program.

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## **Appendix A: Table of Contents**

Positive Psychology Modules

Power Analysis

Flowchart

Teacher Training Sessions

## FIVE POSITIVE PSYCHOLOGY MODULES FOR THE BEM-e

<b>Module Topic</b>	<b>Module Description (all include activities and discussion)</b>
Developing Hope	8 steps for developing hope from Snyder (1994) and Snyder et al. (1997): choose a goal; ways to reach your goal; willing to try; putting forth effort & fine-tuning as you move toward your goal; expect challenges & obstacles; use positive thinking; stick with your goal or be open to changes; keep it going
Mindfulness & Savoring	Definitions and interpretations of mindfulness; characteristics; benefits; savoring (Seligman, 2011)
Expectations & High Hopes	Motivation, expectation, self-efficacy defined; Can I do this? Do I want to do this and why? long-term expectations and hopes; elevating hopes
Altruism, Gratitude, & Forgiveness	Altruism defined; kinds of altruism; egotism defined; egotism motives; empathy defined; empathy motives; gratitude defined; communicating gratitude effectively; forgiveness defined; stages of forgiveness; forgiving oneself
Positive Sharing	Reliving experiences positively; positive sharing and happiness; confidence; positive relationships; constructive listening; destructive listening; turning liabilities into assets

## Power Analysis Computation for Regression Discontinuity Design (Schochet, 2008a, 2008b)

$$MDE = Function(\alpha, \beta, df) * \frac{\sqrt{Var(\hat{\gamma}_1)}}{\sigma_y}$$

$$Var(\hat{\gamma}_1) = \frac{\sigma_y^2(1 - R_x^2)}{np(1 - p)(1 - \rho_{TS}^2)}$$

$\rho_{TS}^2 = 3p(1 - p)$  if distribution of identification scores is uniform


**Table A1. Power Analysis Parameters**

<i>Variable</i>	<i>Estimate</i>	<i>Basis for Estimate</i>
Minimum detectable effect size ( <i>MDE</i> )	.30	<ul style="list-style-type: none"> <li>Yeager et al. (2016) found a pre-/post- effect size of .357 in a randomized controlled trial of a growth mindset intervention in adolescents.</li> </ul>
Proportion of screened students newly identified for school's talent development program ( <i>p</i> )	.15	<ul style="list-style-type: none"> <li>Identification targets students with high scores on positive psychology survey instruments and rubrics</li> </ul>
Correlation between identification status and treatment assignment ( $\rho_{TS}$ )	$\sqrt{3p(1 - p)}$	<ul style="list-style-type: none"> <li>Identification scores are assumed to follow a uniform distribution because limited prior information is available.</li> </ul>
Variance explained by pretest scores ( $R_x^2$ )	.40	<ul style="list-style-type: none"> <li>Conservative estimate, given Kern et al. (2016) found 4-month retest reliability of .44 for EPOCH total scores and Snyder et al. (1997) found 1-month retest reliability of .71 for hope scores.</li> </ul>
Standard deviation of outcome scores ( $\sigma_y$ )	4.50	<ul style="list-style-type: none"> <li>Snyder et al. (1997) had outcome hope score standard deviation of 4.51 in middle-school age sample.</li> </ul>
<i>Function</i> ( $\alpha, \beta, df$ )	2.83 (known)	<ul style="list-style-type: none"> <li>From Schochet (2008b, p. A-1). Two-tailed test of significance of the treatment effect size. Probability of Type I error (<math>\alpha</math>) fixed at .05. Power (<math>\beta</math>) of .80. Degrees of freedom (<i>df</i>) of RD regression model is <math>n - k - 1</math>, where <i>k</i> is number of predictor variables, which will be approximately 10 including 3 school fixed-effects indicators and at least 2 pretest scores on EPOCH and hope.</li> </ul>
Sample size ( <i>n</i> )	679	[Power curve computed for <i>n</i> ]

Note.  $Var(\gamma_1)$  = Estimated variance of treatment effect. Assumptions: Students are unit of assignment and analysis. Schools are modeled as fixed effects. There is a linear functional relationship between identification scores and outcome scores. Constant treatment effects are expected across control and treatment groups. Students' tendency to comply with their treatment assignment is assumed to be equal across the identification score distribution.



## Flowchart



	Phases	Measures / Evaluation	
	1 - Universal Screening (at minimum one grade level per school) and Analysis of Schools' Identification Assessments and Procedures	Students: Identification Measures (EPOCH and Children's Hope Scale)  School: Identification Procedures for Gifted Programming	School data and universal screening results to identify students of interest  Strengths and Weaknesses of Schools' Identification Procedures
	2 - Teacher Training	Teachers: Pretest and Posttest  Training on Implementation of Positive Psychology Modules	Pretest and Posttest results  Knowledge about positive psychology and implementation of modules
	3 - Implementation of Positive Psychology Modules with Students including Dynamic Assessment	Teachers: Reflections, Fidelity Checklists, Module-Specific Checklists for Students of Interest, Interviews  Study Personnel: Observations, Fidelity Checklists, Module-Specific Checklists for Students of Interest	Observations, Teacher Reflections, Fidelity Checklists, Module-Specific Checklists for Students of Interest, Interview data
	4 - Formal Identification of Students from Underrepresented Populations	Involve school personnel in identification of previously unidentified students to secure educator buy-in	Identification Process checklist  Logistic regression (Change in odds ratios for identification across years of the study, by student demographic group)
	5 - Invitation to School's Talent Development Program for Newly Identified Students from Underrepresented Populations	Parental consent forms -> Participation roster	Regression discontinuity models (RQ: To what extent do identified students benefit from

			participation in their school's talent development program, possibly augmented with additional positive psychology modules?)
	<p>6 - Post Identification Intervention to Develop the Newly Identified Students' Affective Strengths</p> <p>Each school will be assigned by study personnel* to participate in one of the options below:</p> <p><b>Option 1:</b> School's Talent Development Program for years 1-3, followed by Option 2 in years 4-5</p> <p><b>Option 2:</b> School's Talent Development Program + Additional Positive Psychology Modules</p> <p><i>*based on fidelity in implementation and acceptance of alternative identification for underrepresented populations</i></p>	<p>Students:</p> <p><b>Option 1:</b> Track achievement data (standardized tests and grades); subset of interviews, observations</p> <p><b>Option 2:</b> Track achievement data; subset of interviews, observations; outcome measures (Rubric scores from Dynamic Assessment within Positive Psychology Modules, EPOCH and Children's Hope Scale)</p> <p>Teachers:</p> <p><b>Option 1:</b> Observations; interviews</p> <p><b>Option 2:</b> Reflections and observations; interviews; checklist for fidelity applied to observations of dynamic assessment; inter-assessor agreement about student rubric scores</p>	<p>Single-case design for intervention arm with positive psychology modules (RQ: Does introduction of dynamic assessment into the positive psychology modules benefit affective outcomes for identified students?)</p>

## Overview of Educator Professional Development Sessions

Session	Description	Personnel
1. Nature and needs of students from underrepresented populations	Educators will get an overview of the needs and characteristics of students from populations underrepresented in gifted education by examining historic and current perspectives from leading research and experts in the field.	Olenchak Desmet
2. Positive psychology and talent development	Educators will learn about positive psychology and the research foundation linking affective development to talent development. Specifically, we will address positive psychology constructs and components. For example, we will address optimism, hope, gratitude, perseverance, compassion, and conation, as well as associated skills such as goal-setting, relationship-building, and kindness-cultivating.	Olenchak Seward
3. Developing talents in underrepresented populations	Educators will learn about the unique needs of students from traditionally underrepresented populations and how those needs influence identification for gifted education services. Specifically, we will address characteristics, needs, and services for students with disabilities and culturally and racially diverse students.	Seward Olenchak
3. Multiply- exceptional (ME) students	Educators will learn about students who are both gifted and have developmental or learning disabilities. We will provide you with information on the needs and characteristics of these students, as well as how to best serve them.	Desmet Olenchak
4. Affective characteristics and needs of students from underrepresented populations	Educators will explore the social and emotional development of youth from underrepresented populations from a counseling perspective. Participants will gain insights about the effects of being underrepresented on developmental challenges, how high achievement and underachievement are scaffolded, and about vulnerability and resilience.	Seward Olenchak
5. BEM-e: a positive psychological, dynamic assessment approach to identification for gifted services	Educators will explore the model and the research supporting it.	Olenchak Desmet

<b>6. Agency, engagement, and connectedness</b>	Educators will learn how to establish and maintain positive relationships with others in a manner that influences each individual's sense of control over actions and consequences. This session offers insights and small in-classroom interventions to help increase the engagement and wellbeing of all students through principles of hope and relationship-focused teaching.	Desmet Seward
<b>7. Perseverance and pathway</b>	Educators will investigate field-tested strategies that facilitate development of perseverance and conation/grit. The session also emphasizes development of a "keep trying" orientation, including the skills to decide when a goal may need to be adjusted so that it can be achieved in small steps.	Olenchak Desmet Seward
<b>8. Optimism and happiness</b>	Educators will gain information needed to nurture an optimistic environment along with tips and tricks for instruction that builds happiness. Specifically, we will address principles of interest-based instruction and how to integrate individual student interests with project-based learning in a positive psychology-driven environment.	Desmet Seward Olenchak
<b>9. Dynamic assessment</b>	Educators will learn how to utilize dynamic assessment with the BEM-e to teach students about positive psychology and its influences on their lives. Additionally, we will review the BEM-e components and techniques for applying the model in classrooms using dynamic assessment.	Seward Olenchak Desmet
<b>10. Assessment tools and instruments for BEM-e</b>	Educators will learn the information needed for assessing student growth in BEM-e using dynamic assessment processes. We will examine and learn how to use the EPOCH, the Children's Hope Scale, and the Junior Metacognitive Awareness Inventory Version B.	Traynor
<b>11. Meta-affect and metacognition to enhance talent identification and talent development</b>	Educators will learn how to develop meta-affect and metacognition in students to strengthen mentoring relationships with them to support talent identification and talent development. Participants will learn everything needed to implement positive psychology in the classroom as a means for identifying underrepresented students for gifted services.	Olenchak Desmet Seward

(1) **Human Subjects Involvement and Characteristics:** Throughout the project, we will work directly with 40 in-service teachers and/or school counselors in grades 4-8 who will receive training to use the positive psychology modules integrated as enrichment into content area curriculum. We will work indirectly with the children who are taught by these teachers within their schools in Georgia (rural district), Texas (urban district), and California (urban district). Teacher and counselor participants will not be excluded due to age, race, disabilities, degrees held, or years of experience. Children will not be excluded due to age, race, disabilities, or English language learning status. Our research involves identifying gifted and talented students, primarily those from groups that have been traditionally under-represented based on race, gender, disabilities, and/or socioeconomic status.

(2) **Sources of Materials:** Data will be collected on the efficacy of the intervention for identifying students with gifts and talents in the affective and conative domains across all participating schools. We will also collect interview data from teachers and counselors annually as well as random observations of sessions in which teachers use modules with students.

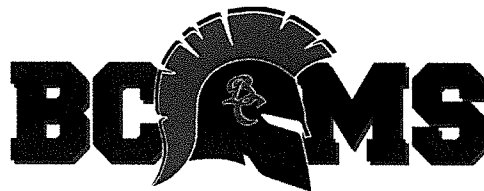
(3) **Recruitment and Informed Consent:** The Principal Investigator will contact each of the partner school districts to identify teacher and counselor participants. The PI will send out an email and informational flyer as well as the informed consent documents to each school district. Educators can return the informed consent form to the PI, Co-PIs, or program manager via email, mail, or in person. PI/co-PIs will be available by phone or video conference to meet with educators or families to give them more information, as needed. Signed informed consent/assent documents will be stored at Purdue University for participating teachers and students. No waivers for consent have been submitted or approved by the Institutional Review board.

(4) **Potential Risks:** The risks to the teacher, administrator, and student participants are low and not outside of the everyday risks experienced by the student or teacher participants in routine classroom settings. There is a potential risk of breach of confidentiality in any research study and we will take steps to minimize this possibility.

(5) **Protection Against Risk:** Data will be collected using paper and pencil and computer software programs. The paper data sheets and any identifier records will be stored in a locked cabinet in the PI's office at Purdue University. Electronic data and video recordings from participants will be stored on a password protected computer or on an encrypted flash drive. 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 training purposes.

(6) **Importance of the Knowledge to be Gained:** Teachers and counselors may demonstrate an increased knowledge and implementation of skills for identifying students with gifts and talents in the affective and conative domains. Students may demonstrate increased confidence in their own abilities as a result of teachers' implementation of skills and knowledges. This study seeks to increase the number of students identified for gifted and talented education, primarily those from groups that have been traditionally under-represented based on race, gender, disabilities, and/or socioeconomic status. The results of the study may contribute to the field of Gifted Education by providing educators with effective professional development modules.

(7) **Collaborating Site(s):** Participating school districts where data collection will occur during regular school hours are Scintilla Charter Academy (Georgia), Brooks County Middle School (Georgia), Pershing Middle School (Texas), Dana Middle School (California). Additional school districts are likely to be added.



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March 22, 2022

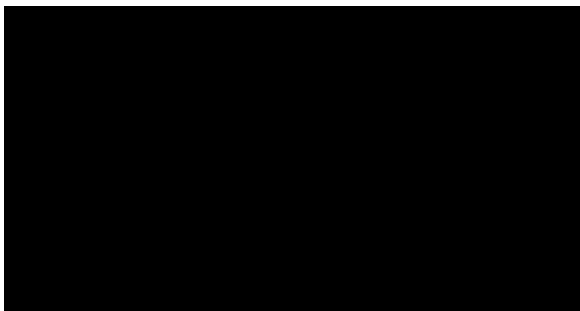
F. Richard Olenchak, Ph.D., P.C.  
Department of Educational Studies  
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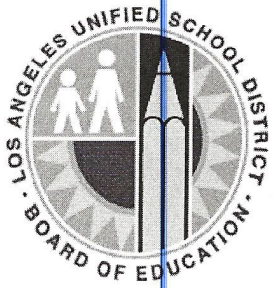
Dr. Olenchak,

It is with pleasure that I write this letter of support for your grant proposal, *Underrepresented Students in Gifted & Talented Education: Positive Psychology Identification & Service*, submitted to the U.S. Department of Education Jacob K. Javits Gifted and Talented Students Education Program. The project's emphasis on identifying giftedness and talent among students with multiple exceptionalities through a positive psychology framework aligns with our school district's mission.

This type of identification process is unique not only in its objectives to focus on students with multiple exceptionalities in particular, but also its focus on social, emotional, and conative variables in identifying students for gifted and talented education. The proposed project also involves a professional development component which will enhance teachers' understanding of the characteristics and needs of students with multiple exceptionalities. The professional development component will also improve teachers' knowledge of evidence-based instructional and support strategies for this underserved population. Therefore, we are very interested in the results of this study and look forward to its positive impact for students and teachers in our community.

On behalf of Brooks County Middle School, I enthusiastically offer my support for this project. We look forward to supporting this important research project.





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March 29, 2022

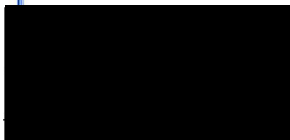
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It is with pleasure that I write this letter of support for your grant proposal, *Underrepresented Students in Gifted & Talented Education: Positive Psychology Identification & Service*, submitted to the U.S. Department of Education Jacob K. Javits Gifted and Talented Students Education Program. The project's emphasis on identifying giftedness and talent among students with multiple exceptionalities through a positive psychology framework aligns with our school district's mission.

This type of identification process is unique not only in its objectives to focus on students with multiple exceptionalities in particular, but also its focus on social, emotional, and cognitive variables in identifying students for gifted and talented education. The proposed project also involves a professional development component which will enhance teachers' understanding of the characteristics and needs of students with multiple exceptionalities. The professional development component will also improve teachers' knowledge of evidence-based instructional and support strategies for this underserved population. Therefore, we are very interested in the results of this study and look forward to its positive impact for students and teachers in our community.

On behalf of Richard Henry Dana Middle School I enthusiastically offer my support for this project. We look forward to supporting this important research project.



*Dana Mariners will become involved, responsible members of the community  
and will make choices that lead to meaningful, productive, and rewarding life.*

PR/Award # S206A220038

Page 672





## HOUSTON INDEPENDENT SCHOOL DISTRICT

Pershing Middle School  
3838 Blue Bonnet Blvd · Houston, Texas 77025

**Steven Shetzer, Ed.D.**  
*Principal*

[www.houstonisd.org/pershing](http://www.houstonisd.org/pershing)

March 22, 2022

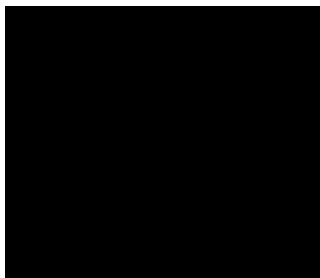
F. Richard Olenchak, Ph.D., P.C.  
Department of Educational Studies  
College of Education  
Purdue University  
100 North University Street  
West Lafayette, IN 47907-2098

Dr. Olenchak,

It is with pleasure that I write this letter of support for your grant proposal, *Underrepresented Students in Gifted & Talented Education: Positive Psychology Identification & Service*, submitted to the U.S. Department of Education Jacob K. Javits Gifted and Talented Students Education Program. The project's emphasis on identifying giftedness and talent among students with multiple exceptionalities through a positive psychology framework aligns with our campus mission of helping all Pershing students.

This type of identification process is unique not only in its objectives to focus on students with multiple exceptionalities, but also its focus on social, emotional, and cognitive variables in identifying students for gifted and talented education. The proposed project also involves a professional development component which will enhance teachers' understanding of the characteristics and needs of students with multiple exceptionalities. The professional development component will also improve teachers' knowledge of evidence-based instructional and support strategies for this underserved population. Therefore, we are very interested in the results of this study and look forward to its positive impact for students and teachers in our community.

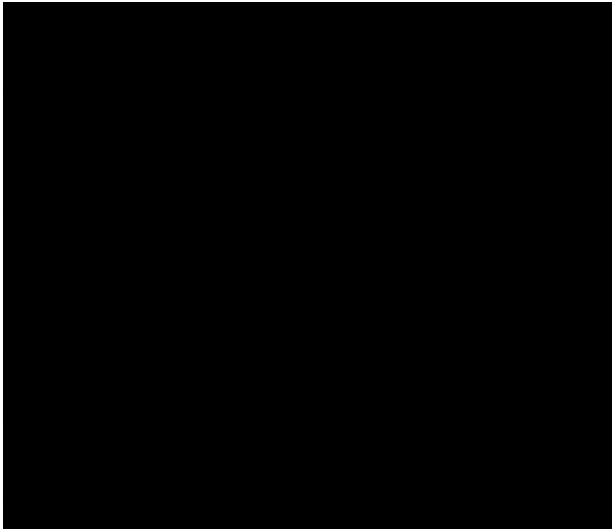
On behalf of Pershing Middle School, I enthusiastically offer my support for this project. We look forward to supporting this important research project.



April 1, 2021

To Whom It May Concern:

I am delighted to submit a letter of support for the proposed collaborative research project exploring pathways to strengthen access to gifted and talented education for students with exceptionalities. Scintilla Charter Academy (SCA) believes that all children deserve equity in high-quality teaching and learning opportunities. To that end, we engage in competency-based educational approaches to ensure that all students demonstrate growth toward attainment of observable and measurable proficiencies. SCA also supports the whole child through a holistic approach with attention to not only the cognitive needs - but also the social-emotional needs of children. Therefore, we would benefit greatly from research resulting in the development and evaluation of an affective assessment system rooted in positive psychology to identify students with multiple exceptionalities (e.g., students with disabilities, from culturally and linguistically diverse backgrounds, and those experiencing socioeconomic challenges) for gifted and talented education. Please, consider Purdue University and Valdosta State University's research in light of the fact that they have our highest recommendation. We are confident that this research would advance the quality of educational experiences we believe that all children deserve.



*Paul Beljan, PsyD, ABPdN, ABN  
Vanessa Berens, PhD  
Jodie Howe, MS  
Stephen Sommers, MS  
J. Gardner, PsyD, Post-Doctoral Fellow*



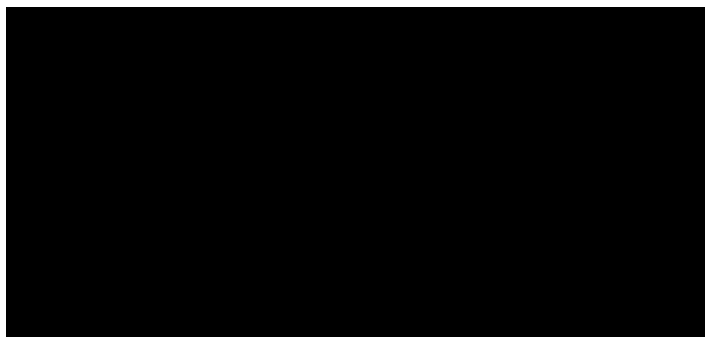
9835 E. Bell Rd., Ste. 140  
Scottsdale, AZ 85260  
(602) 957-7600  
[www.beljanpsych.com](http://www.beljanpsych.com)

April 8, 2022

RE: Advisory Board

Dear Dr. Olenchak:

Please accept this note as my affirmation to join your Jacob Javits project advisory board based at Purdue University. Please let me know whatever I can do from this point forward.



# MICHIGAN STATE UNIVERSITY

April 4, 2022

F. Richard Olenchak, Ph.D., P.C.  
Department of Educational Studies  
College of Education  
Purdue University  
100 North University Street  
West Lafayette, IN 47907-2098

Dear Dr. Olenchak,

It is my distinct pleasure to support your grant proposal, *Underrepresented Students in Gifted & Talented Education: Positive Psychology Identification & Service*, submitted to the U.S. Department of Education Jacob K. Javits Gifted and Talented Students Education Program. As part of my duties as an advisory board member, I would participate in an annual advisory board meeting, submit an annual written evaluation report, and provide guidance as needed. As an expert in how hope and other psychosocial factors can be leveraged to increase equity in gifted education, I am pleased to support you and your team in your research efforts regarding positive psychology identification and services for gifted and talented students.

I look forward to working with you and your team to accomplish the objectives that you put forth in the proposal.



## COLLEGE OF EDUCATION

Department of Counseling,  
Educational Psychology,  
and Special Education

Dante D. Dixon, Ph.D.  
Michigan State University  
442 Erickson Hall  
East Lansing, Michigan  
48824-1034



*MSU is an affirmative-action,  
equal opportunity institution.*

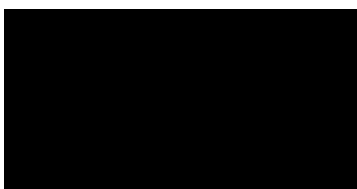
4/10/22

F. Richard Olenchak, Ph.D., P.C.  
Department of Educational Studies  
College of Education  
Purdue University  
100 North University Street  
West Lafayette, IN 47907-2098

Dear Dr. Olenchak,

It is my pleasure to support your grant proposal, *Underrepresented Students in Gifted & Talented Education: Positive Psychology Identification & Service*, submitted to the U.S. Department of Education Jacob K. Javits Gifted and Talented Students Education Program. As part of my duties as an advisory board member, I would participate in an annual advisory board meeting, submit an annual written evaluation report, and provide guidance as needed. As an expert in twice-exceptionality and talent development among underrepresented groups, I am pleased to support you and your team in your research efforts regarding positive psychology identification and services for gifted and talented students.

I look forward to working with you and your team to accomplish the objectives that you put forth in the proposal.



Licensed Psychologist  
Professor, Counseling Psychology Program  
Department Executive Officer, Department of Psychological and Quantitative Foundations



Department of Educational Studies  
Special Education Program

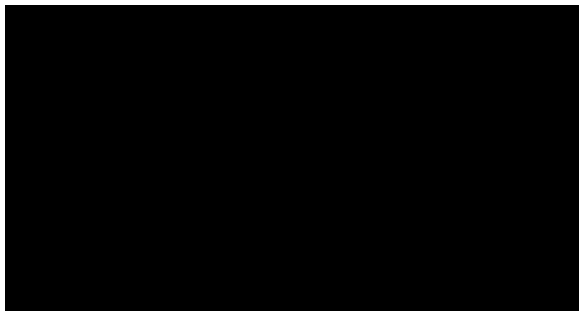
March 31, 2022

F. Richard Olenchak, Ph.D., P.C.  
Department of Educational Studies  
College of Education  
Purdue University  
100 North University Street  
West Lafayette, IN 47907-2098

Dear Dr. Olenchak,

It is my distinct pleasure to support your grant proposal, *Underrepresented Students in Gifted & Talented Education: Positive Psychology Identification & Service*, submitted to the U.S. Department of Education Jacob K. Javits Gifted and Talented Students Education Program. As part of my duties as an advisory board member, I would participate in an annual advisory board meeting, submit an annual written evaluation report, and provide guidance as needed. As an expert in social and emotional development of gifted students, I am pleased to support you and your team in your research efforts regarding positive psychology identification and services for gifted and talented students.

I look forward to working with you and your team to accomplish the objectives that you put forth in the proposal.





Claire E. Hughes, Ph.D.  
Department of Teacher Education and Preparation  
College of Coastal Georgia  
Brunswick, GA 31522  
[REDACTED]

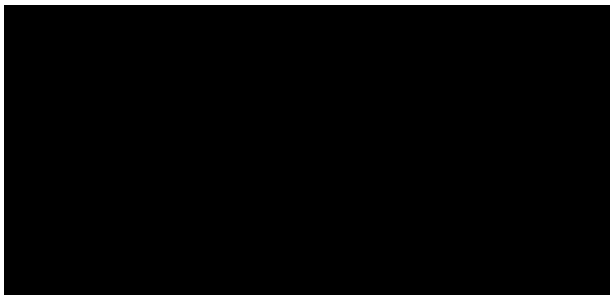
April 5, 2022

F. Richard Olenchak, Ph.D., P.C.  
Department of Educational Studies  
College of Education  
Purdue University  
100 North University Street  
West Lafayette, IN 47907-2098

Dear Dr. Olenchak,

It is my distinct pleasure to support your grant proposal, *Underrepresented Students in Gifted & Talented Education: Positive Psychology Identification & Service*, submitted to the U.S. Department of Education Jacob K. Javits Gifted and Talented Students Education Program. As part of my duties as an advisory board member, I would participate in an annual advisory board meeting, submit an annual written evaluation report, and provide guidance as needed. As an expert in twice-exceptional students, I am pleased to support you and your team in your research efforts regarding positive psychology identification and services for gifted and talented students and I look forward to the contribution that this work will contribute to the education of often-overlooked gifted students.

I look forward to working with you and your team to accomplish the objectives that you put forth in the proposal.



## Other Attachment File(s)

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\* Mandatory Other Attachment Filename:

Add Mandatory Other Attachment

Delete Mandatory Other Attachment

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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

F. Richard Olenchak, Ph.D.

### A. Professional Preparation

Institution	Degree	Areas of Emphasis/Concentrations
University of Connecticut	Ph.D.	Gifted & Talent Development Education; Counseling Psychology; Special Education
Arizona State University		Community Educational Leadership Internship
Eastern Michigan University	M.A.	Educational Psychology; Special Education; Educational Leadership
University of Michigan	B.A.	Pre-Law/Political Science; Psychology

### B. Appointments

Employment Dates	Title	Institution
2015-Present	Professor: Educational Psychology; Gifted, Creative, & Talented Education; Higher Education	Purdue University
2015-2019	Department Head: Department of Educational Studies	Purdue University
2013-2015	Associate Provost: Faculty Development & Faculty Affairs	University of Houston
2012-2013	Chair: Department of Psychological, Health, & Learning Sciences	University of Houston
2011-2012	Associate Chair: Department of Curriculum & Instruction	University of Houston
2001-2015	Director: Urban Talent Research Institute	University of Houston
1998-2015	Professor: Department of Psychological, Health, & Learning Sciences; Department of Curriculum & Instruction	University of Houston
1995-1998	Chair: Department of Special Education	University of Alabama
1992-1995	Area Head: Area of Teacher Education	University of Alabama
1992-1998	Associate Professor: Department of Special Education	University of Alabama
1987-1992	Assistant Professor: Department of Special Education	University of Alabama
1972-1987	Teacher: 9 years; Principal: 6 years	Schools in Michigan, New Hampshire, Connecticut

### C. Selected Activities in Professional Associations and Editing

Association Activities	Years
NAGC: Leadership Development Commission	2018-present
NAGC: Various leadership roles in 4 networks (Social/Emotional; Special Populations; Research & Evaluation; LGBTQ)	1990-present
NAGC: President; President-Elect; Past-President	2001-2007
NAGC: Board of Directors	1994-2000
NCATE (now CAEP): Executive Board	2007-2010
National Urban Alliance: Executive Board	2004-2007
Editorial Boards of Journals	Years
<i>Gifted Education International</i>	2020-present
<i>Roeper Review</i>	2000-present
<i>Gifted Child Quarterly</i>	1992-present

<i>Journal of Advanced Academics</i> (formerly <i>Journal of Secondary Gifted Education</i> )	1997-present
<i>Understanding Our Gifted</i>	1997-present
<b>Editorial Leadership</b>	<b>Years</b>
Editor, NAGC Monographs and Books of Readings	1995-2001
Co-Editor, NAGC Monographs and Books of Readings	1990-1995

#### D. Selected Recent Publications

- Olenchak, F. R. (2022). Pondering the term “gifted” through a Romeo and Juliet lens. *Gifted Education International*, 02614294211070352.
- Olenchak, F.R., & Thomas, J.L. (2022). The conative development of talent: The interactions among characteristics and circumstances. In J. VanTassel-Baska (Ed.). *Talent development in gifted education: Theory, research, and practice*. Routledge.
- Baum, S.M., & Olenchak, F.R. (2021). Twice-exceptional students: Ameliorating an educational dilemma. In J.L. Nyberg & J.A. Manzone (Eds.). *Creating equitable services for the gifted: Protocols for identification, implementation, and evaluation*. IGI Global.
- Froiland, J. M., Worrell, F. C., Olenchak, F. R., & Kowalski, M. (2020). Positive and negative time attitudes, intrinsic motivation, behavioral engagement, and substance use among urban adolescents. *Addictions Research and Theory*, 10.1080/16066359.2020.1857740.
- Olenchak, F.R., Jacobs, L.T., Hussain, M., Lee, K., & Gaa, J.P. (2016). Giftedness plus talent plus disabilities: Twice exceptional persons, the 21st century, and lifespan development as viewed through an affective lens. In D. Ambrose & R.J. Sternberg (Eds.). *Giftedness and talent in the 21st century: Adapting to the turbulence of globalization*. Sense.

**Presentations** -- Since 2015, 54 refereed national or international presentations and 8 keynotes

#### E. Recent Recognition

- Distinguished Service Award, National Association for Gifted Children, 2018
- Distinguished Scholar, Southern Methodist University, 2016
- Chair, Blue Ribbon Task Force on the Whole Gifted Child, National Association for Gifted Children, 2015-2017
- Student-Community Leadership Award, Pride Houston, 2015

#### F. Current Research Support

BEAR (Behavioral Education Accelerating Retention) Power: Using Peer Mentors to Model and Teach Successful Learning Strategies, IES, [REDACTED] total (subaward of [REDACTED]), subaward as external evaluator

## BIOGRAPHICAL SKETCH

NAME: Anne Traynor

POSITION TITLE: Associate Professor, Educational Psychology and Research Methodology

### EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date	FIELD OF STUDY
University of Notre Dame, Notre Dame, IN	B.S.	05/2003	Science-Education
Michigan State University	Ph.D.	07/2014	Measurement and Quantitative Methods

### A. Personal Statement

I am a research methodologist with expertise in experimental and quasi-experimental design, as well as educational measurement. I have served as lead methodologist or consultant on three federally funded studies in STEM education. My work has appeared in *Structural Equation Modeling* and *Teachers College Record*, among other journals. One of the educational statistics courses I teach includes a quasi-experimental design unit. I am well qualified to implement the regression discontinuity modeling and single-subject modeling that will be used to evaluate the study's talent development identification method and intervention, respectively.

### B. Positions and Honors

#### Appointments

2003 – 2008	Science Teacher. Xavier High School, Chuuk, Federated States of Micronesia.
2005 – 2008	Principal. Xavier High School, Chuuk, Federated States of Micronesia.
2008 – 2009	Interviewer. Center for Advancing Research and Communication in Science, Technology, Engineering, and Mathematics. National Opinion Research Center. University of Chicago.

2009 – 2014	Research and Teaching Assistant. Department of Counseling, Educational Psychology and Special Education. College of Education. Michigan State University.
2012	Intern. Measurement Research Department. ACT, Inc., Iowa City, Iowa.
2014 – 2020	Assistant Professor. Department of Educational Studies. College of Education. Purdue University.
2020 – 2020	Associate Professor. Department of Educational Studies. College of Education. Purdue University.

### **Selected Experience and Professional Memberships**

2009 – present National Council on Measurement in Education

2013 – present American Educational Research Association

2020 – present Institutional Review Board, Purdue University.

2019, 2020 US Department of Education, Office of Elementary and Secondary Education, Office of School Support and Accountability, State Assessment Team: Technical reviewer.

2015 Editorial Board, American Educational Research Journal

### **Honors**

2020 University Faculty Scholar, Purdue University.

2015 Outstanding Reviewer, American Educational Research Journal

2008 University Distinguished Fellowship, Michigan State University

### **C. Contribution to Education Research**

1. **Research Design and Analysis:** I have designed data collection and analytic procedures and/or provided statistical consulting for several completed and ongoing educational research projects in collaboration with other investigators. Selected publications:

ALMamari, K. S., & Traynor, A. (2021). The role of general and specific cognitive abilities in predicting performance in three occupations. *Journal of Intelligence*, 9(3), 40.

- Zhou, S., Zhou, W., & Traynor, A. (2020). Parent and teacher homework involvement: Relations with students' homework disaffection and achievement. *Learning and Individual Differences, 77*, 101780.
- Camargo, S., Herrera, A. N., & Traynor, A. (2018). Looking for consensus in the discussion about the concept of validity: A Delphi study. *Methodology, 14*(4), 146–155.
- Yu, S., Traynor, A., & Levesque-Bristol, C. (2018). Psychometric examination of the short version of the Learning Climate Questionnaire using item response theory. *Motivation and Emotion, 42*(6), 795–803.
- Herbel-Eisenmann, B., Keazer, L., & Traynor, A. (2018). Districts' considerations of equity in decision-making about algebra. *Teachers College Record, 120*.
- Traynor, A., & Chapman, A. (2015). Impeded attainment? The role of state exit examination-alternative route policy combinations. *Teachers College Record, 117*(9).

2. **Test-to-Curriculum Alignment Methods:** My research examines the performance of test-to-standards alignment indices, which are used in psychometrics to establish that an educational achievement test's items adequately correspond to a formal curricular standards document. Selected publications:

- Traynor, A., Li, T., & Zhou, S. (2020). Gauging uncertainty in test-to-curriculum alignment indices. *Applied Measurement in Education, 33*(2), 141–158.
- Traynor, A., & Merzdorf, H. E. (2018). Rater agreement in test-to-standards alignment reviews. *Educational Measurement: Issues and Practice, 37*(3), 55–64.
- Traynor, A. (2017). Does test item performance increase with test-to-standards alignment? *Educational Assessment, 22*(3), 171–188.
- Raykov, T., & Traynor, A. (2016). Evaluation of multi-component measuring instrument reliability in complex design studies. *Structural Equation Modeling, 23*(2), 270–277.

## 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

<b>Journals – Submission Reviews</b>	<b>Years</b>
<i>Journal of Advanced Academics</i>	2020-present
<i>Theory &amp; Practice in Rural Education</i>	2020-present
<i>Gifted and Talented International</i>	2017-present
<b>Association Activities</b>	<b>Years</b>
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](http://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](http://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.



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**BIOGRAPHICAL SKETCH**OPHELIE ALLYSSA DESMET

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**A. Professional Preparation**

Institution	Degree	Year
Purdue University	Ph.D.	2020
KU Leuven	M.S.	2015
KU Leuven KULAK	B.S.	2013

**B. Appointments**

Employment Dates	Title	Institution
2021-Present	Assistant Professor & Program Coordinator	Valdosta State University
2020-2021	Postdoctoral Research Associate	Purdue University
2016-2020	Research Assistant	Purdue University

**C. Positions and Honors****AWARDS**

2020	<b>Carolyn Callahan Doctoral Student Award</b> , National Association of Gifted Children
2020	<b>Graduate Student Travel Award</b> , American Educational Research Association, Research on Giftedness, Creativity, and Talent Special Interest Group.
2019	<b>Second Place for Completed Research at the Doctoral Level</b> , Graduate Student Research Gala, National Association for Gifted Children.
2019	<b>Pathbreaker Award</b> , American Educational Research Association, Research on Giftedness, Creativity, and Talent Special Interest Group.
2019	<b>Feldhusen Doctoral Student Fellowship Award</b> , College of Education, Purdue University
2018	<b>First Place, Social and Behavioral Sciences</b> , Sigma XI Poster Competition, Purdue University.
2017	<b>Honorary Poster Award</b> , Annual Graduate Student Educational Research Symposium, Purdue University.
2016-2020	<b>Dean's Doctoral Research Fellowship</b> , College of Education, Purdue University.
2016	<b>First Place, Completed Research at the Non-Doctoral Level</b> , Graduate Student Research Gala, National Association for Gifted Children.

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

<i>National Association for Gifted Children</i>	
Special Populations Network Executive Board Member	2018-present
Research & Evaluation Network Executive Board Member	2019-2020
<i>American Educational Research Association, SIG: Research on Giftedness</i>	
Executive Board	2018-present

**Editorial Review Board and Association Review Activities**

<i>Journal</i>	<i>Years</i>
<i>Journal of Advanced Academics</i>	2018-present
<i>Creativity Research Journal</i>	2018-present
<i>Gifted and Talented International</i>	2018-present
<i>Gifted Child Quarterly</i>	2018-present
<i>Journal for the Education of the Gifted</i>	2018-present
<i>Roeper Review</i>	2018-present
<i>Gifted Education International (Editorial Review Board Member)</i>	2022-present
<i>Organization</i>	<i>Years</i>

<i>National Association for Gifted Children—Proposals reviewer</i>	2018-present
<i>American Educational Research Association—Proposals Review Panel mbr</i>	2018-present

## D. Selected Peer-reviewed Publications

### SELECTED NATIONAL REFERRED JOURNAL ARTICLES

- Desmet, O. A., & Roberts, A. M., (2022). Teaching for Positive and Transformational Creativity through Service Learning. *Educational Sciences*, 2(4), 234; <https://doi.org/10.3390/educsci12040234>
- Desmet, O. A., & Pereira, N., (2022). The Achievement Motivation Enhancement Curriculum: Evaluating an Affective Intervention For Gifted Students. *Journal of Advanced Academics*, 33(1), 129–153. <https://doi.org/10.1177/1932202X211057424>
- Desmet, O., Crimmins, D., Seigfried-Spellar, K. C., & Gentry, M. (2022). AME+Cyber: Evaluating the online delivery of a holistic cyber-related talent development program. *Gifted Education International*, 38(1), 3–24. <https://doi.org/10.1177/02614294211054361>
- Desmet, O. A. & Pereira, N. (2021). Gifted Boys' Perceptions of their Academic Underachievement. *Gifted Education International*. <https://doi.org/10.1177/02614294211050294>
- 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>
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- Desmet, O. A., Pereira, N., & Peterson, J. S. (2020). Telling a tale: How underachievement develops in gifted girls. *Gifted Child Quarterly*. 64(2), 85-99. <https://doi.org/10.1177/0016986219888633>
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### BOOKS & BOOK CHAPTERS

- Desmet, O. A. (2022). Promoting Transformational Giftedness Through Service Learning. In S. Sternberg, D. Ambrose, & S. Karami, *The Palgrave Handbook of Transformational Giftedness for Education*.
- Masta, S. & Desmet, O. A. (2022). Methodological reflections: Teaching and learning the qualitative research process with youth participants (pp. 187-251). In K. Clonan-Roy, P. Nagarajan, N. Gross, & V. Vasudevan (Eds.), *Care-Based Methodologies: Reimagining Qualitative Research with Youth in US Schools*. Bloomsbury Academic.
- Desmet, O. & Gevaert, T. (2019). *Slim onderpresteren aanpakken: De basisschool editie. Werkboek*. [Dealing with gifted underachievement: The elementary school edition. Workbook.] Garant.
- Desmet, O. & Gevaert, T. (2019). *Slim onderpresteren aanpakken: De basisschool editie. Begeleidershandleiding*. [Dealing with gifted underachievement: The elementary school edition. Teacher manual.] Garant.
- Gevaert, T. & Desmet, O. (2016). *Slim onderpresteren aanpakken*. [Dealing with gifted underachievement]. Garant.

**PRESENTATIONS**-- Since 2015: 32 peer-reviewed national or international presentations; 3 invited addresses; 15 peer-reviewed national or international poster presentations; consulting for 5 national and international schools; 16 professional development sessions for schools and school districts in 3 states

## **E. Research Support**

### **GRANTS**

#### **External Awards**

- 2019-2024 Co-Principal Investigator: Jacob K. Javits Gifted and Talented Students Education Program, U.S. Department of Education, Project: *Closing Excellence and Opportunity Gaps for Students from Traditionally Underserved Populations in Gifted Education: A Multi-Tier Systems of Support Approach*: (\$2,172,719)
- 2018 Co-Principal Investigator: APF Esther Katz Rosen Fund Grant American Psychological Foundation, Project: *How Gifted Underachievement Develops According to Gifted Underachievers and their Parents*: (\$46,730)
- 2018 Principal Investigator: Hollingworth Award, National Association for Gifted Children, Project: *Telling a Tale: How underachievement Develops in Gifted Girls*: (\$2,500)

#### **Internal Awards**

- 2022 Principal Investigator: Blazer Summer Research Institute, Project: *Are Creatively Gifted Student More at Risk of Underachievement?* (\$3,000)
- 2019-2020 Co-Principal Investigator: Purdue Polytechnic High School Collaborative Grant, College of Education, Purdue University, Project: *Holistic Talent Development for Underserved Youth: Cybercrime, Internet Safety, and Achievement Motivation*: (\$33,000)
- 2019 Principal Investigator: Synergy Grant, College of Education, Purdue University, Project: *Developing and Evaluating an Affective Curriculum for Achievement Motivation: A Mixed Methods Study*: (\$2,033)
- 2019 Principal Investigator: Dean's Graduate Support Program, College of Education, Purdue University, Project: *Fostering Creativity in a K-8 Enrichment Program*: (\$200)
- 2018-2019 Principal Investigator: Undergraduate Research Trainee Grant, College of Education, Purdue University, Project: *Perceptions of Underachievement*: (\$1,000)
- 2018 Principal Investigator: Dean's Graduate Support Program, College of Education, Purdue University, Project: *Telling a Tale: How Underachievement Develops in Gifted Girls*: (\$200)
- 2017-2018 Principal Investigator: Undergraduate Research Trainee Grant, College of Education, Purdue University, Project: *Parent Perceptions of Enrichment Program Course Offerings: What about non-STEM courses?*: (\$1,000)

## Budget Narrative File(s)

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\* **Mandatory Budget Narrative Filename:**

Add Mandatory Budget Narrative

Delete Mandatory Budget Narrative

View Mandatory Budget Narrative

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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.

### Personnel [REDACTED]

*Rick Olenchak, Ph.D., Principal Investigator (PI):* We request funding for each fiscal year across the duration of the project. This includes two course releases plus 5% during each academic year and two summer months to provide him with sufficient dedicated time to focus on this project (28% FY). The two course releases formally free up 20% of his assigned time allocation to dedicate to this project. Dr. Olenchak will serve as PI and will provide the leadership necessary for the success of the project, including overall responsibility for all activities (e.g., program implementation, outreach, and evaluation), budget management, report writing and submission, and communications with Valdosta staff, participating schools, and the advisory board. He will train and supervise the postdoctoral student and 1-2 graduate students to assist with project implementation and evaluation and to assist with communications and other activities. (Starting base salary as of 7/1/2021 is \$121,225).

<i>R Olenchak</i>	<i>Yr 1</i>	<i>Yr 2</i>	<i>Yr 3</i>	<i>Yr 4</i>	<i>Yr 5</i>
Salary	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

*Kristen Seward, Ph.D. (Co-PI):* We request funding for one course release plus 2.5% effort during the academic year and 1 summer month in each year of the project (20% FY) for Dr. Seward. She will be responsible for the positive psychology modules and dynamic assessment interventions as well as training school personnel, evaluating implementation, and making improvements in these areas. She will also train and supervise one graduate student to assist with these activities

<i>K Seward</i>	<i>Yr 1</i>	<i>Yr 2</i>	<i>Yr 3</i>	<i>Yr 4</i>	<i>Yr 5</i>
Salary	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

*Anne Traynor, Ph.D. (Co-PI):* We request funding for approximately 2 summer weeks (3.6% FY) in each year of the project for Dr. Traynor. She will be responsible for data analysis, such as the regression discontinuity and single-subject modeling, including reporting of effect sizes. She will also train and supervise one graduate student to assist with these activities (Starting base salary as of 7/1/2021 is [REDACTED]).

<i>A Traynor</i>	<i>Yr 1</i>	<i>Yr 2</i>	<i>Yr 3</i>	<i>Yr 4</i>	<i>Yr 5</i>
Salary					

*Learning Design and Technology (LDT), TBD:* We request funding for 1 summer month in each year of the project (8.3% FY) for a faculty member from LDT. S/he will be responsible for online module design for teacher training and positive psychology modules. (Starting base salary as of 7/1/2021 is ).

<i>LDT, TBD</i>	<i>Yr 1</i>	<i>Yr 2</i>	<i>Yr 3</i>	<i>Yr 4</i>	<i>Yr 5</i>
Salary					

*Postdoctoral Student, TBD:* We request funding for approximately 100% fiscal year effort during each year of the project for the postdoctoral student. S/he will assist the PI and project team with program management, development of modules and program materials, recruitment of participants, outreach, and data collection and evaluation. (Starting base salary as of 7/1/2021 is ).

<i>Postdoc</i>	<i>Yr 1</i>	<i>Yr 2</i>	<i>Yr 3</i>	<i>Yr 4</i>	<i>Yr 5</i>
Salary					

*Graduate assistants (GAs), TBD:* We request funding to hire and train three graduate students to assist the PI and project team with program management, development of modules and program materials, recruitment of participants, outreach, assessment scoring, and data collection and evaluation. (Starting base salary for each College of Education GA as of 7/1/2021 is ).

<i>Grad Students (3)</i>	<i>Yr 1</i>	<i>Yr 2</i>	<i>Yr 3</i>	<i>Yr 4</i>	<i>Yr 5</i>
Total Salaries					

### **Fringe Benefits** )

Fringe benefits include retirement, Social Security benefits, unemployment insurance, workman's compensation, and health insurance. These are calculated at the current Purdue rates. Fringe benefits are budgeted in accordance with university policy as follows: Faculty 27.25%, Postdoctoral Students 28.4%, and Graduate Students 8.54%.

<i>Fringe Benefits</i>	<i>Yr 1</i>	<i>Yr 2</i>	<i>Yr 3</i>	<i>Yr 4</i>	<i>Yr 5</i>
Faculty					
Postdoc					
Grad Students					

### **Travel**

We request funds as shown in the table below for three trips per year to Valdosta, GA ( total), which includes 2 to school sites (Quitman and Valdosta) and one additional trip for collaborative work with the Co-PI. We request funds for two trips per year to each of the other locations ( total for Houston and for Los Angeles). Total travel for collaboration and to schools is per year.

We also request funds to travel to conferences (e.g., NAGC, AERA, CED and/or APA) in the final year of the project. Since not all conference locations have been set yet, we request [REDACTED] per conference for travel and registration for 3 people [REDACTED]).

Destination	Days	Airfare	Lodging		Per Diem		Grnd Tran	Cost per Person	# of People	Total Per Trip
			Rate	Total	Rate	Total				
Valdosta	5	[REDACTED]								
Valdosta	5									
Valdosta	5									
Houston, TX	5									
Houston, TX	5									
Los Angeles, CA	5									
Los Angeles, CA	5									

## Equipment (N/A)

### Supplies [REDACTED]

We request [REDACTED] during each year to purchase software licenses and miscellaneous supplies such as assessments, flash drives, data storage space, and printing and duplication supplies. We also request funds in the first year of the project to purchase 4 dedicated laptop computers for the PI, postdoc, and 2 shared computers for the graduate students (Dell Latitude 7520 16GB RAM, 512GB SSD 15" Laptop [REDACTED] each) and [REDACTED] for a computer docking station for the PI (Dell Dock WD19S [REDACTED] Dell 24 Monitor P2422Hx2 [REDACTED] SB521A Sound bar [REDACTED] Mouse MS116 [REDACTED] KB216 Keyboard [REDACTED]).

### Contractual [REDACTED]

*Subaward: Valdosta University.* We request funds during each year of the project for a subaward to our partner organization. Separate budget and justification are provided.

Subaward	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Total	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

## Construction (N/A)

### Other [REDACTED]

*Teacher Incentives:* [REDACTED]). We have budgeted funds for incentives for

40 teachers and counselors to participate in implementation throughout the duration of the project and for them to participate in interviews once per year throughout the project. Each teacher participant will receive [REDACTED] per year for his/her time ([REDACTED]).

*Honorarium:* Advisory Board [REDACTED] total). We request [REDACTED] honorarium for each of the five Advisory Board members in each year of the project for their role as described in the project narrative.

*Honorarium:* School site Coordinators [REDACTED]). We request [REDACTED] honorarium (to be distributed by half after each semester) for each of the four site coordinators in each year of the project for their role as described in the project narrative.

*Transcription:* [REDACTED] total) We request funds in each year to transcribe all recorded interviews. We anticipate approximately 45-60 min/person x 40 interviews each year at a standard rate of [REDACTED]

*Graduate Fee Remissions:* Graduate Fee Remissions [REDACTED] total) are budgeted according to university policy with 2% annual increases.

<i>Grad Fee Rem.</i>	<i>Yr 1</i>	<i>Yr 2</i>	<i>Yr 3</i>	<i>Yr 4</i>	<i>Yr 5</i>
Total	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

**Total Direct Costs =** [REDACTED]

**Indirect Costs** [REDACTED]

Indirect costs are budgeted at the non-research indirect cost rate of 38% of the modified total direct costs. As this project's sub award will collect data, and analysis, dissemination, and engagement will occur collaboratively. This rate was approved on 04/17/2017 by the Department of Health and Human Services (POC: DHHS, Matthew Dito, 214-767-3261).

<i>IDC (38%)</i>	<i>Yr 1</i>	<i>Yr 2</i>	<i>Yr 3</i>	<i>Yr 4</i>	<i>Yr 5</i>
Total	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

**Training Stipends (N/A)**

**Total Cost =** [REDACTED]

<i>Total Cost</i>	<i>Yr 1</i>	<i>Yr 2</i>	<i>Yr 3</i>	<i>Yr 4</i>	<i>Yr 5</i>
Total	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]



*Underrepresented Students in Gifted & Talented Education: Positive Psychology Identification & Service - Valdosta State University*

		Year 1	Year 2	Year 3	Year 4	Year 5	Total Funds Requested from Sponsor
Personnel	<b>Calculations</b>						
Ophélie Desmet	2h/week, 23% summer salary						
Grads 1	.5 FY (Ophélie)						
Total Salary							
Fringe Benefits							
Faculty	17%						
Graduate Student	7.65%						
Total Fringe Benefits							
<b>Total Personnel &amp; Fringes</b>							
Other Expenses							
Graduate student tuition							
<b>Total Other</b>							
<b>Total Direct Costs</b>							
Indirect Costs							
<b>Total Indirect Costs</b>							
<b>TOTAL COST TO SPONSOR</b>							

## BUDGET JUSTIFICATION

In accordance with 2 CFR 200, Uniform Administrative Requirements, Cost Principles, And Audit Requirements for Federal Awards, Valdosta State University tracks and reports its professional personnel on a percent of effort and project period 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.

### Personnel

*Co-Principal Investigator*, Prof. Ophélie Desmet is an expert on affective development of gifted and talented students and multi-exceptionality. Therefore, she will play an important role in training school personnel to implement the EBEM, both by creating some of the modules as well as part of the in-person training. Moreover, she will be actively involved in all parts of the implementation and evaluation of the model. Therefore, she will be assigned 2 hours per week of the academic year and two months during the summer per year.

O. Desmet	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Salary					
Fringes 17%					

*Graduate Student (1)*. In year 1, we will hire one Graduate Student at 50% effort to begin on the project to assist the project team members in the development of program materials, recruitment of participants, outreach to partner sites, data collection plan, and initial training. Graduate students are appointed at .50 which is 19 hours per week for fall, spring, and summer semesters, a standard appointment for graduate students who are also taking classes. This graduate student will continue their role for the remaining project period (through Year 5).

Grad Student	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5
Salary					
Fringes 7.6%					
Tuition					

### Fringe Benefits

Fringe benefits are budgeted in accordance with university policy as follows:

Faculty FICA 7.65%

Faculty ORP 9.24%

Student FICA 7.65%

### Total Direct Costs

Year 1	Year 2	Year 3	Year 4	Year 5	Total

### Total Indirect Costs

Indirect costs are budgeted at the negotiated indirect cost rate of 43.3% of the modified total direct costs for research. No indirect costs are charged for student support expenses. This rate was approved on November 22, 2019 by the Department Health and Human Services

**Total Costs**

	Year 1	Year 2	Year 3	Year 4	Year 5	Total
Direct cost						
Indirect cost						
Total Project						



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

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

**Applicant Information**

**Legal Name:**

Purdue University

**1. Project Objective:**

Objective 1a: Select four middle schools that serve students who are traditionally underrepresented in gifted education in both urban and rural communities.

1.a. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio		%
Sample contains schools with student population coming from underrepresented groups.	PROJECT		33 /	100	33.00

**2. Project Objective:**

Objective 1b: Construct a process for assessing underrepresented students using the BEM-e and positive psychology modules, and train teachers and counselors to identify students through this positive psychology lens for gifted education.

2.a. Performance Measure	Measure Type	Quantitative Data				
		Target				
		Raw Number	Ratio			%
Train teachers and counselors to identify students through this positive psychology lens for gifted education.	PROJECT	40		/		

**3. Project Objective:**

Objective 1c: Evaluate the effectiveness of the BEM-e identification procedure.

3.a. Performance Measure	Measure Type	Quantitative Data				
		Target				
		Raw Number	Ratio			%
Increase in odds of traditionally underserved students being identified for gifted education when using the BEM-e procedures	PROJECT		10	/	100	10.00

PR/Award # S206A220038

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

3.b. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio		%
By the end of the project, the number of students newly identified as gifted and talented under the program (GPRA 1)	GPRA	90		/	

3.c. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio		%
By the end of the project, the number of underserved students newly identified as gifted and talented under the program (GPRA 2).	GPRA	60		/	

3.d. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio		%
By the end of the project, the percentage of students newly identified as gifted and talented under the program who were served under the program (GPRA 3).	GPRA		75	/	100 75.00

3.e. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio		%
By the end of the project, the percentage of underserved students newly identified as gifted and talented under the program who were served by the program(GPRA 4)	GPRA		75	/	100 75.00

**4. Project Objective:**

Objective 1d: To increase students' positive psychological traits.

4.a. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio		%
Percent of students who demonstrate growth in hope, self-perceptions, engagement, perseverance, optimism, connectedness, happiness, mindset, and resilience.	PROJECT		75	/	100 75.00

4.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		80	/	100 80.00

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

4.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		80	/	100 80.00

4.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		80	/	100 80.00

**5. Project Objective:**

Objective 2a: Train teachers and counselors to implement the modules and identify students for gifted education.

5.a. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio		%
Forty participating teachers and/or counselors will be monitored through online engagement	PROJECT	40		/	

5.b. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio		%
Percentage of teachers/counselors completing training.	PROJECT		80	/	100 80.00

**6. Project Objective:**

Objective 2b: After the completion of online training, at least 80% of the teachers and counselors will have accurate knowledge and skills for identifying underrepresented students in gifted education, including those with disabilities using the BEM-e.

6.a. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio		%
Percentage of teachers and counselors with accurate knowledge and skills for identifying underrepresented students in gifted education, including those with disabilities, using the BEM-e.	PROJECT		80	/	100 80.00

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

6.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	40		/	

**7. Project Objective:**

Objective 2c: Teachers and counselors implement the positive psychology modules with 60 – 80% fidelity (Swanson et al., 2011) and administer the EPOCH, the Children's Hope Scale, and the Jr. MAI, Version B to identify underrepresented students.

7.a. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio		%
Percentage of fidelity with which teachers/counselors implement positive psychology modules and administer the EPOCH and Children's Hope Scale, and the Jr. MAI, Version B to identify underrepresented children.	PROJECT		70	/	100
					70.00

**8. Project Objective:**

Objective 2d: To improve teacher knowledge, skills, and perceptions regarding affective needs of traditionally underserved students.

8.a. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio		%
Percentage of participating educators who will have increased knowledge about the affective needs of gifted and talented students after participating in the training.	PROJECT		75	/	100
					75.00

**9. Project Objective:**

Objective 3a: Larger numbers of students with disabilities and others from underrepresented groups in gifted education will be identified and provided with gifted education services available at their schools or new services co-developed with the schools through this project.

9.a. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio		%
Increase in odds of students with disabilities being identified for gifted education.	PROJECT		10	/	100
					10.00

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

**10. Project Objective:**

Objective 4a: Develop, field test, and distribute an effective training model enabling school personnel to replicate or adapt the BEM-e model.

10.a. Performance Measure	Measure Type	Quantitative Data				
		Target				
		Raw Number	Ratio			%
By then end of year 5, all materials associated with professional development and training, the positive psychology modules, and positive psychology and growth mindset curricular materials will be available through conferences, workshops, and the project’s website	PROJECT		100	/	100	100.00

**11. Project Objective:**

Objective 4b: Access to the BEM-e, its various components, and research findings about its effectiveness will be streamlined.

11.a. Performance Measure	Measure Type	Quantitative Data				
		Target				
		Raw Number	Ratio			%
Number of publications resulting from the project will be at least 1 per year.	PROJECT	5		/		

11.b. Performance Measure	Measure Type	Quantitative Data				
		Target				
		Raw Number	Ratio			%
Number of conference presentations on project will be at least 1 per year.	PROJECT	5		/		



## 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](http://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								
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: 04/17/2017 To: 07/01/2022 (mm/dd/yyyy)  
Approving Federal agency: ☐ ED ☒ Other (please specify): DHHS  
The Indirect Cost Rate is  %.
- (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))?

PR/Award # S206A220028

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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								
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)								

**SECTION C - BUDGET NARRATIVE (see instructions)**

ED 524

Name of Institution/Organization <div style="border: 1px solid black; padding: 2px; margin-top: 5px;">Purdue University</div>	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.
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**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



U.S. Department of Education  
Evidence Form

OMB Number: 1894-0001  
Expiration Date: 05/31/2022

## 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
Borman, G. D., Rozek, C. S., Pyne, J., & Hanselman, P. (2019). Reappraising academic and social adversity improves middle school students' academic achievement, behavior, and well-being. <i>Proceedings of the National Academy of Sciences</i> , 116(33), 16286-16291.	The 15 minutes self-perception intervention reduced sixth-grade disciplinary incidents across the district by 34%, increased attendance by 12%, and reduced the number of failing grades by 18%. Impact were descriptively larger for historically underserved minority students. 80% of longterm intervention effects on students' grade point averages were accounted for by changes in students' attitudes and behaviors.	The cited study and the proposed project include a positive psychology intervention targeting self-perception of middle school students implemented by classroom teachers. The Borman et al. study involved 1304 sixth grade students across one school district in the Midwestern US. The district had a diverse population, similar to those in the proposed school sites: white (44%), Latino (19%), African American (18%), and Asian (9%).
Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. <i>Child Development</i> , 78(1), 246-263.	Two studies explored the role of implicit theories of intelligence in adolescents' mathematics achievement. In Study 1 with 373 7th graders, the belief that intelligence is malleable (incremental theory) predicted an upward trajectory in grades over the two years of junior high school, while a belief that intelligence is fixed (entity theory) predicted a flat trajectory. A mediational model including learning goals, positive beliefs about effort, and causal attributions and strategies was tested. In Study 2, an intervention teaching an incremental theory to 7th graders (N=48) promoted positive change in classroom motivation, compared with a control group (N=43). Simultaneously, students in the control group displayed a continuing downward trajectory in grades, while this decline was reversed for students in the experimental group.	The cited research and also the proposed project target the notion of fixed versus malleable identities among diverse populations of middle school students. In the Blackwell et al. research, study 1 showed that students who believed they have malleable ability outperformed those who saw ability as fixed. Part of that study infused a model addressing the value of goals and positive beliefs about effort. That model compares with aspects of the model in the proposed project. Study 2 of the Blackwell et al. work included an incrementalism intervention. This notion of growth in ability occurring incrementally parallels the theory in the model we intend to use in the proposed project. Students in the two experimental groups in the Blackwell et al. studies continued to improve academically while the control group students declined.
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## 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). <i>Teaching secondary students to write effectively</i> (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: <a href="https://ies.ed.gov/ncee/wwc/PracticeGuide/22">https://ies.ed.gov/ncee/wwc/PracticeGuide/22</a> . This report was prepared under Version 3.0 of the WWC Handbook (p. 72).	<p>(Table 1, p. 4) Recommendation 1 ("Explicitly teach appropriate strategies using a Model – Practice – Reflect instructional cycle") is characterized as backed by "strong evidence."</p> <p>(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.</p>	(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
<p>U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2017, February). Transition to College intervention report: Dual Enrollment Programs. Retrieved from <a href="https://ies.ed.gov/ncee/wwc/Intervention/1043">https://ies.ed.gov/ncee/wwc/Intervention/1043</a>. This report was prepared under Version 3.0 of the WWC Handbook (p. 1).</p>	<p>(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.</p>	<p>(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.</p>
<p>Bettinger, E.P., &amp; Baker, R. (2011). <i>The effects of student coaching in college: An evaluation of a randomized experiment in student mentoring</i>. Stanford, CA: Stanford University School of Education. Available at <a href="https://ed.stanford.edu/sites/default/files/bettinger_baker_030711.pdf">https://ed.stanford.edu/sites/default/files/bettinger_baker_030711.pdf</a></p> <p>Meets WWC Group Design Standards without Reservations under review standards 2.1 (<a href="http://ies.ed.gov/ncee/wwc/Study/72030">http://ies.ed.gov/ncee/wwc/Study/72030</a>).</p>	<p>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.</p> <p>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.</p> <p>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).</p>	<p>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.</p>

**Paperwork Burden Statement:** 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. The valid OMB control number for this information collection is 1894-0001. The time required to complete this information collection is estimated to vary from 1 to 4 hours per response, with an average of 1.5 hours per response, including the time to review instructions, search existing data sources, gather the data needed, and complete and review the information collection. If you have any comments concerning the accuracy of the time estimate(s) or suggestions for improving this form, please write to: U.S. Department of Education, Washington, D.C. 20202-4537. If you have comments or concerns regarding the status of your individual submission of this form, write directly to the Office of Innovation and Improvement, U.S. Department of Education, 400 Maryland Avenue, S.W., Washington, D.C. 20202

PR/Award # S206A220038