

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 # S206A220021

Grants.gov Tracking#: GRANT13593451

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

Closing Date: Apr 11, 2022

PR/Award # S206A220021

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

Application for Federal Assistance SF-424

* 1. Type of Submission: <input type="checkbox"/> Preapplication <input checked="" type="checkbox"/> Application <input type="checkbox"/> Changed/Corrected Application	* 2. Type of Application: <input checked="" type="checkbox"/> New <input type="checkbox"/> Continuation <input type="checkbox"/> Revision	* If Revision, select appropriate letter(s): <input type="text"/> * Other (Specify): <input type="text"/>
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* 3. Date Received: <input type="text" value="04/08/2022"/>	4. Applicant Identifier: <input type="text"/>
--	--

5a. Federal Entity Identifier: <input type="text"/>	5b. Federal Award Identifier: <input type="text" value="NA"/>
--	--

State Use Only:

6. Date Received by State: <input type="text"/>	7. State Application Identifier: <input type="text"/>
---	---

8. APPLICANT INFORMATION:

* a. Legal Name:

* b. Employer/Taxpayer Identification Number (EIN/TIN): <input type="text" value="REDACTED"/>	* c. UEI: <input type="text" value="REDACTED"/>
--	--

d. Address:

* Street1:	<input type="text" value="2 Gilmore Hall"/>
Street2:	<input type="text"/>
* City:	<input type="text" value="Iowa City"/>
County/Parish:	<input type="text" value="Johnson"/>
* State:	<input type="text" value="IA: Iowa"/>
Province:	<input type="text"/>
* Country:	<input type="text" value="USA: UNITED STATES"/>
* Zip / Postal Code:	<input type="text" value="52242-1320"/>

e. Organizational Unit:

Department Name: <input type="text" value="Division of Sponsored Program"/>	Division Name: <input type="text" value="Vice President for Research"/>
--	--

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

Prefix: <input type="text"/>	* First Name: <input type="text" value="Wendy"/>
Middle Name: <input type="text"/>	
* Last Name: <input type="text" value="Beaver"/>	
Suffix: <input type="text"/>	

Title:

Organizational Affiliation:

* Telephone Number: <input type="text" value="REDACTED"/>	Fax Number: <input type="text" value="REDACTED"/>
---	---

* Email:

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:**

Innovations in Discovering and Developing Talented Twice-Exceptional Students

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.

Add Attachment

Delete Attachment

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17. Proposed Project:

* a. Start Date:

* b. End Date:

18. Estimated Funding (\$):

* a. Federal	<input type="text"/>	
* b. Applicant	<input type="text"/>	
* c. State	<input type="text"/>	
* d. Local	<input type="text"/>	
* e. Other	<input type="text"/>	
* f. Program Income	<input type="text"/>	
* g. TOTAL	<input type="text"/>	

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

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

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

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

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

Yes No

If "Yes", provide explanation and attach

Add Attachment

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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:

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 and reference the OMB Control Number 1894-0005.

Optional - You may attach 1 file to this page.

GEPA_Statement_2022FINAL1042287586.pdf

Add Attachment

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GEPA Statement: The University of Iowa (UI) will make all reasonable accommodations to avoid creating barriers to access of programs that are presented under the auspices of this Jacob K. Javits Gifted and Talented Students Education Program (CFDA Number: 84.206A). The UI will take action to ensure that any barriers that might exist are addressed and efforts are made to eliminate them to provide equitable access to all participants in the project, *Innovations in Discovering and Developing Talented Twice-Exceptional Students (DD2E)*

This project will take several steps to guarantee that serious efforts are made toward ensuring participation of members of diverse groups. The Project PIs will track student and teacher demographic data each year to monitor the number of participants regarding gender, race, national origin, color, disability, and age. The project PIs will prepare a written review of participant statistics that will document the project's success at including participants without regard to race, color, national origin, gender, age, or disability. Participants with different learning styles and abilities will be able to experience all aspects of the *DD2E* project through appropriate teaching methods.

Barriers that might exist to equitable access to professional development include those that are presented by differences in disabilities. Participants needing accommodations on standardized assessments will be provided with needed accommodations to enable completion of written tests and assessments. Participants needing help in understanding the instruction and training will be assisted by the use of any recognized instructional techniques and technologies that will provide equal program access. Participants with visual or hearing impairments will be provided with equitable access through appropriate accommodations requested by the individual participant. The needs of physically impaired participants are already met through appropriate accommodations at the physical plant. There will be no barriers to participation based on gender, race, age, national origin, sexual orientation, or disability.

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 University of Iowa	
* PRINTED NAME AND TITLE OF AUTHORIZED REPRESENTATIVE	
Prefix: <input type="text"/>	* First Name: <input type="text" value="J. Martin"/> Middle Name: <input type="text"/>
* Last Name: <input type="text" value="Scholtz"/>	Suffix: <input type="text"/>
* Title: <input type="text" value="Vice President for Research"/>	
* SIGNATURE: <input type="text" value="J. Martin Scholtz"/>	* DATE: <input type="text" value="04/08/2022"/>

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

1. Project Director:


Prefix:	* First Name:	Middle Name:	* Last Name:	Suffix:
	Susan		Assouline	

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

Address:

* Street1:	600BHC
Street2:	
* City:	Iowa City
County:	Johnson
* State:	IA: Iowa
* Zip Code:	52242-1320
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:

<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

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:

00003007

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.

Javits_Human_Subjects_Nonexempt_20221042287585.p

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*Innovations in Discovering and Developing Talented Twice-Exceptional Students
(DD2E)*

The University of Iowa

Jacob K. Javits Gifted and Talented Students Education Program (CFDA 84.206A)

Nonexempt Research Narrative

- (1) Human Subjects Involvement and Characteristics.** The participants involved in the proposed project consist of upper elementary (primarily 6th grade) students attending schools in one of Iowa's 10 area education agencies (Prairie Lakes AEA), Iowa's largest school district (Des Moines Independent Community School District), and one of Iowa's more diverse school districts (Waterloo Community School District). Prairie Lakes AEA is in Northwest Iowa; 75% of the students are white, 45% of students are eligible for free-reduced lunch (FRL), 13% are enrolled with an IEP, and 7.2% are identified as gifted and talented. Des Moines is in Central Iowa; 34% of the students are white, 78% are FRL-eligible, 16% are enrolled with an IEP, and 7.7% are identified as gifted and talented. Waterloo is in Northeast Iowa; 43% of the students are white, 73% are FRL-eligible, 17% are enrolled with an IEP, and 6.7% are identified as gifted and talented. The selected AEA/LEAs represent approximately 5,000 6th graders and a geographically, racially, and socioeconomically diverse population, which are key inclusion criteria for the proposed project. As part of the project, data will be collected and analyzed from students' scores on their most recently administered grade-level achievement (Iowa Assessments); above-level aptitude testing (I-Excel or ACT); group ability test Cognitive Abilities Test (CogAT); and psychosocial measures (PALS). Participants will be recruited within these schools and if they agree to participate surveys will be administered electronically during the school day.
- (2) Sources of Materials.** Student data and demographic data will be collected by the project team members and will consist of archival data obtained from school records of student grade-level achievement, curriculum-based assessments, and additional cognitive and non-cognitive assessments performed by licensed psychologists.
- (3) Recruitment and Informed Consent.** The student subjects will be recruited from middle schools across partner area education agencies in Iowa. In compliance with federal regulations, the project will receive approval from the University's Institutional Review Board prior to conducting the project's planned activities. Participant Informed Consent will be obtained from parents and students. Students will be provided with an informed consent form for their parents and themselves to review and sign before the students can participate in the proposed activities. As indicated above, parents of children selected to participate in the proposed project will be informed before the administration of any authorized assessments or activities, that their children may be excused from participation for any reason, that they are not required to complete any assessments, answer any questions or participate in any project activities or that they may withdraw at any time from the project without penalty. They will be assured that the identities of their children and schools will be protected and the data maintained in strict confidence.
- (4) Potential Risks.** Participants will be involved in activities typically found within educational settings. At times they may feel discomfort from participating in new activities or from social interactions. If they become fatigued, bored, or uncomfortable, they may end your

participation in the study at any time. Students will be asked to provide information over the Internet. Information provided via the internet may be viewed by individuals who have access to the computers where the information is collected or stored. It is also possible that responses could be viewed by unauthorized persons. We will use a secure web site to collect the study information, password protected computers to store the study information. We will not collect any information in the on-line questions that would identify students.

- (5) Protection against Risk.** Through the formal consent and assent process, students will be advised that they are not required to work with us and that they can stop working with us at any point. Besides the primary investigator and teachers, who are already involved in instruction with the students, no one else will have access to the data collected on the students throughout the project. Teachers will be cautioned that the data collected during this study are confidential and that similarly to information they acquire during their professional activities with students should not be shared. When reporting results, no personally identifiable data will be used. Confidential data collected from the students, including pre and post data, will only be available to the investigators. No other person will have access to the data. Prior to entering the data into my computer for data analyses, each participating student will be assigned an ID number. No personally identifiable data will be used or reported. Only the primary investigator will have access to the name/ ID code. All data will be kept on the primary investigator's computer for a period of one year from the end of data collection. At that point, the subject ID/link will be destroyed and the anonymous data will be retained.
- (6) Importance of Knowledge to be Gained.** The proposed research and instruction project addresses a critical area of gifted education- that of appropriately identifying students with disabilities (i.e., twice-exceptional) for participation in gifted education programs. Identifying students with disabilities who qualify for gifted programs will encourage more students from underserved groups to pursue and participate in enrichment programs designed specifically for gifted and talented students.
- (7) Collaborating Sites:** Prairie Lakes AEA and Des Moines and Waterloo Community School Districts have agreed to participate in this and are fully committed to the mission and goals of the proposed project. They have indicated a strong commitment to providing human and physical resources. They stand ready to work collaboratively with the project's research team to accomplish the various project activities including recruitment of potential subjects for participation in the research project, securing parental and student consent, identifying target students, scheduling of activities, and providing access to pertinent data regarding student reading performance. The Principal Investigators and the school administrators will work collaboratively to ensure success in accomplishing the major goals of the project as delineated in this application.

Abstract

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

1. Abstract Requirements

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

For research applications, abstracts also include the following:

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

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

You may now Close the Form

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

* Attachment:

Innovations in Discovering and Developing Talented Twice-Exceptional Students (DD2E), a project by the University of Iowa (UI) College of Education (COE) and the Belin-Blank International Center for Gifted Education and Talent Development, has four primary objectives that align with the absolute priority (AP) and all three competitive preference priorities (CPP). **Objective 1**, comprised of three related subobjectives, addresses the AP, CPP2, and CPP3. Objective 1 aims to identify/discover twice-exceptional students using nontraditional methods and deliver talent development services and opportunities designed for twice-exceptional students through: a) promoting equity in student access to educational resources and talent development by forming a broad talent pool of students, including twice-exceptional students, who are screened and identified using nontraditional methods (AP, CPP2, CPP3); b) establishing procedures that are informed by clinical assessment and educational best practice for screening for twice-exceptionality in schools (AP, CPP2); and c) estimating prevalence rates for twice-exceptional through the triangulation of local and state data (AP). **Objective 2** directly relates to CPP1: train educators and mental health professionals with the knowledge and skills to implement nontraditional screening and identification models and provide education interventions that prepare twice-exceptional students for high school, college, career, and civic life. **Objective 3** aligns with CPP3: increase the number of educators from traditionally underrepresented backgrounds who are certified to identify and teach all gifted and talented students, including the twice exceptional. **Objective 4** aligns with the AP: broadly disseminate information of a new model that directly addresses challenges of discovering and developing twice-exceptional students nationwide. **Project activities** include: universal pre-screening of 6th grade students; annual screening assessments of 6th grade students' achievement, cognitive, and psychosocial characteristics; implementation of a career education intervention modified to meet

the needs of twice-exceptional students; comprehensive individual evaluations for twice-exceptional students; estimate twice-exceptionality base rates to serve as a foundation for determining magnitude of potential intervention impact; in-person and online professional development workshops and seminars for school personnel; and continuous improvement activities related to program implementation. The project will be conducted in three geographically, racially, and socioeconomically diverse LEAs/AEAs in Iowa. Expected **project outcomes** include: the development of a twice-exceptional universal screening protocol using school-based tools (e.g., portfolios, psychosocial information, CogAT, standardized achievement assessments); establishment of a broader talent pool of twice-exceptional students for talent development opportunities; estimation of prevalence rates of twice-exceptionality across multiple datasets that can serve as benchmarks for the field; increased number of professionals who are trained to discover and develop the unique talent domains of twice-exceptional students through talent development opportunities; increased number of professionals who are trained to deliver a career intervention specifically for twice-exceptional youth; increased numbers of educators from underrepresented groups (especially teachers with disabilities) specializing in gifted and talented education in the workforce across Iowa and surrounding states; new twice-exceptional course for endorsement; greater dissemination of inclusive screening and programming models; more twice-exceptional resources available for educators and mental health practitioners.

Project Narrative File(s)

* **Mandatory Project Narrative File Filename:**

[Add Mandatory Project Narrative File](#)

[Delete Mandatory Project Narrative File](#)

[View Mandatory Project Narrative File](#)

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

[Add Optional Project Narrative File](#)

[Delete Optional Project Narrative File](#)

[View Optional Project Narrative File](#)

Innovations in Discovering and Developing Talented Twice-Exceptional Students (DD2E)

Jacob J. Javits Gifted and Talented Students Education Program, April 2022

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Need for the Project: *Innovations in Discovering and Developing Talented Twice-Exceptional Students (DD2E)*, a project by the University of Iowa (UI) College of Education (COE) and the Belin-Blank International Center for Gifted Education and Talent Development (Belin-Blank), directly addresses the *absolute priority* to develop and disseminate new methods to discover and develop talent in children with disabilities. Reliance on traditional approaches to talented and gifted identification and education jeopardizes the discovery and development of talent among underrepresented students, including those with co-existing disabilities (twice exceptional), because of the systemic limitations and biases traditional approaches impose (Reis et al., 2014). Project personnel will build upon effective identification models for broadening the talent pool (Assouline et al., 2017; Assouline & Whiteman, 2011; Foley-Nicpon & Assouline, 2020) and provide new information to meet the objectives for three *competitive preference priorities*

Researchers (Baldwin, 2005; Olszewski-Kubilius et al., 2017; Peters 2021; Peters et al., 2019) have investigated multiple reasons why increasing access to gifted programming for underrepresented groups is such a pernicious problem. Peters et al. (2019) found that students with limited English proficiency and individuals served under IDEA are the most disproportionately underrepresented students. With respect to the latter, Peters et al. (2019) posited that twice-exceptional students are at risk for under-identification due to a masking effect (giftedness masking disability and/or disability masking giftedness). The masking effect is a theoretical concept that does not fully address the multiple nuances associated with masking, especially the impact of various types of disability.

Belin-Blank Center scholars have over 15 years of research on twice-exceptionality (Assouline et al., 2010; Assouline et al., 2012; Assouline & Whiteman, 2011; Foley-Nicpon & Assouline, 2015; Foley-Nicpon et al., 2013; Foley-Nicpon et al. 2010; Foley-Nicpon et al., 2012)

to better understand identification practices and intervention strategies relative to strengths and vulnerabilities associated with one's disability. An important conclusion from their research highlights a fundamental premise of our project: *Early identification of underrepresented high-potential students, including twice-exceptional students, followed by advanced programming in content-specific domains, enhances access to opportunities for education and career success (Plucker et al., 2010).*

Critical gaps remain when it comes to identifying twice-exceptionality. For example, Maddocks' (2020) analysis of achievement profiles of gifted students with specific learning disorder (SLD) demonstrates the profiles are more variable than for students who are not twice exceptional. Foley-Nicpon et al. (2012) and Doobay et al. (2014) found gifted students with autism spectrum disorder (ASD) obtained variable domain-specific cognitive ability scores such that their composite scores appeared closer to "average." Assessment issues also are present on measures specific to determining whether clinical diagnoses exist. For example, Gomez et al. (2019) found high ability students with attention-deficit hyperactive disorder (ADHD) differ from their peers with ADHD but without high ability on measures of both hyperactivity and inattention, suggesting reduced severity may lead to missed diagnoses. Both Cederberg et al. (2018) and Foley-Nicpon et al. (2016) demonstrated that administering screening measures of ASD and avoiding use of a standard developmental interview with parents may result in some students with ASD not being identified as gifted. Assessing for twice-exceptionality requires considering domain specific talent while simultaneously understanding the unique issues that impact how diagnosis presents among high ability youth with SLD, ASD, and ADHD.

One of the reasons twice-exceptional students are especially at risk of talented and gifted under-identification is because most schools identify students based on outstanding performance

across all academic and cognitive domains, yet twice-exceptional students are more likely to have highly variable testing profiles because they have domain specific strengths and corresponding vulnerabilities (Foley-Nicpon & Assouline, 2020; Foley-Nicpon et al., 2012; Mee Bell et al., 2015; Ottone-Cross et al., 2017; Reis, 2014). Without identification, twice-exceptional students may not receive services aimed at developing their talent domains. Because current gifted programming focuses on general academic enhancement and enrichment (Callahan, et al., 2017; Harradine, et al., 2014; Lee, et al., 2009, 2010; Mayer, 2008), the unique needs of twice-exceptional students, including students' aspirations and desires for advanced curriculum that matches their readiness for challenge, are often overlooked. The problem is exacerbated when students are identified first for special education services, because the likelihood of also being identified as talented and gifted is miniscule, even if students have high domain-specific scores (Barnard-Brak, et al., 2015; Crim, et al., 2008). Students with disabilities often are held to lower educational expectations and take less rigorous coursework than their peers without disabilities, which impacts readiness for challenging coursework in college as well as diverse and advanced career opportunities (Hawley, et al., 2013) following college.

Moreover, educators lack training in screening for twice-exceptionality. Leggett et al. (2011) found three-fourths of counselors surveyed had never heard of twice-exceptionality. Foley-Nicpon et al. (2013) found educational professionals outside gifted education show less familiarity and experience in working with twice-exceptional learners. Mayes and Moore III (2016) qualitatively examined the experiences of eight Black twice-exceptional students and discovered dissention between their high ability and disability identities such that many did not even know they were gifted. Later, Belchard's (2019) qualitative study demonstrated teachers would benefit from more understanding about twice-exceptionality to collaborate across

disciplines and accommodate students' unique strengths and areas for growth. In this project, we leverage the educational, clinical, and methodological expertise of the project team to design and test novel approaches that equip school personnel with the knowledge, skills, and tools that are readily accessible in schools to screen, identify, and educate gifted and talented students and give twice-exceptional students learning experiences that optimize their potential.

Project Design: DD2E has four **objectives** that address the critical need to discover and develop talent among underrepresented students in gifted education by focusing on twice-exceptional students. Activities under **Objective 1** (and related subobjectives) serve as the bedrock of the proposed project. The psychoeducational assessment data generated from Objective 1 project activities feed directly into the activities proposed for **Objectives 2-4**. The table below summarizes the four objectives and their alignment with the absolute priority (**AP**) and competitive preference priorities (**CPP**).

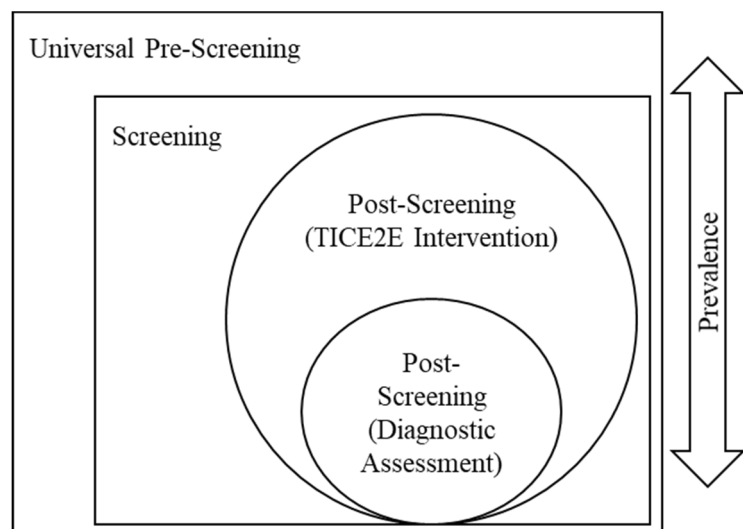
Objectives	AP	CPP1	CCP2	CPP3
(1) Identify/Discover twice-exceptional students using nontraditional methods informed by clinical and educational best practice for delivery of talent development services and opportunities designed for twice-exceptional students.	X			
(1a) Promote equity in student access to educational resources and talent development opportunities by forming a broad talent pool of students, including twice-exceptional students, who are screened and identified using nontraditional methods.	X		X	X

(1b) Establish procedures that are informed by clinical assessment and educational best practice for screening for twice-exceptionality in schools.			x	
(1c) Estimate prevalence rates for twice-exceptionality through triangulation of extant data including IDEA eligibility, Belin-Blank Center clinic diagnostic information, and district and state level data on identification for gifted programs.	x			
(2) Train educators and mental health professionals with the knowledge and skills to implement nontraditional screening and identification models and provide education interventions that prepare underrepresented students, especially twice-exceptional students, for high school, college, career, and civic life.		x		
(3) Increase the number of educators from traditionally underrepresented backgrounds who are certified to identify and teach all gifted and talented students, including underrepresented students, specifically students who are gifted and have a disability (twice exceptional).				x
(4) Broadly disseminate project results, models, and materials.	x			

Objective (1) - Identify/Discover twice-exceptional students using nontraditional methods informed by clinical and educational best practice for delivery of talent development services and opportunities designed for twice-exceptional students. Objective 1, comprised of three related subobjectives (*1a, 1b, 1c*), aligns directly to the Absolute Priority (AP) and Competitive Preference Priority 2 (CPP2) and 3 (CPP3). Objective 1 project activities develop expanded in-school screening methods (*1a* and *1b*) and estimate prevalence rates (*1c*) based on more representative samples. Outcomes of this work will provide schools with new information to identify and deliver services to twice-exceptional students.

Given concerns about under-identification of twice-exceptional students for traditional talented and gifted programs, it is crucial to adapt guidelines that ensure broader, more equitable participation. The reliance on standardized assessments (Ford, 1996; Frasier, et al., 1995; Milner & Ford, 2007) coupled with the use of cut scores based on national norms for traditional identification assessments (Lohman, 2005; 2006; Lohman et al., 2008; Lohman & Foley-Nicpon, 2012) perpetuates the underrepresentation of students with disabilities in talented and gifted programs.

DD2E addresses this concern because the project is multifaceted, collects information from multiple assessments and multiple informants, and focuses on interpretation of test results that promote talent discovery, development, and potential for success in diverse talented and gifted



educational environments (Ford & Harris, 1999; Lohman & Foley-Nicpon, 2012; Lohman & Lakin, 2007; Milner & Ford, 2007). Objective 1 activities focus on creating screening protocols and triangulating data to estimate prevalence and are detailed below.

Universal Pre-Screening – Promoting Equity in Access (1a): Traditional approaches to identification for gifted programming typically involve universal pre-screening of young elementary students (i.e., 3rd grade) based upon composite scores at the 97th or 98th percentile on achievement tests and group-administered ability tests (Callahan et al., 2017). Because we aim to examine the use of nontraditional screening and assessment measures and procedures to reach more students who are missed in the traditional process, we focus our universal pre-screening for academic giftedness by looking for 6th grade students with one or more subtests scores that are at, or above, the 75th percentile on any of the most recent administrations of the Iowa Statewide Assessment of Student Progress (ISASP; the Iowa version of the Iowa Assessments). This second opportunity to examine school-wide data, as well as widening the percentage of potentially eligible students, is novel in our state and will result in more students available for talent domain intervention. The Iowa Assessments are school-based assessments that correspond to the construct of academic achievement with strong reliability and validity evidence.

By extending the universal pre-screening from the top 2-5% of 3rd graders to the top quartile of academic achievement on any subtest of the achievement tests of 6th graders (Callahan et al., 2017), we will reach more students who are missed through the traditional process of narrowly screening once. These are individuals who may be academically gifted in specific academic domains (e.g., science or math), but whose composite scores may not have allowed them to participate in the next step in the traditional approach (i.e., taking a group-administered ability test). We also extend universal pre-screening to include individual portfolios

of creative giftedness in art, writing, and/or inventiveness. Using portfolios and/or achievement scores in the top quartile (as opposed to the top 2-5% based upon academic achievement) as part of the universal pre-screening process will create a more diverse, broader talent pool that includes more underrepresented students, especially those who are twice-exceptional.

Screening – Creating a Broad Talent Pool (1a): Next in our process, all universally pre-screened students will be recruited into a talent pool. As part of the talent pool, students will complete three group assessments: A measure of ability (Cognitive Abilities Test [CogAT; Warne, 2015]), which assesses Verbal, Non-verbal, and Quantitative ability; an above-level achievement measure (I-Excel [LeBeau, et al., 2020]), which measures domain specific aptitude in reading, math, science, and writing); and a psychosocial measure, Patterns of Adaptive Learning (PALS [Midgley et al., 2000]). Using multiple measures offers more opportunities to discover underrepresented students, including twice-exceptional students, because it follows recommended guidelines for creating a larger pool of potentially identified twice-exceptional students at the screening phase (Mee Bell et al., 2015; McCallum et al., 2013, Reis et al, 2014) and considers domain specific strengths and areas for growth in identification (Assouline et al., 2012; Foley-Nicpon & Cederberg, 2015). McCallum et al. (2013) recommend using the most liberal criteria in the screening phase to later identify twice-exceptional students and using local standards of performance over national ones. Reis et al. (2014) emphasize examining subtest scores on multiple measures given the variability in domain-specific performance for our twice-exceptional learners. These guidelines follow the philosophy we will abide by, that screening protocols should be less concerned with false positives than false negatives if we are to diversify the talent pool.

We will use information from these assessments to conduct latent profile analysis (LPA) to create groups (i.e., profiles) of high-ability students (Rinn et al., 2020) and then determine the association of the profiles with a disability status that matches one of the five cognitive profiles found from a preliminary analysis of a clinical sample ($n > 1000$) from the Belin-Blank Center. Findings will be used to select students eligible for more comprehensive diagnostic assessment (explained in *Post-Screening - Comprehensive Individual Evaluation to Assess for Twice-Exceptionality [1b]*).

Post-Screening – Intervention for Talent Pool Students (1a): All students who are part of the broad talent pool will be invited to participate in a Social Cognitive Career Theory-based career intervention (Ali, 2019; Assouline, 2019) developed for high ability, underrepresented students that has been modified for twice-exceptional students (*TICE2E*). The original curriculum, *Talent Identification and Career Exploration (TICE)* was developed through a Javits grant awarded to four of the UI faculty on the **DD2E** proposal. *TICE* aimed to increase (a) the enrichment opportunities for highly capable underrepresented students, including students of color, twice-exceptional students, English Language Learners, and students attending under-resourced schools and (b) students' awareness of and ability to link academic talent domains and other strengths to planning for career-related tasks and aspirations. An additional module will be developed for *TICE2E* specific to exploration of one's disability and how it intersects with one's talent domains and career interests and opportunities. The five *TICE2E* modules will be flexible such that participating schools can implement the program in various formats (e.g., in-person, hybrid, online) according to their needs and constraints during one academic year. *TICE2E* will be modified in year 1, piloted in year 2, and fully implemented in years 3-4. Implementation of

the intervention will be locally determined by our partners in Prairie Lakes Area Education Agency, Des Moines Public Schools, and Waterloo Community School District.

Post-Screening -- Comprehensive Individual Evaluation to Assess for Twice-Exceptionality (1b): We will use Latent Profile Analysis to associate the profiles from the talent pool students' school-based and group-administered assessments with a disability status that matches one of the cognitive profiles obtained from a preliminary analysis of a clinical sample from the Belin-Blank Center's clinic. The Center's clinic sample is based upon more than 1000 evaluations conducted from 2009-2019 and is important for two reasons: (a) the clinic's licensed psychologists use gold standard individual measures for ability, achievement, aptitude, and psychosocial characteristics and (b) the clinic sample is focused on high-ability individuals (average ability score for each disability category is at least one standard deviation above average), which provides a more representative profile of individuals who are twice-exceptional in comparison to national datasets. Students whose group-administered assessment data match one of the cognitive profiles from the Clinic data will be invited to receive an individualized assessment at the Belin-Blank Center's Assessment and Counseling Clinic. The purpose of the diagnostic assessment will be to determine whether the student is twice exceptional and, if so, to identify strengths and areas of diagnostic concern. The data from the comprehensive evaluation will be compared to the model implied probability from the latent profile analysis to evaluate the model's accuracy using the screening measures.

Prevalence estimates (1c): To estimate prevalence, we will use state level administrative datasets that include student disability categorization, gifted identification status, and student achievement test score data. We will calculate a diagnostic prevalence estimate that reports $p(\text{gifted} \mid \text{exceptionality})$, which refers to the probability of a student being gifted given the

presence of an exceptionality. This will tell us whether students who exhibit a particular exceptionality are likely to be gifted. These base rate estimates will serve as an important foundation for determining magnitude of potential impact of any intervention. Namely, if the number of gifted students with Autism is 10x the size of gifted students with ADHD, then any intervention designed to work with gifted students with autism would be expected to have a larger impact (because it would help more students). Without any estimates of population base rates, potential impact of services is based on biased guesses at best.

***Objective 1 Outcomes:** (a) a twice-exceptional universal screening protocol using school-based tools (e.g., portfolios, psychosocial information, CogAT, standardized achievement assessments); (b) comparison of models for talented and gifted identification focused on broadening the talent pool; (c) establishment of a talent pool of twice-exceptional students for talent development opportunities; (d) delivery of a career-based intervention for underrepresented students, specifically the twice-exceptional; and (e) estimation of prevalence rates of twice-exceptionality across multiple datasets that can serve as benchmarks for the field.*

Objective (2) - Train educators and mental health professionals with the knowledge and skills to implement nontraditional screening and identification models and provide education interventions that prepare twice-exceptional students for high school, college, career, and civic life. Our second objective directly relates to Competitive Preference Priority 1, which focuses on training personnel to identify and educate twice-exceptional youth. We will develop workshops and programs that teach effective instructional and communication techniques and other strategies that support the social, emotional, developmental, and academic needs of twice-exceptional youth.

Objective 2 activities focus on creating and widely disseminating professional development modules for pre-service and in-service educators and clinicians to discover and develop the talent domains of twice-exceptional children. Gifted educators, school counselors, school psychologists, clinical or counseling psychologists, and other mental health professionals will be trained to consider the contextual needs of students for talent discovery and development, including the ways in which traditional identification methods overlook twice-exceptional students, the impact of the various disabilities on students' academic and social-emotional development, and the need for talent development interventions that are domain specific. Project staff will develop and implement training modules on the newly created nontraditional process (Objective 1) for discovering (identifying) and developing (providing integrated services) to twice-exceptional students. These screening methods and interventions (*TICE2E*) can be replicated in other schools through the dissemination of printed and web-based materials.

Professional development will focus on the use of nontraditional interpretation of assessment methods informed by our educational and clinical expertise with twice-exceptional children. We will describe the process outlined under Objective 1a of examining multiple assessment measures to identify talent domains and potential areas of challenge. Additionally, we will provide on-site clinical consultation for our **DD2E** partners. This ongoing consultation will provide local practitioners with the tools needed to examine group-level data to determine whether an individualized evaluation is appropriate to assess for twice-exceptionality. Additionally, we will teach educators and mental health professionals how to implement the *TICE2E* curriculum outlined under Objective 1b. Focus will be on identifying and describing students' talent profiles and how they might interface with the student's disability, abilities, interests, values, and personality characteristics. Through professional development modules, we

will discuss how the *TICE2E* intervention connects career exploration, understanding of academic and psychosocial strengths, and implications for advanced curriculum in preparation for college and beyond.

The professional development modules will be developed in year 1 and then offered in-person during the summer and on-line during the academic year so educators can easily participate and have access to ongoing support. On-line discussion groups provide opportunities for professionals to obtain support and learn/disseminate suggestions for effective strategies for discovering and developing twice-exceptional students' talents. Participants also have the option of registering for course credit toward the State of Iowa Talented and Gifted (TAG) endorsement coursework available through the Belin-Blank Center and/or continuing education credit.

***Objective 2 Outcomes:** (a) Annually, train 30 new school personnel to discover and twice-exceptional students for talent development opportunities; (b) Annually, train at least 2 school personnel in participating LEAs/AEAs to deliver a career intervention specifically for twice-exceptional youth; (c) greater dissemination of inclusive screening, programming models, and twice-exceptional resources to educators and mental health practitioners; and (e) new twice-exceptional course for endorsement.*

Objective 3: Increase the number of educators from traditionally underrepresented backgrounds who are certified to identify and teach all gifted and talented students, including the twice exceptional. Objective 3 directly relates to Competitive Preference Priority 3, which focuses on increasing the number and proportion of educators from traditionally underrepresented backgrounds who are certified to identify and teach all gifted and talented students, including the twice exceptional. To meet this objective, the **DD2E** project staff will partner with two existing programs in the UI COE. The first project is the Teacher Leaders

Center's Pipeline Program, which is designed to increase the number of teachers of color in our local district and across the state. For example, students of color make up 42% of our local student body, while only 6% of teachers are teachers of color. Participants in the program attend workshops and seminars led by professors and graduate students from the COE Teacher Leader Center. As a part of **DD2E**, program staff will offer a workshop or seminar regarding specializing in gifted and talented education and information about the Belin-Blank Center's TAG endorsement.

The second is the Master of Arts in Teaching, Leadership, and Cultural Competency (MATLCC). This innovative program prepares educators to become leaders in the field and transforms schools and communities in the process. The program requires 24 credit hours in core courses and nine semester hours of specialization through electives, one of which is talented and gifted. As a part of **DD2E**, project staff will work with the MATLCC directors to recruit teachers of color and teachers with disabilities to pursue this specialty area. We will offer a workshop or seminar regarding the **DD2E** objectives and the *TICE2E* intervention to MATLCC participants.

***Objective 3 Outcomes:** Annually, recruit 10 educators of color and/or with disabilities interested in talented and gifted (TAG) into the MATLCC or Pipeline program.*

Objective 4: Broadly disseminate project results and materials. The goal of Objective 4 is to disseminate information on best practices for working with twice-exceptional students to three main audiences: researchers, educators, and policymakers. Quantitative and qualitative results will be shared with researchers via presentations at national conferences and in peer-reviewed journal publications. Graduate students will write two peer-reviewed articles from the project for their dissertations. Their clinical and research participation will lead to more psychologists with expertise in twice-exceptionality. The quantitative and qualitative findings, information about

feasibility, and the project deliverables will be shared with practitioners via ongoing professional development associated with the project and through our continuous work with the Iowa Department of Education and Area Education Agency personnel. We also will make the information available to policymakers via the Belin-Blank Center's website and social media outlets. The Center hosts its own website that showcases and archives research and best practices concerning academic talent identification for policymakers, educators, and researchers.

***Objective 4 Outcome:** Disseminate the discovery and development models to educators and mental health professionals; educators, counselors, and clinicians implement the models and curriculum in their schools.*

Management Plan: The PI and co-PIs have managed numerous grants from federal, state, and private sources and completed all grant-funded projects at or under budget and on time. The table below outlines the proposal objectives and corresponding activities, personnel responsible, and timeline for completion. For every project activity, we identify all the necessary resources and include these items in our budget. The PI and co-PIs will work together to ensure that activities are conducted in a timely fashion and provide all project staff with monthly expenditure reports that detail what funds have been spent and what funds have been encumbered. PIs and co-PIs will meet quarterly throughout the project to use ongoing evaluation to assess achievement of milestones and progress toward project goals and develop strategies for improvement.

Activity & Personnel	YR1:2022		YR2:2023		YR3:2024		YR4:2025		YR5:2026		
	F	Sp	F	Sp	F	Sp	F	Sp	F	Sp	
<p>Objective 1: Identify/Discover twice-exceptional (2e) students using nontraditional methods informed by clinical and educational best practice for delivery of talent development services and opportunities designed for 2e students.</p>											
<p>Objective 1a: Promote equity in student access to educational resources and talent development opportunities by forming a broad talent pool of students, including 2e students, who are screened and identified using nontraditional methods.</p>											
<p>Objective 1b: Establish procedures that are informed by clinical assessment and educational best practice for 2e screening in schools.</p>											
Iteratively develop, test, and refine new screening methods and profile analysis. (Assouline, LeBeau, Schabillon, GAs)	x	x	x	x							
Modify TICE curriculum with 2e content (TICE2E) (Foley-Nicpon, Ali, Mahatmya, GAs)	x	x									
Pilot TICE2E and new screener. (Foley-Nicpon, Ali, Mahatmya, GAs)			x	x							
Implement final screener and TICE2E curriculum. (Foley-Nicpon, Ali, Mahatmya, GAs)					x	x					

Project Services: We have organized project activities to respond directly to the needs identified for the target population—students underrepresented in gifted and talented programming, specifically children with disabilities (Absolute Priority)—as well as ensure **equitable access and treatment**. The first **strategy** is to ensure that we have widened the net to include more students who can be identified for and participate in gifted and talented programming.

DD2E initially will serve upper elementary (primarily 6th grade) students and educators attending schools in one of Iowa’s 10 AEAs (Prairie Lakes AEA), Iowa’s largest school district (Des Moines Independent Community School District), and one of Iowa’s more diverse school districts (Waterloo Community School District). We selected these partners because of their history working with the Belin-Blank Center and their enthusiasm to discover and develop twice-exceptional youth. The selected schools represent approximately 5,000 6th graders and a geographically, racially, and socioeconomically diverse population. AY2021-2022 Demographics for each participating area are included in the table below.

	Prairie Lakes	Des Moines	Waterloo
Region	Northwest	Central	Northeast
Total K-12 enrollment	29,543	29,553	10,164
6 th grade enrollment	2,230	2,065	764
Race	75% white 25% minority	34% white 66% minority	43% white 56% minority
Free-Reduced Lunch	45%	78%	73%
IEP Enrollment	13%	16%	17%
Gifted Identified	7.2%	7.7%	6.7%

Des Moines and Waterloo schools were partners in our current Javits grant and implemented the original *TICE* curriculum with 285 6th and 7th grade students. Across four years, *TICE* was implemented in 12 school districts with 1,162 6th and 7th grade students and we identified 12.3% more students for gifted and talented programming. The original *TICE* project also included 9.6% of students who identified as twice-exceptional.

Objective 1 activities will continue our successful efforts in creating a broader talent pool of students in several ways. First, we extend screening to include all 6th grade students who score in the 75th percentile or above on any grade-level achievement test. Our previous work has applied an expanded talent identification protocol with 5th grade students at the 85th percentile as the first part of an educational intervention and helped us identify 13% more students (Assouline et al., 2017). Second, all students screened for the talent pool are invited to complete a series of cognitive and psychosocial assessments that can help determine their areas of strength and are also invited to participate in the *TICE2E* academic year curriculum. By widening the guidelines (top quartile versus top 2-5%) on whom to include in identification, we aim to identify and provide services for 10-15% more students each year ($n = 400$ in year 1, 600 in years 2-5). Finally, drawing upon the Belin-Blank Center's rich clinic data, we will examine the cognitive and psychosocial profiles of students in the talent pool to determine students eligible for more comprehensive individual evaluation. Through this multi-step process, by the end of the funding period, we estimate that **DD2E** will identify and directly serve 2,800 6th grade students.

The second **strategy** is to provide school personnel with the knowledge and skills needed to identify and provide services to students with disabilities. Training multiple school personnel (i.e., Gifted educators, school counselors, school psychologists, clinical or counseling psychologists, and other mental health professionals) ensures that best practice can be embedded

within the schools and that educators can create a community of practice to sustain this work beyond the project. **Objectives 2 and 3** will generate professional development opportunities, technical assistance, and a training pipeline to help educators develop the competencies to effectively recognize characteristics of twice-exceptional students and to identify them for comprehensive evaluation that will generate appropriate recommendations for intervention.

Impact of Services to be Provided to Participants. As a result of the aforementioned strategies, by the end of the project, expected impacts include: (a) 10-15% increase in the number of students newly identified as gifted and talented; (b) broadened talent pool that includes 10-15% students who are identified as twice-exceptional; (c) gains in students' self-efficacy, outcomes expectations, and academic aspirations from being part of the talent pool and participating in the career education intervention; and (d) doubling the number of school personnel in LEAs/AEAs with the knowledge and skills to identify twice-exceptionality.

The impact of services on participants will be examined through process and outcome evaluation activities aligned with project objectives. Process evaluation activities review and monitor the content and implementation of the project. Quantitative data sources will include *formative assessments* (e.g., online surveys) that will be distributed to all students and school personnel who participated in at least 1 component of the project. Surveys will be distributed annually and include questions asking which project services (e.g., pre-screening, screening, *TICE2E*, comprehensive individual evaluation, professional development, etc.) participants experienced and how well the service met their expectations and needs. Surveys will also include demographic questions to track the number of people served. Qualitative data will include annual *focus groups* with the participants as well as *artifacts* (e.g., screening and curriculum materials, record of project tasks). The process evaluation will allow the project team to obtain stakeholder

input about project activities and monitor progress toward **Objectives 1-3**. Specific GPRA performance measures to be monitored and reviewed annually from the process evaluation activities include: (a) number of students, overall and underserved, who are newly identified as gifted and talented; (b) percentage of students, overall and underserved, newly identified who were served by the program; and (c) number of educators who receive services that enable them to better identify and improve instruction for gifted and talented students.

Outcome evaluation activities will document measurable results by triangulating all quantitative and qualitative data collected throughout the project. Quantitative data sources will include students' CogAT, I-Excel, and psychosocial (e.g., Midgley et al., 2000) assessments, data of students who received a comprehensive individual evaluation, school personnel's self-reports about their knowledge and skills related to identifying and providing services to twice-exceptional students, and calculated prevalence estimates. Appropriate descriptive and inferential statistical analysis will be conducted to determine (a) changes in the identification rate of students with disabilities, (b) changes in the various measures, and (c) alignment with prevalence estimates over the duration of the project. Student assessment data will also be used to examine GPRA measures related to the percentage of students served under the program who made gains on state assessments in mathematics, science, and reading. Qualitative data sources will draw from the focus groups conducted in all years of the project. A final follow-up focus group will be conducted in the last year of the project with all school personnel, students, and others who have been involved in the project to assess satisfaction with the programmatic activities. Project staff will publish and present the results of the program's research and evaluation (**Objective 4**). Dissemination products will guide future efforts to replicate the

model nationwide to increase the capability of LEAs/AEAs and school personnel to identify twice-exceptional students and provide appropriate extended academic activities.

Project Personnel. We have put together a comprehensive and diverse team to ensure we successfully achieve our project goals and objectives. The specific activities assigned to members of the project team are noted in the management plan table. The **Project PI, Dr. Susan Assouline**, and the **Project Co-PIs, Drs. Saba Ali, Megan Foley-Nicpon, and Duhita Mahatmya**, have complementary and significant experience administering programs and conducting research around gifted education, talent development, career exploration, research methods and statistics, research and program evaluation, and experience working with underrepresented groups, including the twice-exceptional.

Assouline holds the Blank Endowed Chair in Gifted Education and is director of the Belin-Blank Center for Gifted Education and Talent Development. She is an active researcher with expertise in twice-exceptionality, talent identification, talent development, mathematically talented students, and talented and gifted education in rural settings. **Foley-Nicpon** is a professor in counseling psychology and Department Executive Officer for the Department of Psychological and Quantitative Foundations in the UI COE. Foley-Nicpon is an expert in talent identification and talent development for twice-exceptional students. Foley-Nicpon has written extensively on underserved populations of gifted and talented students. **Ali** is a professor in counseling psychology and Associate Dean for Research in the UI COE. For the last 15 years she has directed Project HOPE, a healthcare career intervention, in seven different elementary and middle schools in Iowa. Ali's expertise is in the development and delivery of career education programming for underrepresented students, with a focus on healthcare and STEM. She has

published extensively on career development needs of minority students living in poverty.

Mahatmya is an associate research scientist and Associate Director for the Grants and Research Services Center in UI COE. She has served as the methodologist on successful NSF, DOE, IES, SAMHSA, and other funded projects and has expertise in longitudinal mixed methods research. Assouline, Ali, Foley-Nicpon, and Mahatmya developed and deliver *TICE* to underrepresented talented and gifted students through their current Javits project.

The team also includes **Dr. Brandon LeBeau**, an associate professor in the Education Measurement and Statistics Program, who will provide statistical expertise in managing and analyzing large datasets; **Dr. Matthew Makel**, a researcher who will consult on the prevalence estimation study; and **Dr. Katherine Schabilion**, a licensed psychologist in the Belin-Blank Center's Assessment and Counseling Clinic, who will conduct the comprehensive individualized assessments; and three **graduate assistants**. The graduate students will be selected from the school and counseling psychology programs at the UI. The students will be trained in academic, career, and intelligence assessment via coursework and practicum experiences. Graduate assistants affiliated with this project will take research design and statistics courses to prepare them to assist project directors with the data collection and analysis components of the program.

Dr. Susan Assouline, PI, (3% FY effort) will oversee the administrative and financial aspects of the project and personnel management. Assouline will work with Belin-Blank Center colleagues to coordinate the evaluation of the group-administered assessments and the comparison with the clinic model of assessment. She will contribute to the professional development workshops and materials and will write up results for publication in scholarly journals and presentations at national conferences. She will co-supervise the graduate assistant assigned to data management and refining screening and identification models. Assouline holds

the Blank Endowed Chair in Gifted Education and is director of the Belin-Blank Center.

Assouline will ensure that the resources of the Belin- Blank Center are available as needed.

Dr. Megan Foley-Nicpon Co-PI (5% AY effort + one-month summer) will assist with onsite LEAs/AEAs consultation regarding twice-exceptional student identification and intervention, modify the *TICE* curriculum to be specific for twice-exceptional youth (*TICE2E*), assist with professional development and other ongoing training opportunities, and partner with existing COE teacher training programs. She will supervise the graduate assistant who is assigned to the development of the professional development materials and workshops. Foley-Nicpon will be responsible for writing up results for publication scholarly journals and presentations at national conferences.

Dr. Saba Ali, Co-PI (3% AY effort + one-month summer) will coordinate the implementation of *TICE2E* in the LEAs/AEAs, supervise the graduate assistant assigned to implementation of the career education components of *TICE2E*, and be responsible for writing up results for publication in scholarly journals and presentations at national conferences.

Dr. Duhita Mahatmya, Co-PI (12% FY effort) will design and monitor continuous improvement procedures and evaluate quality of project services in the operation of **DD2E**. She will oversee the data collection protocol, data analysis, data cleaning, and interpretation of results. She will co-supervise the graduate assistant assigned to data management across all components of the project. Mahatmya will assist in writing up results for publication in scholarly journals and presentations at national conferences.

Dr. Brandon LeBeau (8% AY effort) will develop, test, and refine new screening methods for profile analysis; obtain new twice-exceptional data sources and migrate them into a

shared, secure platform for analysis to estimate prevalence, and prepare a technical manual for dissemination.

Dr. Katie Schabilion (15% FY effort in year 1, 20% FY effort in years 2-5) will develop, test, and refine new screening methods for profile analysis; develop professional development modules and assist with the on-campus and on-site professional development and consultation; provide individual assessments for students screened as potentially twice-exceptional; and conduct site visits at LEAs/AEAs to provide on-going consultation to teachers.

Dr. Matthew Makel, Consultant (8% FY effort in year 1, 4% FY effort in years 2-5) will consult with LeBeau to obtain data sources to create prevalence estimates and migrate them into a shared secure platform; create relevant datasets and execute data cleaning, analysis, and triangulation protocols across all datasets for prevalence estimates; and prepare a technical manual with data procedures and findings. He will also provide consultation to the grant team on aligning grant activities to be informed by results of prevalence estimate studies.

Graduate Assistants (3 at .50 FY FTE each) will deliver the programmatic activities for **DD2E** and assist in all data management tasks. Under the direction of Assouline, LeBeau, and Mahatmya, they will ensure that all data collection and analysis needs are met. Under the direction of Foley-Nicpon, they will organize and participate in professional development activities. Under the direction of Ali and Foley-Nicpon, they will be responsible for consulting with teachers regarding *TICE2E* curriculum in the schools and facilitating small group sessions.

Resources. The **University of Iowa** is a research extensive university with the necessary infrastructure and resources expected at such an institution. In fiscal year 2021, UI collected over \$702 million in external grant and contract funds while the COE collected \$7.2 million in FY 21.

The COE houses some of the best teacher preparation and counseling programs in the country (US News Report, 2020; National Council on Teacher Quality, 2020). COE faculty hold large NIH, NSF, U.S. Department of Education and other federally, state, and privately supported grants. The College has an established record of successfully conducting training and professional development projects and has a staff member who is a licensed CRA who works with PIs to ensure grants are managed appropriately. Classrooms, offices, labs, and public areas are totally wireless. COE also provides extensive access to libraries, technical support, and online journal access. The **Belin Blank Center for Gifted Education and Talent Development** is located on two floors of the Blank Honors Center on the UI campus. Research and evaluation are central to the Center's comprehensive programming. Since 1988, the Center has conducted major research programs that address the academic and social-emotional needs of high-potential students, their families, and their teachers. The Center houses administrative offices, classrooms, and an Assessment and Counseling Clinic (ACC). The Center employs 17 professional faculty and staff, 12 graduate/undergraduate assistants, and 2 secretaries. The ACC is comprised of three state-of-the-art assessment and observation rooms and employs three licensed psychologists. The Belin Family Research Library contains an extensive collection of materials specific to gifted education, autism, and twice exceptionality. Project staff and the research team will have the full range of the Center's resources available to them to complete the project. All College of Education faculty, students, and staff have access to the **Baker Teacher Leader Center (BTLC)**, a 6,000 square foot comprehensive space. The BTLC houses the Learning Commons, which provides students, faculty, and staff with collaborative workspaces, models new and innovative technologies in education, and supports frequent and relevant seminars, workshops, and presentations with the goal of producing 21st century leaders in education. With the

assistance of community partners, the BTLC coordinates a series of competencies and experiences in areas of assessment, technology, and disability. Both the MATLCC and the Pipeline programs utilize resources with the BTLC.

Adequacy of Budget. Given the scope of the project, the project's costs are reasonable and sufficient to accomplish project activities. Minimal funds are requested to support faculty efforts to initiate and conclude the project. The majority of funds support efforts to 1) provide screening and comprehensive individualized evaluation for students who are twice-exceptional, 2) support schools in the implementation of post-screening activities, and 3) train teachers to identify and recommend services for gifted and talented students and children with disabilities. The remaining funds, though minimal, are necessary to achieve project goals and address costs related to personnel, fringe, continuous improvement, and dissemination of project findings.

Reasonable Costs. This project will directly impact 2,800 students who will be assessed for academic, cognitive, and psychosocial strengths and twice-exceptionality and 150 teachers across northwest, central, and northeast Iowa LEA/AEAs. Funds for individualized and group administered assessments are reasonable because they typically cost more than what is currently budgeted for materials and personnel effort. The budget justification describes all costs in detail.

Other Attachment File(s)

* Mandatory Other Attachment Filename:

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

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.

Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Susan Goodsell Assouline

eRA COMMONS USER NAME (credential, e.g., agency login): SASSOULINE

POSITION TITLE: Endowed Chair and Director, The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
The University of Iowa	B.S.	05/1975	General Science
The University of Iowa	Ed.S.	08/1984	School Psychology
The University of Iowa	Ph.D.	08/1988	Psychological and Quantitative Foundations
Johns Hopkins University	Postdoctoral Fellowship	08/1990	Psychology of Gifted Students

A. Personal Statement

As the director of the Belin Blank Center for Gifted and Talented Education and the Myron and Jacqueline N. Blank Endowed Chair for Gifted Education at the University of Iowa, I bring more than 40 years of experience and expertise in assessment, talent development in STEM, and academic interventions for individuals with high aptitude. As director of the Belin Blank Center, I oversee a budget ranging from \$4.95 million (FY19) to \$3.71 million (FY21 due to COVID impact) and a 34-member staff comprised of 16 faculty and administrators, 1 post-doctoral fellow, 1 administrative services coordinator, 2 secretaries, and 14 graduate and undergraduate students. In 2005, I was PI on a federally-funded three-year Javits Grant for Gifted and Talented to carry-out a large-scale investigation of twice-exceptionality that has yielded multiple studies informing the scientific community about students with high intellectual ability (IQ 120 or higher) who are also diagnosed with an autism spectrum disorder (ASD). As a result of this work, I received private funding to conduct research on interventions for twice-exceptional students. All investigations from the center concerning twice-exceptionality include data obtained from a comprehensive psycho-educational evaluation, conducted by the center's licensed psychologists, which provides extensive information about both cognitive and psychosocial characteristics of twice-

exceptional students. Furthermore, this line of research has provided extensive opportunities to mentor and train early-career professionals and doctoral students. With over 40 years of experience as an educator, psychologist, and researcher, I collaborate with an extensive network of colleagues who share my knowledge in teaching and learning, teacher education, professional development, program administration, academic acceleration, talent development, and twice-exceptionality. This extensive network of national and international collaborators and partnerships across the domains of psychology and education enhances all activities associated with the dissemination of results from research projects such as those fostered through the ACE networks. These include co-authoring peer-reviewed journal articles and presentations at international, national, and regional scientific and professional meetings.

1. **Assouline, S. G.**, Nicpon, M. F., & Doobay, A. (2009). Profoundly gifted girls and autism spectrum disorder a psychometric case study comparison. *Gifted Child Quarterly*, 53(2), 89-105.
2. **Assouline, S. G.**, & Whiteman, C. S. (2011). Twice-exceptionality: Implications for school psychologists in the post-IDEA 2004 era. *Journal of Applied School Psychology*, 27(4), 380-402. <http://dx.doi.org/10.1080/15377903.2011.616576>.
3. **Assouline, S. G.**, Nicpon, M. F., & Dockery, L. (2012). Predicting the academic achievement of gifted students with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 42(9), 1781-1789. doi: 10.1007/s10803-011-1403-x.
4. Foley-Nicpon, M., **Assouline, S. G.**, & Stinson, R. D. (2012). Cognitive and academic distinctions between gifted students with autism and Asperger syndrome. *Gifted Child Quarterly*, 56(2), 77-89. doi: 10.1177/0016986211433199.

B. Positions, Scientific Appointments, and Honors

Positions and Employment

2012–present	Director, The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development (December 15, 2012–present) and Myron and Jacqueline Blank Endowed Chair in Gifted and Talented Education (July 1, 2015–present)
1991–2012	Associate Director of The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development
1990–1991	Psychologist and Clinical Supervisor for the Belin-Blank Center
1989–1990	Assistant Director of the Study of Mathematically Precocious Youth (SMPY) at Johns Hopkins University
1988–1990	Postdoctoral Fellow for Study of Mathematically Precocious Youth (SMPY) at Johns Hopkins University
1988–1989	Instructor for the Connie Belin Fellowship Program in Gifted Education
1985–1988	School Psychologist for Grant Wood Area Education Agency, Cedar Rapids, Iowa
1984–1985	High School Science Teacher for Iowa City Community School District
1982–1985	Graduate Research Assistant, University of Iowa
1977–1982	Junior High School Science Teacher, Iowa City Community School District

Other Experience and Professional Memberships

- 2004–present American Psychological Association
 2005 Clinically and research certified in administration of the Autism Diagnostic Observation Schedule and the Autism Diagnostic Interview—Revised
 1997–2002 Board Member, Iowa Talented and Gifted
 1993–1999 Endorsement Program in Gifted Education (with Nicholas Colangelo) approved by the Iowa Department of Education
 1991–2005 Supervisor of Practicum for counseling and assessment of gifted students
 1991–2000 Supervisor of Practicum for curriculum development and teaching of gifted students
 1989–present National Association for Gifted Children
 1984–present National Association of School Psychologists
 1984 Permanently certified as a school psychologist in the State of Iowa

Honors

- 2019 University of Iowa Leadership in Research Award for 2019
 2019 Inductee into the Bridges 2e Center Hall of Fame
 2018 Regents Award for Faculty Excellence
 2016 NAGC Distinguished Scholar Award
 2015 Endowed Chair in Gifted Education
 2008 Colorado Association for Gifted and Talented Distinguished Service Award
 2007 MENSA Education and Research Foundation Award for Excellence in Research
 2005 Board of Regents State of Iowa Award for Staff Excellence

C. Contributions to Science

1. **Large-scale investigation of twice exceptionalism.** With colleagues and doctoral students from the University of Iowa, I was the primary investigator for a federally funded study of twice-exceptionality. Although a few educators and psychologists had written literature reviews and content analyses regarding twice-exceptionality, no other investigators had initiated a large-scale investigation. In addition to the contributions we made with respect to elevating the awareness of gifted students with an ASD, we elevated awareness of gifted students with attention-deficit/hyperactivity disorder (ADHD) and specific learning disability (SLD). The most significant contribution was to demonstrate that twice-exceptional students have unique needs and profiles and require differential diagnosis to understand their disability and selective interventions to develop their talents. In addition to research describing cognitive and psychosocial characteristics, we are contributing to the field by conducting empirical work on interventions with twice-exceptional students. There is a dearth of research on empirically-based interventions required to support twice-exceptional individuals.
 - a. **Assouline, S. G.**, Foley Nicpon, M., & Whiteman, C. (2010). Cognitive and psychosocial characteristics of gifted students with written language disability. *Gifted Child Quarterly*, 54(2), 102-115. doi: 10.1177/0016986209355974.
 - b. Nicpon, M. F., Doobay, A. F., & **Assouline, S. G.** (2010). Parent, teacher, and self-perceptions of psychosocial functioning in intellectually gifted children and

- adolescents with autism spectrum disorder. *Journal of Autism and Developmental Disorders*, 40(8), 1028-1038. doi: 10.1007/s10803-010-0952-8.
- c. **Assouline, S. G.**, Foley Nicpon, M., & Dockery, L. (2011). Predicting the academic achievement of gifted students with autism spectrum disorder. *Journal of Autism and Developmental Disabilities*. doi: 10.1007/s10803-011-1403-x.
 - d. Foley-Nicpon, M., & **Assouline, S.G.** (2020). High ability students with coexisting disabilities: Implications for school psychological practice. *Psychology in the Schools*. <https://doi.org/10.1002/pits.22342>.
2. **Nuances associated with twice-exceptionality.** Twice-exceptional students have a diagnosed social or learning disability, and they also have very high academic potential. The nuances associated with twice-exceptionality require a broad perspective about diagnosis, intervention, and psychosocial profiles.
- a. Foley Nicpon, M., **Assouline, S. G.**, & Fosenburg, S. (2015). The relationship between self-concept, ability, and academic programming among twice-exceptional youth. *Journal of Advanced Academics*, 1–18. doi: 10.1177/1932202X15603364.
 - b. Foley Nicpon, M., & **Assouline, S. G.** (2015). Counseling considerations for the twice-exceptional client. *Journal of Counseling and Development*, 93, 202–211. doi: 10.1008/j.1556-6676.2015.00196.x.
 - c. Foley-Nicpon, M., Fosenburg, S. L., Wurster, K. G., & **Assouline, S. G.** (2016). Identifying high ability children with DSM-5 autism spectrum or social communication disorder: Performance on autism diagnostic instruments. *Journal of Autism and Developmental Disorders*, doi: 10.1007/s10803-016-2973-4.
 - d. Foley-Nicpon, M., **Assouline, S. G.**, Kivlighan, D., & Nanji, M. (2017). The effects of a social and talent development intervention for high ability youth with social skill difficulties. *High Ability Studies*, doi: 10.1080/13598139.2017.1298997.
3. **Model of academic talent discovery and development focused on elementary students.** In the early 1990s, I implemented a model of academic talent discovery and development (the talent search model) focused on elementary students (The Belin-Blank Exceptional Student Talent Search). This is a model that was built upon the highly successful model developed in the early 1970s at Johns Hopkins University, which focused on an application of the model with middle-school students and specifically investigated mathematically precocious youth. Our extension of this model to elementary students has been extremely fruitful in terms of intervention and investigation. In 2015, I led a team of collaborators in the development of an online test of 8th grade content (licensed from ACT) that can be used to discover 4th–6th graders talented in STEM and tailor interventions designed to address their individual strengths.
- a. **Assouline, S. G.**, & Lupkowski-Shoplik, A. E. (2011). *Developing math talent: A comprehensive guide to math education for gifted students in elementary and middle school (2nd ed.)*. Waco, TX: Prufrock Press.
 - b. **Assouline, S. G.**, & Lupkowski-Shoplik, A. E. (2012). The talent search model of gifted identification. *Journal of Psychoeducational Assessment*, 1–15. doi: 10.1177/0734282911433946.
 - c. **Assouline, S. G.**, Colangelo, N., Heo, N., & Dockery, L. (2013). High-ability students' participation in specialized instructional interventions: Variations by

- apptitude, grade, gender, and content area. *Gifted Child Quarterly*, doi: 10.1177/0016986213479654
- d. LeBeau, B., **Assouline, S. G.**, Mahatmya, D., & Lupkowski-Shoplik, A.E. (2020). Differentiating among high-achieving learners: A comparison of classical test theory and item response theory on above-level testing. *Gifted Child Quarterly*, 64(3), 219–237.
4. **Diversifying the talent pool and closing the excellence gap.** Discovering academic talent drives much of my professional work. An important component of that aim is diversifying the talent pool and closing the excellence gap. Three major grants over the past five years have contributed to better understanding of the characteristics of diverse learners, especially with respect to those who come from under-resourced communities.
- a. Muratori, M., Colangelo, N., & **Assouline, S. G.** (2003). Early entrance students: Impressions of their first year of college. *Gifted Child Quarterly*, 23(3), 219–237.
 - b. **Assouline, S. G.**, Ihrig, L. M., & Mahatmya, D. (2017). Closing the excellence gap: Investigation of an expanded talent search model for student selection into an extracurricular STEM program in *rural middle schools*. *Gifted Child Quarterly*, 1–12. doi: 10.1177/0016986217701833.
 - c. **Assouline, S. G.**, Mahatmya, D., Ihrig, L. M., & Lane, E. (2020). High-achieving rural middle-school student’s academic self-efficacy and attributions in relationship to gender. *High Ability Studies*. doi: 10.1080/13598139.2020.1740582.
 - d. LeBeau, B. **Assouline, S. G.**, Lupkowski-Shoplik, A.E., & Mahatmya. (2020) The Advanced Placement Program in rural schools: Equalizing opportunity. *Roeper Review*, 42(3), 192–205.
5. **Academic acceleration of individuals with high intellectual potential.** I have collaborated with several individuals to contribute to the education and psychology communities to further the understanding of both the cognitive and social-emotional development of individuals with high intellectual potential. Of significance is the work investigating the effectiveness of the under-used intervention of academic acceleration. Several products have been significant contributions to the field across the US and worldwide. I was either the lead investigator or the co-investigator for these projects.
- a. Colangelo, N., **Assouline, S. G.**, & Gross, M. U. (2004). *A nation deceived: How schools hold back America's brightest students. The Templeton National Report on Acceleration*. Volumes 1 and 2. Iowa City, IA: Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development.
 - b. **Assouline, S. G.**, Colangelo, N., Ihrig, D., & Forstadt, L. (2006). Attributional choices for academic success and failure by intellectually gifted students. *Gifted Child Quarterly*, 50(4), 283–294.
 - c. **Assouline, S. G.**, Colangelo, N., Lupkowski-Shoplik, A., Forstadt, L., & Lipscomb, J. (2009). Iowa Acceleration Scale Manual: A Guide for Whole-Grade Acceleration K–8 (3rd edition). *Great Potential Press, Inc.*
 - d. **Assouline, S. G.**, Colangelo, N., VanTassel-Baska, J., & Lupkowski-Shoplik, A. (2015). *A nation empowered: Evidence trumps the excuses holding back America’s brightest students*. Volumes 1 and 2. Iowa City, IA: The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development.

BIOGRAPHICAL SKETCH

NAME: Saba Rasheed Ali

eRA COMMONS USER NAME (credential, e.g., agency login): sabaali

POSITION TITLE: Professor

EDUCATION/TRAINING

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
West Virginia University, Morgantown, WVA	BA	1992	Psychology
Loyola University, Chicago, IL	MA	1996	Community Counseling
University of Oregon, Eugene, OR	PhD	2001	Counseling Psychology

A. Personal Statement

I am a professor in counseling psychology in the College of Education. I have expertise in workforce and career development processes for K-professional degree students and in rural workforce development issues. Much of my research focuses on understanding how rural underrepresented youth make decisions about careers and in particular, how to help students overcome barriers to career attainment. I have coordinated two successful career education program in twelve schools (FICE and HOPE) and have evaluated the effectiveness of these programs (e.g., student outcomes as well as broader systemic impact). I currently direct Project HOPE (Health science opportunities, preparation, and exploration) which has been funded by the Roy J. Carver Trust, Greater Muscatine Community Foundation, John Deere Foundation, and the Statewide Governor's STEM scale up initiative. I am also the PI on two federal grants related to workforce development and career education in rural areas. In 2009, I was awarded the Audrey Qualls Commitment to Diversity Award for my work with underrepresented K-12 students in helping them to make the connections between career and academics. I was also awarded in the Distinguished Achievement in Publicly Engaged Scholarship Award for the University of Iowa in 2017. I will serve as a PI on the current HRSA project, *Building a Mental Health Workforce to Serve Rural Iowa Youth*.

Solberg, V.S. & Ali, S.R. (2017) *The Handbook of Career and Workforce Development Practice and Policy*. Routledge/Taylor and Francis.

B. Positions and Honors**Positions and Employment**

2001-2003	Multicultural/Diversity Post-Doctoral Research Associate, University of Iowa, Iowa City, IA
2003-2009	Assistant Professor, Counseling Psychology, University of Iowa, Iowa City, IA
2009-2016	Associate Professor, Counseling Psychology, University of Iowa, Iowa City
2016-Present	Professor, Counseling Psychology, University of Iowa, Iowa City, IA

- 2017-Present Associate Dean for Research, College of Education, University of Iowa, Iowa City, IA
- 2018-2019 Interim Departmental Executive Officer (Chair), Department of Psychological and Quantitative Foundations, University of Iowa, Iowa City, IA

Honors

- 1998 Travel Award, Center for Woman's Studies, University of Oregon
- 1998 Scholarship Travel Award, Section on the Advancement of Woman, Division 17, APA
- 2000 Student of the Year Award, Section on the Advancement of Women, Division 17, APA
- 2000 Graduate Student Research Award, University of Oregon
- 2004 Old Gold Summer Fellowship, University of Iowa
- 2005 Old Gold Summer Fellowship, University of Iowa
- 2008 James N. Murray Faculty Award, University of Iowa
- 2009 College of Education Teaching Award
- 2009 College of Education, Audrey Qualls Commitment to Diversity Award
- 2010 College of Education, Dean's Scholar
- 2012 Fellow in Residence, Public Policy Center, University of Iowa
- 2014 Fellow, American Psychological Association
- 2015 Senior Fellow, Massachusetts Institute for College and Career Readiness, Boston University
- 2017 Distinguished Achievement in Publicly Engaged Scholarship Award, University of Iowa

C. Peer Reviewed Publications

- **Ali SR**, McWhirter EH. Rural Appalachian youth's vocational/educational post-secondary aspirations: Applying Social Cognitive Career Theory. *Journal of Career Development*, 2006; 33, 87-111.
- Ali, S.R. & Saunders, J.L. The Career Aspirations of Rural Appalachian High School Students. *J Career Assessment*, 2009; 2 172-188.
- Ali, Saba Rasheed, and Kristen A. Menke. "Rural Latino Youth Career Development: An Application of Social Cognitive Career Theory." *The Career Development Quarterly* 62.2 (2014): 175-186.
- Ali, S.R., Yang, Y.L., Button, C.J., McCoy, T.H. Career education programming in three diverse schools; *J Career Development* 2012; 39 357-385.
- Ali, S. R., Brown, S. D., & Loh, Y. (2017). Project HOPE: Evaluation of health science career education programming for rural Latino and European American youth. *Career Development Quarterly*, 65(1), 57-71.
- Ali, S. R., Pham, A., Loh Garrison, Y., & Brown, S. D. (2019). Project HOPE: Sociopolitical Development and SCCT Beliefs of Latinx and White Rural Middle School Students. *Journal of Career Development*, 46(4), 410-424.

BIOGRAPHICAL SKETCH

NAME: Foley-Nicpon, Megan

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Professor, Counseling Psychology Program; Department Executive Officer, Psychological and Quantitative Foundations; Associate Director for Research and Clinic, Belin-Blank Center

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date	FIELD OF STUDY
Arizona State University, Tempe, AZ	BA	1995	Psychology
Arizona State University, Tempe, AZ	MA	2001	Educational Psychology
Arizona State University, Tempe, AZ	PhD	2003	Counseling Psychology
La Rabida Children's Hospital, Chicago, IL	Internship	2002-03	Clinical Psychology
Linden Oaks Hospital at Edward, Naperville, IL	Post-doc	2003	Clinical Psychology
Belin-Blank Center, The Univ. of Iowa, Iowa City, IA	Post-doc	2004	Counseling Psychology

A. Personal Statement

I bring to this project 18 years of research and clinical experience with youth diagnosed with ADHD, ASD, and learning disabilities, and I am well-published in the areas of ASD, disability, diagnostic assessment and intervention, and high ability. I have experience with qualitative and quantitative methodologies and formative and summative evaluative processes. I have been on the UI Counseling Psychology faculty for 13 years, teaching, mentoring and supervising Counseling Psychology doctoral students.

B. Positions and Honors

Positions

2004-06	Licensed Psychologist and Administrator, Belin-Blank Center, The University of Iowa (UI), Iowa City, IA
2005-08	Adjunct Assistant Professor, Counseling Psychology Program, UI, Iowa City, IA
2006-08	Supervisor of Psychological Services, Belin-Blank Center, UI, Iowa City, IA
2008-13	Assistant Professor, Counseling Psychology Program, UI, Iowa City, IA
2008-14	Licensed Psychologist, Belin-Blank Center, UI, Iowa City, IA
2013-18	Associate Professor, Counseling Psychology Program, UI, Iowa City, IA

2018-Pre Professor, Counseling Psychology Program, UI, Iowa City, IA
 2019-Pre Department Executive Officer, Psychological and Quantitative Foundations, UI

Honors

2001 Graduate Student Research Award, Graduate College, ASU, Tempe, AZ
 2002 Outstanding Research Award in Human Development, Division E, AERA
 2002 Dean's Excellence Award for Graduate Student Research, ASU College of Education
 2008/10 Mensa Research Award, MENSA Education and Research Foundation
 2009 New Voices in Creativity and Intelligence Research Award, University of Kansas
 2011 AERA Giftedness, Creativity, and Talent SIG Path Breaker Award
 2012 Early Scholar Award, National Association for Gifted Children
 2019 BTAA Academic Leadership Fellow
 2019 Iowa Academy of Education Inductee

C. Contributions to Science

- Teriba, A., & **Foley-Nicpon, M.** (2021). Connectedness and perseverance: Examining grit's relation to age, academic performance and interest, and adult attachment. *International Journal of Applied Positive Psychology*, published online. <https://doi.org/10.1007/s41042-021-00055-x>
- Wurster, K. G., Kivlighan, D. M. III, & **Foley-Nicpon, M.** (2021). Does person-group fit matter? A further examination of hope and belongingness in academic enhancement groups. *Journal of Counseling Psychology*, 68(1), 67–76. <https://doi.org/10.1037/cou0000437>
- Foley-Nicpon, M.**, & Assouline, S. G. (2020). High ability students with co-existing disabilities: Implications for school psychological practice. *Psychology in the Schools*. <https://doi.org/10.1002/pits.22342>
- Bolenbaugh, M., **Foley-Nicpon, M.**, Young, R., Tully, M., Grunewald, N., & Ramirez, M. (2020). Parental perceptions of gender differences in child technology use and cyberbullying. *Psychology in the Schools*, 1 – 23. <https://doi.org/10.1002/pits.22430>
- Knotek, S. E., **Foley-Nicpon, M.**, Kozbelt, A., Olszewski-Kubilius, P., Portenga, S., Subotnik, R., & Worrell, F. (2020). Gatekeeping in high performance settings. *Review of General Psychology*, 1 – 14. <https://doi.org/10.1177/1089268020905578>
- Lin, C. L., & **Foley-Nicpon, M.** (2020). Integrating creativity into career interventions for twice-exceptional students in the United States: A review of recent literature. *Gifted and Talented International*. <https://doi.org/10.1080/15332276.2019.1704667>
- Park, S., **Foley-Nicpon, M.**, Choate, A., & Bolenbaugh, M. (2018). “Nothing fits exactly:” Experiences of Asian American parents of twice-exceptional children. *Gifted Child Quarterly*, 62(3), 306-319. <https://doi.org/10.1177/0016986218758442>
- Cederberg, C., Gann, L., **Foley-Nicpon, M.**, & Sussman, Z. (2018). ASD screening measures for high ability youth with ASD: Examining the ASSQ and SRS. *Gifted Child Quarterly*, 62(2), 220-229. <https://doi.org/10.1177/0016986217752098>
- Foley-Nicpon, M.**, Fosenburg, S., & Wurster, K., & Assouline, S. (2017). Identifying high ability children with DSM-5 autism spectrum or social communication disorder: Performance on autism diagnostic instruments. *Journal of Autism and Developmental Disorders*, 47(2), 460-471. <https://doi.org/10.1007/s10803-016-2973-4>
- Foley-Nicpon, M.**, Assouline, S. G., Kivlighan, D. M., Fosenburg, S., Cederberg, C., & Nanji, M. (2017). The impact of a social and talent development intervention for high ability youth with social skill deficits. *High Ability Studies*, 28(1), 73-92.

<https://doi.org/10.1080/13598139.2017.1298997>

Doobay, A. F., **Foley-Nicpon, M.**, Ali, S., & Assouline, S. G., (2014). Cognitive, adaptive and psychosocial differences between high ability youth with and without autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 44, 2026-2040.

<https://doi.org/10.1007/s10803-014-2082-1>

Foley-Nicpon, M., Assouline, S. G., & Colangelo, N. (2013). Twice-exceptional learners: Who needs to know what? *Gifted Child Quarterly*, 57(3), 169-180.

<https://doi.org/10.1177/0016986213490021>

Assouline, S. G., **Foley-Nicpon, M.**, & Dockery, L. (2012). Predicting the academic achievement of gifted students with autism spectrum disorder. *Journal of Autism and Developmental Disabilities*, 42(2), 1781-1789. <https://doi.org/10.1007/s10803-011-1403-x>

Foley-Nicpon, M., Assouline, S. G., & Stinson, R. D. (2012). Cognitive and academic distinctions between gifted students with autism and Asperger syndrome. *Gifted Child Quarterly*, 56(2), 77-89. <https://doi.org/10.1177/0016986211433199>

D. Other Support

S206A170017

Assouline (PI)

2018-present

U.S. Department of Education

Culturally responsive talent identification and career exploration (TICE)

Develop identification/career intervention for low income, rural, high ability students of color.

Role: Co-PI

Number

Ali (PI)

2021 – present

Behavioral Health Workforce Education

(BHWET)

Building a mental health workforce to serve rural Iowa youth.

Increase the number of practitioners working with children and adolescents in rural settings

Role: Co-PI

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.

Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Duhita Mahatmya

eRA COMMONS USER NAME (credential, e.g., agency login): dmahatmya

POSITION TITLE: Associate Research Scientist

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Drake University, Des Moines, IA	B.S./B.A.	05/2007	Psychology/English
Iowa State University, Ames, IA	M.S.	05/2009	Human Development & Family Studies
Iowa State University, Ames, IA	Ph.D.	05/2011	Human Development & Family Studies

A. Personal Statement

My broad research interests examine the interplay of individual, family, school, and community factors on the academic and psychosocial development of children and adolescents, particularly those from traditionally marginalized communities. Additionally, I have the training and expertise necessary to accomplish multi-disciplinary work. My Ph.D. in Human Development and Family Studies and previous faculty position in Integrative Studies were inherently interdisciplinary and required an appreciation for inter-, multi, and trans-disciplinary points of view in the search for innovative research questions and approaches. Thus, I am particularly skilled at collaborating on and supporting projects with multiple principal investigators, and investigators across diverse scholarly areas. I have an established record publishing and presenting with faculty in developmental psychology, higher education, family studies, economics, communication, and the natural sciences to implement and investigate interventions to support positive youth development. In addition to serving as the primary methodologist on these multi-disciplinary research teams, I have led and managed multiple projects assessing K-12 and college student development. This work involved analyzing national survey data, collecting and analyzing multi-institutional and classroom-level assessments for predictors of student success, and overseeing institutional assessment protocols. As a result of my previous experiences in research design, data analysis, and institutional assessment, I am highly adept at creating and executing evaluation and continuous improvement protocols.

B. Positions, Scientific Appointments, and Honors

2021-Present	Associate Research Scientist, College of Education University of Iowa, Iowa City, IA
2016-2021	Assistant Research Scientist, College of Education, University of Iowa, Iowa City, IA
2011-2016	Assistant Professor, Integrative Studies, New Century College, George Mason University, Fairfax, VA
2007-2011	Graduate Research Assistant, Institute for Social & Behavioral Research Iowa State University, Ames, IA

C. Contributions to Science

My early scholarship focused on psychosocial stress and resilience among low-income families. In this programmatic line of research, I studied the physical, social, and emotional well-being of low-income minority families. I explore these outcomes empirically using data from the *Welfare, Children, and Families: A Three-City Study* (Three-City Study). The Three-City Study, a longitudinal study of approximately 2,400 children and their caregivers in Boston, Chicago, and San Antonio, is one of the most in-depth sources of information on low-income families and children in the context of welfare reform. Taken together, my research contributes to the existing research by considering the transactional nature of child/adolescent and family development, particularly in low-income families of color. Further, these papers acknowledge the policy context in which families live and how public policy can impact family development.

- **Mahatmya, D., & Lohman, B. J.** (2012). The influence of maternal life transitions and financial stress on adolescent educational and occupational attainment. *Children and Youth Services Review, 34*, 1616-1623.
- **Mahatmya, D., & Lohman, B. J.** (2011). Predictors of late adolescent delinquency: The protective role of after-school activities in low-income families. *Children and Youth Services Review, 33*, 1309-1317.

As a result of my early work, I delved deeper in the home-school partnership and the ways in which these systems interact to influence child development. In this second research area, I focused on the well-being of children, adolescents, and young adults around two main outcomes: academic and psychosocial. Academic outcomes capture student engagement and educational attainment. Psychosocial outcomes reflect positive social and emotional adjustment. Collectively, these papers proposed and tested new, integrated theories on how the family, school, and neighborhood environments shape academic and psychosocial well-being.

- Brown, E. L., **Mahatmya, D., & Vesely, C. K.** (2016). Home and school influences on the behavioral and academic outcomes of low-income children of color. *Journal of Children & Poverty.*

- Garner, P. W., **Mahatmya, D.**, Brown, E. L., & Vesely, C. K. (2014). Promoting desirable outcomes among culturally and ethnically diverse children in social emotional learning programs: A multilevel heuristic model. *Educational Psychology Review*, 26(1), 165-189.
- **Mahatmya, D.**, Lohman, B. J., Brown, E. L., & Conway-Turner, J. (2016). The role of race and teachers' cultural awareness in predicting low-income Black and Hispanic students' perceptions of educational attainment. *Social Psychology of Education*, 19(2), 427-449.
- **Mahatmya, D.**, & Smith, A.* (2016). Neighborhood and family influences on meeting college expectations in emerging adulthood. *Emerging Adulthood*, 5(3), 164-176.
- Vesely, C. K., Brown, E. L., & **Mahatmya, D.** (2013). It takes two: Caregiving across contexts and children's social, emotional, and academic outcomes. *Early Education & Development*, 24(7), 960-978.

More recently, I have worked with interdisciplinary teams to understand the role of informal learning environments and interventions and school climate on improving the academic and psychosocial outcomes of students from marginalized backgrounds or communities. I have also investigated the influence of school climate on teacher outcomes. These projects translate and apply my previous research into the development, implementation, and evaluation of community and school-based interventions. These papers represent the application of the integrated theories I investigated in my previous work.

- Assouline, S., Ihrig, L., & **Mahatmya, D.** (2017). Closing the excellence gap: Investigation of an expanded talent search model for student-selection into a rural middle-school extracurricular STEM program. *Gifted Child Quarterly*, 61(3), 250-261.
- Brown, E. L., Valenti, M., Horner, C. G., **Mahatmya, D.**, & Colditz, J. (2019). Pathways to working alliances: The mediational relationship between special educators' emotional behaviors and teacher-student relationships. *Teachers College Record*, 121(7).
- Bruhn, A. L., Rila, A., **Mahatmya, D.**, Estrapala, S., & Hendrix, N. (2018). The effects of data-based, individualized interventions for behavior. *Journal of Emotional and Behavioral Disorders*, 28(1), 3-16.
- **Mahatmya, D.**, Grooms, A. A., Kim, J. Y., McGinnis, D., & Johnson, E. (2021). Burnout and race-related stress among women of color K-12 educators. *Journal of Education Human Resources*.

OMB No. 0925-0001 and 0925-0002 (Rev. 12/2020 Approved Through 02/28/2023)

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.

Follow this format for each person. DO NOT EXCEED FIVE PAGES.

NAME: Brandon LeBeau

eRA COMMONS USER NAME (credential, e.g., agency login): BLEBEAU

POSITION TITLE: Associate Professor of Educational Measurement and Statistics

EDUCATION/TRAINING (*Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.*)

INSTITUTION AND LOCATION	DEGREE (if applicable)	Completion Date MM/YYYY	FIELD OF STUDY
Luther College	B.A.	05/2007	Psychology
University of Minnesota	Ph.D.	02/2013	Quantitative Methods in Education

A. Personal Statement

I have the statistical expertise and training to successfully complete the methodology in the proposed research project. While a graduate student and while working at Saint Paul Public Schools (SPPS) in Minnesota, I was a lead analyst for program evaluation grants, including one from the National Science Foundation. With this background I have experience planning and carrying out data analysis, while keeping stakeholder and project intent at the forefront of the analysis. I also am a strong proponent of open science through the sharing of data where able and openly share research code to ensure the analysis is as transparent as possible. As an Assistant Professor and most recently Associate Professor at the University of Iowa, I have gained experience and background using psychometric models. This line of research includes both methodological explorations of item response theory and linking procedures and using these methods in applied research settings, with particularly focus on developmental scaling of psychological measures over time.

Funded research most relevant to this application includes:

NIH/Eunice Kennedy Shriver National Institute of Child Health and Human Development
01/01/2020-12/31/2025

Role: Co-Investigator; PI Petersen, Isaac

Cognitive Control in the Development of School Readiness in Early Childhood

Institute of Educational Sciences R305 C200012

09/01/2020-08/31/2025

Role: Co-Investigator; PI Siegle; Site PI Assouline

Improving Access, Instruction, and Outcomes in Gifted Education

1. LeBeau, B., Ellison, S., & Aloe, A. M. (2021). Reproducible Analyses in Education Research. *Review of Research in Education*, 45(1), 195-222.
2. LeBeau, B., Harwell, M., Monson, D., Dupuis, D., Medhanie, A., & Post, T. R. (2012). Student and high-school characteristics related to completing a science, technology, engineering or mathematics (STEM) major in college. *Research in Science & Technological Education*, 30(1), 17 – 28.
3. Petersen, I. T., Lindhiem, O., LeBeau, B., Bates, J. E., Pettit, G. S., Lanford, J. E., & Dodge, K. A. (2018). Development of Internalizing Problems from Adolescence to Emerging Adulthood: Accounting for Heterotypic Continuity With Vertical Scaling. *Developmental Psychology*, 54(3), 586
4. LeBeau, B. (2017). Ability and Prior Distribution Mismatch: An Exploration of Common-Item Linking Methods. *Applied Psychological Measurement*, 41(7), 545 - 560.

B. Positions, Scientific Appointments, and Honors

Positions and Employment

2021 -	Associate Professor, Educational Measurement and Statistics Program, University of Iowa, Iowa City, IA
2014 - 2021	Assistant Professor, Educational Measurement and Statistics Program, University of Iowa, Iowa City, IA
2013 – 2014	Visiting Assistant Professor, Educational Statistics and Research Methods Program, University of Arkansas, Fayetteville, AR
2012 – 2013	Assessment Specialist, Saint Paul Public Schools, Saint Paul, MN

Professional Memberships

2018 -	Institute of Educational Sciences (IES) grant panel reviewer.
2015 - 2019	Member, National Council on Measurement in Education (NCME)
2015 - 2018	Secretary, Iowa Educational Research & Evaluation Association (IEREA)
2015 -	Member, American Statistical Association (ASA)
2014 - 2018	Councilmember, Iowa Educational Research & Evaluation Association (IEREA)
2010 - 2019	Member, American Educational Research Association (AERA)

Honors

2017	Outstanding Reviewer, Review of Educational Research (AERA)
2016	Outstanding Reviewer, Review of Educational Research (AERA)

C. Contribution to Science

1. My methodological research interests generally surround longitudinal data conditions. This includes evaluation and development of new methods to adequately model longitudinal data and includes the creation of developmental scales for measures across a wide developmental age span. Much of the evaluation and development work has

focused on the linear mixed model, a type of model commonly used for nested data including longitudinal data. My findings have found that serial correlation misspecification does not bias the fixed effects on average, but the misspecification does have implications for the random components, which can influence the standard errors. As an example, if a random effect is not included in the model but is an aspect of the data, the empirical type I error rate can be inflated compared to the nominal rate. My current research is exploring ways to overcome this problem and attempt to relax statistical assumptions to model three levels of nesting in a two level model and use of bootstrap or resampling methods to overcome this inflation. My research on creation of developmental scales for measures collected across a wide developmental age span uses item response theory and linking methodology. These methods allow for the use of age-relevant items to account for heterotypic continuity and to measure the trait more reliably, efficiently, and validly.

- a. LeBeau, Brandon C. (2013). Misspecification of the covariance matrix in the linear mixed model: a Monte Carlo simulation. Retrieved from the University of Minnesota Digital Conservancy, <http://hdl.handle.net/11299/146916>.
 - b. LeBeau, B. (2018). Misspecification of the random structure: Implications for the linear mixed model. https://ir.uiowa.edu/pq_pubs/2.
 - c. Petersen, I.T., LeBeau, B. & Choe, D. (2021). Creating a Developmental Scale to Account for Heterotypic Continuity in Development: A Simulation Study. *Child Development*.
 - d. Petersen, I. T., & LeBeau, B. (2020). Language ability in the development of externalizing behavior problems in childhood. *Journal of Educational Psychology*.
2. In addition to my methodological research interests noted above, my applied research interests surround quantitative program evaluation. Within this broad scope, I have applied statistical methods to explore the relationship between high school mathematics curricula and subsequent college performance in mathematics, evaluate the impact of a rural AP delivery platform in a rural state, evaluate when presenting the question to students can impact their performance on an achievement test. These projects used the linear mixed model or generalized estimating equations to adequately account for the dependency due to correlated data, either from longitudinal or clustered data conditions commonly found within education or psychology. These applied research projects often inform my methodological research where solutions to real world data needs to be explored, then a simulation study is conducted to evaluate the impact this choice may have had on the analysis.
- a. LeBeau, B., Assouline, S.G., Lupowski-Shoplik, A. & Mahatmya, D. (2020). The Advanced Placement Program in Rural Schools: Equalizing Opportunity. *Roeper Review*.
 - b. LeBeau, B., Assouline, S.G., Mahatmya, D. & Lupowski-Shoplik. (2020). Differentiating Among High-Achieving Learners: A Comparison of Classical Test

Theory and Item Response Theory on Above-Level Testing. *Gifted Child Quarterly*. <https://doi.org/10.1177/0016986220924050>

- c. Harwell, M., Post, T., LeBeau, B., Dupuis, D., & Medhanie, A. (2014). A multisite study of high school mathematics curricula and developmental mathematics course-taking in college. *Educational Research Quarterly*, 37(3).
 - d. Reed, D. K., Stevenson, N., & LeBeau, B. C. (2019). Reading Comprehension Assessment: The Effects of Reading the Items Aloud Before or After Reading the Passage. *The Elementary School Journal*, 120(2), 300-318.
3. Lastly, I have significant statistical software programming interests that have led me to create four R packages. These packages fill a few specific gaps. One package, `simglm`, allows for the simulation and estimation of power for simulation for nested designs, including longitudinal data. A second package, `pdfsearch`, allows for keyword searching of pdf documents. This may allow for the conducting of research synthesis or study screening for research synthesis or meta-analyses in a reproducible analysis framework. The last two packages, `highlightHTML` and `SPSSstoR`, allow for formatting of reproducible HTML reports and conversion of SPSS statistical syntax to comparable R syntax. These programming skills can also translate to statistical analyses in a research context to help ensure analyses are reproducible, transparent, and scripted.
- a. LeBeau, B. (2018). `highlightHTML`: CSS formatting of R Markdown Documents. *Journal of Open Source Software*, 3(21), 185. Retrieved from <http://joss.theoj.org/papers/10.21105/joss.00185>
 - b. LeBeau, B. (2018). `pdfsearch`: Search Tools for PDF Files. *Journal of Open Source Software*, 3(27), 668, <https://doi.org/10.21105/joss.00668>
 - c. LeBeau, B. (2020). `simglm`. <https://cran.r-project.org/package=simglm>
 - d. LeBeau, B. (2019). `SPSSstoR`. <https://github.com/lebebr01/SPSSstoR>

BIOGRAPHICAL SKETCH

Provide the following information for the Senior/key personnel and other significant contributors.

Follow this format for each person. **DO NOT EXCEED FIVE PAGES.**

NAME: Katherine Schabilion

eRA COMMONS USER NAME (credential, e.g., agency login):

POSITION TITLE: Licensed Psychologist, The Connie Belin & Jacqueline N. Blank International Center for Gifted Education and Talent Development

EDUCATION/TRAINING *(Begin with baccalaureate or other initial professional education, such as nursing, include postdoctoral training and residency training if applicable. Add/delete rows as necessary.)*

INSTITUTION AND LOCATION	DEGREE <i>(if applicable)</i>	Completion Date MM/YYYY	FIELD OF STUDY
University of Iowa (Iowa City, IA)	B.A.	05/2013	Psychology
University of Iowa (Iowa City, IA)	Ed.S.	05/2017	School Psychology
Avondale Elementary School District (Avondale, AZ)	Internship	06/2019	School Psychology
University of Iowa (Iowa City, IA)	Ph.D.	05/2020	Psychological and Quantitative Foundations
University of Iowa Belin-Blank Center (Iowa City, IA)	Postdoctoral Scholar	03/2021	Clinical/School Psychology

A. Personal Statement

As an early career psychologist and researcher, I bring to this project an enthusiasm for furthering research related to twice-exceptional students, who are the primary population I serve in my clinical work. I have a thorough understanding of the unique psychological assessment considerations with this population, and I have the opportunity to support the development of future professionals through clinical supervision of doctoral trainees in School Psychology and Counseling Psychology. I also have experience teaching courses and professional development workshops in gifted education to further disseminate this knowledge to pre- and in-service teachers. I have experience with quantitative and qualitative research and multi-disciplinary collaboration across the fields of psychology, education, and neuroscience.

B. Positions, Scientific Appointments, and Honors

Positions

2021-Present	Licensed Psychologist, Belin-Blank Center, University of Iowa
2019-2021	Psychometrist/Postdoc, Belin-Blank Center, University of Iowa
2014-2018	Graduate Research and Teaching Assistant, Belin-Blank Center, University of Iowa
2013	Graduate Research Assistant, Special Education, University of Iowa

Other Professional Experiences and Memberships

2021-Present	Member, American Psychological Association
2021-Present	Member, Iowa Psychological Association
2015-Present	Member, National Association for Gifted Children
2014-Present	Nationally Certified School Psychologist (10/21/2020) & Member, National Association of School Psychologists

C. Contributions to Science

My early research experience involved working with children in school and clinic settings, investigating vocabulary and intellectual abilities of children with cochlear implants and language impairments (through the Mechanics of Audiovisual Categorization lab at the University of Iowa), supporting career development (through Project HOPE at the University of Iowa), and investigating children's capacity for self-monitoring of challenging behavior (through a study on the use of a self-monitoring app at the University of Iowa).

- Bruhn, A. L., Vogelgsang, K., **Schabilion, K.**, Waller, L., & Fernando, J. (2015). I don't like being good! Changing behavior with technology-based self-monitoring. *Journal of Special Education Technology*, 30(3), 133-144.

I had the opportunity to support scholarship related to academic acceleration of high ability students as an editorial assistant on *A Nation Empowered: Evidence Trumps the Excuses Holding Back America's Brightest Students* and through related publications and presentations

- Assouline, S. G., Fosenburg, S., & **Schabilion, K.** (2014). From *A Nation Deceived* to *A Nation Empowered*: A never-ending story. *TEMPO*, 35(3), 6-13.
- **Schabilion, K.** (2015, October). *Academic Acceleration: Influencing Perceptions Through Exposure* [Conference session]. Iowa Talented and Gifted Association Annual Conference, Des Moines, IA.
- **Schabilion, K.** (2015, November). *What do pre-service teachers learn about academic acceleration?* [Poster presentation]. National Association for Gifted Children Annual Convention, Phoenix, AZ.
- **Schabilion, K.** (2016). Identification for academic acceleration. *The Iowa Psychologist*, Winter, 6-7.
- **Schabilion, K.** (2016, November). *Identification for academic acceleration: Recommendations for best practice* [Poster presentation]. National Association for Gifted Children Annual Convention, Orlando, FL.
- **Schabilion, K.** (2017, February). *Academic acceleration: What school psychologists need to know* [Conference session]. National Association of School Psychologists Annual Convention, San Antonio, TX, United States.

Most recently, my scholarship has focused on empirical investigation of characteristics of twice-exceptional students. I have worked in collaboration with other psychologists to disseminate scholarly knowledge about this population to parents and educators through national conference presentations and professional development for pre-service and in-service teachers. My dissertation research focused on high ability students with specific learning disorder (SLD) with impairment in written expression. I am also participating in collaborative projects on the neuroscience of twice-exceptionality, including facilitation of a virtual Summit on the Neuroscience of Twice-Exceptionality in May 2021.

- Doobay, A., Goodwin, J., & **Schabilion, K.** (2020, November). *Essential tips for teachers of twice-exceptional students* [Conference session]. National Association for Gifted Children Annual Convention, Orlando, FL, United States (Virtual).
- **Schabilion, K.**, Doobay, A. F., & Foley-Nicpon, M. (2020, November). *Resources and strategies for teachers of high ability students with anxiety* [Conference session]. National Association for Gifted Children Annual Convention, Orlando, FL. United States (Virtual).
- Assouline, S.G., LeBeau, B., & **Schabilion, K.** (2021, May). Intersection of the Medical Model and Talent Development Model in Understanding Twice-Exceptionality. Invited presentation at the Summit on the Neuroscience of Twice-Exceptionality (Virtual).
- Doobay, A. F., **Schabilion, K.**, & Foley Nicpon, M. (2021, November). Essential tips for parents of twice-exceptional students [Conference session]. National Association for Gifted Children Annual Convention, Denver, CO, United States.

Effective 10/04/2021

NSF BIOGRAPHICAL SKETCH

OMB-3145-0058

NAME: Makel, Matthew C.

POSITION TITLE & INSTITUTION: Associate Research Scientist, Johns Hopkins University

A. PROFESSIONAL PREPARATION - (see PAPPG Chapter II.C.2.f.(i)(a))

INSTITUTION	LOCATION	MAJOR/AREA OF STUDY	DEGREE (if applicable)	YEAR (YYYY)
Duke University	Durham, NC	Psychology	BA	2002
Cornell University	Ithaca, NY	Developmental Psychology	MA	2005
Indiana University	Bloomington, IN	Educational Psychology	PhD	2008

B. APPOINTMENTS - (see PAPPG Chapter II.C.2.f.(i)(b))

From - To	Position Title, Organization and Location
2021-Present	Associate Research Scientist, Johns Hopkins University
2019-2021	Director of Research & Evaluation, Duke University Talent Identification Program
2016-2019	Director of Research, Duke University Talent Identification Program
2008-2016	Gifted Education Research Specialist, Duke University Talent Identification Program

BS-1 of 3

C. PRODUCTS - (see PAPPG Chapter II.C.2.f.(i)(c)) Products Most Closely Related to the Proposed Project

Peters, S., Rambo-Hernandez, K.E., Makel, M. C., Matthews, M., & Plucker, J. (2019). The effect of local norms on racial and ethnic representation in gifted education. *AERA Open*, 5(2), 1-18.

<https://doi.org/10.1177/2332858419848446>

McBee, M. T. & Makel, M. C. (2019). The quantitative implications of definitions of giftedness. *AERA Open*, 5(1), 1-13. <https://doi.org/10.1177/2332858419831007>

Makel, M. C., Kell, H. J., Lubinski, D., Putallaz, M., & Benbow, C. P. (2016). When lightning strikes twice: Profoundly gifted, profoundly accomplished. *Psychological Science*, 27(7), 1004-1018.

<https://doi.org/10.1177/0956797616644735>

Steenbergen-Hu, S., Makel, M. C., Olszewski-Kubilius, P. (2016). What one hundred years of research says about the effects of ability grouping and acceleration on K-12 students' academic achievement: Findings from two second-order meta-analyses. *Review of Educational Research*, 86(4), 849-899.

<https://doi.org/10.3102/0034654316675417>

Makel, M. C. & Plucker, J. A. (2014). Facts are more important than novelty: Replication in the education sciences. *Educational Researcher*, 43(6), 304-316. <https://doi.org/10.3102/0013189X14545513>

Other Significant Products, Whether or Not Related to the Proposed Project

Makel, M. C., Hodges, J., Cook, B. G., & Plucker, J. A. (2021). Both questionable and open research practices are prevalent in education research. *Educational Researcher*. <https://doi.org/10.3102/0013189X211001356>

Makel, M. C., Lee, S. Y., Olszewski-Kubilius, P., & Putallaz, M. (2012). Changing the pond, not the fish: Following high ability students across different educational environments. *Journal of Educational Psychology*, 104(3), 778-792. <https://doi.org/10.1037/a0027558>

Makel, M. C., Wai, J. Peairs, K., & Putallaz, M. (2016). Sex differences in the right tail of cognitive abilities: An update and cross cultural extension. *Intelligence*, 59, 8-15. <https://doi.org/10.1016/j.intell.2016.09.003>

Makel, M. C. & Plucker, J. A. (Eds). (2017). *Toward a More Perfect Psychology: Improving Trust, Accuracy, and Transparency in Research*. Washington, DC: American Psychological Association.

Makel, M. C., Plucker, J. A., Freeman, J., Lombardi, A., Simonsen, B., & Coyne, M. (2016). Replication of special education research: Necessary but far too rare. *Remedial and Special Education*, 37(4), 205-212. <https://doi.org/10.1177/0741932516646083>

Makel, M. C., Plucker, J. A., Hegarty, B. (2012). Replications in psychology research: How often do they really occur? *Perspectives on Psychological Science*, 7(6), 537-542. <https://doi.org/10.1177/1745691612460688>

Critical Actions to Realize Equity and Excellence in Gifted Education Changing Mindsets, Policies, and Practices. Retrieved from: <https://www.dpi.nc.gov/media/7263/download> [co-authored with colleagues from North Carolina DPI]

D. SYNERGISTIC ACTIVITIES - (see PAPPG Chapter II.C.2.f.(i)(d))

1. Dr. Makel is PI on U. S. Department of Education grant designed to increase representation in gifted and talented programs. With this grant, he A. works with districts to help them identify and serve gifted students in their communities; B. helps recruit academically talented students to a talent search program at Western Kentucky University; and C. identifies and serves academically talented students with the Western Kentucky University Center for Gifted Studies.
2. Dr. Makel is a leader in Open Science efforts, co-founding EdArXiv, a community-based open access preprint service for education that aims to remove paywalls between consumers of research and research findings.
3. Dr. Makel is on the national advisory board of the National Center for Research on Gifted Education, funded by the U.S. Department of Education, Institute for Education Science.



Des Moines Public Schools
Advanced Learning Program

March 11, 2022

Administrative Assistant

Gwen Abington-Robbins

Elementary Consultants

Jill Alessio

Sarah Backstrom

Vanessa Baker

Pam Hartung

Emma Hill

Christie McConathy

Kate Mead

Louise Lehman

Kelly Randleman

Jenny Schiltz

Carolyn Taylor

Michelle Volquardsen

Melissa Wolf

Secondary Consultants

Bryan Berg

Stephanie Davis

Casey Dunley

Steve Loew

Johanna MacKenzie

Louise Lehman

Steph Ovrrom

Katie Pilcher

Troy Salazar

Karen Sissel

Tony Snyder

Sarah Zdenek

Dear Drs. Assouline and Foley-Nicpon:

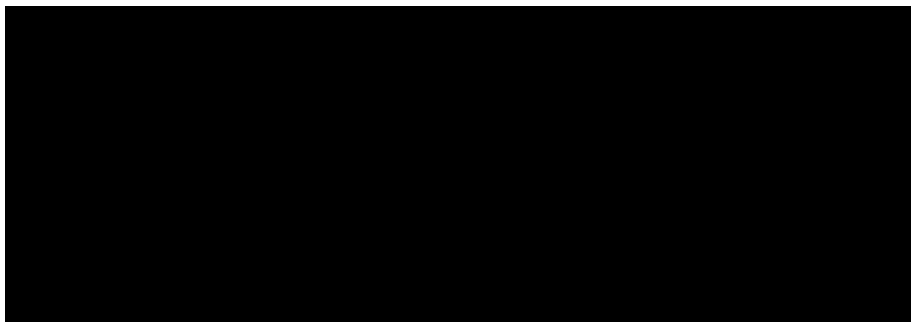
Should your proposal for the Jacob K. Javits Gifted and Talented Students Education Program titled “*Innovations in Discovering and Developing Talented Twice-Exceptional Students (DD2E)*” be funded, the Des Moines Public School District is committed to participating in your project.

As part of our participation, we understand that we will collaborate with the University of Iowa to:

1. Establish best practice, nontraditional identification, and education models for twice-exceptional students.
2. Identify twice-exceptional students for talent development opportunities informed by clinical and educational best practice.
3. Engage educators who work with talented and gifted students in our district’s schools to participate in continuous professional development designed to enhance and sustain their capacity to implement nontraditional screening and identification models and interventions that prepare twice-exceptional students for college, career, and civic life.

We are excited at the prospect of collaborating with you to better identify our talented and gifted students with disabilities who are often overlooked through traditional talent identification methods and services. We also look forward to working with the University of Iowa to establish professional development opportunities in our community to grow and sustain this program.

Des Moines Public Schools have partnered with the Belin-Blank International Center for Gifted Education and Talent Development, at the University of Iowa on other projects and have found the work to be fruitful and beneficial to our students. We are excited about the prospect of continued collaboration and partnership.





March 25, 2022

Dear Drs. Assouline and Foley-Nicpon:

Should your proposal for the Jacob K. Javits Gifted and Talented Students Education Program titled "Innovations in Discovering and Developing Talented Twice-Exceptional Students (DD2E)" be funded, the Waterloo Public School District is committed to participating in your project.

As part of our participation, we understand that we will collaborate with the University of Iowa to:

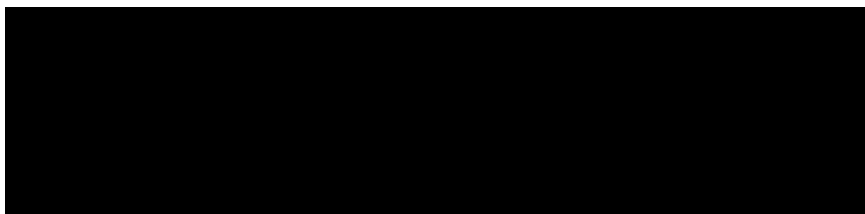
Establish best practice, nontraditional identification, and education models for twice-exceptional students.

Identify twice-exceptional students for talent development opportunities informed by clinical and educational best practice.

Engage educators who work with talented and gifted students in our district's schools to participate in continuous professional development designed to enhance and sustain their capacity to implement nontraditional screening and identification models and interventions that prepare twice-exceptional students for college, career, and civic life.

We are excited at the prospect of collaborating with you to better identify our talented and gifted students with disabilities who are often overlooked through traditional talent identification methods and services. We also look forward to working with the University of Iowa to establish professional development opportunities in our community to grow and sustain this program.

Waterloo Public Schools have partnered with the Belin-Blank International Center for Gifted Education and Talent Development, at the University of Iowa, on other projects and have found the work to be fruitful and beneficial to our students. We are excited about the prospect of continued collaboration and partnership.





Dear Drs. Assouline and Foley-Nicpon:

March 8, 2022

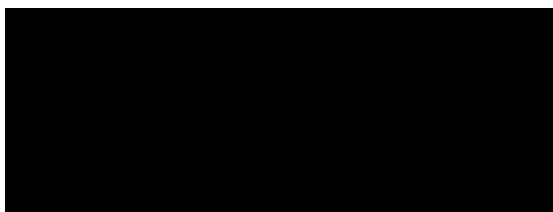
Should your proposal for the Jacob K. Javits Gifted and Talented Students Education Program titled "*Innovations in Discovering and Developing Talented Twice-Exceptional Students (DD2E)*" be funded, the Prairie Lakes AEA is committed to participating in your project.

As part of our participation, we understand that we will collaborate with the University of Iowa to:

1. Establish best practice, nontraditional identification, and education models for twice-exceptional students.
2. Identify twice-exceptional students for talent development opportunities informed by clinical and educational best practice.
3. Engage educators who work with talented and gifted students in our AEA's schools to participate in continuous professional development designed to enhance and sustain their capacity to implement nontraditional screening and identification models and interventions that prepare twice-exceptional students for college, career, and civic life.

We are excited at the prospect of collaborating with you to better identify our talented and gifted students with disabilities who are often overlooked through traditional talent identification methods and services. We also look forward to working with the University of Iowa to establish professional development opportunities in our community to grow and sustain this program.

Schools in Prairie Lakes AEA have partnered with the Belin-Blank International Center for Gifted Education and Talent Development, at the University of Iowa on other projects and have found the work to be fruitful and beneficial to our students. We are excited about the prospect of continued collaboration and partnership.



**College of Education**

Psychological and
Quantitative Foundations
University of Iowa
361 Lindquist Center
Iowa City, Iowa 52242

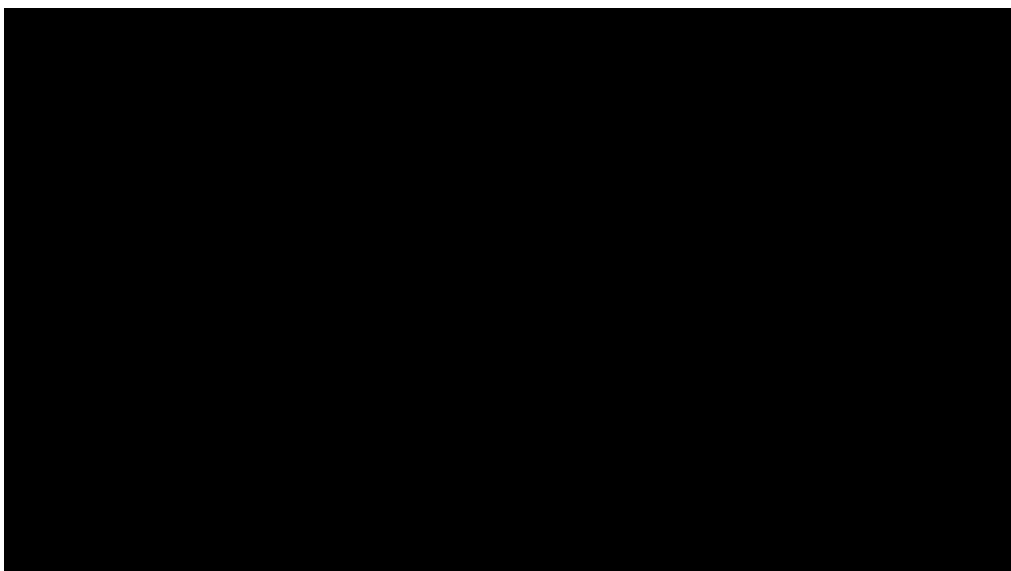
Dear Drs. Assouline, Foley-Nicpon, Ali, and Mahatmya:

Should your proposal for the Jacob K. Javits Gifted and Talented Students Education Program titled "*Innovations in Discovering and Developing Talented Twice-Exceptional Students (DD2E)*" be funded, the Master of Arts in Teaching, Leadership, and Cultural Competency (MATLCC) and the Teacher Leader Center's Pipeline Project are committed to participating in your project.

As part of our participation, we understand that we will collaborate with you on the following objective: **Increase the number of educators from traditionally underrepresented backgrounds who are certified to identify and teach all gifted and talented students, including underrepresented students, specifically students who are gifted and have a disability (twice exceptional).**

We at the Baker Teacher Leaders Center are excited at the prospect of collaborating with you to increase the number of educators from underrepresented groups (especially teachers with disabilities) specializing in gifted education in the workforce across Iowa and surrounding states. We will support your providing a seminar and/or informational session to our students about the Talented and Gifted (TAG) endorsement currently offered in the College of Education. We anticipate you will focus our discussion on identifying and working with twice-exceptional and other underrepresented students in gifted education.

Thank you and we look forward to our continued collaboration.





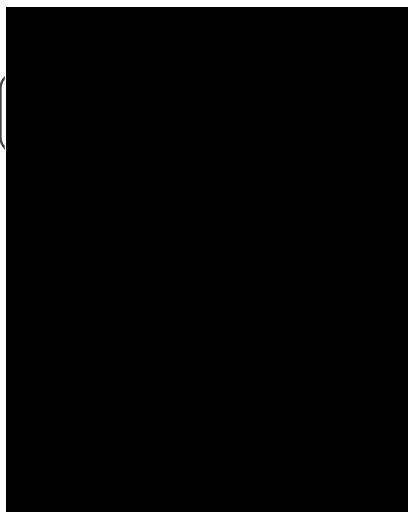
JOHNS HOPKINS
SCHOOL of EDUCATION

Letter of Support
Johns Hopkins University
Innovations in Discovering and Developing Talented Twice-Exceptional Students

Dear Dr. Assouline,

Dr. Matthew Makel from the School of Education is pleased to participate in this important project. He will serve as the primary liaison with states for data acquisition and communication, and will consult with the IU team on data cleaning, analysis and reporting.

This proposal has been reviewed and approved by the appropriate officials at Johns Hopkins University Research Administration.



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**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.

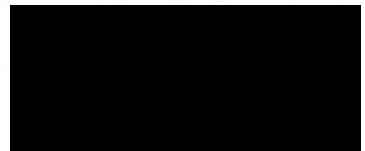
A. Research/Citation	B. Relevant Outcome(s)/Relevant Finding(s)	C. Project Component(s)/Overlap of Populations and/or Settings
<p>Assouline, S. G., Ihrig, L. M., & Mahatmya, D. (2017). Closing the Excellence Gap: Investigation of an Expanded Talent Search Model for Student Selection Into an Extracurricular STEM Program in Rural Middle Schools. <i>Gifted Child Quarterly</i>, 61(3), 250-261. https://doi.org/10.1177/0016986217701833</p>	<p>An expanded talent search model was used to differentiate among high-achieving 5th grade students in rural schools using above-level tests, using domain-specific potential to broaden the talent pool and increase accessibility for rural students.</p> <p>(Table 3, pg. 256) Logistic regression analysis and calculation of odds ratios found that no psychosocial measures significantly impacted the likelihood of identification, math and science scores significantly predicted the likelihood of identification, and that gender had no significant effect on the likelihood of identification.</p> <p>(Table 4, pg. 257) Repeated-measures ANOVA was used to analyze the impact of program identification and participation on math and science achievement. All students improved in math achievement, with main effects for identification and gender (higher performance in males). All students also improved in science achievement, but identification was the only significant between-subjects effect. Thus, program participation successfully developed potential in identified students.</p>	<p>The study investigated the effectiveness of an expanded talent search model using domain-specific testing for 219 rural Midwestern students (grades 5-9) for gifted programming identification by allowing a broader talent pool of rural students, especially for those with STEM talents (p. 259). This study sample overlaps with both the populations (e.g., underserved twice-exceptional students, low income) and settings (e.g., rural populations) proposed for the project.</p>
<p>Foley-Nicpon, M., Assouline, S. G., Kivlighan, D. M., Fosenburg, S., Cederberg, C., & Nanji, M. (2017). The impact of a social and talent development intervention for high ability youth with social skill deficits. <i>High Ability Studies</i>, 28(1), 73-92. https://doi.org/10.1080/13598139.2017.1298997</p>	<p>A group social skills intervention was found to be effective for psychosocial factors in high-ability youth involved in a talent development program.</p> <p>(Table 3, p. 84) The social skills intervention was significantly more effective than the comparison condition for some adjusted friendship quality scores, suggesting that the intervention had a significant and positive</p>	<p>The study found support for including psychosocial skills interventions within talent development programs, and also found that all 43 children (3rd - 7th grade) who attended the talent development program saw improvements in perceived enjoyment and friendship quality (p. 87). This study overlaps in population and project components as it tested an intervention with an underserved group of twice-exceptional youth, and found that social skills</p>

	<p>impact on seeking help within friendships but not for companionship, conflict, security, or closeness.</p> <p>(Table 4, p. 85) Participant goal orientation was negatively and significantly related to post-treatment friendship closeness, but not related to companionship, conflict, help, or security. Findings indicate that gifted students may have difficulty with friendships in part due to performance goal orientations.</p>	<p>interventions can have both psychosocial and talent outcomes, and talent development programs can improve friendship qualities.</p>
<p>Ali, S. R., Yang, L.-Y., Button, C. J., & McCoy, T. T. H. (2012). Career education programming in three diverse high schools: A critical psychology-case study research approach. <i>Journal of Career Development, 39</i>(4), 357-385. https://doi.org/10.1177/0894845311398131</p>	<p>A career education program (FICE, Table 1, p. 364-365) was associated with increased self-efficacy and career aspirations (Table 3, 4, & 5, p. 371-373; Table 7, p. 374). Implementation of the program varied across three differing rural schools (Table 2, p. 367).</p>	<p>Findings of this study expand knowledge of development, implementation, and evaluation of career education programs in diverse high schools (p. 378). This study overlaps in population and project components as it examined the development, implementation, and evaluation of a career development program in multiple ethnically and economically diverse rural high schools using the same theoretical approach (SCCT).</p>



DEPARTMENT OF HEALTH & HUMAN SERVICES

Program Support Center
Financial Management Portfolio
Cost Allocation Services



January 28, 2021

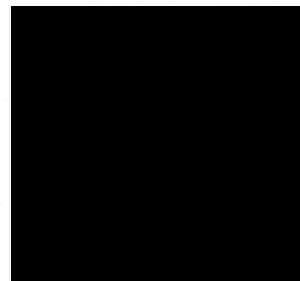
Mr. Terry L. Johnson
Chief Financial Officer and Treasurer
University of Iowa
105 Jessup Hall
Iowa City, IA 52242

Dear Mr. Johnson:

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

In addition, your FB cost rate(s) for the fiscal year ending June 30, 2022 based on actual costs for the fiscal year ended June 30, 2020 and FB cost rates for the fiscal year ending June 30, 2021 based on actual costs for the fiscal year ended June 30, 2019 under-recovered (-) or over-recovered (+) amounts are listed below:

Clinical Faculty:
Fellows:
Post-Doctoral/Graduate Assistants:
Non-Clinical Faculty:
Professional & Scientific:
Temporary Staff:
Composite:



The fixed rate(s) for the fiscal years ended June 30, 2019 and June 30, 2020 are considered final.

Mr. T.L. Johnson
January 28, 2021
Page 2 of 2

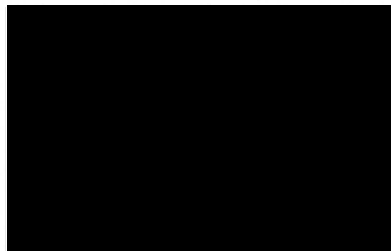
Please indicate your concurrence with this condition by counter-signing this letter below and returning it to me.

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

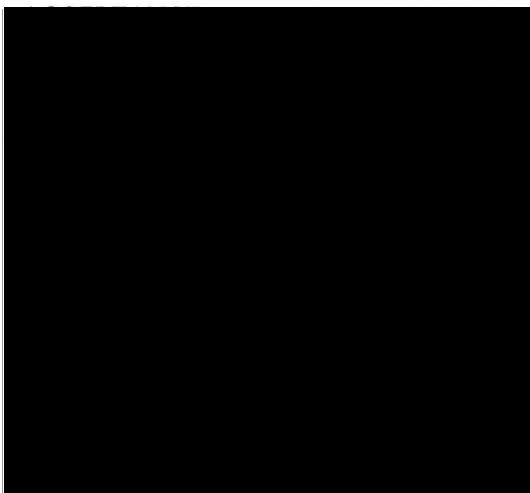
A Fringe Benefit cost proposal, together with supporting information and the certified audit financial statement, is required each year. Thus, your next Fringe Benefit cost proposal based on actual costs for the fiscal year ending June 30, 2021 is due in our office by December 31, 2021. Your next Facilities and Administrative cost rate proposal based on actual costs for the fiscal year ending June 30, 2021 is due in our office by December 31, 2021. Please submit your proposal electronically via email to [REDACTED].

Since this is an integral part of the negotiation agreement, please note your acceptance by signing in the space provided below of this letter.

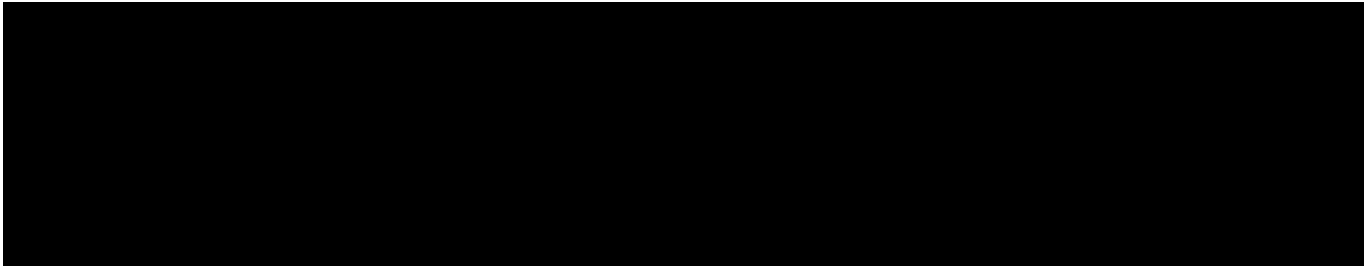
Thank you for your cooperation.



Enclosures



COLLEGES AND UNIVERSITIES RATE AGREEMENT



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

SECTION I: INDIRECT COST RATES

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

EFFECTIVE PERIOD

<u>TYPE</u>	<u>FROM</u>	<u>TO</u>	<u>RATE (%)</u>	<u>LOCATION</u>	<u>APPLICABLE TO</u>
PRED.	07/01/2018	06/30/2019			Organized Research
PRED.	07/01/2019	06/30/2022			Organized Research
PRED.	07/01/2018	06/30/2022			Instruction
PRED.	07/01/2018	06/30/2019			Other Sponsored Activities
PRED.	07/01/2019	06/30/2022			Other Sponsored Activities
PRED.	07/01/2018	06/30/2019			All Programs
PRED.	07/01/2019	06/30/2022			Other Sponsored Activities
PRED.	07/01/2019	06/30/2022			Org. Research & Instruction
PROV.	07/01/2022	Until Amended			Use same rates and conditions as those cited for fiscal year ending June 30, 2022.

ORGANIZATION: University of Iowa

AGREEMENT DATE: 1/28/2021

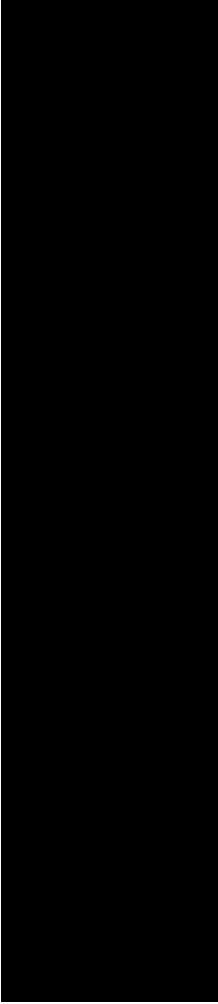
*BASE

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

ORGANIZATION: University of Iowa

AGREEMENT DATE: 1/28/2021

SECTION I: FRINGE BENEFIT RATES**

<u>TYPE</u>	<u>FROM</u>	<u>TO</u>	<u>RATE (%)</u>	<u>LOCATION</u>	<u>APPLICABLE TO</u>
FIXED	7/1/2020	6/30/2021			Clinical Faculty
FIXED	7/1/2020	6/30/2021			Fellows
FIXED	7/1/2020	6/30/2021			Post Docs & G.A.'s
FIXED	7/1/2020	6/30/2021			Non-Clinical Faculty
FIXED	7/1/2020	6/30/2021			Professional & Scientific
FIXED	7/1/2020	6/30/2021			Temporary Staff
FIXED	7/1/2020	6/30/2021			Composite
FIXED	7/1/2021	6/30/2022			Clinical Faculty
FIXED	7/1/2021	6/30/2022			Fellows
FIXED	7/1/2021	6/30/2022			Post Docs & G.A.'s
FIXED	7/1/2021	6/30/2022			Non-Clinical Faculty
FIXED	7/1/2021	6/30/2022			Professional & Scientific
FIXED	7/1/2021	6/30/2022			Temporary Staff
FIXED	7/1/2021	6/30/2022			Composite
PROV.	7/1/2022	Until amended			Use same rates and conditions as those cited for fiscal year ending June 30, 2022.

** DESCRIPTION OF FRINGE BENEFITS RATE BASE:

Salaries and wages.

ORGANIZATION: University of Iowa

AGREEMENT DATE: 1/28/2021

SECTION II: SPECIAL REMARKS

TREATMENT OF FRINGE BENEFITS:

The fringe benefits are charged using the rate(s) listed in the Fringe Benefits Section of this Agreement. The fringe benefits included in the rate(s) are listed below.

TREATMENT OF PAID ABSENCES

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

OFF-CAMPUS DEFINITION: For all activities performed in facilities not owned by the institution and to which rent is directly allocated to the project(s) the off-campus rate will apply. Grants or contracts will not be subject to more than one F&A cost rate. If more than 50% of a project is performed off-campus, the off-campus rate will apply to the entire project.

FRINGE BENEFITS:

FICA	Post Employment Retirement Benefit
Disability Insurance	Worker's Compensation
Life Insurance	Unemployment Insurance
Health Insurance	Dental Insurance
Death Benefit	Waiver of TIAA/CREF Retirement Premium
Dividend Allocation	Early Retirement Incentive Program
Retirement	Vacation & Sick Leave Termination Payouts

This Rate Agreement reflects new Fringe Benefits Rates only.

The next fringe benefit rate proposal, based on actual costs for the fiscal year ending June 30, 2021, is due in our office by December 31, 2021. The next indirect cost rate proposal, based on actual costs for the fiscal year ending June 30, 2021, is due in our office by December 31, 2021.

Equipment means tangible personal property (including information technology systems) having a useful life of more than one year and a per-unit acquisition cost which equals or exceeds the lesser of the capitalization level established by the non-Federal entity for financial statement purposes, or

██████████

ORGANIZATION: University of Iowa

AGREEMENT DATE: 1/28/2021

SECTION III: GENERAL

A. LIMITATIONS:

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

B. ACCOUNTING CHANGES:

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

C. FIXED RATES:

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

D. USE BY OTHER FEDERAL AGENCIES:

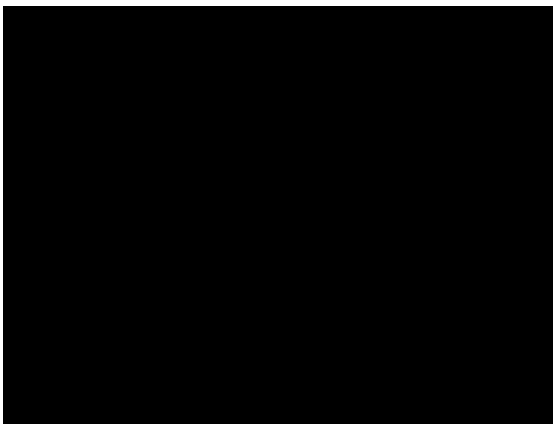
The rates in this Agreement were approved in accordance with the authority in Title 2 of the Code of Federal Regulations, Part 200 (2 CFR 200), and should be applied to grants, contracts and other agreements covered by 2 CFR 200, subject to any limitations in A above. The organization may provide copies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

E. OTHER:

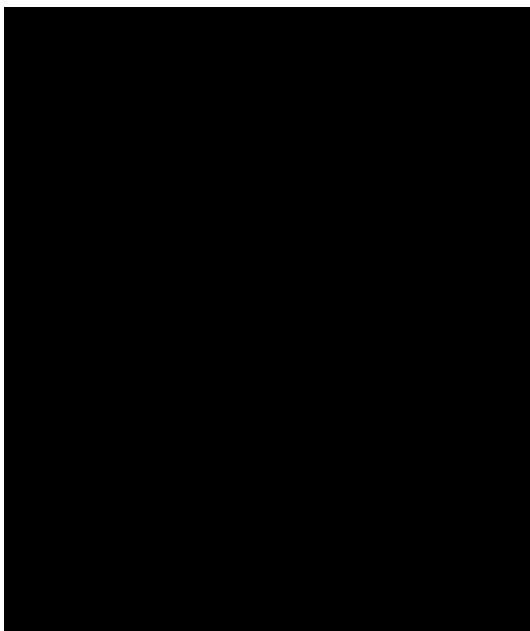
If any Federal contract, grant or other agreement is reimbursing facilities and administrative costs by a means other than the approved rate(s) in this Agreement, the organization should (1) credit such costs to the affected programs, and (2) apply the approved rate(s) to the appropriate base to identify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

BY THE INSTITUTION:

University of Iowa



ON BEHALF OF THE FEDERAL GOVERNMENT:



Budget Narrative File(s)

* **Mandatory Budget Narrative Filename:**

[Add Mandatory Budget Narrative](#)

[Delete Mandatory Budget Narrative](#)

[View Mandatory Budget Narrative](#)

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

[Add Optional Budget Narrative](#)

[Delete Optional Budget Narrative](#)

[View Optional Budget Narrative](#)

Budget Narrative

Innovations in Discovering and Developing Talented Twice-Exceptional Students (DD2E)

A budget of [REDACTED] is proposed for this five-year project. The project budget reflects a balance between costs that are essential to develop an effective program and conservative cost management measures. The proposed costs are presented for each year of the project. An explanation of the proposed costs by budget category is provided in the following paragraphs.

Year 1**PERSONNEL** ([REDACTED])

Susan Assouline (UI Project Director). [REDACTED] 3% annual effort. FY23 base salary = [REDACTED]. Salary includes a 3% cost-of-living increase per year. **DUTIES:** Assouline will oversee the administrative and financial aspects of the project and personnel management. Assouline will work with Belin-Blank Center colleagues to coordinate the evaluation of the group-administered assessments and the comparison with the clinic model of assessment. She will contribute to the professional development workshops and materials and will write up results for publication in scholarly journals and presentations at national conferences. She will co-supervise the graduate assistant assigned to data management and refining screening and identification models. **IMPORTANCE TO PROJECT:** Assouline holds the Blank Endowed Chair in Gifted Education and is director of the Belin-Blank Center. She is an active researcher with expertise in talent development, mathematically talented students, talented and gifted education in rural settings, and twice-exceptionality. Assouline will ensure that the resources of the Belin- Blank Center are available to project staff as needed.

Saba Rasheed Ali (UI Co-Project Director). [REDACTED] 3% academic year and one summer month. FY23 base salary = [REDACTED]. Salary includes a 3% cost-of-living increase per year. **DUTIES:** Ali will coordinate the implementation of TICE2E in the partner schools, supervise the graduate assistant assigned to implementation of the career education components of TICE2E, and be responsible for writing up results for publication in scholarly journals and presentations at national conferences. **IMPORTANCE TO PROJECT:** Ali has extensive experience developing and implementing social cognitive career theory-based interventions with middle school students. Over the last 15 years, she has implemented career interventions to over 1000 students with high populations of underrepresented students. Ali will ensure that TICE2E modifications and implementation align with best practices.

Megan Foley Nicpon (UI Co-Project Director). [REDACTED] 5% academic year and one summer month. FY23 base salary = [REDACTED]. Salary includes a 3% cost-of-living increase per year. **DUTIES:** Foley-Nicpon will assist with onsite consultation regarding twice-exceptional student identification and intervention, modify the TICE curriculum to be specific for twice-exceptional youth (TICE2E), assist with professional development and other ongoing training opportunities, and partner with existing COE teacher training programs. She will supervise the graduate assistant who is assigned to the development of the professional development materials and workshops. Foley-Nicpon will be responsible for writing up results for publication scholarly journals and presentations at national conferences.

IMPORTANCE TO PROJECT: Foley-Nicpon brings more than 16 years of clinical and research experience working with twice-exceptional students. She will ensure that talent identification methods align with appropriate talent development opportunities and comprehensive assessment for twice-exceptional students.

Duhita Mahatmya (UI Co-Project Director). [REDACTED] 12% annual effort per year. FY23 base salary = [REDACTED] Salary includes a 3% cost-of-living increase per year. **DUTIES:** Mahatmya will design and monitor continuous improvement procedures and evaluate quality of project services in the operation of DD2E. She will also oversee the data collection protocol, data analysis, data cleaning, and interpretation of results related to TICE2E implementation. She will co-supervise the graduate assistant assigned to data management across all components of the project. Mahatmya will assist in writing up results for publication in scholarly journals and presentations at national conferences. **IMPORTANCE TO PROJECT:** Mahatmya will play a critical role in ensuring that appropriate methods and measures are selected to evaluate progress and outcomes related to project objectives.

Brandon LeBeau (Statistician). [REDACTED] 3% academic year. FY23 base salary = [REDACTED] Salary includes a 3% cost-of-living increase per year. **DUTIES:** LeBeau will develop, test, and refine new screening methods that aim to broaden the talent pool and include high ability students with disabilities; conduct latent profile analysis of students' ability, achievement, and psychosocial data; obtain new twice-exceptional data sources and migrate them into a shared, secure platform for analysis to estimate prevalence, and prepare reports and publications for dissemination. **IMPORTANCE TO PROJECT:** LeBeau is an associate professor in the Education Measurement and Statistics Program, who will provide expertise in statistical and computational modeling of complex datasets.

Katherine Schabilion (Licensed Psychologist). [REDACTED] 15% annual effort in year 1. FY23 base salary = [REDACTED] Salary includes a 3% cost-of-living increase per year. **DUTIES:** Schabilion will assist in the development and refinement of new screening methods that identify high ability students with disabilities; develop professional development modules and assist with the on-campus and on-site professional development and consultation; provide individual assessments for students screened as potentially twice-exceptional; and conduct site visits at partner schools to provide on-going consultation to teachers. **IMPORTANCE TO PROJECT:** Dr. Schabilion is a licensed psychologist in the Belin-Blank Center's Assessment and Counseling Clinic. She will be instrumental in coordinating and conducting the comprehensive individualized assessments.

Graduate Research Assistants. [REDACTED] Three 50% fiscal year graduate assistants. FY22 base salary for fiscal year GA is [REDACTED]/student. Salary includes a 2.5% cost-of-living increase per year. **DUTIES:** GA's will deliver the programmatic activities for DD2E and assist in all data management tasks. Under the direction of Assouline, LeBeau, and Mahatmya, they will ensure that all data collection and analysis needs are met. Under the direction of Foley-Nicpon, they will organize and participate in professional development activities. Under the direction of Ali and Foley-Nicpon, they will be responsible for consulting with teachers regarding TICE2E curriculum in the schools and facilitating small group sessions. **IMPORTANCE TO PROJECT:** GAs will be critical in the daily

monitoring of data collection and analysis needs, school implementation of TICE2E, and preparation of presentations, publications, and other required grant reporting.

FRINGE BENEFITS [REDACTED]

University of Iowa employees, faculty, staff, and students, have fringe benefits entitlements associated with their University appointments. The fringe benefits pool method establishes different employee groups, each of which includes employees with similar fringe benefits entitlements. Computations for benefits are based employees’ base salary. Fringe benefits rates for the employees in Year 1 are provided below.

Year One Fringe	Fringe Rate (%)	Fringe Amount
Faculty (Assouline, Ali, Foley-Nicpon, LeBeau)	30.5%	[REDACTED]
P&S (Mahatmya, Schabilion)	39.2%	[REDACTED]
Graduate Assistants (GAs)	19.1%	[REDACTED]

TRAVEL (\$3,999)

Travel for 3 project staff to 3 participating schools each year. Average RT of 150 miles (Fleet service car [REDACTED])

[REDACTED] During these on-site visits, project staff will consult with school personnel about how to implement nontraditional identification models and provide education interventions (e.g., TICE2E) to 2e students.

SUPPLIES [REDACTED]

Testing: **I-Excel** @ [REDACTED] student x 400 students. **CogAT** @ [REDACTED] tudent x 400 students. Testing materials are necessary to gather students’ ability and aptitude data, and to identify gifted and talented students.

CONTRACTUAL [REDACTED]

Matt Makel, John Hopkins University. 8% FY effort in Year 1. Dr. Makel is researcher who will consult on the prevalence estimation study. He will consult with LeBeau to obtain data sources to create prevalence estimates and migrate them into a shared secure platform; create relevant datasets and execute data cleaning, analysis, and triangulation protocols across all datasets for prevalence estimates; and prepare a technical manual with data procedures and findings. He will also provide consultation to the grant team on aligning grant activities to be informed by results of prevalence estimate studies.

OTHER [REDACTED]

Stipends to School Districts @ [REDACTED] per school district x 3 districts to assist with data collection and project implementation. Total = [REDACTED].

Stipends for Teachers @ [REDACTED] to attend on-site 2-day professional development x 30 teachers. Total = [REDACTED].

GA tuition scholarships. [REDACTED]. The University of Iowa Graduate College assures that students holding a 25% or greater teaching or research assistantship appointment receive a tuition scholarship. FY22 GA Tuition and fees in Year 1 = [REDACTED] x 3 GAs. Total = [REDACTED]. Subsequent project years include increase of 3% per year.

TOTAL DIRECT COSTS FOR YEAR 1: [REDACTED]

INDIRECT COSTS FOR YEAR 1: [REDACTED] Indirect costs are calculated at the approved rate of 54.5% MTDC (indirect costs minus graduate tuition scholarship and all but first [REDACTED] of subcontract).

TOTAL COSTS FOR YEAR 1: [REDACTED]

Year 2 We will continue to iteratively develop, test, and refine new screening methods and profile analysis. We will also pilot TICE2E and new screener.

PERSONNEL ([REDACTED])

Susan Assouline (UI Project Director). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Saba Rasheed Ali (UI Co-Project Director). [REDACTED]. Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Megan Foley Nicpon (UI Co-Project Director). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Duhita Mahatmya (UI Co-Project Director). [REDACTED]. Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Brandon LeBeau (Statistician). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Katherine Schabilion (Licensed Psychologist). [REDACTED]. Annual effort increases to 20%. Salary includes a 3% cost-of-living increase per year.

Graduate Research Assistants. [REDACTED]. Salaries include a 2.5% cost-of-living increase per year. Three 50% fiscal year graduate assistants. Project responsibilities remain the same.

FRINGE BENEFITS ([REDACTED])

The University of Iowa fringe benefits projected rates for the employees in Year 2 are provided below.

Year Two Fringe	Fringe Rate (%)	Fringe Amount
Faculty (Assouline, Ali, Foley-Nicpon, LeBeau)	30.6%	
P&S (Mahatmya, Schabilion)	39.3%	
Graduate Assistants (GAs)	19.6%	

TRAVEL (\$11,535)

Travel for 3 project staff to 3 participating schools each year. Average RT of 150 miles (Fleet service car [redacted])

[redacted] During these on-site visits, project staff will consult with school personnel about how to implement nontraditional identification models and provide education interventions (e.g., TICE2E) to 2e students.

Travel for 4 staff to attend conference for dissemination. [redacted]

SUPPLIES [redacted]

Testing: I-Excel @ [redacted]. CogAT @ [redacted]

Materials for comprehensive assessment @ [redacted]

CONTRACTUAL ([redacted])

Matt Makel, John Hopkins University. 4% FY effort in Year 2. Project responsibilities remain constant

OTHER ([redacted])

Stipends to School Districts @ [redacted]/school district x 3 districts to assist with data collection and project implementation. Total = [redacted]

Stipends for Teachers @ [redacted] to attend onsite 2-day professional development x 30 teachers. Total = [redacted]

GA tuition scholarships. [redacted] for three graduate assistants in Year 2. Subsequent project years include increase of 3% per year.

TOTAL DIRECT COSTS FOR YEAR 2: [REDACTED]

INDIRECT COSTS FOR YEAR 2: [REDACTED] Indirect costs are calculated at the approved rate of 54.5% MTDC (indirect costs minus graduate tuition scholarship and all but first [REDACTED] of subcontract).

TOTAL COSTS FOR YEAR 2: [REDACTED]

Year 3 We will continue to implement the final screener and TICE2E curriculum and provide individualized assessment at B-BC for students whose profiles match clinic data. We will provide ongoing professional development and consultation.

PERSONNEL [REDACTED]

Susan Assouline (UI Project Director). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Saba Rasheed Ali (UI Co-Project Director). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Megan Foley Nicpon (UI Co-Project Director). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Duhita Mahatmya (UI Co-Project Director). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Brandon LeBeau (Statistician). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Katherine Schabilion (Licensed Psychologist). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Graduate Research Assistants. [REDACTED] Salaries include a 2.5% cost-of-living increase per year. Three 50% fiscal year graduate assistants. Project responsibilities remain the same.

FRINGE BENEFITS [REDACTED]

The University of Iowa fringe benefits projected rates for the employees in Year 3 are provided below.

Year Three Fringe	Fringe Rate (%)	Fringe Amount
Faculty (Assouline, Ali, Foley-Nicpon, LeBeau)	30.7%	[REDACTED]
P&S (Mahatmya, Schabilion)	39.5%	[REDACTED]
Graduate Assistants (GAs)	20%	[REDACTED]

TRAVEL (\$11,535)

Travel for 3 project staff to 3 participating schools each year. Average RT of 150 miles (Fleet service car [REDACTED])

[REDACTED] During these on-site visits, project staff will consult with school personnel about how to implement nontraditional identification models and provide education interventions (e.g., TICE2E) to 2e students.

Travel for 4 staff to attend conference for dissemination. [REDACTED]

SUPPLIES [REDACTED]

Testing: I-Excel @ [REDACTED]. CogAT @ \$ [REDACTED]

Materials for comprehensive assessments @ [REDACTED]

CONTRACTUAL [REDACTED]

Matt Makel, John Hopkins University. 4% FY effort and includes a 3% cost of living increase in years 3-5. Project responsibilities remain constant.

OTHER ([REDACTED])

Stipends to School Districts @ [REDACTED] school district x 3 districts to assist with data collection and project implementation. Total = \$ [REDACTED]

Stipends for Teachers @ [REDACTED] to attend on-site 2-day PD x 30 teachers. Total = [REDACTED].

GA tuition scholarships. [REDACTED] for three graduate assistants in Year 3. Subsequent project years include increase of 3% per year.

TOTAL DIRECT COSTS FOR YEAR 3: [REDACTED]

INDIRECT COSTS FOR YEAR 3: [REDACTED]. Indirect costs are calculated at the approved rate of 52.5% MTDC (indirect costs minus graduate tuition scholarship and all but first [REDACTED] of subcontract).

TOTAL COSTS FOR YEAR 3: [REDACTED]

Year 4 We will continue to implement the final screener and TICE2E curriculum and provide individualized assessment at B-BC for students whose profiles match clinic data. We will provide ongoing professional development and consultation.

PERSONNEL ([REDACTED])

Susan Assouline (UI Project Director). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Saba Rasheed Ali (UI Co-Project Director). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Megan Foley Nicpon (UI Co-Project Director). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Duhita Mahatmya (UI Co-Project Director). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Brandon LeBeau (Statistician). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Katherine Schabilion (Licensed Psychologist). [REDACTED]. Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Graduate Research Assistants. [REDACTED] Salaries include a 2.5% cost-of-living increase per year. Three 50% fiscal year graduate assistants. Project responsibilities remain the same.

FRINGE BENEFITS ([REDACTED])

The University of Iowa fringe benefits projected rates for the employees in Year 4 are provided below.

Year Four Fringe	Fringe Rate (%)	Fringe Amount
Faculty (Assouline, Ali, Foley-Nicpon, LeBeau)	30.8%	[REDACTED]
P&S (Mahatmya, Schabilion)	39.7%	[REDACTED]
Graduate Assistants (GAs)	20.5%	[REDACTED]

TRAVEL (\$11,535)

Travel for 3 project staff to 3 participating schools each year. Average RT of 150 miles (Fleet service car [REDACTED])

[REDACTED] During these on-site visits, project staff will consult with school

personnel about how to implement nontraditional identification models and provide education interventions (e.g., TICE2E) to 2e students.

Travel for 4 staff to attend conference for dissemination. [REDACTED]

SUPPLIES ([REDACTED])

Testing: I-Excel @ [REDACTED] student x 600 students. CogAT @ [REDACTED]/student x 600 students. Total = [REDACTED]

Materials for comprehensive assessment @ [REDACTED]

CONTRACTUAL ([REDACTED])

Matt Makel, John Hopkins Univeristy. 4% FY effort and includes a 3% cost of living increase in years 3-5. Project responsibilities remain constant.

OTHER ([REDACTED])

Stipends to School Districts @ [REDACTED]/school district x 3 districts to assist with data collection and project implementation. Total = [REDACTED]

Stipends for Teachers @ [REDACTED] to attend on-ste 2-day PD x 30 teachers. Total = [REDACTED]

GA tuition scholarships. [REDACTED] for three graduate assistants in Year 4. Subsequent project years include increase of 3% per year.

TOTAL DIRECT COSTS FOR YEAR 4: [REDACTED]

INDIRECT COSTS FOR YEAR 4: [REDACTED]. Indirect costs are calculated at the approved rate of 52.5% MTDC (indirect costs minus graduate tuition scholarship and all but first [REDACTED] of subcontract).

TOTAL COSTS FOR YEAR 4: [REDACTED]

Year 5 We will provide ongoing professional development and consultation to participating schools and teachers. We will broadly disseminate project findings.

PERSONNEL ([REDACTED])

Susan Assouline (UI Project Director). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Saba Rasheed Ali (UI Co-Project Director). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Megan Foley Nicpon (UI Co-Project Director). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Duhita Mahatmya (UI Co-Project Director). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Brandon LeBeau (Statistician). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Katherine Schabilion (Licensed Psychologist). [REDACTED] Salary includes a 3% cost-of-living increase per year. Percent effort and project responsibilities remain constant.

Graduate Research Assistants. [REDACTED]. Salaries include a 2.5% cost-of-living increase per year. Three 50% fiscal year graduate assistants. Project responsibilities remain the same.

FRINGE BENEFITS [REDACTED]

The University of Iowa fringe benefits projected rates for the employees in Year 5 are provided below.

Year Five Fringe	Fringe Rate (%)	Fringe Amount
Faculty (Assouline, Ali, Foley-Nicpon, LeBeau)	31%	[REDACTED]
P&S (Mahatmya, Schabilion)	39.9%	[REDACTED]
Graduate Assistants (GAs)	21%	[REDACTED]

TRAVEL [REDACTED]

Travel for 3 project staff to 3 participating schools each year. Average RT of 150 miles (Fleet service car [REDACTED])

[REDACTED] During these on-site visits, project staff will consult with school personnel about how to implement nontraditional identification models and provide education interventions (e.g., TICE2E) to 2e students.

Travel for 4 staff to attend conference for dissemination [REDACTED]

SUPPLIES [REDACTED]

Testing: I-Excel @ [REDACTED]. CogAT @ [REDACTED]

Materials for comprehensive assessment @ [REDACTED]

CONTRACTUAL [REDACTED]

Matt Makel, John Hopkins University. 4% FY effort and includes a 3% cost of living increase in years 3-5. Project responsibilities remain constant.

OTHER ([REDACTED])

Stipends to School Districts @ [REDACTED]/school district x 3 districts to assist with data collection and project implementation. Total = [REDACTED]

Stipends for Teachers @ [REDACTED] to attend on-site 2-day PD x 30 teachers. Total = [REDACTED].

GA tuition scholarships. [REDACTED] for three graduate assistants in Year 5.

TOTAL DIRECT COSTS FOR YEAR 5: [REDACTED]

INDIRECT COSTS FOR YEAR 5: [REDACTED]. Indirect costs are calculated at the approved rate of 54.5% MTDC (indirect costs minus graduate tuition scholarship and all but first [REDACTED] of subcontract).

TOTAL COSTS FOR YEAR 5: [REDACTED]

TOTAL PROJECT COST: [REDACTED]



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:

University of Iowa

1. Project Objective:

Identify/Discover twice-exceptional students using nontraditional methods informed by clinical and educational best practice for delivery of talent development services and opportunities designed for twice-exceptional students.

1.a. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio	%	
Number of students who participate in nontraditional screening	PROJECT	400	/		

1.b. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio	%	
Number of students newly identified using nontraditional methods as gifted and talented under the program.	GPRA	60	/		

1.c. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio	%	
Number of underserved students newly identified using nontraditional methods as gifted and talented under the program.	GPRA	20	/		

1.d. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio	%	
Percentage of students newly identified as gifted and talented under the program who were served under the program.	GPRA		60 /	60	100.00

1.e. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio	%	
Percentage of underserved students newly identified as gifted and talented under the program who were served by the program.	GPRA		20 /	20	100.00

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

1.f. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio	%	
Of the students served under the program who were tested in grades, the percentage who made gains on State assessment in mathematics.	GPRA	300	/	400	75.00

1.g. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio	%	
Of the students served under the program who were tested in grades, the percentage who made gains on State assessment in science.	GPRA	300	/	400	75.00

1.h. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio	%	
Of the students served under the program who were tested in grades, the percentage who made gains on State assessment in reading.	GPRA	300	/	400	75.00

2. Project Objective:

Train educators and mental health professionals with the knowledge and skills to implement nontraditional screening and identification models and provide education interventions that prepare underrepresented students, especially twice-exceptional students, for high school, college, career, and civic life.

2.a. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio	%	
Number of teachers and other educators who receive services that enable them to better identify and improve instruction for gifted and talented students.	GPRA	30	/		

2.b. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio	%	
Number of teachers and mental health professions that attend annual professional development.	PROJECT	30	/		

2.c. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio	%	
Number of LEAs/AEAs implementing new identification models and education interventions.	PROJECT	3	/		

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

2.d. Performance Measure	Measure Type	Quantitative Data		
		Target		
		Raw Number	Ratio	%
Number of site visits and consultations conducted at LEAs/AEAs to support educators and mental health professional with implementation of identification models and education interventions.	PROJECT	6	/	

2.e. Performance Measure	Measure Type	Quantitative Data		
		Target		
		Raw Number	Ratio	%
Number of professional development workshops/modules developed focusing on twice-exceptionality.	PROJECT	2	/	

3. Project Objective:

Increase the number of educators from traditionally underrepresented backgrounds who are certified to identify and teach all gifted and talented students, including underrepresented students, specifically students who are gifted and have a disability (twice exceptional).

3.a. Performance Measure	Measure Type	Quantitative Data		
		Target		
		Raw Number	Ratio	%
Number of educators of color and/or with disabilities recruited into MATLCC program or Pipeline program.	PROJECT	10	/	

3.b. Performance Measure	Measure Type	Quantitative Data		
		Target		
		Raw Number	Ratio	%
Number of educators of color and/or with disabilities interested in talented and gifted (TAG) endorsement.	PROJECT	10	/	

4. Project Objective:

Broadly disseminate project results, models, and materials.

4.a. Performance Measure	Measure Type	Quantitative Data		
		Target		
		Raw Number	Ratio	%
Number of presentations (local, state, or national) delivered by project personnel.	PROJECT	4	/	

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

4.b. Performance Measure	Measure Type	Quantitative Data			
		Target			
		Raw Number	Ratio		%
Number of publications submitted by project personnel.	PROJECT	2	/		

INSTRUCTIONS GRANT APPLICATION FORM FOR PROJECT OBJECTIVES AND PERFORMANCE MEASURES INFORMATION

PURPOSE

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

GENERAL INSTRUCTIONS

Applicant Information

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

Project Objectives Information and Related Performance Measures Data

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

- **Project Objective:** Enter each project objective that is included in your grant application. When completing this form in Grants.gov, a maximum of 26 project objectives may be entered. Only one project objective should be entered per row. Project objectives should be numbered sequentially, i.e., 1., 2., 3., etc. If applicable, project objectives may be entered for each project year; however, the year to which the project objective applies must be clearly identified as is presented in the following examples:
 1. **Year 1.** Provide two hour training to teachers in the Boston school district that focuses on improving test scores.
 2. **Year 2.** Provide two hour training to teachers in the Washington D.C. school district that focuses on improving test scores.
- **Performance Measure:** For each project objective, enter each associated quantitative and/or qualitative performance measure. When completing this form in Grants.gov, a maximum of 26 quantitative and/or qualitative performance measures may be entered. There may be multiple quantitative and/or qualitative performance measures associated with each project objective. Enter only one quantitative or qualitative performance measure per row. Each quantitative or qualitative performance measure that is associated with a particular project objective should be labeled using an alpha indicator. Example: The first quantitative or qualitative performance measure associated with project objective "1" should be labeled "1.a.," the second quantitative or qualitative performance measure for project objective "1" should be labeled "1.b.," etc. If applicable, quantitative and/or qualitative performance measures may be entered for each project year; however, the year to which the quantitative and/or qualitative performance measures apply must be clearly identified as is presented in the following examples:

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

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

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

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

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

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

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

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

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

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



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

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

Name of Institution/Organization

University of Iowa

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: To: (mm/dd/yyyy)
 Approving Federal agency: ED Other (please specify):
 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))?

Name of Institution/Organization University of Iowa	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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**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 University of Iowa	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								0.00

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
<p>Assouline, S. G., Ihrig, L. M., & Mahatmya, D. (2017). Closing the Excellence Gap: Investigation of an Expanded Talent Search Model for Student Selection Into an Extracurricular STEM Program in Rural Middle Schools. <i>Gifted Child Quarterly</i>, 61(3), 250-261. https://doi.org/10.1177/0016986217701833</p>	<p>An expanded talent search model was used to differentiate among high-achieving 5th grade students in rural schools using above-level tests, using domain-specific potential to broaden the talent pool and increase accessibility for rural students.</p> <p>(Table 3, pg. 256) Logistic regression analysis and calculation of odds ratios found that no psychosocial measures significantly impacted the likelihood of identification, math and science scores significantly predicted the likelihood of identification, and that gender had no significant effect on the likelihood of identification.</p> <p>(Table 4, pg. 257) Repeated-measures ANOVA was used to analyze the impact of program identification and participation on math and science achievement. All students improved in math achievement, with main effects for identification and gender (higher performance in males). All students also improved in science achievement, but identification was the only significant between-subjects effect. Thus, program participation successfully developed potential in identified students.</p>	<p>The study investigated the effectiveness of an expanded talent search model using domain-specific testing for 219 rural Midwestern students (grades 5-9) for gifted programming identification by allowing a broader talent pool of rural students, especially for those with STEM talents (p. 259). This study sample overlaps with both the populations (e.g., underserved twice-exceptional students, low income) and settings (e.g., rural populations) proposed for the project.</p>
<p>Foley-Nicpon, M., Assouline, S. G., Kivlighan, D. M., Fosenburg, S., Cederberg, C., & Nanji, M. (2017). The impact of a social and talent development intervention for high ability youth with social skill deficits. <i>High Ability Studies</i>, 28(1), 73-92. https://doi.org/10.1080/13598139.2017.1298997</p>	<p>A group social skills intervention was found to be effective for psychosocial factors in high-ability youth involved in a talent development program.</p> <p>(Table 3, p. 84) The social skills intervention was significantly more effective than the comparison condition for some adjusted friendship quality scores, suggesting that the intervention had a significant and positive</p>	<p>The study found support for including psychosocial skills interventions within talent development programs, and also found that all 43 children (3rd - 7th grade) who attended the talent development program saw improvements in perceived enjoyment and friendship quality (p. 87). This study overlaps in population and project components as it tested an intervention with an underserved group of twice-exceptional youth, and found that social skills</p>

	<p>impact on seeking help within friendships but not for companionship, conflict, security, or closeness.</p> <p>(Table 4, p. 85) Participant goal orientation was negatively and significantly related to post-treatment friendship closeness, but not related to companionship, conflict, help, or security. Findings indicate that gifted students may have difficulty with friendships in part due to performance goal orientations.</p>	<p>interventions can have both psychosocial and talent outcomes, and talent development programs can improve friendship qualities.</p>
<p>Ali, S. R., Yang, L.-Y., Button, C. J., & McCoy, T. T. H. (2012). Career education programming in three diverse high schools: A critical psychology-case study research approach. <i>Journal of Career Development, 39</i>(4), 357-385. https://doi.org/10.1177/0894845311398131</p>	<p>A career education program (FICE, Table 1, p. 364-365) was associated with increased self-efficacy and career aspirations (Table 3, 4, & 5, p. 371-373; Table 7, p. 374). Implementation of the program varied across three differing rural schools (Table 2, p. 367).</p>	<p>Findings of this study expand knowledge of development, implementation, and evaluation of career education programs in diverse high schools (p. 378). This study overlaps in population and project components as it examined the development, implementation, and evaluation of a career development program in multiple ethnically and economically diverse rural high schools using the same theoretical approach (SCCT).</p>

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
<p>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: https://ies.ed.gov/ncee/wwc/PracticeGuide/22. This report was prepared under Version 3.0 of the WWC Handbook (p. 72).</p>	<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>	<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.</p>

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 https://ies.ed.gov/ncee/wwc/Intervention/1043. 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., & 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 https://ed.stanford.edu/sites/default/files/bettinger_baker_030711.pdf</p> <p>Meets WWC Group Design Standards without Reservations under review standards 2.1 (http://ies.ed.gov/ncee/wwc/Study/72030).</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

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