[1100094-1] Self-regulation and metacognition use in two national finalists for the Presidential Award for Excellence in Mathematics and Science Teaching: A phenomenological study exploring masterful mathematics instruction in high-poverty low-language classrooms

I. Principal Investigator

Name: Melissa Schneider  
Status: Graduate Student  
Credentials: M.A. in Education Administration, current RMS PhD student  
Phone: 303-681-5565  
Email: melissapeterson.schneider@du.edu  
Department: Education

II. Faculty Sponsor

Note: A faculty sponsor is required if the PI is a student or fellow, and the Faculty Sponsor MUST sign this package through IRBNet.

Name: Nicholas Cutforth  
Status: Faculty  
Credentials: PhD  
Phone: 303-871-2477  
Email: nicholas.cutforth@du.edu  
Department: Education

III. Co-Investigator

Name:  
Status:  
Credentials:  
Phone:  
Email:  
Department: 

IV. Administrative Contact

Name:  
Status:  
Credentials:  
Phone:  
Email:  
Department: 

[click for checklist]
V. Additional Personnel

<table>
<thead>
<tr>
<th>Name</th>
<th>Status</th>
<th>Role</th>
</tr>
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VI. Funding Information

Project Funding: ☑ No ☐ Yes ☐ Pending

☐ Grant/Contract: Please attach human subjects section of your funding proposal.
SPA #: Admin. By:
Source: PI on Grant:
Proposal Title:
Funds to be used for participant compensation?

☐ Fellowship:
Fellow: Fellowship #:
Source: Admin. By:

☐ Departmental:

☐ Gift / Other:
Description:
Source: POC Name:
Contact Info.:

Do all personnel on this project have a current COI Disclosure on file with ORSP?
☐ Yes
☐ No [contact the ORSP; research may not begin until all disclosures have been filed]

Do any of the personnel on this project have a disclosed COI for this project?
☐ Yes
☐ No

If yes: Is there a management plan for all disclosed conflicts for this project?
☐ Yes
☐ No [contact the ORSP for additional information]
VII. Participant Compensation

Compensation Method:
- ☐ All participants will be compensated for participation
- ☐ Entered into a lottery

Total Potential Compensation Per Participant:

Compensation Type:
- ☐ Gift or gift card
- ☐ Monetary
- ☐ Class credit

Is payment conditional upon completion of research?
- ☐ Yes
- ☐ No

VIII. Review Information

Lay Summary:
This study involves interviewing two elementary school math teachers who have both been nominated for the 2016 Presidential Award for Excellence in Mathematics and Science Teaching (PAEMST) and have both received advancement to national finalist status. The participants are past colleagues of the PI in this study and have a trusted relationship already established with the PI. Both participants have agreed to be interviewed individually for 1 hour, and contacted as a follow-up for a member check of the interview transcript and study-write-up. The study will examine, through a series of interview questions, how the participants employ self-regulation and metacognition as part of their pedagogical practices, and their lived experiences in achieving a level of mastery in their teaching of high-poverty, low-language students. The participants will each be interviewed at a public location (cafe or coffee shop) and time of their choice. The PI will record the interview, transcribe, and code it for use in a phenomenological paper that describes the teaching experiences and skills of these two teachers. The purpose and hope for this study is to be able to articulate the thought processes and instructional strategies specifically used by these two masterful teachers and offer the information to other teachers, principals, and instructional coaches as meaningful guidance in expert teaching.

Requested Review Path:
- ☑ Not Human Subjects Research
  [complete the Exempt Application form]
- ☑ Classroom Research
  [complete the Exempt Application form]
- ☑ Exempt
  [complete the Exempt Application form]
- ☑ Expedited
  [complete a protocol narrative]
[complete a protocol narrative]

- Request for Ceded Review
  [contact the IRB Office for additional information]
- Non-DU Researcher
  [contact the IRB Office for additional information]

Protocol Type:
- Biomedical
- Social/Behavioral/Educational Research

**IX. Performance Sites**

Performance Sites:

- University of Denver:
  - University Health Center
  - Graduate School of Social Work
  - Professional Psychology
  - University Technology Services
  - Human Resources
  - None of the above

- University of Colorado:
  - CU - Boulder
  - CU - Colorado Springs
  - UC - Denver: Downtown
  - UC - Denver: Anschutz Medical Campus

- School Districts:
  - Denver Public Schools
  - Boulder School District
  - Aurora Public Schools
  - JeffCo Public Schools
  - Littleton Public Schools
  - Other public schools
  - Private schools
  - Other schools:

- International Sites:

- Other Sites:

Multi-site study?
- Yes [complete Multi-site/Non-DU Collaborators form]
- No
Research includes non-DU collaborators?

☐ Yes [complete Multi-site/Non-DU Collaborators form]
☑ No

X. Project Information

Study Population:

☑ Normal adults / healthy volunteers
☐ Cognitively impaired individuals
☐ Individuals with low socio-economic status (only if targeted)
☐ Hospital patients or outpatients
☐ Illiterate persons
☐ Neonates
☐ Children/minors, age range:
☐ Non-English speakers [provide translated documents with this submission]
☐ Pregnant women (only if targeted)
☐ Prisoners
☐ College students
☐ DU employees
☐ Other specific population:

If non-English speakers: Using a translator during consent or research process?

☐ Yes [provide an unsigned translator agreement with this submission]
☐ No

Research Procedures:

☐ No non-biomedical procedures will be used
☐ Records review - retrospective [provide Data Use Agreement or Coded Information Agreement (see Guidance on Data Use, Privacy and Confidentiality)]
☐ Records review - prospective [provide Letter of Permission to Access]
☐ Use of pre-existing data
☐ Educational setting research
☐ Behavioral intervention
☐ Behavioral observation
☐ Questionnaires/surveys [include questions with submission]
☑ Interviews [include script with submission]
Audio/video recording
[include template language in consent document]

Other:

If using pre-existing data: Have an existing Data Use Agreement?
☐ Yes [attach Data Use Agreement with submission]
☐ No [contact the IRB Office if a Data Use Agreement is not in process]

Biomedical Procedures:
☐ Clinical testing
☐ Radiology
☐ Radiation/X-ray/DEXA
☐ fMRI
☐ Other:

☑ No biomedical procedures will be used
☐ Pregnancy screening
☐ EKG
☐ EEG
☐ Genetic analysis

Study involves use of human blood, cells, tissues, or body fluids (tissues)?
☐ Yes
☑ No

If yes: Human tissues will be stored for future research projects?
☐ Yes
☐ No

Other Special Considerations:
☐ International research
[complete International Research form]
☐ Use of secondary data only
☐ Genetic testing
[include GINA language in consent document]
☐ Use of investigational drugs, reagents, or chemicals
[complete Biomedical Research form]
☐ Administration of commercially available drugs, reagents, or chemicals (even if not being studied)
☐ Medical devices (investigational or FDA approved)
[complete Research Involving Medical Device form]
☐ Deception
[complete Research Involving Deception form; request full or partial waiver of consent in Consent Process/Waivers form; provide Debriefing form]
☐ Use of the Internet in data collection or recruitment
[complete Research Involving Internet form]
XI. Consent and Authorization

Informed Consent:

☑ Fully Informed consent will be prospectively obtained from subjects and documented with a signed, written consent form.  
[provide consent document with submission]

☐ Informed consent will be obtained from subjects; however, a waiver of documentation of informed consent has been requested. This includes oral consent, implied consent (e.g., completing a survey).

☐ Fully informed consent will not be obtained from all subjects. A waiver of full or partial consent is included here. This includes deception, withholding information, etc.

Protected Health Information:

☑ No

☐ Yes, data are de-identified or constitute a limited data set.

☐ Yes, subject's authorization will be obtained or a waiver or alteration of authorization will be requested. 
[complete Research Involving Protected Health Information form]

XII. Assurances and Signatures

Assurances
This research, once approved, is subject to continuing review and approval by the IRB. The principal investigator will maintain records of this research according to IRB guidelines. If these conditions are not met, approval of this research could be suspended or terminated.

Electronic signatures certify that:

• The signatory agrees that he or she is aware of the policies on research involving participants of the University of Denver and will safeguard the rights, dignity, and privacy of all participants.

• The information provided in this application form is correct.

• The principal investigator will seek and obtain prior written approval from the IRB for any substantive modification in the proposal, including but not limited to changes in cooperating investigators/agencies as well as changes in procedures.

• Unexpected or otherwise significant adverse events in the course of this study which may affect the risks and benefits to participation will be reported to the IRB.

• The research will not be initiated and subjects cannot be recruited until final written approval is granted.

The following signatures are required for new project submissions:

• Principal Investigator

• Faculty Sponsor (if applicable)
INSTRUCTIONS TO RESEARCHERS

Thank you for completing the University of Denver IRB Application Form. Review the contents of this form for accuracy and completeness, upload additional required documents, and obtain any signatures necessary (including the PI) for this submission before submitting the package to the IRB. For additional guidance related to documents required for review by the DU IRB, please see the READ ME FIRST document in the IRBNet Forms and Templates Library.

Based on your responses, the following additional documentation must be included with this package before submission. Upload additional documentation in the Designer.

**Required documents (available in the IRBNet Forms and Templates Library) and next steps:**

- Provide your faculty sponsor with Full access in IRBNet
- Complete a protocol narrative
- Include interview scripts with submission
- Provide consent document with submission

If you have any questions, please refer to the guidelines in the IRBNet Forms and Templates Library or contact the IRB office at 303-871-4052 or irbadmin@du.edu.