



EXAMINING UNDERGRADUATE STUDENTS' EXPERIENCES WITH HANDS-ON GERONTOLOGY RESEARCH

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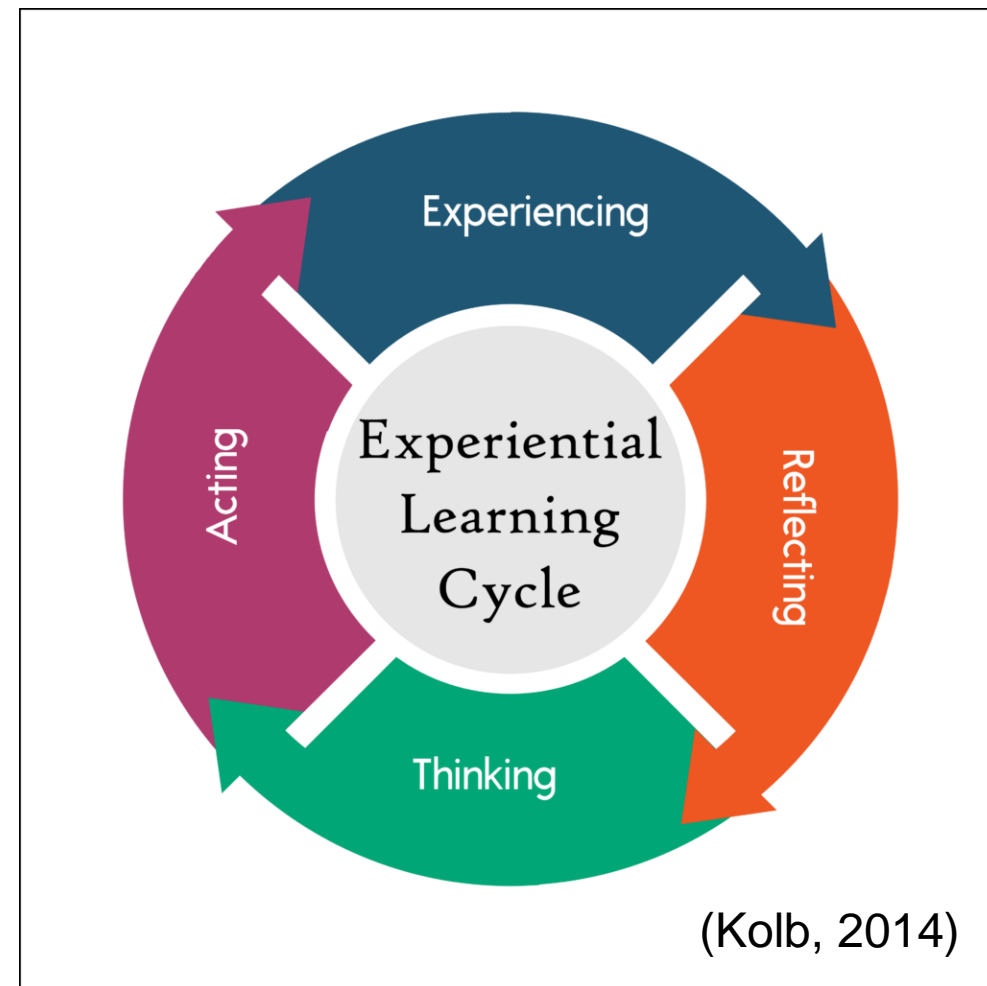
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Engaging Undergraduate Students in Gerontology

- Experiential Learning Framework
- Often used by gerontology educators through:
 - Service learning opportunities
 - Course interview projects
 - **Research assistant involvement**





Undergraduate Researchers in Gerontology

Little research on undergraduate students' experiences as gerontology research assistants

- *Prepares* students for *real-world situations* and *future career* (Lovell et al., 2018)
- Successful research environments emphasize *collaboration, communication, and positive relationships* (Jones, 1994; Howell & Peterson, 2022; Mitchell et al., 2019)

This presentation:

- **Participatory Case Study** drawing on experience of undergraduate researchers conducting gerontology research

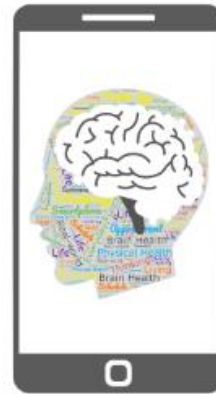


TRAILS: the Tracking Real-world Activities in Life Study

Pilot study designed to:

(1)

Explore connections between cognitive, physical, and everyday functioning



TRAILS

Tracking Real-world
Activities in Life Study

(2)

Test the acceptability & validity of an interactive mobile app for early detection of cognitive decline



Objectives of the Current Investigation

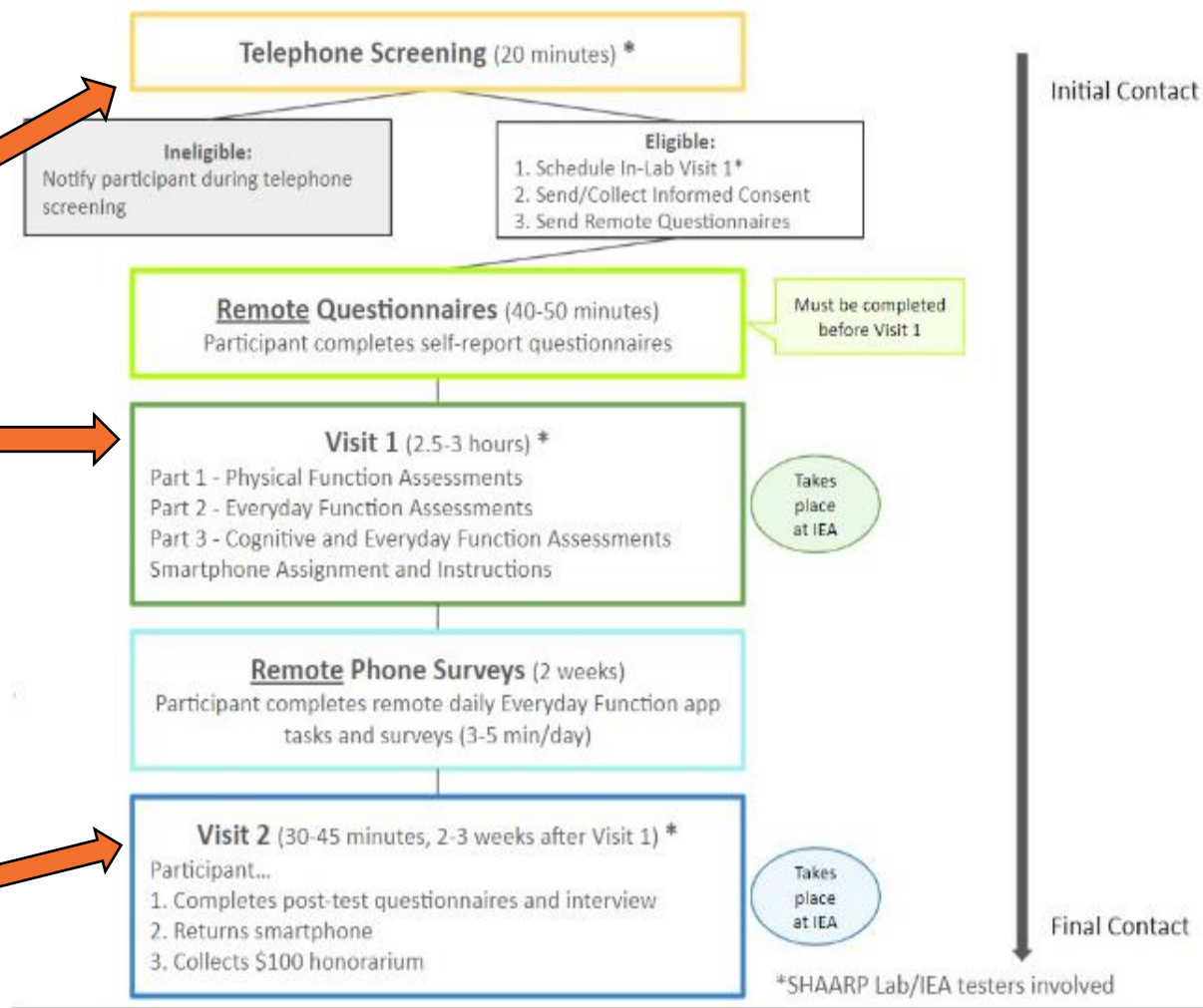
We wanted to know:

- What did students ***gain*** from their experience as research assistants on TRAiLS?
- What ***worked well*** to make these gains possible?
- What could be ***improved*** in the future?



UR responsibilities on TRAiLS:

- Training & certification for screening and visits
- Telephone screening and reminder calls
- Visit 1: 2-3 hours w/ physical, cognitive, and everyday function assessments, mobile study phone & app set-up; UR worked in pairs with measure administration and data recording
- Visit 2: 1 hour follow up interview, collecting mobile phone for app data





Methods: Sample

$N = 10$ undergraduate students at Clemson University

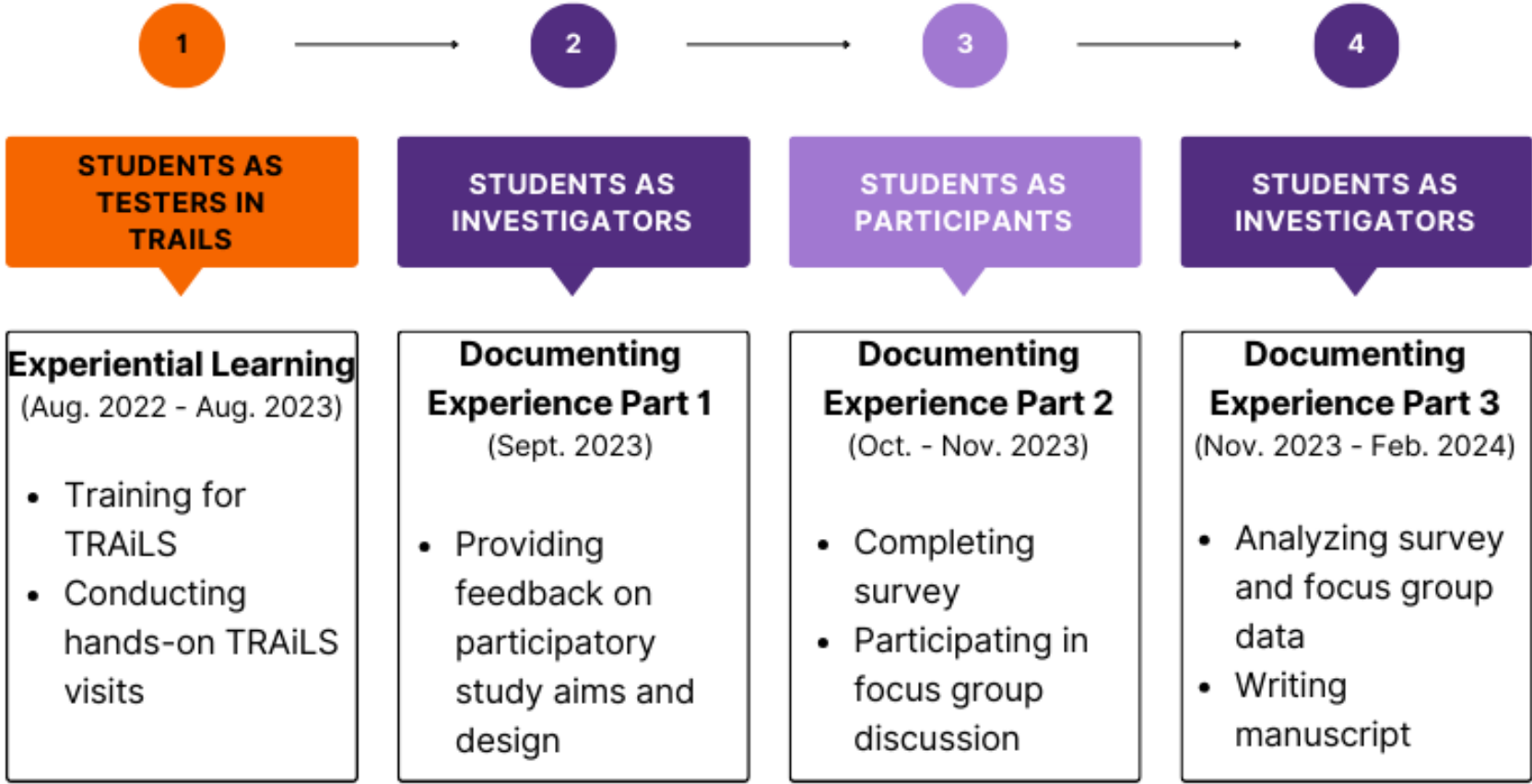
$N = 1$ undergraduate student at Furman University

Gender	Male = 4 Female = 7
Major	Biology/Health Sciences = 4 Psychology = 7
Class Standing	Sophomore = 2 Junior = 6 Senior = 3
Number of Semesters Involved in Lab*	Zero = 8 One = 2 Two = 0 Three = 1

**Zero semesters involved in lab indicates students that began in the lab the same semester TRAILS began*



Methods: Procedure





Methods: Measures

Quantitative Data

Scale	# of Items
Demographic Information	4
Telephone Screening Training Efficacy (TTS)	6
Visit 1 Training Efficacy (TV1)	6
Overall Experience (Exper)	9
Perceived Gains (GAIN)	5
Experiencing Scale (ExpL) (Stock & Kolb, 2021)	18

Qualitative Data

Source	# of ?s
Survey – Training Experience	4
Survey – Overall Experience	4
Survey – General	6
Focus Groups – Worked Well, Areas for Improvement, Gains from Experience	7



Methods: Data Analysis

Quantitative Analysis

- Descriptive Statistics

Qualitative Analysis

1. Preliminary Coding (115 codes)
2. Categorizing & Consolidating (23 codes)
3. Generating Themes (3 themes)



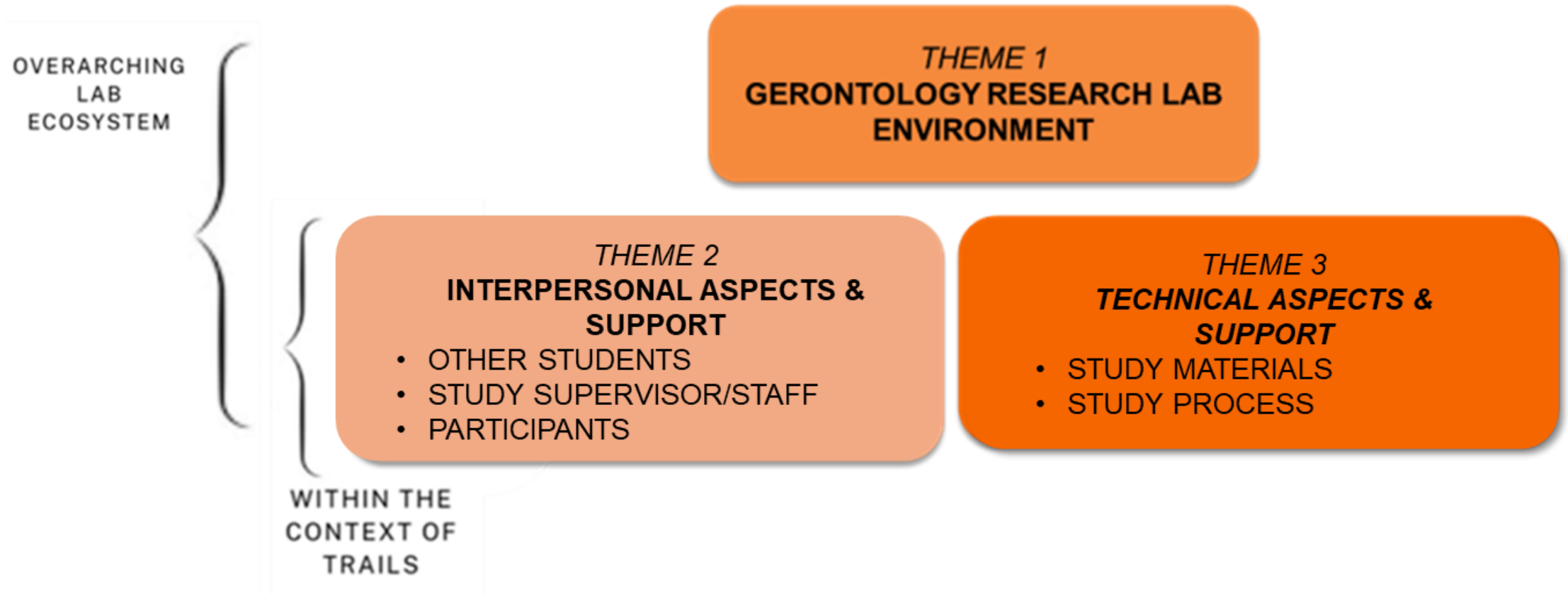
Quantitative Results

MEASURES	M (SD)
Perceived Efficacy of Telephone Screening Training (TTS) <i>(average of 6 TTS items)</i>	4.6 (0.6)
Perceived Efficacy of In-Person Visit Training (TV1) <i>(average of 6 TV1 items)</i>	4.9 (0.1)
Overall Experience Rating (Exper) <i>(average of 9 Exper Items)</i>	4.7 (0.2)
Perceived Gains (GAIN) <i>(average of 5 GAIN items)</i>	4.7 (0.3)
Experiential Learning Engagement (ExpL) <i>(average of composite ExpL scores - composite created by summing score on ExpL1 - ExpL18)</i>	106.4 (8.9)

- Positive correlation ($p=0.04$) between TTS scores and class standing ($r=0.62$)
- Positive correlation ($p=0.02$) between the average TV1 score and TTS score ($r=0.7$)



Qualitative Results



Each theme includes student gains, what worked well, and areas for improvement



Theme 1: Gerontology Research Lab Environment

- Pertains to the laboratory environment within the entire SHAARP lab, encompassing factors beyond the TRAILS study

I definitely would say the...I guess the right word for it would be ***the culture that we have in our lab, I think, is huge***. I think ***the compassion, the empathy***, and how everybody really...If we need something done, we just say, "Hey, let's go do this," and ***it gets done***.

The ***culture that we have around here is so amazing*** for a work environment.



Theme 2: Interpersonal Aspects & Supports

I really *learned how to be personable* to an extent, while also being appropriate and conducting myself in a good manner.

I feel like I probably would have gained equal research experience, but in *terms of a different outlook on life, I don't think I would have had that same experience if I was just reading it* rather than having the actual interactions.

- Relates to interpersonal dynamics and support networks, highlighting interactions among students, supervisors, staff, and TRAILS participants



Theme 3: Technical Aspects & Supports

- Examines the study materials utilized and the procedural aspects involved in training and conducting the sessions

But I would say the ***[gait assessment device] frustrations were my number one*** thing that I wish would have gone differently ... I think ***that was a big road block for a lot of our sessions.***

Training felt pretty long, but it actually did end up ***working out pretty well that we did so many repetitions on each thing*** cause end up ***feeling really prepared*** and I really did need all of those times to really get it down, especially because participants asked a lot of questions.



What We Learned

Student Gains	Worked Well	Areas for Improvement
<ul style="list-style-type: none">• Gerontology knowledge• Research process & skills• Personal & professional development• Sense of accomplishment & community• Passion for gerontology & learning from older adults		



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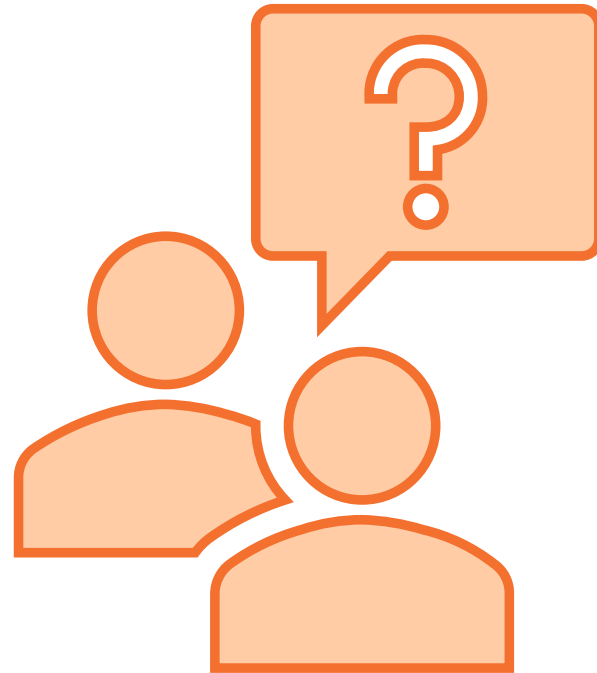


Takeaways: How You Can Use What We Learned

- Prioritize relationship building within research labs
- Provide clear expectations for students
- Implement consistent processes and efficient technologies
- Include students in meaningful research tasks that allow for translation, application, and connection



Thank You!





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