

**TO LEARN** 

# **CONTEXTUALIZE TO LEARN: PREPARING FACULTY TOWARD MATH CONTEXTUALIZATION** FOR STUDENT SUCCESS IN ADVANCED TECHNOLOGICAL EDUCATION: HIGHLIGHTS FROM THE FIRST TWO YEARS

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# What do we want to know?

1. How do faculty teaching Advanced Technological Education students math engage with and make sense of professional development activities as part of a community of practice around math contextualization?

2. How do faculty in the community of practice apply contextualization in teaching math?

3. What is the effect of math contextualization on students' interim and longer-term outcomes such as course grade, course completion rate, credential completion, transfer, and workforce participation, and how does contextualization exert its effect, if any?

4. How do Advanced Technological Education students in math courses of varying levels of contextualization describe their learning experiences and motivational beliefs regarding math and their overall educational and career success?

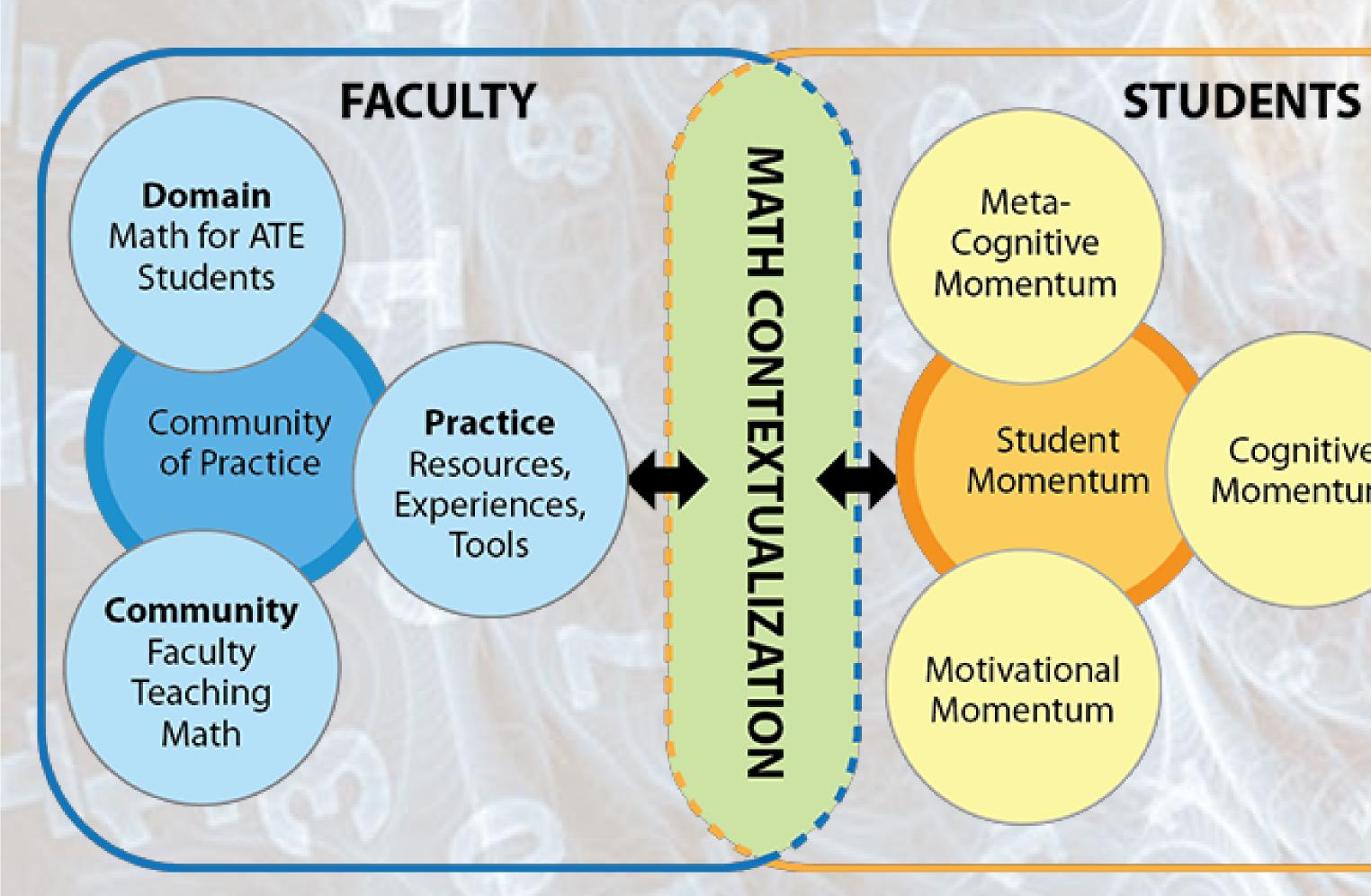
Cognitive

Momentum

MATG.

Student

Success

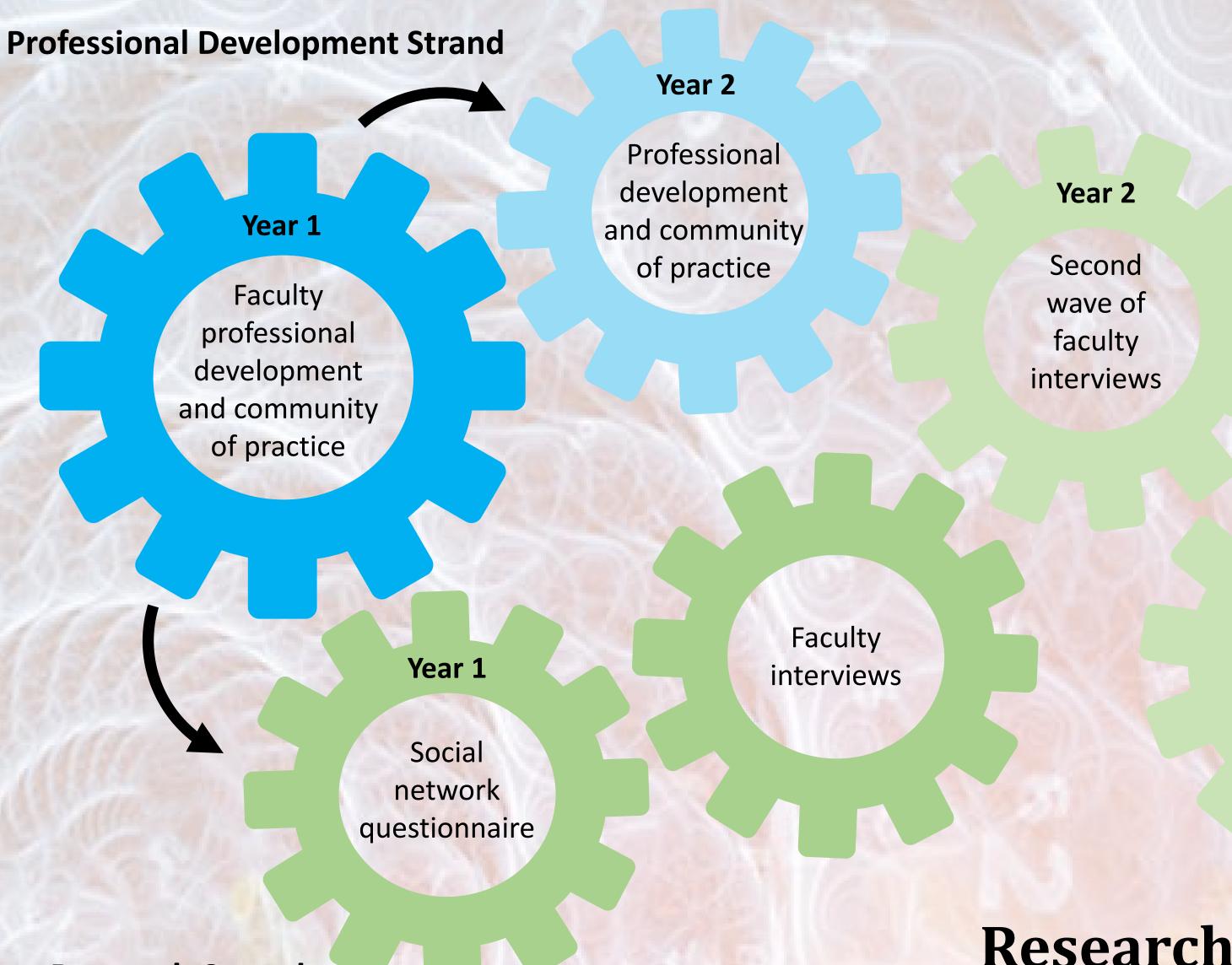


#### Who is partnering?





Wisconsin Center for Education Research UNIVERSITY OF WISCONSIN-MADISON



**Research Strand** 



How faculty make sense of contextualization

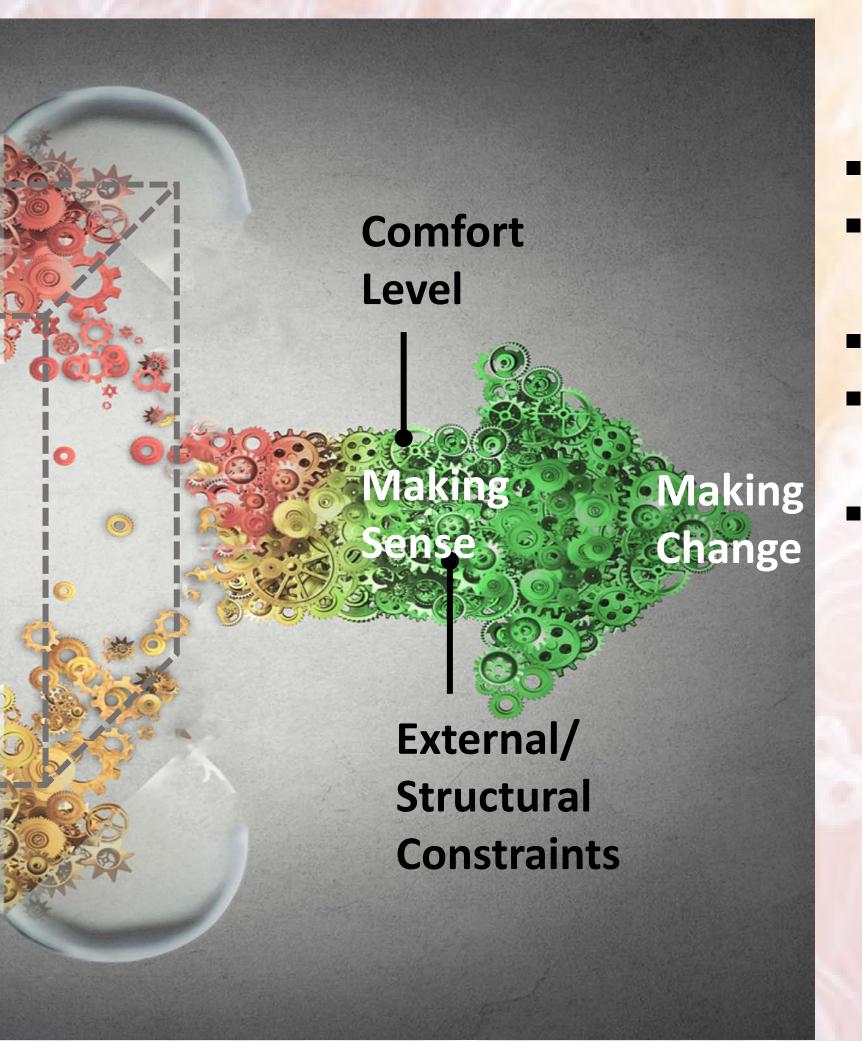


Orientation

## What are we doing to find out?

Interview protocols Classroom observation Student survey protocol

# What have we found so far?





- Analyze data from Years 1 and 2

- products

## For further information

Contact Dr. Xueli Wang at xwang273@wisc.edu or visit https://c2l.wceruw.org

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Student surveys and track outcomes

Classroom observations

Student interviews

### **Research Data Collection Protocols**





### Looking ahead...

Sustain efforts around community of practice and professional development into Year 3 and beyond Launch final wave of faculty interviews Integrate administrative records with student survey data and analyze longer-term student outcomes Disseminate project research and professional development

