

Overview of the Louisiana STEM Micro-credential Project

What is the Louisiana STEM Micro-Credential Project?

This project involves the development and testing of a set of micro-credentials intended to allow teachers to apply what they have learned through their STEM Pathway training to the classes they teach. The partners involved in this project include:

- Louisiana Department of Education (LDOE)
- Louisiana State University (LSU)
- BloomBoard
- RAND Corporation

See a more in-depth description of micro-credentials and what they are on the next page.

Why am I getting information on this project?

As a teacher in the LSU training to teach a STEM Pathway course, you are eligible to participate in a research study that will investigate whether teachers who take the micro-credentials experience improvements to their teaching and whether their students experience learning gains, compared to teachers who do not take the micro-credentials. Teachers who agree to participate in the study will provide critical information to all project partners about the usefulness of micro-credentials for STEM Pathway teaching and learning.

Some important highlights about the study:

- Teachers who agree to participate will be placed in a lottery for a random drawing to either be part of a (1) “treatment group” who works toward the completion of 6 to 8 micro-credentials over the next two school years (from 2021-22 to 2022-23) OR (2) “comparison group” who does not complete the micro-credentials but will be able to complete them for free after school year 2022-23.
- Teachers who agree to participate in the study will be asked to complete a series of short surveys about their instruction over the next two school years, and they may also be asked to participate in a one hour in person or phone interview once a year.
- Teachers in both the treatment and comparison group will receive monetary compensation for their participation.

RAND Corporation is gathering the names and contact information of teachers who are interested in participating.

If you have questions about the study or are interested in signing up, please contact Karen Christianson (kchristi@rand.org), a policy analyst at the RAND Corporation.

Introduction to Micro-credentials

Micro-credentials are a form of micro-certification earned by demonstrating competence in one specific skill at a time, via a portfolio of evidence, created through classroom practice.

Micro-credentials Are...

- ✓ Competency-based
- ✓ Personalized and Self-directed
- ✓ Demonstration of New or Existing Expertise
- ✓ Available On-demand
- ✓ Job Embedded
- ✓ Learning By Doing

Micro-credentials Are Not...

- ✗ Seat-time Based
- ✗ One Size Fits All
- ✗ Traditional Online Course or Class
- ✗ Available Only at Set Times
- ✗ Separate from Teachers' Classroom Contexts
- ✗ Learning By Absorbing Information



The micro-credentials in this program were designed by LSU and BloomBoard and are aligned to the competencies needed to effectively teach STEM pathway courses. Below, please find an example of the portfolio of evidence you might create by completing a micro-credential.

Facilitating Project-Based Learning

Analyze: Select a project-based assignment from your curriculum and analyze its alignment to PBL principles.

Design: Design an entry-event for the project-based assignment you selected in Analyze.

Develop: Thoughtfully assemble teams for the project based on students' prior skills, knowledge, and abilities.

Implement: Implement your PBL assignment.

Evaluate: Evaluate the degree to which your project successfully aligned with PBL principles.

Working on micro-credentials has allowed me to refine my classroom practices and identify areas of improvement while implementing new, innovative practices.

Working on micro-credentials really made me put into practice what we learned in the training, and anchor the work in multiple data points over time. I think I'm more reflective about the content I teach.