Computer Science Teaching and Learning Collaboratory (CS-TLC): Connecting CS Educators for Equity and Engagement
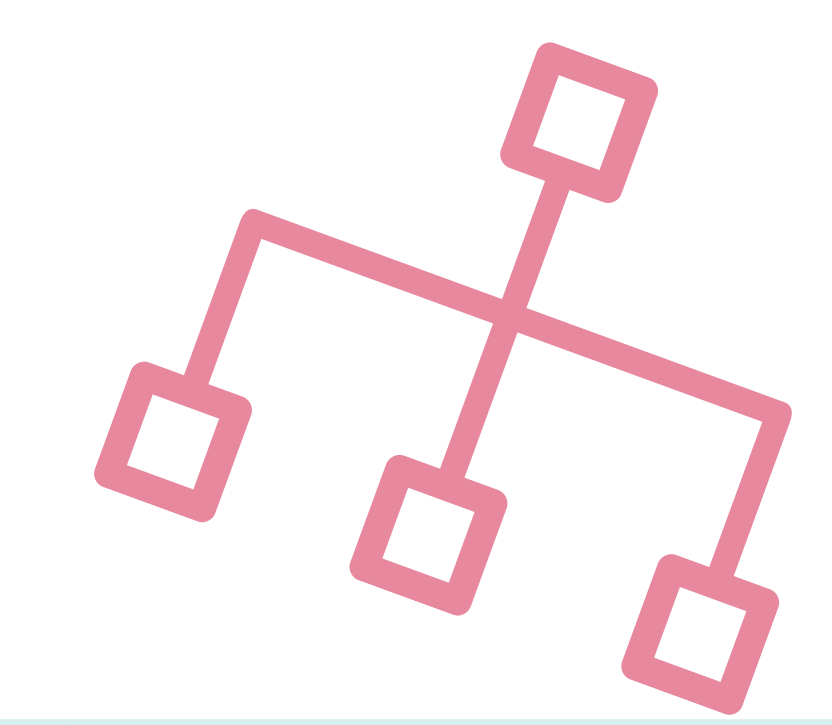
RUTGERS

Cynthia L. Blitz, Ph.D.[1], Francis P. Trees, DPS[2], and Thu D. Nguyen, Ph.D.[2]
(1) Center for Effective School Practices, Graduate School of Education
(2) Department of Computer Science

PROJECT GOALS

GOAL 1
Actively engage educators in an RPP focused on broadening participation in and equity of CS education.

GOAL 2
Develop and deliver high-quality CS PD and ongoing support for teachers to enable them to deliver rigorous courses at their high schools in ways that value their underrepresented students' abilities, motivations, and cultural backgrounds.

GOAL 3
Invest in the capacity of high school and district leaders to plan, implement, manage, and evaluate programs and policies that can support rigor and equity in CS education.

GOAL 4
Actively engage educators in an RPP focused on broadening participation in and equity of CS education.

#RUCSReady

OVERVIEW

This NSF-funded project builds the capacity of an established research practice partnership (RPP) to address equity in CS education for underrepresented students.

The Computer Science Teaching and Learning Collaboratory (CS-TLC) is intended to promote and support key mechanisms and processes of effective collaborations to address inequity challenges in schools and districts by utilizing rapid, iterative, and content-expanding research cycles.

CS - TLC #RUCSReady

PROJECT 1

INPUTS 2

ACTIVITIES 3

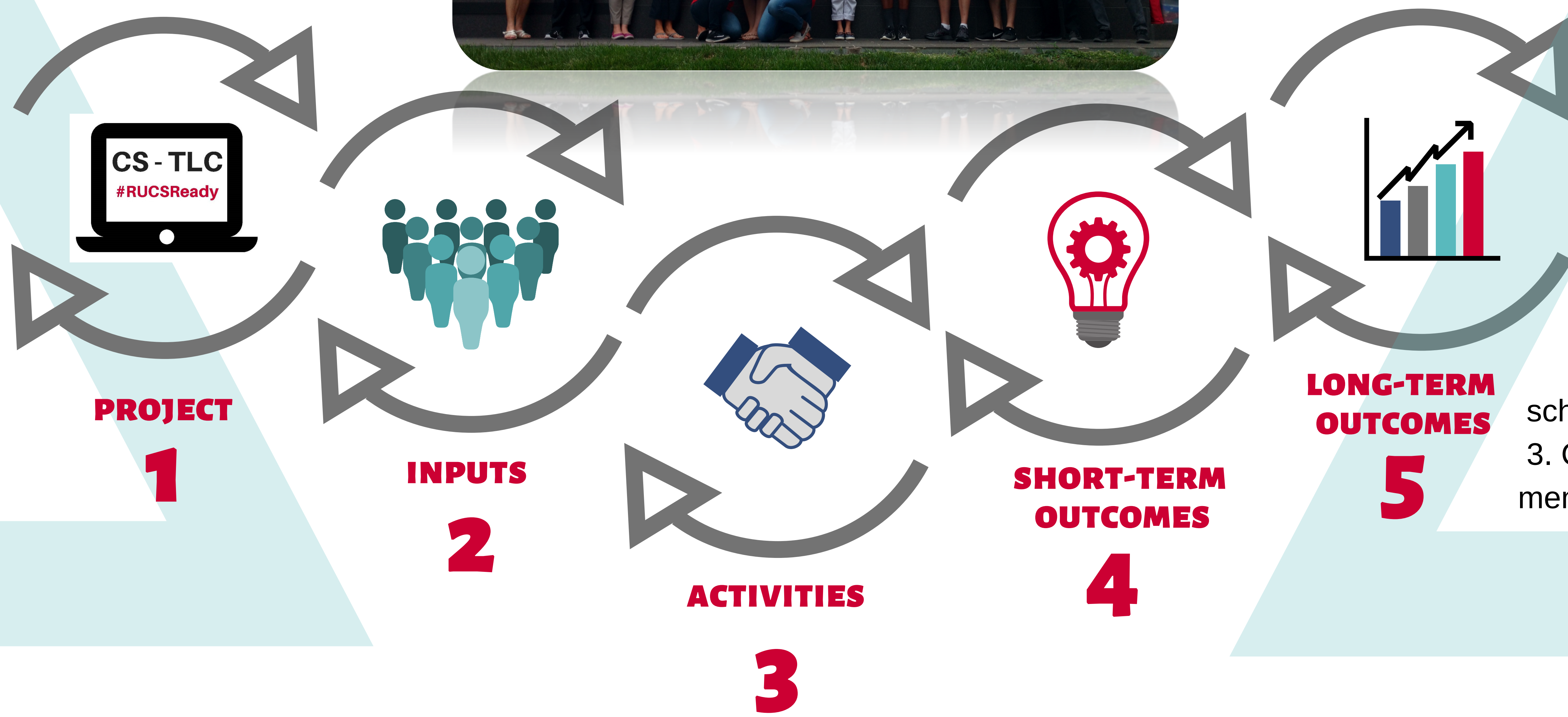**SHORT-TERM OUTCOMES 4**

LONG-TERM OUTCOMES 5

RESEARCH PLAN

1. Assess the degree to which the RPP is achieving its goals. Examine the growth of the RPP over time and how it may increase or decrease the ability of the RPP to achieve its goals.

2. Track improvements in teacher content and pedagogical CS knowledge.

3. Record any indicators of systemic changes within districts and schools that occurred as a result of administrators' participation in CS-TLC activities.

4. Measure any change in student enrollment, performance, satisfaction/interest, and career aspirations.

5. Explore the relative effectiveness of F2F and virtual PD and support concerning teacher outcomes for different groups of teachers and for different types of schools and districts.

CS-TLC brings together
1. CS educators and researchers from a large public research university and a teaching university.
2. Teachers and administrators from 10 diverse school districts in NJ and PA.
3. Content experts, TA providers, community members, and industry representatives.

PARTICIPANTS

Contact Information:
cindy.blitz@gse.rutgers.edu
732-564-9100, xt 21