Reaching Across the Hallway

An Interdisciplinary Approach to Teaching Computer Science in Rural Schools

Project Overview
Create an innovative PD model for rural middle school teachers integrating culturally relevant computer science content into social studies classrooms.

Phase I Outcomes
August 2020 to April 2021

1. Understand commonalities and unique qualities of the 5 rural school districts.

2. Project Team developed consensus-based iterative design model and used it to create:
   - PD Materials
   - Skeleton Lesson Plans and rubrics
   - An online Professional Learning Community (PLC)

3. Convened an Advisory Board (AB) of nationally-recognized experts in history, computer science, culturally-responsive teaching, and rural education and engaged Advisors throughout project activities.
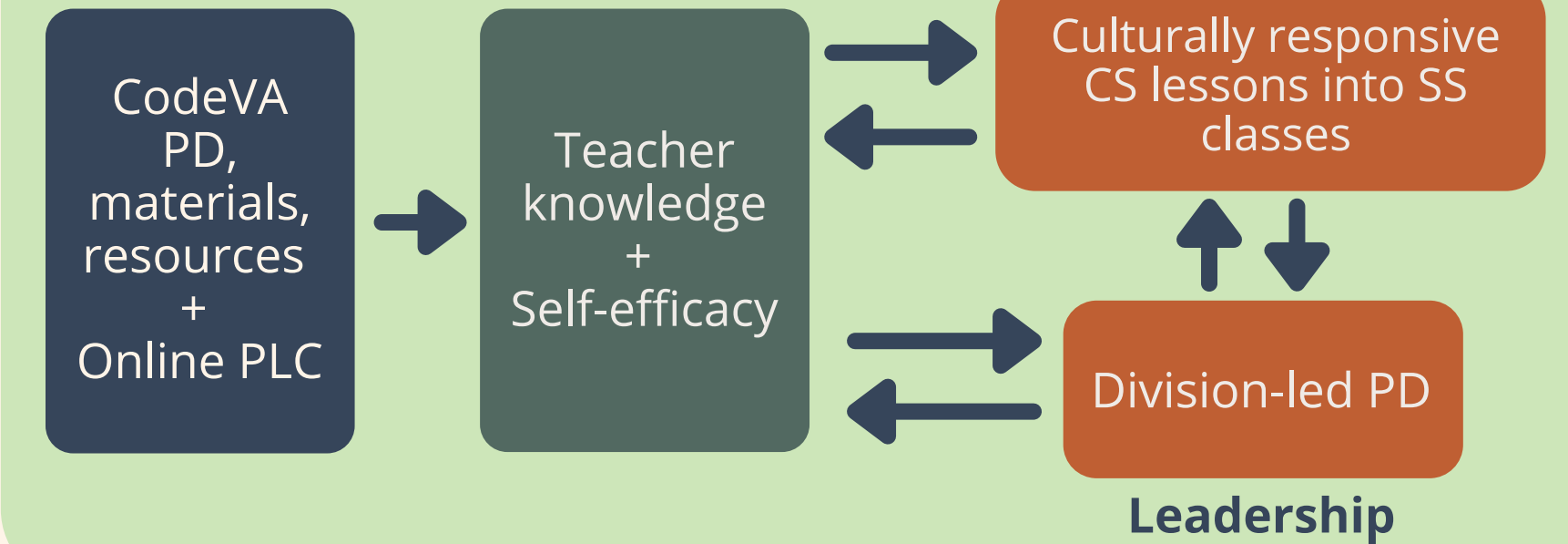
The PD model uses a **train-the-trainer approach** to foster **increased self-efficacy** in computer science instruction, establishing participants as **district-embedded CS resources** in their own rural communities.

Curricular Iteration

- Study of Existing Practice Survey
- Unpacking the Data ✳
- Lesson Spark Ideation
- Skeleton Lesson Plan (SLP) Ideation ✳
- SLP Writing
- SLP Review ✳
- Teacher Focus Group
- SLP Edits
- ✳ Professional Development (PD) Planning
- PD Scope + Sequence
- PD Writing
- PD Review ✳

PD Delivery

Research Model

CodeVA PD, materials, resources + Online PLC → Teacher knowledge + Self-efficacy ⇄ Culturally responsive CS lessons into SS classes

Curricular Integration

Division-led PD

Leadership

Research Framework ✳
This framework supports conjectures:
- relationships between these components, and
- about how contextual factors may impact project outcomes (e.g. examining collaboration between teacher leaders and instructional coaches).

Curricular Integration
- How does the PD intervention facilitate the integration of culturally relevant CS and CT practices into middle school social studies courses?
- To what extent does teacher enactment reflect the goals and principles of the project's approach to integration?

Leadership
- How can a professional development intervention build and sustain a cohort of teacher leaders that have the capacity to engage in and support computer science integration into social studies?

✳ **indicates Advisory Board input**

Project Team
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Advisory Board
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