

Preparing Teachers to Design 5D Tasks to Support and Assess Science Learning

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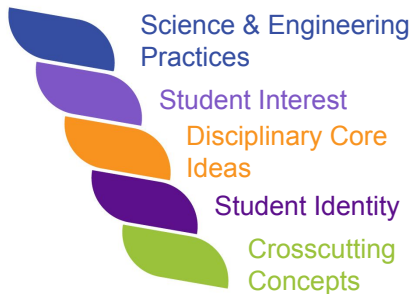
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PROJECT GOAL

Supporting secondary rural science teachers to shift to 5D instruction & assessment through an online, co-adapted course

5D Science Teaching & Learning involves



INITIAL FINDINGS

Unique Aspects of Rural Science Teaching

1. Community, small classes, outdoor resources
2. Limited resources, changing population, conservative climate

Reported 5D Instruction

3. Broad efforts to align
4. Less attention to student interest & identity

Curricular & Assessment Resources

5. Autonomy in generating "aligned" resources
6. Less familiar with 3D assessment

PL Experiences & Preferences

7. Desire science-specific PL with knowledgeable facilitators, sensitive to local context

COADAPTATION SPRING 2021



PROJECT PHASES

- 1) Teacher Survey, Focus Groups
- 2) Course Design & Pilot
- 3) Experimental Impact Study



COURSE DESCRIPTION

Developing 5D Vision for Science Teaching and Learning

- 1: Vision for meaningful science learning
- 2: What does 5D science learning look like in classrooms?
- 3: Reflect on current practice
- 4: Guidance from the standards

Choosing phenomenon to frame instruction and assessment

- 5: Using phenomena
- 6: Choosing phenomena
- 7: Developing assessment scenarios

Developing & using tasks to assess student 5D understanding

- 8: Developing prompts
- 9: Assessing student learning
- 10: Accessibility
- 11: Application to practice



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