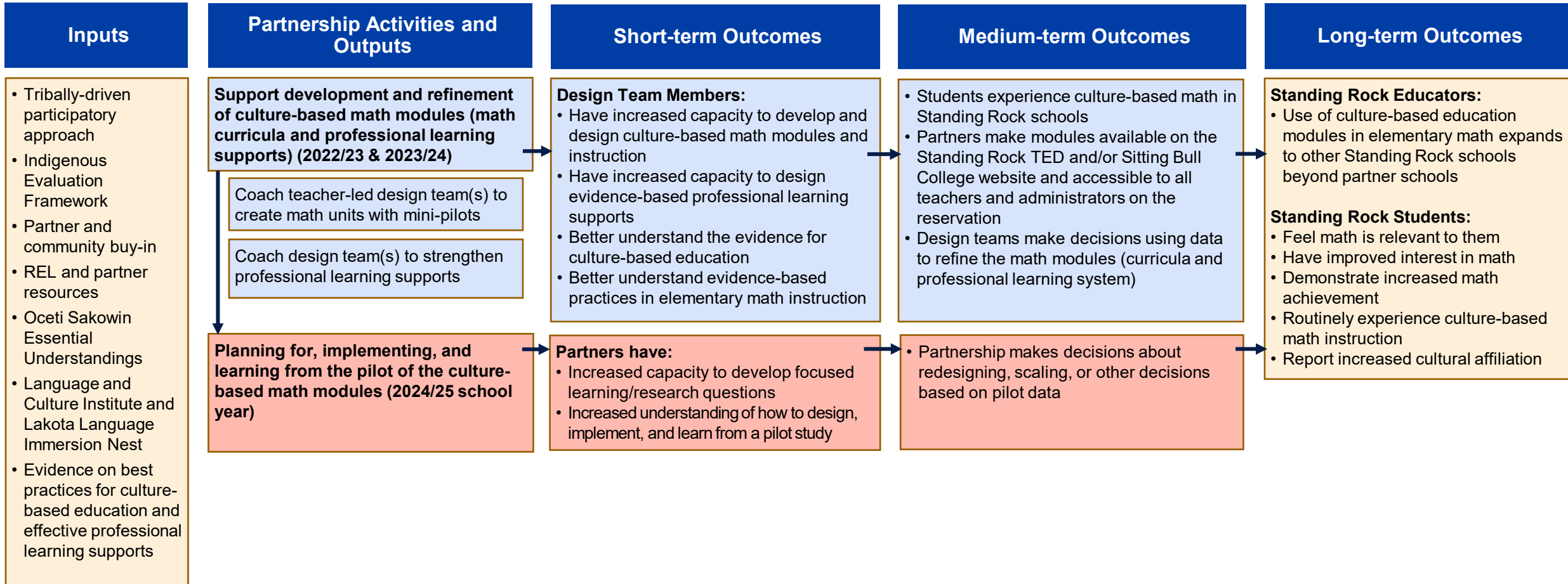


# Strengthening culture-based elementary math education in Standing Rock



## Contextual factors

- Broader strategic plans at the school and Tribal levels
- Working across cultural differences
- Availability of resources (within the schools and Tribe)
- Limited staff availability

## **Strengthening culture-based elementary math education in Standing Rock**

### **Inputs**

- Tribally-driven participatory approach
- Indigenous Evaluation Framework
- Partner and community buy-in
- REL and partner resources
- Oceti Sakowin Essential Understandings
- Language and Culture Institute and Lakota Language Immersion Nest
- Evidence on best practices for culture-based education and effective professional learning supports

### **Partnership Activities and Outputs**

#### **1. Support development and refinement of culture-based math modules (math curricula and professional learning supports) (2022/23 & 2023/24)**

- **Coach teacher-led design team(s) to create math units with mini-pilots**
- **Coach design team(s) to strengthen professional learning supports**

#### ***Short-Term Outcomes***

- Design Team Members:
  - Have increased capacity to develop and design culture-based math modules and instruction
  - Have increased capacity to design evidence-based professional learning supports
  - Better understand the evidence for culture-based education
  - Better understand evidence-based practices in elementary math instruction

#### ***Medium-Term Outcomes***

- Students experience culture-based math in Standing Rock schools
- Partners make modules available on the Standing Rock TED and/or Sitting Bull College website and accessible to all teachers and administrators on the reservation
- Design teams make decisions using data to refine the math modules (curricula and professional learning system)

#### ***Long-Term Outcomes***

- Standing Rock Educators:
  - Use of culture-based education modules in elementary math expands to other Standing Rock schools beyond partner schools
- Standing Rock Students:
  - Feel math is relevant to them
  - Have improved interest in math
  - Demonstrate increased math achievement
  - Routinely experience culture-based math instruction
  - Report increased cultural affiliation

2. **Planning for, implementing, and learning from the pilot of the culture-based math modules (2024/25 school year)**

***Short-Term Outcomes***

- Partners have:
  - Increased capacity to develop focused learning/research questions
  - Increased understanding of how to design, implement, and learn from a pilot study

***Medium-Term Outcomes***

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- Partners make modules available on the Standing Rock TED and/or Sitting Bull College website and accessible to all teachers and administrators on the reservation
- Design teams make decisions using data to refine the math modules (curricula and professional learning system)

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