WDE Opportunity Through Education

Wyoming Perkins Innovation & Modernization Project

Evaluation Highlights Across the 16 Computer Science Micro-Credentials (MC)*

WY Micro-Credentials positively impact teachers' computer science knowledge, teaching practices, and self-efficacy!

Teachers Realize Benefits from MCs

Based on the End-of-Micro-Credential Questionnaire (N=86):

99% said that overall MC experience was positive.

95% said that as a result of completing the MC they would change their teaching practices.

~ 98% said that as a result of completing the MC the following increased:

- Work-related Motivation
- Work-related Knowledge
- Work-related Skills

86% said they would recommend the MC to other teachers.

92% said that the MC will impact their work with students.

Impacts of MCs on Teachers

Teachers were asked how the MCs impacted them personally and professionally.

Sample Teacher Comments:

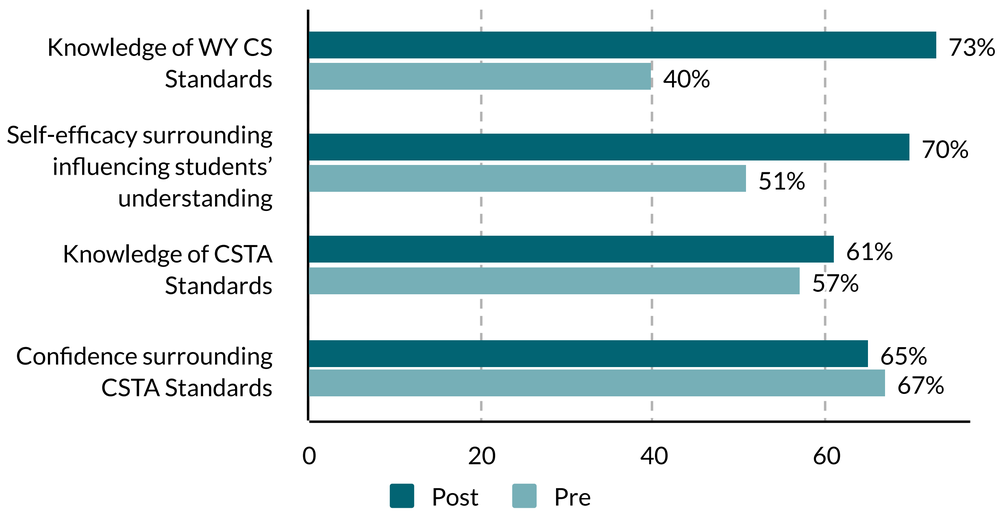
- *"Able to prove my CS knowledge while impacting my classroom in such a positive and standard-driven way."*
- *"Ability to earn MC while creating quality projects and assessments that are standard aligned for my current students/classes."*
- *"My overall understanding of nested loops and compound conditionals was increased and I am better prepared to help my students in their projects."*
- *"Professionally I benefited from this MC in my knowledge and ability to teach students how to be appropriate and report inappropriate behavior online. This is a lesson I will re-use each year."*

Teachers Experience Increased Knowledge/Self-Efficacy from the MCs

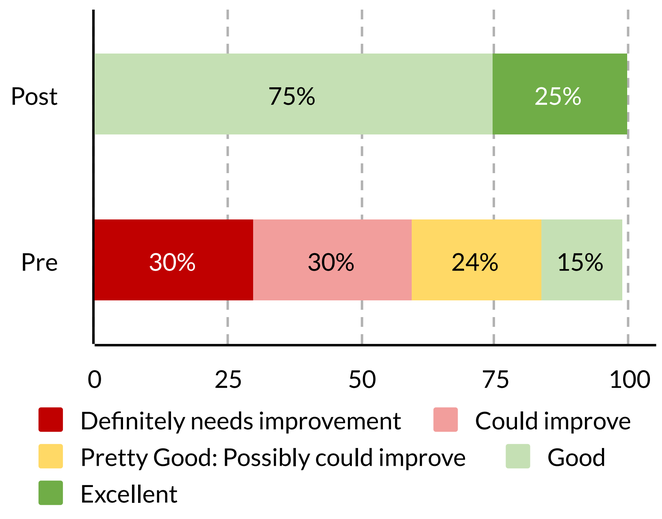
Pre-/Post-Assessments show improvements in outcomes (N=22). For example:

(CS=Computer Science; CSTA=Computer Science Teacher Association)

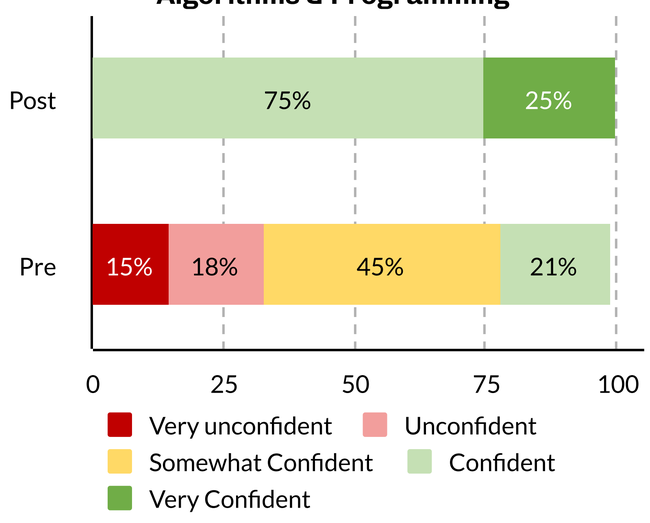
WY Computer Science Standards
Average percent of possible points earned on each scale



Rating of Teacher Knowledge of CS Standards in Algorithms



Rating of Teacher Confidence Regarding Influencing Students' Understanding of Algorithms & Programming



DATA DRIVEN ENTERPRISES

*Does not include the Computational Thinking MC.

June 13, 2022