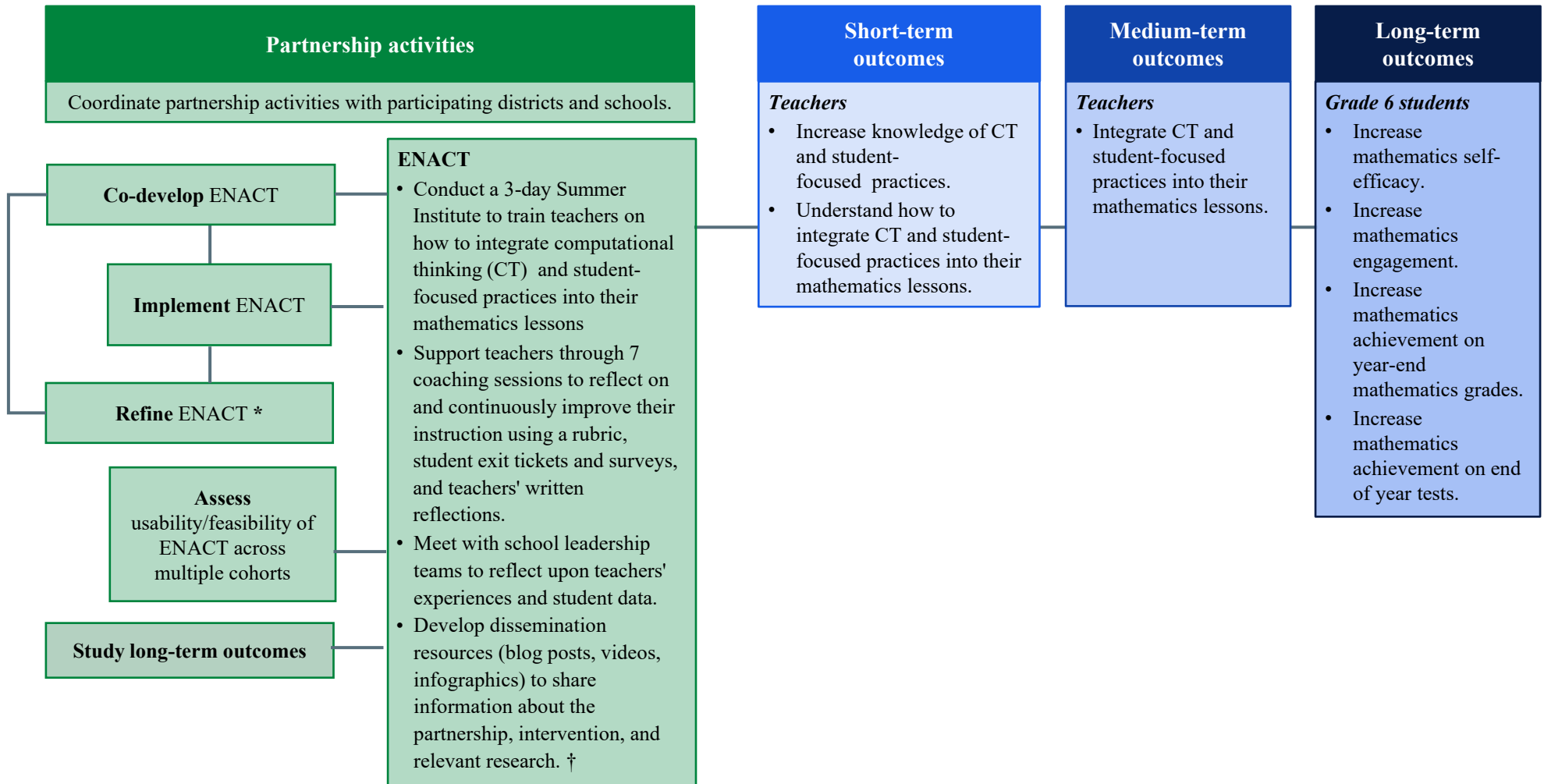# ENgagement and Achievement through Computational Thinking Partnership

Regional Educational Laboratory (REL) Midwest is partnering with school districts in Wisconsin to increase grade 6 students' confidence, engagement, and achievement in math, especially among groups that are traditionally underserved in science, technology, engineering, and mathematics (STEM) career fields. To achieve this goal, the ENgagement and Achievement Through Computational Thinking (ENACT) partnership will develop, test, and refine an intervention to support Wisconsin grade 6 teachers in integrating computational thinking and student-focused practices into their district's grade 6 mathematics curriculum.

Partnership activities

Coordinate partnership activities with participating districts and schools.

Co-develop ENACT

Implement ENACT

Refine ENACT *

Assess usability/feasibility of ENACT across multiple cohorts

Study long-term outcomes

ENACT
- Conduct a 3-day Summer Institute to train teachers on how to integrate computational thinking (CT) and student-focused practices into their mathematics lessons
- Support teachers through 7 coaching sessions to reflect on and continuously improve their instruction using a rubric, student exit tickets and surveys, and teachers' written reflections.
- Meet with school leadership teams to reflect upon teachers' experiences and student data.
- Develop dissemination resources (blog posts, videos, infographics) to share information about the partnership, intervention, and relevant research. †

Short-term outcomes

Teachers
- Increase knowledge of CT and student-focused practices.
- Understand how to integrate CT and student-focused practices into their mathematics lessons.

Medium-term outcomes

Teachers
- Integrate CT and student-focused practices into their mathematics lessons.

Long-term outcomes

Grade 6 students
- Increase mathematics self-efficacy.
- Increase mathematics engagement.
- Increase mathematics achievement on year-end mathematics grades.
- Increase mathematics achievement on end of year tests.

Notes:

* REL Midwest employs an iterative research and development model, across several cohorts, in the development and refinement work.

† Dissemination materials are designed to support acceptability and feasibility of the approach.

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