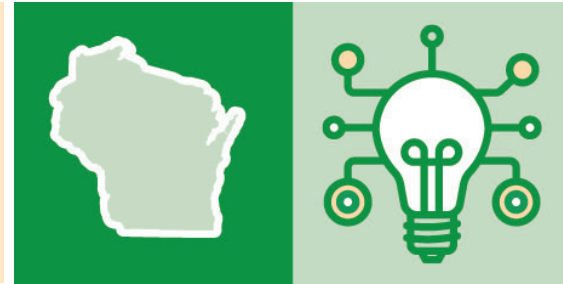


Regional Educational Laboratory Midwest Engagement and Achievement Through Computational Thinking

Regional Educational Laboratory (REL) Midwest is partnering with school districts in Wisconsin to **increase grade 6 students' confidence, engagement, and achievement in mathematics**, especially among groups traditionally underrepresented 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 mathematics instruction.



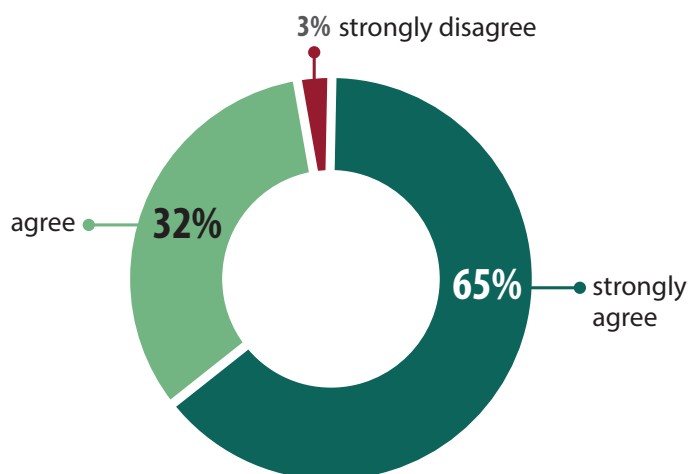
Computational thinking refers to problem-solving strategies that help students approach unfamiliar problems. These strategies encourage student inquiry and focus on understanding concepts instead of memorizing formulas to deepen mathematical learning. Computational thinking strategies also help students develop skills and mindsets that unlock pathways into high-wage, in-demand fields.¹



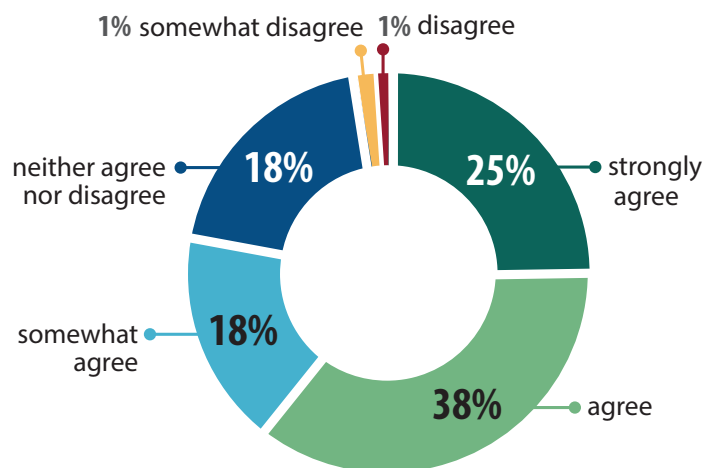
Student-focused practices help all students see themselves as important contributors to the classroom community; this in turn supports students' self-confidence and engagement in mathematics.²

Why is this topic important?

In a 2021 survey of Milwaukee Public Schools' principals, **97 percent** of respondents agreed that **computational thinking should be integrated** across content areas.³



In a 2020 survey of Milwaukee Public Schools' teachers, **81 percent** of respondents agreed they would like to **learn how to integrate computational thinking** into their teaching.³



Note: Percentages do not total 100 due to rounding.

Planned partnership activities

In collaboration with **Milwaukee Public Schools' mathematics coaches and grade 6 math teachers**, REL Midwest will develop, implement, test, and refine the ENACT intervention. The work will take place in phases over 5 years, and the partnership will expand to other Wisconsin districts over time.

Visit our [website](#) and follow us on [Twitter](#) to learn more as the work unfolds.

Contact us to learn more!



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REL Midwest is part of a network of 10 regional educational laboratories funded by the Institute of Education Sciences at the U.S. Department of Education. REL Midwest works in partnership with practitioners in seven midwestern states to support the use of research and data to improve student outcomes, with a focus on students who are farthest from opportunity.

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- ¹ Perez, A. (2018). A framework for computational thinking dispositions in mathematics education. *Journal for Research in Mathematics Education*, 49(4), 424–461. <https://eric.ed.gov/?id=EJ1183634>
- ² Hubert, T. L. (2014). Learners of mathematics: High school students' perspectives of culturally relevant mathematics pedagogy. *Journal of African American Studies*, 18(1), 324–336.
- ³ Scholz, C., Ibis, M., & Frederking, D. (2021). [Unpublished raw data on Milwaukee Public School principals' perceptions of computational thinking]. American Institutes for Research.