<u>Learning and Teaching with Learning Trajectories (LTLT or [LT]<sup>2</sup>)</u> is a *free tool* for researchers professional developers, and practitioners in early childhood mathematics: Birth to grade 2.

**Researchers** can see and use videos of all three components of learning trajectories: Math goal, developmental progression of levels of thinking, and correlated instructional activities, complementing the research reports (Clements & Sarama, 2021; Sarama and Clements, 2009).

**Professional developers** can use the tool to help practitioners understand all three of those components. This was the reason that [LT]<sup>2</sup> was originally created.

Early childhood educators can learn about how children think and learn about math and how to teach math to young children "their way" (birth to age 8). [LT]<sup>2</sup> allows teachers, caregivers, and parents to see and use learning trajectories for math, as they view short video clips of good teaching as well as children working on math problems in a way that clearly reveals their thinking.

[LT]<sup>2</sup> runs on all technological platforms, includes alignments with standards and assessments, and includes hands-on and built-in software for children.

**Coming Soon.** We are also working on a new portal that will help practitioners to use a "curriculum view" that will guide them and their children through all early math's interwoven topics, guided by age and then automatically adjusted based on children's responses to online games and activities. Please stay tuned.

Please contact us with any questions or to be placed on a mailing list. Douglas.Clements@du.edu, Julie.Sarama@du.edu, Shannon.StarkGuss@du.edu.

## References

Clements, D. H., & Sarama, J. (2015). Developing young children's mathematical thinking and understanding. In S. Robson & S. F. Quinn (Eds.), *The Routledge international handbook of young children's thinking and understanding* (pp. 331–344). New York, NY: Routledge. Clements, D. H., & Sarama, J. (2021). *Learning and teaching early math: The learning trajectories approach* (3rd ed.). New York, NY: Routledge.