

THE ZONES OF REGULATION

**RESEARCH**  **IMPACT**

# The Zones of Regulation Framework and Curriculum: Evidence of Effectiveness



## The Zones of Regulation is **RESEARCH-BASED.**

The Zones of Regulation framework and curriculum was developed from foundational research and practices in the fields of social-emotional learning, neuroscience, curriculum development, and psychology. To learn more about the research base behind The Zones of Regulation, view the [Research page](#) on our website.

## The Zones of Regulation is **EVIDENCE-BASED.**

Studies examining The Zones of Regulation's impact have shown the curriculum has a positive effect on learner outcomes. This brief provides an overview of prior research on The Zones of Regulation™ (Kuypers, 2011) original curriculum and the preliminary, promising evidence of The Zones of Regulation® Digital Curriculum (Kuypers, 2024).



## Background

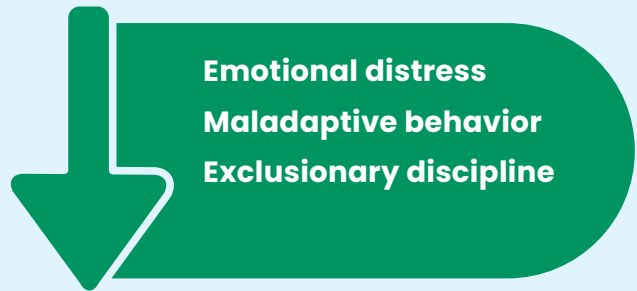
Since its introduction in 2011, we have seen the impact of The Zones of Regulation from an abundance of practice-based evidence. Practice-based evidence is the collection of authentic experiences with The Zones of Regulation from educators, therapists, families, and learners. For over a decade, we have partnered with communities using The Zones to gather practical feedback and learn from real-time users. This community-centered approach guides the refinement of our framework and curriculum and helps to minimize the “research-to-practice gap” where programs adopted on the basis of research fail to be effective in practice. Our prioritization of practice-based evidence, ongoing evaluation, and continuous improvement has allowed us to gain a deep understanding of the real-world challenges faced by learners, leaders, and systems using The Zones of Regulation.

In addition to practice-based evidence, rigorous studies conducted by independent researchers have demonstrated the positive impact of The Zones of Regulation. The use of the framework and curriculum is associated with the following outcomes (for more details on these studies, view our [Evidence Grid](#)).

- **Improved self-regulation:** statistically significant improvement on measures of learners' positive self-regulation (e.g., self-awareness, self-management, responsible decision-making)
- **Improved positive social behavior:** statistically significant improvement on measures of learners' positive social behaviors (e.g., social awareness, relationship skills, social communication, self-confidence)
- **Reduced maladaptive behavior:** statistically significant reduction on measures of learners' maladaptive behaviors related to learners' social, emotional, and behavioral competencies (e.g., emotional reactivity, irritability, hyperactivity, inattention)

- **Reduced emotional distress:** statistically significant reduction on measures of learners' emotional distress (e.g., sadness, nervousness)
- **Improved academic performance:** statistically significant improvement on measures of learners' academic performance (e.g., grades, standardized achievement scores)
- **Decreased use of exclusionary discipline:** statistically significant reduction on measures of exclusionary discipline (e.g., suspensions, expulsions, office discipline referrals)
- **Improved teaching practices:** statistically significant improvement on measures of teaching practices that foster learner social-emotional competencies (e.g., teacher self-efficacy)

## Outcomes of The Zones of Regulation



We continue to emphasize the importance of evaluation and practice-based evidence while expanding our evidence base. This includes the prioritization of external partnerships to conduct large-scale efficacy research. Examples of active research projects include:

- Researchers at Emory University and the University of Colorado are conducting a randomized control trial to assess the impact of The Zones of Regulation framework for autistic learners with anxiety.
- Researchers at the University of Wisconsin are looking at the effectiveness of The Zones of Regulation curriculum in supporting middle school learners' social-emotional development.
- Researchers at Colorado State University are conducting a randomized control trial to examine the effectiveness of The Zones of Regulation curriculum with autistic learners using both clinical and Equine Therapy Integrated Approaches.

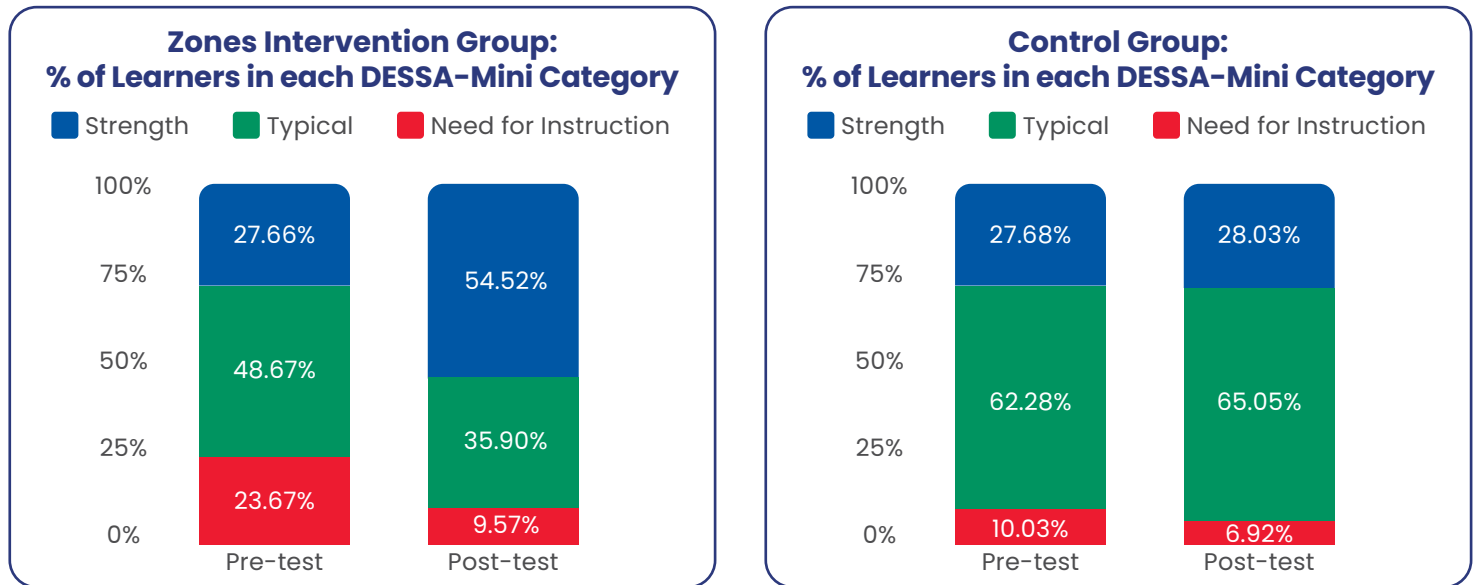


## Pilot Study of The Zones of Regulation Digital Curriculum

A pilot study of The Zones of Regulation Digital Curriculum conducted in spring of 2024 included five elementary schools, 35 teachers, and over 600 learners. Three schools participated as intervention sites (n=18 teachers) and two schools participated as comparison sites (n=17 teachers). Teachers at comparison schools did not implement the curriculum in any form.

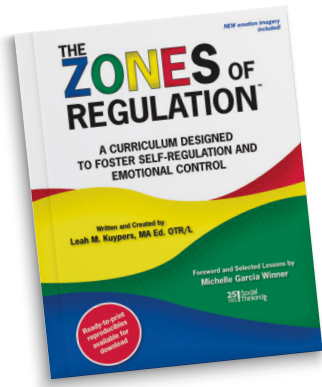
General education classroom teachers at intervention sites attended The Zones of Regulation® Basic Training program and delivered the curriculum over four months.

Both intervention and comparison teachers completed the Devereux Student Strengths Assessment-Mini (DESSA-Mini) before and after delivering the curriculum (pre- and post-test) to assess the impact of the curriculum on learner social, emotional, and behavioral competencies. The DESSA-Mini is a strengths-based assessment that can be used to screen for and monitor progress in the areas of self-awareness, self-management, social awareness, relationship skills, goal-directed behavior, personal responsibility, decision-making, and optimistic thinking.



Of the 665 learners with ratings at pre- and post-test, learners in intervention classrooms (n=376) showed a significant increase in social-emotional competencies. At pre-test, 23.67% of learners in intervention classrooms fell in the *Need for Instruction* level and 27.66% were rated at the *Strength* level. Following four months of implementation using The Zones of Regulation Digital Curriculum, learners at the *Need for Instruction* level decreased to 9.57% and learners at the *Strength* level increased to 54.52%. Learners in comparison classrooms (n=289) showed minimal change in their overall social-emotional competencies. At pre-test, 10.03% of learners in comparison classrooms fell in the *Need for Instruction* level and 27.68% were rated at the *Strength* level. At post-test, learners at the *Need for Instruction* level slightly decreased to 6.92% and learners at the *Strength* level slightly increased to 28.03%.

**Overall, The Zones of Regulation Digital Curriculum had a large, positive effect on student’s development of social-emotional competencies.**



# Study Spotlights of The Zones of Regulation 1st Edition Curriculum

## Reductions in Maladaptive Behaviors

The Zones of Regulation original curriculum was used as an intervention with autistic learners ages six to thirteen in a clinical setting. Learners displayed reductions in maladaptive behaviors throughout curriculum delivery and at follow-up, including statistically significant decreases in irritability, hyperactivity, emotional reactivity, sadness, and nervousness. Additionally, facilitators and caregivers expressed satisfaction with the framework and curriculum.

### [Read more about this study](#)

Peters, B. C., Gabriels, R., Schmid, A. A., Lassell, R. K. F., Pan, Z., Hoffman, A., & Hepburn, S. (2024). Occupational Therapy Using Zones of Regulation™ Concepts: A Feasibility Study. *Occupational Therapy Journal of Research*. Advance online publication. <https://doi.org/10.1177/15394492241246549>

## Increased Teacher Self-Efficacy

Teachers' sense of self-efficacy in supporting learners with diverse needs was examined alongside implementation of The Zones of Regulation original curriculum. Teachers found the curriculum to be acceptable, understandable, and feasible to implement. Teachers also reported statistically significant increases in self-efficacy when navigating the self-regulation needs of autistic learners. They reported higher levels of agreement when asked about their self-efficacy related to classroom management, instructional practices, and learner engagement.

### [Read more about this study](#)

Öhlböck, E., Stinson, M., McClintock, K., & Turtle, B. (2024). Evaluating the effectiveness of key components of Zones of Regulation™ curriculum training on teachers' self-efficacy at managing self-regulation needs in autistic pupils. *British Journal of Special Education*, 51(1), 111-122. <https://doi.org/10.1111/1467-8578.12501>



## Conclusion

The Zones of Regulation is a social-emotional learning framework and curriculum developed over 15 years of research and practice. The framework and curriculum integrates research-based theory and practices, and has demonstrated positive outcomes for learners. At The Zones of Regulation, we are committed to making social-emotional learning accessible, relevant, and inclusive for all. We look forward to growing and evolving alongside our community of learners, families, educators, therapists, and clinicians to continue our mission of empowering learners of all ages to understand the full range of their feelings and to identify and apply strategies that support their well-being.