

Strategies for Specially Designed Instruction

Shelley Littleton, M.Ed., T/TAC W&M Project Specialist

Math

Visual Representations

Teaching [visual representations](#) is one way to help students with disabilities succeed in math (Marita & Hord, 2017). One example of a visual representation is a diagram to represent key components for solving a word problem (van Garderen, 2007; van Garderen & Scheuermann, 2015). A [line diagram](#) is often used to measure or order numbers and a [part/whole diagram](#) is used to group information. Another example of a visual representation is a [graphic organizer](#), which is used to solve [systems of linear equations](#) (Ives, 2007). Explicit instruction in the use of a graphic organizer for math benefits students who struggle with working memory and processing (Keeler & Swanson, 2001).

Interested in learning more?

Explore examples of [handwritten diagrams](#), [computerized diagrams](#), and [graphic organizers](#).

Want another math strategy?

Learn [proceduralizing](#), featured in T/TAC William & Mary Link Lines.

Behavior

Self-Monitoring

Self-monitoring is an essential skill for improving behavior and increasing independence (Bruhn et al., 2015). Teaching students to [self-monitor](#) requires structured, positive guidance from the teacher(s) to assist the student in tracking desired behavior (Menzies, Lane & Lee, 2009). As the student reaches independent self-regulation, supports are faded (Rafferty, 2010). Before implementing a self-monitoring strategy, review the following considerations.

- ✓ The student has the ability to perform the target behavior, but is not motivated.
- ✓ The student is expected to engage in the target behavior multiple times per week.
- ✓ The student's culture is not interfering with his lack of performance of the target behavior.

(Rafferty, 2010)

Interested in learning more?

Begin by [creating a self-monitoring checklist](#).

Want another behavior strategy?

Read the related T/TAC William & Mary article on [visual supports](#).

Need a class wide management system?

Browse management card examples in the related article ['It's in the Cards'](#).

Reading

Repeated Reading

Students who have strong [reading fluency](#) can process and understand literature (Rasinski, 2004; Stevens et al., 2017). One strategy which increases reading fluency for students with learning disabilities, is [repeated reading](#). Not only does repeated reading address fluency deficits, it also improves comprehension and accuracy of text read (Stevens et al., 2017). When repeated reading is paired with video self-modeling, it promotes positive student experiences, and ensures errorless practice (Decker & Buggey, 2014).

Interested in learning more?

Watch [repeated reading in action](#) and find free graphing templates.

Follow a sequential process for [video self-modeling](#).

Want free lessons to use in a small group?

Explore student activities on [monitoring fluency](#).

Check out this list of additional links!

Reference T/TAC William & Mary's [Reading Resource Guide](#).

Writing

Self-Regulated Strategy Development

Students with disabilities benefit from strategy instruction for the writing process (Gillespie & Graham, 2014). One teaching model which incorporates both strategy instruction and self-regulation is Self-Regulated Strategy Development (SRSD) (Harris, Santangelo, & Graham, 2008). SRSD may supplement a writing workshop approach to intensify the instruction for students in need. The [stages of SRSD](#) include direct instruction in activating prior knowledge, writing strategies, modeling, memorizing through use of mnemonics, and goal-setting prior to independent student practice (Harris et al., 2003).

Want to learn more?

View an in-depth module on using SRSD with a writing strategy from Vanderbilt University's [IRIS Center](#).

View a testimony from a classroom teacher on the [benefits of SRSD](#).

Need free tools?

Explore more tools to support the [SRSD](#) strategy.

Wondering how SRSD can support Specially Designed Instruction?

Browse a related T/TAC William & Mary's article on [Specially Designed Instruction and SRSD](#).

References

- Bruhn, A., McDaniel, S., & Kreigh, C. (2015). Self-monitoring interventions for students with behavior problems: A systematic review of current research. *Behavioral Disorders, 40*(2), 102-121.
- Decker, M. M., & Buggey, T. (2014). Using video self- and peer modeling to facilitate reading fluency in children with learning disabilities. *Journal of Learning Disabilities, 47*(2), 167-177. doi: 10.1177/002221941250618
- Gillespie, A., & Graham, S. (2014). A meta-analysis of writing interventions for students with learning disabilities. *Exceptional Children, 80*(4), 454-473. doi: 10.1177/0014402914527238
- Harris, K. R., Graham, S., & Mason, L. H. (2003). Self-regulated strategy development in the classroom: Part of a balanced approach to writing instruction for students with disabilities. *Focus on Exceptional Children, 35*(7), 1-14. Retrieved from <https://journals.ku.edu/FOEC/article/view/6799/6152>
- Harris, K. R., Santangelo, T., & Graham, S. (2008). Self-regulated strategy development in writing: Going beyond NLEs to a more balanced approach. *Instructional Science, 36*(5-6), 395-408. doi: 10.1007/s11251-008-9062-9
- The IRIS Center. (2008). SRSD: *Using learning strategies to enhance student learning*. Retrieved from <https://iris.peabody.vanderbilt.edu/module/srs>

- Ives, B. (2007). Graphic organizers applied to secondary algebra instruction for students with learning disabilities. *Learning Disabilities Research and Practice, 22*(2), 110-118. doi: 10.1111/j.1540-5826.2007.00235.x
- Keeler, M., & Swanson, H. L. (2001). Does strategy knowledge influence working memory in children with mathematical disabilities? *Journal of Learning Disabilities, 34*(5). doi: 10.1177/002221940103400504
- Marita, S., & Hord, C. (2017). Review of mathematics interventions for secondary students with learning disabilities. *Learning Disability Quarterly, 40*(1), 29-40. doi: 10.1177/0731948716657495
- Menzies, H. M., Lane, K. L., & Lee, J. M. (2009). Self-monitoring strategies for use in the classroom: A promising practice to support productive behavior for students with emotional or behavioral disorders. *Beyond Behavior, 18*(2), 27-35. Retrieved from <https://www.semanticscholar.org/paper/Self-Monitoring-Strategies-for-Use-in-the-Classroom-Menzies/5ae049d6d18bf0659672890526f8706aefa8de21>
- Rafferty, L. (2010). Step-by-step: Teaching students to self-monitor. *Teaching Exceptional Children, 43*(2), 50-58. doi: 10.1177/004005991004300205
- Rasinski, T. (2004). Creating fluent readers. *Educational Leadership, 61*(6), 46-61. Retrieved from <http://www.ascd.org/publications/educational-leadership/mar04/vol61/num06/Creating-Fluent-Readers.aspx>
- Stevens, E. A., Walker, M. A., & Vaughn, S. (2017). The effects of reading fluency interventions on the reading fluency and reading comprehension performance of elementary students with learning disabilities: A synthesis

of the research from 2001-2014. *The Journal of Learning Disabilities*,
(50)5, 576-590. doi: 10.1177/0022219416638028

van Garderen, D., & Scheuermann, A. (2015). Diagramming word problems: A
strategic approach for instruction. *Intervention i School and Clinic*, 50(5),
282-290. doi: 10.1177/1053451214560889

van Garderen, D. (2007). Teaching students with LD to use diagrams to solve
mathematical word problems. *Journal of Learning Disabilities*, 40(6). doi:
10.1177/00222194070400060501