

COVID-19 Resources

Class-Wide Math Intervention Protocol

Class-wide interventions tend to be standard protocol fluency-building interventions by design, which means that the skills targeted should be skills that students have been taught how to do (i.e., students have acquired these skills). This intervention protocol should be used in conjunction with the NASP handout *Considerations for Math Intervention Upon the Return to School*.

Materials Needed to Implement Class-Wide Math Intervention

- Intervention protocol. Here is one to try:
<https://static1.squarespace.com/static/57ab866cf7e0ab5cbba29721/t/5d67ed2a390a160001c5b4ac/1567092010232/Spring+Math+Classwide+IP.pdf>
 - Sequence of skills.
 - Daily practice materials.
 - Weekly assessment materials.
 - Criteria for decision making, a way to graph progress, and implementation support structures.
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Students are paired up with classmates so that each student pair includes a relatively higher performing and a relatively lower performing student. The higher performing student will be the first worker each day. Students work together to complete a period of skill practice where one student works and the other student follows along and helps if the worker gets stuck or makes an error. The worker should attempt to solve each practice problem and think aloud while solving each problem. After a set period of time (3 minutes), students change roles—the worker becomes the helper, and the helper becomes the worker for a second 3-minute practice interval.

The teacher should be monitoring the quality of the practice and note any common error patterns. If there is a common error pattern (e.g., a regrouping error), the teacher can quickly reteach the concept using explicit instructional techniques and make a note to provide more in-depth instruction or review of that concept during core instruction. After the second practice interval, the teacher will distribute an independent practice page to each student, and students will work independently for a timed interval to generate a fluency score. After the timed practice is complete, students will trade papers for scoring. The teacher calls out the correct answers, and students score the papers. After scoring, students should correct their errors and explain to their math partners how they have repaired the errors that they made. Finally, the teacher delivers a small reward, privilege, or celebration for the class as a whole based on growth. Class-wide math intervention requires 12–15 minutes in Grades K–6 and 14–20 minutes in Grades 7–12. Research has found that class-wide math intervention implemented four times per week resulted in stronger learning gains than the same number of total minutes of intervention delivered once per week or twice per week (Coddling, VanDerHeyden, Martin, & Perrault, 2016).

Active Ingredients of Class-Wide Math Intervention

- Guided practice with corrective feedback as needed.
 - Think aloud during problem solving.
 - High dosage of opportunities to respond at the correct level of task difficulty.
 - Task difficulty is selected to reflect a skill that the student has acquired (i.e., the child can accurately complete the task, but the performance is labored).
 - Independent practice with a goal to try to “beat one’s last best score.”
 - Delayed error correction and explanation to math partner how the error was corrected.
 - Group contingency delivering a small privilege, reward, or celebration based on growth of the class as a whole.
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REFERENCE

Codding, R., VanDerHeyden, Martin, R. J., & Perrault, L. (2016). Manipulating Treatment Dose: Evaluating the Frequency of a Small Group Intervention Targeting Whole Number Operations. *Learning Disabilities Research & Practice, 31*, 208-220.

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