

Planning Standards-Aligned Instruction Within a Multi-Tiered System of Supports

Basic Facts Example

College- and Career-Ready Standard Addressed

Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a ten (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$). (CCSS 1.OA.6)

Core Instruction

1. Implement a standards-aligned mathematics program that includes instruction in addition, subtraction, and underlying skills.
2. Provide explicit instruction in addition and subtraction strategies.
3. Incorporate peer-mediated and independent practice opportunities to foster skill fluency, maintenance, and generalization to new problem type.
4. Incorporate class-wide motivation strategies to promote engagement and on-task behavior, with individualized supports for students receiving supplemental intervention.
5. Periodically assess learning of all students in the class to determine the effectiveness of core instruction and identify students in need of additional supports.¹

Secondary Intervention

1. Use companion evidence-based materials that align with the core program (if available) or an evidence-based intervention program that addresses first-grade standards (e.g., Fusion).²
2. Provide explicit preteaching of core content as a supplement to core instruction.
3. Provide explicit instruction in and practice with underlying skills (e.g., adding and subtracting within 10).
4. Provide small-group instruction with multiple response formats and explicit corrective feedback.
5. Incorporate additional small-group or individual behavior strategies targeted to individual needs in engagement and motivation.
6. Collect progress monitoring data on first-grade computation at least one or two times per month using a valid, reliable tool.³

Intensive Intervention

1. Use progress monitoring and error analysis data to identify skill deficits and necessary adaptations to the secondary intervention.
2. Provide explicit instruction in foundational skills (broken into smaller steps), such as representing addition and subtraction with visuals or objects.⁴
3. Prioritize standards and spend extended time providing explicit instruction in those areas.
4. Provide multiple and varied opportunities for learning and practice (e.g., using manipulatives or number lines) with explicit corrective feedback.
5. Incorporate additional behavior strategies targeted to individual needs in attention, self-regulation, learning or organizational skills, or social skills.
6. Collect progress monitoring data weekly, at a level that is sensitive to change, and adjust instruction as needed.⁵

Alternate Achievement Standards⁶

1. Provide instruction appropriate to a student's level of cognitive and symbolic functioning, using precise, simple language.
2. Provide explicit instruction in foundational skills that underlie the standard (e.g., number sense and object counting with one-to-one correspondence).
3. Use additional individualized behavior and motivation strategies, with a focus on functional communication and independence.
4. Collect progress monitoring data on accuracy, fluency, and level of independence.
5. Incorporate assistive technology as needed to teach and assess skills.

- ^{1.} For reviews of academic screening tools, see the Screening Tools Chart produced by the National Center on Response to Intervention (<http://www.rti4success.org/resources/tools-charts/screening-tools-chart>). Although mastery measurement may track progress in specific skills, such as addition within 20, using a general outcome measure, such as mathematics computation, will provide a broader assessment of generalized progress in the annual curriculum.
- ^{2.} All noted programs are for illustrative purposes only; the National Center on Intensive Intervention (NCII) does not endorse products. For reviews of academic interventions, see the Academic Intervention Tools Chart produced by NCII (<http://www.intensiveintervention.org/chart/instructional-intervention-tools>).
- ^{3.} Progress monitoring data will determine whether secondary intervention is sufficient or a student needs more intensive supports. For reviews of progress monitoring tools, see the Progress Monitoring General Outcome Measures Tools Chart produced by NCII (<http://www.intensiveintervention.org/chart/progress-monitoring>).
- ^{4.} For more information on identifying relevant foundational skills to guide individualized intervention, see Powell, S. R., & Fuchs, L. S. (2013). Reaching the mountaintop: Addressing the Common Core Standards in Mathematics for students with mathematics difficulties. *Learning Disabilities Research and Practice*, 28(1), 28–37.
- ^{5.} Frequent progress monitoring will allow for timely adaptations, as needed. Note that progress monitoring must occur at a student's instructional level to be sensitive to growth in skills.
- ^{6.} For more information on these strategies, see Courtade-Little, G., & Browder, D. M. (2005). *Aligning IEPs to academic standards for students with moderate and severe disabilities*. Verona, WI: Attainment Company.