Closing the Gap:

An Actionable Guide for Effective Intervention Instruction at the Secondary Level

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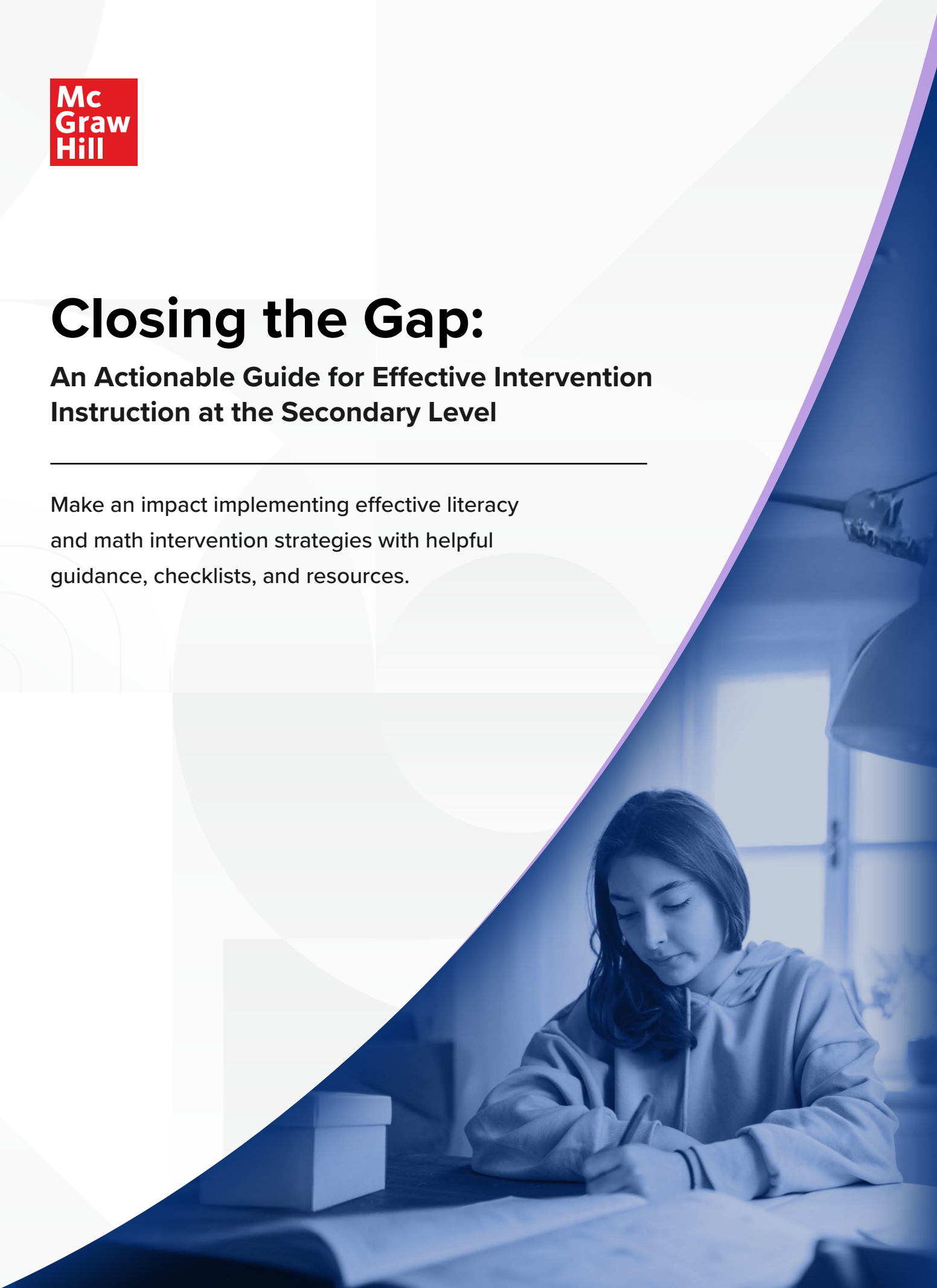
Make an impact implementing effective literacy and math intervention strategies with helpful guidance, checklists, and resources.



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Current Challenges and How to Take Action

The Urgency

Secondary school students who lack foundational literacy or numeracy skills face steep challenges in accessing grade-level content. As academic expectations rise sharply in middle school, students are expected to read complex texts, draw knowledge across multiple disciplines, and apply mathematical reasoning to problem-solving. Yet too many adolescents enter secondary school without the literacy and numeracy foundations required for success.

Research shows that without targeted intervention, these gaps persist and limit students' ability to engage in deeper learning (De Bruin et al., 2023). Moreover, the social and academic consequences compound: students who struggle to access grade-level work often disengage from school, which undermines both achievement and confidence (Allensworth et al., 2018).

The Nation's Report Card further highlights the urgency of targeted solutions in secondary education. In 2024, only 30% of eighth graders scored at or above Proficient in reading, while 28% were Proficient in mathematics. Eighth-grade reading performance was two points lower than 2022 and five points lower than 2019. In mathematics, the average eighth-grade score was not significantly different from 2022, remaining well below pre-pandemic levels.

Together, these results paint an alarming picture of adolescent learning in the United States.

Call to Action

To close literacy gaps, schools must implement structured, explicit, and systematic interventions and supplemental supports grounded in scientifically proven approaches. This includes:

- Explicit vocabulary development, comprehension strategy instruction, and targeted supports for those reading below grade level (Kamil et al., 2008).
- Direct vocabulary instruction, guided comprehension practice, and sustained engagement with complex texts (Biancarosa & Snow, 2006).
- Discipline-specific literacy strategies required to navigate texts in science, history, or mathematics (Shanahan & Shanahan, 2008).
- Pairing reading with purposeful writing tasks to enhance comprehension and support skill mastery (Graham & Hebert, 2010).

These findings underscore that effective literacy solutions must go beyond surface-level skills to provide explicit, strategy-based instruction that enables students to access and succeed with grade-level content (Snow & Moje, 2010).

Similarly, addressing gaps in mathematics requires explicit, systematic, and responsive instruction, including:

- Carefully sequenced lessons, scaffolded practice, and ongoing progress monitoring to ensure measurable gains and student mastery (National Center on Intensive Intervention, 2016).

- Teaching students to recognize and apply problem schemas to improve word-problem solving and overall mathematical reasoning (Powell & Fuchs, 2018).
- Exposing students to mathematical ideas through different representations such as visual models, symbolic, and real-world contexts to deepen understanding and support accurate skill application (Rau & Matthews, 2017).

The research aligns with evidence that intervention and supplemental programs must be intentional, data-driven, and designed to rebuild essential numeracy skills while supporting access to rigorous, grade-level coursework.

The McGraw Hill Commitment

McGraw Hill has spent decades developing and refining both intervention and supplemental solutions on this foundation of research. We deliver programs that are grounded in scientific evidence and proven in classrooms with carefully sequenced lessons that consistently demonstrate efficacy. Equally important, we provide professional learning and ongoing coaching to empower educators with the knowledge, skills, and confidence to deliver instruction effectively. With this combination of high-quality curricula and robust teacher support, schools can ensure instruction is both effective and equitable, fueling every student's acceleration toward lasting success.

Why Closing the Gap Is Harder for Adolescent Students

Instruction Assumes Mastery

By middle school, teachers expect students to have already mastered basic skills. Instruction focuses on higher-order thinking, not reteaching foundational skills or concepts.

Pace and Instructional Rigor Increases

Middle and high school curricula move quickly and include complex texts and multi-step math problems, making it difficult for students with skill gaps to keep up.

Motivation and Self-Esteem Are Impacted

Older students are more aware of their struggles, which can affect their willingness to take academic risks (Allensworth et al., 2018; Foorman et al., 2018).

Less Time for Intervention

There's less instructional time built into the secondary school day for remediation and fewer dedicated intervention resources (Kamil et al., 2008; NCII, 2016).

Gaps Widen Over Time

Students in Grades 6–12 with math and literacy gaps often fall further behind because they struggle to engage with grade-level content across all subjects (De Bruin et al., 2023; NAEP, 2024).

Core Principles of Effective Literacy and Math Intervention

Explicit, Systematic, and Sequential

- Skills are directly taught in a logical, step-by-step manner.
- Instruction is cumulative, building on mastered skills to support new learning.
- Modeling, guided practice, and immediate feedback are key components.

(Kamil et al., 2008; Biancarosa & Snow, 2006; NCII, 2016)

Targeted and Efficient

- Lessons are designed to address only what students need to fill gaps.
- Instruction is designed to accelerate learning and fits within limited intervention time.

(De Bruin et al., 2023; NCII, 2016)

Age-Appropriate and Respectful

- Materials and delivery acknowledge students' maturity while addressing their skill level.
- Engagement is prioritized through pacing and relevance.

(Allensworth et al., 2018; Foorman et al., 2018)

Grounded in the Science of Reading and Science of Math

- Use research-proven curricula that demonstrate effectiveness in closing literacy and math gaps.
- Align instruction with the Science of Reading, Science of Math, and other evidence-based practices.

(Foorman et al., 2018; Sweller, Clark, & Kirschner, 2010)

Implementation Considerations

Effective intervention isn't just about having the right program—how schools organize time, deploy staff, and support educators are other key considerations for implementation. This can be particularly challenging in middle and high schools where school schedules and class credits leave little room for remediation on a large scale. Administrators, instructional leaders, and teachers must work together to ensure structured, high-quality implementation. Research shows that schools that protect intervention time, prioritize teacher support, and use ongoing progress monitoring are more successful in accelerating student growth (Kamil et al., 2008; NCII, 2016).

Roles and Responsibilities for Administrators

Schedule with Intent

- Allocate intervention blocks that fit within the school day.
- Protect intervention time from being overtaken by other priorities.

Staff Strategically

- Assign intervention to teachers who can follow structured routines and build student rapport—no prior specialization in foundational instruction is required.

Provide Ongoing Support

- Offer coaching, planning time, and access to professional learning focused on explicit instruction practices.

Monitor and Adjust

- Use progress data to ensure students are on track and adjust placement or pacing as needed.

Roles and Responsibilities for Teachers

Follow a Consistent Routine

- Use clear, structured lessons that emphasize modeling, checking for understanding, and scaffolding.

Prioritize Practice and Feedback

- Allow time for students to respond aloud or in writing, and correct misconceptions immediately.

Build Relationships and Celebrate Growth

- Foster a positive learning environment where progress is recognized and setbacks are normalized.

Differentiate

- Group students by skill level and adjust pacing to meet their needs.

Secondary Intervention Design Guide

This design guide builds on the research and implementation strategies outlined earlier, turning evidence into actionable secondary intervention practices. Addressing skill gaps, academic demands, and limited instructional time requires a structured, research-based approach. This framework gives schools a clear roadmap for designing, delivering, and sustaining effective intervention and supplemental supports.

Drawing on a broad body of research, our nine-step guide focuses on explicit instruction, accurate placement, progress monitoring, and student engagement so you can apply these practices consistently across classrooms to accelerate learning.

Each step highlights essential components of effective secondary intervention with practical literacy and math applications, giving teachers, leaders, and administrators a shared playbook for delivering instruction that is targeted, responsive, and equitable for all learners (Kamil et al., 2008; NCII, 2016).

	Component	Literacy Application	Math Application
1.	Accurate Skill Placement Why: Identifying the right starting point ensures instruction targets the cause of learning gaps.	Use a diagnostic that identifies decoding, fluency, or comprehension gaps (e.g., cannot decode multisyllabic words, low fluency rate).	Use a screener to identify gaps in number sense, place value, or operations (e.g., doesn't understand regrouping, struggles with multiplication facts).
2.	Systematic, Explicit Instruction Why: Direct, structured instruction accelerates learning by removing ambiguity and building mastery step by step.	Lessons follow a clear gradual release of responsibility structure with repetition and review of key literacy skills. The amount of new information introduced is controlled.	Lessons are broken into sequenced steps for one concept at a time. Teachers model problem-solving (I Do, We Do, You Do).
3.	Age-Appropriate Content and Materials Why: Engaging, respectful content keeps students motivated while addressing elementary-level skills.	Texts and examples reflect middle and high school interests. Avoid young (juvenile) illustrations or themes.	Word problems and examples are realistic and relevant to adolescent experiences (e.g., ratios with music playlists, budgeting with decimals).
4.	Student Engagement Why: High-engagement routines increase practice and attention, which are essential for catching up.	Use choral and individual reading aloud to build fluency; incorporate guided oral responses (e.g., "What word?", "What does it mean?").	Use oral fact fluency routines, verbal math reasoning, and student explanations (e.g., "How do you know that?", "Say it with me.").
5.	Immediate Feedback and Error Correction Why: Timely correction prevents misunderstandings and reinforces accurate skills.	When a student misreads a word, the teacher immediately models, then practices (e.g., "Listen: *con-struct*. Say it with me.").	When a student makes a math error, the teacher immediately corrects, models, and practices the correct steps (e.g., regrouping, order of operations).
6.	Academic Vocabulary Why: Understanding key terms helps students access complex content and instructions.	Teach academic vocabulary explicitly (e.g., summarize, infer) and use sentence stems (e.g., "The author is saying...").	Pre-teach math terms (e.g., product, numerator) and support math talk with structured prompts (e.g., "To solve this, I...").
7.	Progress Monitoring Why: Ongoing checks ensure instruction stays targeted to student needs.	Weekly fluency checks or comprehension questions track growth. Teachers chart data to adjust group pacing.	Quick checks on fact fluency, computation accuracy, or problem-solving strategies guide regrouping or reteaching.
8.	Motivating Environment Why: A supportive classroom environment builds a willingness to take academic risks.	Provide regular positive feedback. Materials avoid a childish tone; celebrate growth.	Use quick wins and affirm progress. Mistakes are learning opportunities for everyone.
9.	Instructional Routines Why: Consistent routines make learning feel more manageable and help students lock in the steps they need to succeed.	Create a predictable structure that reinforces decoding, fluency, and comprehension skills, helping students focus, build automaticity, and gain confidence.	Consistent routines support procedural fluency and conceptual understanding by reducing cognitive load and providing clear, repeatable steps for problem-solving.

Scaling, Empowering Students, and Supporting Grade-Level Learning

Now that we've established the core principles and implementation strategies for effective intervention, the next step is scaling impact across the school or district. Building a structured, sustainable framework ensures students receive consistent, targeted supports while maintaining access to grade-level learning.

Creating a system where every student is seen, supported, and empowered begins with early identification, tiered supports, and strategies that build engagement and motivation. Together, these elements help schools create environments where students stay connected to learning and are positioned for long-term success.

Creating a Scalable Schoolwide System

Screen Early, Place Accurately

Use screeners or diagnostic tools at the start of the year (and midyear) to identify students needing foundational support.

Build a Tiered System of Support

Ensure Tier 2 and Tier 3 interventions are distinct, focused, and progress-monitored.

Use Data for Grouping and Exit Decisions

Progress monitoring should be embedded and used to move students up and out when appropriate.

Supporting Students and Student Motivation

Sustained progress depends on more than instruction alone; it requires an environment where students feel valued, capable, and motivated to grow. The strategies below highlight how schools can create that environment and keep students moving forward:

- Use asset-based language that emphasizes strengths and potential (avoiding terms like struggling, below-level, or deficits).
- Celebrate all progress, no matter how small, to build momentum and motivation.
- Select evidence-based materials that are scientifically proven to close achievement gaps and designed specifically for older learners.
- Instruction should include built-in opportunities for ongoing skill practice and application.

Making Grade-Level Learning Possible

Middle and high schoolers deserve grade-level access, and foundational intervention makes it possible. With structure, support, and explicit instruction, schools can close gaps without losing time or engagement. Here is how we can make it possible:

- Give every student the chance to succeed. Foundational intervention helps middle and high schoolers access grade-level content and build the skills they need to thrive.
- Create opportunity through structure. With clear frameworks, intentional supports, and explicit instruction, schools can close literacy and math gaps without losing valuable learning time or student engagement.
- Rebuild the foundation for success. The right approach can rebuild essential skills, boost academic confidence, and reignite students' motivation—setting the foundation for future success and lifelong learning.

(Biancarosa & Snow, 2006; Allensworth et al., 2018)

McGraw Hill Intervention Solutions

McGraw Hill's literacy and math intervention solutions and supplemental supports are structured, explicit, and systematically designed to equip students with the foundational skills they need to re-engage with learning and thrive in secondary school. Supported by fidelity structures, our research-based, classroom-tested programs ensure that instruction is not left to chance.

But delivering effective intervention requires more than a program—it requires a comprehensive implementation plan. McGraw Hill partners with districts to support success for all, from district leadership and instructional coaches to teachers and students. Our implementation resources are designed to make this possible, offering planning frameworks, fidelity checklists, reflection prompts, and progress-monitoring guides that help every stakeholder stay aligned and focused on student growth.

Resources

Administrator, Teacher, and Student Checklists

Implementation Reflection Questions

Explore our intervention solutions that empower you to accelerate learning for every student:

mheducation.com/intervention

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Administrator Checklist

Planning and Infrastructure

- ☐ Intervention time is scheduled consistently and protected from interruptions.
- ☐ Screening and diagnostic tools are in place for both literacy and math.
- ☐ Clear criteria exist for student qualification and intervention duration.

Staffing and Training

- ☐ Interventionists are selected based on ability to implement explicit routines.
- ☐ Professional development on foundational instruction has been provided.
- ☐ Coaching and collaboration opportunities support instructional fidelity.

Monitoring and Adjustment

- ☐ Progress-monitoring systems guide instructional decisions and student movement.
- ☐ Regular data reviews inform groupings and pacing adjustments.
- ☐ Walkthroughs or observations monitor implementation quality and happen frequently.

Teacher Checklist

Preparation

- ☐ Student skill data has been reviewed for accurate placement.
- ☐ Structured lessons and materials are prepared in advance.

Instructional Delivery

- ☐ Lessons include clear modeling, guided practice, and frequent comprehension checks.
- ☐ Students are actively engaged through oral and written responses.
- ☐ Immediate corrective feedback is provided as needed.

Classroom Culture and Motivation

- ☐ A respectful, growth-focused environment is maintained.
- ☐ Materials and examples are age-appropriate and relevant.
- ☐ Student progress is communicated to families regularly.

Student Self-Checklist for Intervention Success

Engagement and Effort

- ☐ I come prepared.
- ☐ I follow instructions.
- ☐ I participate.

Growth Mindset

- ☐ Mistakes are part of learning, and I keep trying.
- ☐ I use feedback to improve.
- ☐ I notice my progress and celebrate all progress.

Classroom Community

- ☐ I treat classmates with respect.
- ☐ I help create a positive learning environment.
- ☐ I receive feedback on my progress regularly, which is communicated to my family.

Ownership

- ☐ I track my goals and progress.
- ☐ I ask for help when needed.

Pre-Implementation Reflection Questions

For Administrators

- What gaps exist in our current foundational skills support for literacy and math?
- How can intervention time be effectively protected?
- Who will deliver intervention, and what support will they require?
- How will success be defined and measured?
- How will staff buy-in be cultivated?

For Teachers

- What are my students' key skill barriers?
- How prepared am I to deliver explicit instruction?
- What support do I need to implement intervention effectively?
- How will I create a motivating environment?
- How will I communicate progress to students, administrators, and families?

For Students

- What skills do I feel confident about?
- What do I find challenging?
- What goals do I have for math and reading?
- How do I feel about reading and math?
- What helps me focus and learn best?

Post-Implementation Reflection Questions

For Administrators

- Was intervention delivered consistently and with fidelity?
- What student outcomes were observed?
- How effectively was data used for decision-making?
- What feedback was received from staff and students?
- What improvements are needed?

For Teachers

- What progress did students make, and what evidence supports this?
- How did students respond academically and emotionally?
- What instructional strategies worked best?
- What adjustments were made (outcomes)?
- What will be changed next time (expected outcomes)?
- How has this experience influenced my view of intervention?

For Students

- What skill improvements do I notice in math and reading?
- What did I learn about how I learn best?
- When did I feel proud of my progress?
- How did I feel working in math or reading groups?
- What advice would I give to new students?

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