

**Strategy Matrix for Students with Learning Disability in Mathematics
Organization of Needs with Useful Interventions**

Disability: Learning Disability in Mathematics

Student Strengths:

- Have significantly better performance in word problem solving than students with a Reading Learning disability.
- Excel with visual concepts.
- Be independent in the student's safety skills.

| Common Disability Characteristic that Interfere with Learning | Evidence-based Strategies to Increase Students School Success |
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| Academic (reading, writing, math, science, social studies) | |
| Have poorly developed number sense. | <p>Constant Time Delay</p> <ul style="list-style-type: none"> - Provide visual timers. For example, a teacher individualizes a timeline for the student to complete a task. - Allot for task completion. - Drill the frequent timed practice. <p>Peer Assisted Learning Strategies (PALS)</p> <ul style="list-style-type: none"> - Increase the amount of personal assistant to keep the student on task to use physical space and environmental structure such as a cross-age tutor. - Use different visual aids and hands-on activities with a partner. - Allow verbal response instead of writing answers with a cross-age tutor. - Practice and repetition of math fact calculations in a group. |
| Demonstrate slow or inaccurate recall of basic arithmetic facts. | <p>Graphic Organizers</p> <ul style="list-style-type: none"> - Engage with interactive dynamic visual models such as number lines. - Visually encode both the number question and answer for long-term memory storage. - Use visual strategies such as STAR Strategies. (S – Search the word problem/ T - Translate the words into an equation in picture form/ A – Answer the problem/ R – Review the solution.) <p>Mnemonics</p> <ul style="list-style-type: none"> - Use explicit instruction in selecting, applying, monitoring, evaluating the use of appropriate strategies to solve word problems. - Have paper-and-pencil and/or computerized drill and practice such as modeling, practice, and reinforcement. - Connection between efficient paring of math problems and correct answers promptly. - Use Flashcards to master basic math concepts. |
| Social / School Skills | |
| Have low self-esteem | <p>Positive self-talk</p> <ul style="list-style-type: none"> - Try not to say negative comments about him in the class. - Be sure that it is ok for him to be sad, uncomfortable, or embarrassed. - Have constant communication with him and his parents and let them know that the teacher cares for his needs and how the student is doing great before doing anything else. - Positive behavioral supports to him upon repeated incidents of his inefficient behaviors. <p>Academic games</p> <ul style="list-style-type: none"> - Practice playing games in a low-stress environment. - Help boost confidence to join in on the fun another time. - Help him participate in the game with verbal practice. - Avoid playing a game like Uno or Bingo altogether. - Set up game stations with various games with/without math skills. |
| Have a tough time understand school or class rules regarding math skills | <p>Precorrection</p> <ul style="list-style-type: none"> - Count on something with the whole class, not individually. - Pick one or two students or the teacher's assistant to hand out something to the students evenly. - Count on time altogether, write the time on the whiteboard, and ring a bell or give students verbal signs when time is up. - Build-in opportunities to talk about things like time or amounts during his spare time. <p>Behavior Specific Praise Statements</p> <ul style="list-style-type: none"> - Compliment him on his strengths in front of his classmates. - Share a partnership with his peer to develop group-monitoring systems. - Be verbalized what he does well on time by the teacher one on one. - Understand the needs for some time to adjust and get used to it via communication. |
| Behavior / Organization | |
| Use inefficient behaviors to learn | <p>Good Behavior Game</p> <ul style="list-style-type: none"> - Teacher-led explicit modeling. - Why and how questions and students' verbalized answers. - Define appropriate and inappropriate behaviors and post the rules during the game. - Award points or rewards. - Provide feedback on (in)appropriate class-behaviors through the game. - Use 'progress monitoring' to reduce negative behavioral learning strategies. |

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| | <p>Written Behavior Chart</p> <ul style="list-style-type: none"> - Clear, concise, and explicit steps are necessary to use the chart. - Use a learning strategy that emphasizes the attainment of skills and behaviors in the class. - Make a chart of an individual's behavioral challenges and check how it goes with the teacher. - Create safe and supportive learning environments with his close friends, the teacher, and parents with the teacher's guidance. |
| <p>Have difficulty understanding how problems are organized on the page.</p> | <p>Journaling for Academics</p> <ul style="list-style-type: none"> - Use a goal or progress journal to find different ways to approach math facts; i.e., instead of just memorizing the number forms up to 1,200, use the ages of his family members to explain the number forms with a teacher's assistant. - Use a journal to organize ideas daily. - Instead of forcibly memorizing math concepts he does not understand clearly, explain ideas and problems clearly and encourage him to jot down what he understands in terms of the math concept on his journal. <p>Foldables</p> <ul style="list-style-type: none"> - Write phrases or words on each side of the foldable with a teacher's assistant to help him organize and represent materials or contents he learned in a subjectively meaningful way. - Give him enough time to encourage him, make a pattern of organization with the foldable, and keep practicing. - Modify the essential concepts with the foldable he needs to know. |