

# Inclusion of Students With Learning, Emotional, and Behavioral Disabilities Through Strength-Based Approaches

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## Abstract

As more and more students with learning disabilities (LD) and emotional and behavioral disabilities (EBD) find themselves in an inclusive, general education setting, there is a need to find ways to maximize their educational performance. One promising approach is to use growth mindset training to help students move away from deficit thinking and instead use strengths-based thinking. This column explains the meaning of growth mindset theory and includes a rationale that explains why this approach may be particularly beneficial for students with LD and EBD. A brief review of past studies investigating the use of growth mindset that highlights the positive potential of this inexpensive, easy-to-implement approach is presented. Finally, a nine-step process for incorporating a growth mindset into the inclusive classroom setting is provided and tools to be used by teachers working with students with LD and EBD are included.

## Keywords

growth mindset, emotional and behavioral disorders, learning disabilities, inclusion, self-concept

Students with learning disabilities (LD) and emotional and behavioral disabilities (EBD) often experience frustration around learning, and consequently develop negative academic self-concepts (i.e., they underestimate their own abilities and fail to recognize their potential; Gage & Lierheimer, 2012; Klassen & Lynch, 2007). Federal legislation has required that school districts meet the educational needs of students with disabilities in the least restrictive environment, which for students with LD and EBD increasingly means the general education classroom (McLeskey, Landers, Williamson, & Hoppey, 2012). General education teachers often report that they feel unprepared to teach students with disabilities (Ajuwon et al., 2012). Therefore, it is necessary to equip teachers working in inclusive settings with effective ways to promote the success of students with LD and EBD. One potentially promising philosophy of learning is growth mindset training, which can help students move away from deficit thinking and toward a strengths-based model of learning (Dweck, 2010; Snipes & Loan, 2017). Cognitive-behavioral therapy, which informs growth mindset training, is rooted in the idea that if people change

how they think, their actions will change as well (Mayer & Van Acker, 2009).

## Growth Mindset: Theory and Research

*Growth mindset*, a term coined by Dweck (2010), concerns a person's views about the nature of intelligence. Individuals who have a growth mindset understand that the brain is like a muscle that becomes stronger with use. Students with a growth mindset are more likely to see academic difficulty or errors as opportunities to learn and to develop their brains (Dweck, 2010). By contrast, individuals with a *fixed mindset*

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believe that intelligence is a set characteristic that cannot be changed. The drawback of students having a fixed mindset is that they may be more likely to give up when faced with difficult tasks because they believe they cannot change their adverse circumstances (Farrington, 2013). The belief that one has no control over what happens to them is also referred to as *learned helplessness*, and it is common among students with LD and EBD (Sutherland & Singh, 2004; Valas, 2001).

Low expectations are often set for students with disabilities (Pugach & Warger, 2001). To make matters worse, students with LD and EBD face frequent setbacks in school (Klassen & Lynch, 2007; Nelson, Benner, & Boharty, 2014) and may begin to internalize these struggles as they develop fixed mindsets. If a student feels incapable or inferior in some way due to societal stereotypes about disability and/or learned helplessness, it can have detrimental impacts on confidence and performance. Spitzer and Aronson (2015) reviewed a number of social psychological interventions aimed at addressing stereotype threat, including growth mindset training, and concluded that these approaches can help students to change their theories of intelligence for the better, and ultimately increase their academic achievement.

A recent report from the Institute of Education Sciences found that students' self-reported growth mindset scores were positively correlated with prior academic achievement (Snipes & Loan, 2017). The report posited that students' thoughts about the malleability of intelligence (i.e., their mindset) influenced their academic behaviors (e.g., completing assignments, engagement), which in turn affected academic achievement. Experimental studies with low-achieving middle and high school students have found that interventions designed to teach students to develop growth mindsets have improved students' behavior and academic achievement (Blackwell, Trzesniewski, & Dweck, 2007; Yeager et al., 2016).

## Implementing Growth Mindset in the Classroom

Students with LD and EBD are at risk for developing learned helplessness and negative academic self-concepts. Teachers need tools to help these students change their thinking to a strengths-based perspective. A nine-step process for implementing growth mindset training follows.

### Step 1: Gather Baseline Data

Before beginning to teach students about growth mindset, it is helpful to get a sense of what type of beliefs they currently have concerning theories of intelligence. One way to do this is by using a mindset scale or quiz. To build interest and get buy-in from students, especially those with learning and/or behavioral challenges, the teacher

might say: "We are going to be learning about a topic called growth mindset. But before we start, I am interested in finding out more about your ideas and beliefs about intelligence."

One popular mindset measure is the Project for Education Research That Scales (PERTS) Growth Mindset Scale (Blackwell et al., 2007). This survey consists of a series of statements to which users indicate their agreement on a 6-point Likert-type scale (e.g., "You can learn new things, but you cannot really change your basic intelligence"). Young children or those with reading difficulties may have trouble understanding all of the items on the PERTS, and teachers may wish to modify wording or explain the questions to students before they complete it. Another online version of a growth mindset quiz is available at [www.mindsetonline.com](http://www.mindsetonline.com). "Test Your Mindset" is a 16-item quiz that allows users to click their responses to a series of statements about mindset, intelligence, and talent. At the end of the quiz, the program provides a score, indicating the degree to which the user possesses either a fixed or a growth mindset. Table 1 provides links to additional mindset tests and quizzes.

To facilitate student completion of these scales, in particular for students with LD and EBD, teachers may wish to consider the following accommodations: (a) provide a model/think-aloud demonstration of how the Likert-type format works, completing a few items for the class on an overhead projector or Smartboard; (b) preteach some of the terminology that may be new or confusing for students (e.g., *substantial*); (c) read the quiz items aloud to the class to facilitate student understanding and answer any questions about vocabulary that may arise; and (d) explain that there are no wrong answers or judgments attached to the quiz.

### Step 2: Define Growth Mindset and Fixed Mindset

Depending on the age of the students, teachers may want to adapt the following definitions and descriptions to make them more developmentally appropriate. A good place to begin is by explaining that there are two ways people can think about learning and being smart. One is known as a *fixed mindset*. People who have a fixed mindset believe that intelligence, or how smart they are, is something that people are born with a certain amount of, and no matter how hard they work or practice, they cannot really change it. Those with a *growth mindset*, on the other hand, believe that with effort and practice, the brain can grow and intelligence can be developed over time. Visual aids are often particularly helpful for students with LD (Dexter & Hughes, 2011); teachers may wish to create a chart, with one side listing descriptors associated with a growth mindset, and the other describing a fixed mindset.

**Table 1.** Ways to Use Growth Mindset in the Classroom.

Resource	Examples for use in the classroom		
Mindset quizzes	<a href="http://mindsetonline.com/testyourmindset/step1.php">http://mindsetonline.com/testyourmindset/step1.php</a>		<a href="http://rpd.net/admin/images/uploads/resource_177.pdf">http://rpd.net/admin/images/uploads/resource_177.pdf</a>
Videos	Kahn Academy: <a href="https://www.khanacademy.org/youcanlearnanything?video=main#">https://www.khanacademy.org/youcanlearnanything?video=main#</a>	University of California: <a href="https://www.youtube.com/watch?v=EIVUqy0vIEE">https://www.youtube.com/watch?v=EIVUqy0vIEE</a>	How We Learn: <a href="http://www.youtube.com/watch?v=t4np5wLAhVw">http://www.youtube.com/watch?v=t4np5wLAhVw</a>
Bubble maps (display in room as a visual reminder)	What does a growth mindset look like? What does a fixed mindset look like?	What does a growth mindset sound like? What does a fixed mindset sound like?	Why is this helpful? Why is this harmful?
Modeling/think-alouds	Model making mistakes (be enthusiastic!)	Explain mistakes as opportunities for growth	Mistakes mean we are on the edge of new learning
Bulletin board	Growth mindset quotes (e.g., “I have failed over and over again in my life, and that is why I succeed”; Michael Jordan)	Reframing (examples of changing a fixed mindset statement into a GM statement)	Brag Board—a place to post times when students used growth mindset
Praise/encourage students	Catch them making mistakes	Celebrate attempts to solve challenging problems	Invite them to come up and share their thinking process

To engage students, especially those with EBD who may lack interest or motivation (Ryan, Pierce, & Mooney, 2008), teachers can put each descriptor on a sentence strip and have students help determine on which side of the chart they belong. Examples of fixed mindset descriptors include “You can’t change how smart you are” and “Mistakes are something to be feared/ashamed of.” Possible growth mindset descriptors include the following: “With effort and practice, you can develop your intelligence” and “Mistakes are opportunities to learn and grow our brains.” Another idea to help solidify the definitions of each type of mindset is to create a “Jeopardy” or interactive clicker game using mindset statements. Students can earn points, which may have value in a token economy, for correct responses.

### Step 3: Examples and Explanations of Growth Mindset

To further deepen students’ understanding of growth mindset, it is helpful to present information in a variety of instructional formats. There are numerous video presentations that provide engaging descriptions and examples of growth mindset (see Table 1). Some reference famous people who began with little or no talent in a given area and became famous in their field, and others use intriguing metaphors (e.g., crossing a ravine) to help students understand that, with practice and effort, a task or skill becomes easier. Teachers may want to consider preteaching some of the vocabulary that may be unfamiliar to students, such as *neuron*, *synapse*, and *ravine*, which will help make the concepts accessible to students with LD and EBD.

A “K-W-L” chart is another way to check on student knowledge and questions prior to and after instruction (Ogle, 2009). The K-W-L method involves charting what

students already **K**now about a topic and **W**ant to know about it before a lesson begins. After completion of the lesson, teachers ask the students to share that they have **L**earned about the topic. During or after showing one or more of the videos, it is helpful to have a class discussion to reflect on the content. This allows the teacher to check for understanding, provides students a chance to practice organizing and sharing their thoughts and to work on valuable social skills.

Another idea is to have the students do a “think-pair-share” to respond to prompts or questions created ahead of time (Kagan, 1990). These might include questions such as the following: “Can you think of something you could not do at first, but became skilled at with practice? How does it feel when we stay in a fixed mindset?” The think-pair-share is particularly helpful for students who may be hesitant to share, or who need additional processing time. The initial “think” step builds in extra time to gather thoughts and prepare an idea to share.

### Step 4: Create a Culture that Fosters Growth Mindset

Now that the students have an understanding of the concept of growth mindset, it is time to get them engaged in helping to build a community that fosters this type of thinking. The overall goals of this step are to show students that their contributions are valued and to emphasize that the classroom is an active, connected, positive community, of which they are an integral part. This message is especially pertinent for many students with EBD, who may feel that they are not valued, understood, or connected while at school (Cefai & Cooper, 2010). Teachers can ask students for input to create two bubble maps, one for “growth mindset” and the other

for “fixed mindset.” Bubble maps are simply a form of graphic organizer, which have a strong evidence base in supporting content acquisition for students with disabilities (Dexter & Hughes, 2011). These charts can be tailored to students’ individual needs, but could also include prompts such as the following: What does a growth mindset look like? Why is a growth mindset important? Teachers can let students take turns writing on the bubble map, or putting prewritten sentence strips of their ideas on if necessary, acting out role-playing scenarios to demonstrate growth and fixed mindsets, and coming up with additional ways of fostering growth mindset in the classroom. After completing the charts, teachers can display them in an easily visible area of the classroom and refer to them frequently as they notice students encountering challenges. Finally, teachers can consider incorporating a classwide system for documenting students’ use of growth mindset. A simple mason jar with a pile of blank slips of paper beside it can be used by students anytime they feel like adding to the collection. Pulling a slip from the jar and celebrating the growth mindset described is a great strategy to maintain student interest.

### *Step 5: Model Growth Mindset Thinking*

For teachers and students to get maximum benefit from growth mindset activities, it is important for teachers to be consistent in their use and acknowledgment of this type of thinking. One of the most powerful tools that teachers have to influence their students is through their own behavior modeling. As teachers are solving a problem or teaching a lesson, they should make a conscious effort to model mistakes of their own. It is important for students, especially those with LD and EBD who often experience failure in school, to see mistakes as a natural and an expected part of the learning process. For example, teachers can use a challenging math problem to demonstrate the value of attempting to work through a solution, reframing this as an opportunity for growth and something about which to be excited and not ashamed. Teachers can invite students to share about their own thinking process, how they tackle a difficult problem, and discuss possible solutions with the class as a whole.

### *Step 6: Allow Room to Grow*

Although the goal is to build a growth mindset and to expand its use over time, it is also important to talk with students about times when they may not have done this, which is especially important for students with disabilities who may have a tendency to shut down when they receive negative feedback, and who, perhaps, are not accustomed to the idea that mistakes are okay. To create a safe place for students to explore this concept, it may be helpful for the

teacher to start the conversation by sharing about a time when she or he displayed a fixed mindset and how that worked out. For example, “I went bowling with my friends last weekend, and I was so terrible, that I got upset and left after the first frame! I was so embarrassed!” Teachers can discuss how this felt, and how next time they might choose a growth mindset, and perhaps how things could go differently.

For example, “This choice left me feeling disappointed, frustrated, and left out. I thought that giving up when I failed would help, but it actually made me feel worse. Next time, I will try to remind myself that we all have things that are new or difficult for us and that with practice, I could actually get better, which would feel really empowering! Giving up when I face a challenge only makes me lose a chance to grow in that area.”

Teachers can invite students to share about times when they had a fixed mindset and what the experience was like for them, and they can create a chart with discussion starters such as the following: (a) “A time where I did not have a growth mindset was . . .” (b) “This left me feeling . . .” (c) “Next time, I might consider trying . . .” (d) “I imagine this might feel . . .” Offering a word bank and examples to facilitate students’ ideas and group conversation is a good way to get started.

### *Step 7: Fill the Classroom with Examples*

To aid students in building their growth mindset, teachers can think about types of visual displays that can serve as reminders and encouragement. A growth mindset bulletin board, which might include inspirational quotes, is a good place to begin. Using the students’ interests and role models as a guide, teachers can search for mindset-related quotes that they believe will speak to them. One example would be to include quotes from famous athletes, such as the following from Michael Jordan: “I’ve failed over and over again, and that is why I succeed” (Jordan & Vancil, 2005, p. 91). The bulletin board is also a place to post examples of changing a fixed mindset statement into a growth mindset statement (see Table 2).

It is worth taking the time to discuss the power of self-talk, a strategy that has been effective in improving academic engagement for students with EBD (Callicott & Park, 2003), and then to work together with students to identify both types of self-talk. Afterward, the teacher can create a bulletin board, with one side titled “A Fixed Mindset Would Say . . .” and the other titled “A Growth Mindset Would Say . . .” Students should be encouraged to stop and think about what type of self-talk they are engaging in, and reminded that they can choose to talk back to their fixed mindset! A third idea for the growth mindset bulletin board is to create a brag board of students’ use of growth mindset. This could be a place where

**Table 2.** Fixed Versus Growth Mindset T-chart.

What can I say to myself?	
Instead of . . .	Try thinking . . .
I don't understand.	I will ask for help. Other people can show me a different way.
I'm not as good at this as other people.	I will not compare myself to others. I set my own goals and work hard to reach them.
I'm not smart.	I can learn and grow my brain by working hard.
I made a mistake.	I can learn from my mistakes and try another way.
This is too hard.	This may take some time and effort.
This is impossible.	It might be hard but hard is not impossible. The word itself says "I'm possible!"
I give up.	I'll use some of the strategies I've learned.
It's good enough.	Is it really my best work?

both teachers and students post sticky-notes, lists, or illustrations documenting times when they observed a classmate implementing growth mindset thinking. For example, "I noticed that Betty did not give up when we were working through a really tricky word problem." As with the bubble maps discussed earlier, it is most effective if the bulletin board is frequently referenced, acknowledged, and utilized, so teachers can consider a weekly *brag time* when they can highlight its contents. With younger students, this could be during circle time; with older ones, perhaps a brief weekly meeting could be dedicated to "Growth Mindset Brag Time." Finally, the bulletin board could have photos and interviews with faculty/staff sharing examples of times when they faced a challenge with a growth mindset.

### Step 8: Consider Grading and Feedback

As opposed to traditional letter, number, or pass/fail grades, a grade of *Not Yet* conveys the message that learning is a process that takes time (Dweck, 2010). This can be particularly helpful for students with LD and EBD, who may associate grades with a sense of failure or disappointment. Although traditional grades can shut down or discourage students who do not get desired scores, a grade of *Not Yet* feels expansive, hopeful, and filled with possibility. It is also worthwhile for teachers to take the time to think about the words they use to praise and acknowledge the students as they work. Behavior-specific praise, especially that which focuses on effort, hard work, and observable growth/skills, is more effective than generic/nonspecific praise, such as *Good job!* (Hattie & Timperley, 2007). Instead of telling a student "You are so smart," which implies that intelligence is an innate fixed trait, teachers can be more specific and draw attention to the effort the student expended in the process of tackling that challenge. For example, "You have put so much effort and time into learning long division; it really shows!"

### Step 9: Generalizing Beyond the Classroom

Now that the students are familiar and comfortable with using growth mindset in the academic sense, it can be valuable to brainstorm ways to incorporate this kind of thinking beyond the classroom setting. Teachers may try facilitating a discussion in which students think of contexts where a growth mindset would be helpful, such as the following: "As I was writing a poem for a friend, I noticed I was feeling rather stuck and frustrated. The words and ideas were not flowing easily and I wanted to give up. Then I remembered the growth mindset lessons that I am teaching you all! And I realized that I could apply a growth mindset to almost anything that is challenging! Can you all help me brainstorm some ideas of where we might test out our growth mindset thinking?" Now, with the students' help, the teacher can chart a list of places and circumstances that might be good for testing out growth mindset thinking. Some ideas might include relationships, learning a sport or foreign language, and overcoming a fear.

### Conclusion

One potentially effective and efficient means of reducing the academic achievement gap is to "help students cope with threats to their identity that impair intellectual functioning and motivation" (Spitzer & Aronson, 2015, p. 1). If teachers have high expectations for students and teach them to have a growth mindset, they may help them overcome deficit thinking (Gutshall, 2013). For students with LD and EBD, who often lack confidence in their own abilities (Gage & Lierheimer, 2012; Klassen & Lynch, 2007), these expectations may make all the difference.

### Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The author(s) received no financial support for the research, authorship, and/or publication of this article.

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