

Mathematics Thinkers and Everyone Needs a Positive Story

All children—regardless of personal characteristics, background, or physical challenges—deserve an opportunity to learn mathematics to the best of their ability. This declaration is loud and clear, and NCTM’s mission of providing sound mathematics instruction and holding high expectations for *all* children (NCTM 2000) is important in our mathematical world. Mathematics permeates our daily lives from the moment we awaken to the moment we fall asleep. In many ways, our mathematical successes and failures get woven into the life stories that make us who we are.

Unfortunately, for some students, mathematics is more a burden than a joy. A sizable number of students struggle in mathematics, and their stories often do not have happy endings. Second only to reading, mathematics is the domain in which many students encounter great difficulty (Mazzocco 2001), which may arise from a lack of prerequisite knowledge, poor instruction, or a learning disability. Children with learning disabilities in mathematics often have perceptual or memory problems, and they tend to use poor strategies (Hallahan and Kauffman 2003; Van de Walle 2007). If such problems are not addressed early with sound instruction, students may come to believe that they are not capable of succeeding in mathematics. Students’ ideas as to why they succeed or fail are called *attributions*, and these fuel their motivation and drive.

Attribution Theory

Attribution theory is a psychological theory that explains motivation in terms of attributions—explanations, justifications, and excuses—that individuals make (Weiner 1994, 2000). According to this theory, most attributions can be characterized along these three dimensions:

1. Locus—Is the cause of success or failure internal or external?
2. Stability—Is the cause of success or failure likely to remain the same or change in the near future?
3. Control—Can the cause of success or failure be controlled?

In many ways, attributions are the perfect example of knowledge construction in action. Children interpret new events in terms of their existing knowledge and beliefs about themselves and develop what seems like a reasonable explanation of what has happened to them. Because attributions are self constructed, they may or may not be true (Schunk 2004; Weiner 1994, 2000). False attributions can still provide a window into how children feel about themselves as learners in a domain. If teachers listen carefully to the stories children tell about themselves and mathematics, they will hear the attributions children make.

This insight can help teachers better understand students’ motivation and behavior. For example, if a child succeeds in mathematics, her story will likely contain a happy tale and be full of positive attributions as to why she is able to succeed. Holding a happy story with positive attributions will encourage her to set higher goals for herself because she believes that she has the capacity to succeed (her ability is inside) and that her ability will remain

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Doers:

(it is stable). When obstacles to learning arise, this child likely will seek assistance, work hard, and try new strategies (she has control). Success helps students develop positive attributions that, in turn, help them become capable characters in their life stories.

In contrast, children who have not succeeded in mathematics often attribute their failure to themselves (believing they do not have what it takes to succeed). They believe that no matter what they do, mathematics will always be difficult for them (it is a stable trait) and that there is nothing they can do to improve (failure is uncontrollable). In their minds, doing mathematics leads to little joy and causes feelings of frustration, shame, and guilt. Children who feel this way set low goals for themselves, put forth little effort to practice, and fall further and further behind (Ames and Lau 1982). Just as positive attributions influence behavior and motivation, so do negative attributions, persuading children to perceive themselves as incapable characters in their life stories (Schank 1990).

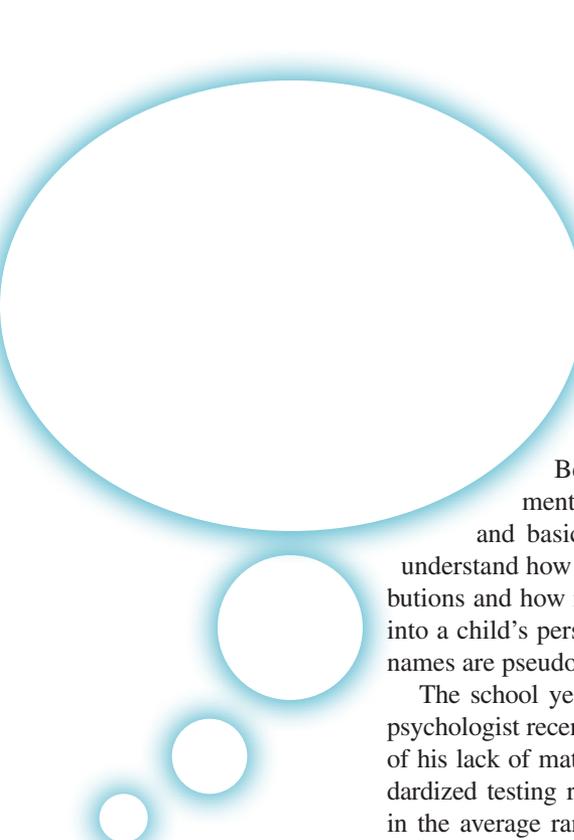
As a teacher and researcher, I believe that teachers can learn much about children and their concepts about mathematics and themselves by listening to their stories and the attributions they contain. I also believe that just as teachers can learn from children's stories, children can learn from the stories of others. Listening to a story in a carefully

chosen picture book, identifying with a character or characters, and hearing what they attribute their success and failures to can help children develop more positive ways of thinking, which, in turn, may influence their motivation and behavior in a classroom (Schiro 2004; Sipe 2001). Providing sound instruction and helping children develop positive attributions can assist their development of a positive story about themselves and mathematics, fueling their motivation and making NCTM's ideal of opportunity a reality for every child. I base my claims on my experience in working with children with mathematics disabilities. Each scenario that follows provides specific examples of how my ideas can be transformed into practice. See the **appendix** on page 234 for additional storybooks and applications.

Four Vignettes

Justin's story

Perceptual difficulties in mathematics manifest themselves in rotations, inversions, and distortions of symbols, signs, and words. Children with perceptual difficulties mix up operational signs such as + and \times and confuse numbers such as 6 and 9. Many young children display these behaviors, but children with perceptual difficulties do not outgrow this



confusion. Even in the upper grades, they experience problems in detecting operations, placing numbers on a line, and putting numbers in columns and rows (Thornton et al. 1983).

Because of problems with alignment, place value is difficult for them, and basic algorithms are challenging. To understand how perceptual factors influence attributions and how negative attributions may be built into a child's personal story, I introduce Justin (all names are pseudonyms), a third-grade student.

The school year has just begun, and the school psychologist recently finished testing Justin because of his lack of mathematics progress last year. Standardized testing reveals that Justin's intelligence is in the average range, but a significant discrepancy exists between his verbal reasoning and his spatial ability. Justin has tremendous difficulty writing numbers on paper and lining up numbers in columns and rows. Before testing confirmed this weakness, Justin's teachers considered him careless and inattentive. In the past, he received many reprimands and failing grades as a result of their misconceptions.

When Justin arrives in Ms. Sally's class, she wants to learn all she can about the struggles he has with mathematics. She reviews the testing results in his file and decides that if she is going to help Justin, she must listen to his attributions, help him set realistic goals, and show him strategies he can use to compensate for his perceptual difficulties. To begin to understand Justin, Ms. Sally listens carefully to his story and analyzes the attributions he makes. As Justin works on his mathematics assignments, she determines where he places blame for his struggles (inside himself or outside?), the stability of his beliefs (will things always be this way, or can they change?), and the controllability of his situation (can he control the cause of his struggles?). Ms. Sally hears him make comments such as, "I can't do this; math is hard. I'm just dumb and will always be this way." It is evident that Justin perceives himself to have a low aptitude in mathematics, believes there is nothing he can do to change this, and, as a result, sets low goals for himself. These negative beliefs are not good and are taking their toll. Although he is only in third grade, Justin is becoming more and more frustrated with mathematics, and he is not getting the practice he needs. Armed with insight, Ms. Sally begins her work.

Ms. Sally and Justin sit down and discuss the results of his tests. Ms. Sally explains how Justin's trouble perceiving operational signs and numbers

leads to his difficulties. Ms. Sally tells Justin that she believes in him and conveys high expectations for him in mathematics this year. She explains that they will be working all year on solving problems and that she will help him develop strategies he can use to get unruly numbers under control. To make her ideas more concrete, Ms. Sally reads *One Hundred Hungry Ants* (Pinczes 1993) to Justin. She chose this book because it reveals the importance and necessity of lining up in an orderly fashion and being in control.

Justin likes the story about one hundred hungry ants marching single file to a picnic and discovering that moving in one long row is too slow to get to the picnic on time. To speed things up, one ant decides to organize the others. He gets them to march side by side and in rows of four, five, and then ten. On pages where the ants are rearranging themselves, utter chaos ensues; and Ms. Sally uses these pages to help Justin understand the importance of using ordered rows, columns, and lines: "Look at how paying attention to where everyone should go helps the ants move more smoothly. Think of numbers on a page as the ants in this story."

To help Justin gain a sense of control over numbers and operations, Ms. Sally tells him to "think of yourself as the ant in the story who orders the others to help them get to their goal." To aid Justin in his battle, she has him solve addition problems by building one-, two-, and three-digit numbers with base-ten blocks. She gives him a place-value mat to keep the blocks aligned and provides him with a template when he transfers numbers onto paper. Ms. Sally also writes the operation signs in color to help Justin focus on the operation he needs to perform.

Ms. Sally helps Justin work on positive affirmations to say to himself as he works, especially when the going gets tough:

- I can do mathematics with hard work and a strategy.
- I am like the little ant who keeps numbers in a line.
- The more I practice subtracting, the better I get.

Thinking more clearly about himself and mathematics has led Justin to set some realistic goals that focus on self-improvement instead of comparison to others. To determine if his goals are being met, Justin now monitors his own progress with a simple bar graph. In four short months, Justin's grades have

Table 1**Mathematical Difficulties and Strategies**

Mathematical Difficulties	Strategies to Use
<i>Perceptual</i>	
<u>Visual</u> Problems with column alignment, place value, operand adherence <u>Auditory</u> Problems with picking up auditory information in noisy rooms and difficulty with tuning out noises	<u>Visual</u> Provide worksheets with centimeter grids and templates for traditional algorithms. Use real models when possible (i.e., base-ten blocks). Assign a buddy to check work. Keep workspace free of clutter. <u>Auditory</u> Seat child in front of room. Keep room quiet when concentration is needed. Clearly provide information and repeat key facts and ideas.
<i>Memory</i>	
<u>Short-Term</u> Trouble recalling what was just learned Can recall new information for a period of time but loses it rapidly <u>Long-Term</u> No immediate difficulty but later difficulty retrieving information Poor automaticity of basic facts (recall is slow and inaccurate) Poor quantitative knowledge, number concepts, counting, and arithmetic skills	<u>Short-Term</u> Present facts and instructions slowly and one at a time. Check for understanding: Ask child to restate directions and have child listen to peers restating directions and ideas. Provide a special quiet space when child must work alone. Use external memory aids. <u>Long-Term</u> When giving problems verbally, be sure child has access to a written version. Be patient for answers; allow ample wait time. Use games to exercise memory skills for basic facts. Provide external memory aids (e.g., computers, timers, calculators). Teach children how to use these tools; encourage and reinforce them when they do. Encourage children to use mathematics across domains and in the real world.
<i>Integrative</i>	
Difficulty with abstract ideas, concepts, and connections Makes many errors Relies on immature strategies Limited flexibility due to limited strategy knowledge	Provide explicit training in strategies. Encourage child to restate problems in own words. Have student express ideas in verbal and written form. Frequently require explanations and justifications to heighten awareness of new ideas and make connections. Allow time for repetition and practice of new skills. Provide opportunities for child to teach concepts to peers. Use multiple presentations (illustrations, words, drawings, concrete objects, actions).

gone from failing to passing, and his frustration has lessened tremendously! Justin's story is changing and becoming more positive. Instead of being in an uncontrollable situation, Justin now works hard to get unruly numbers under control. Other strategies Ms. Sally uses with Justin are listed in **table 1**,

which also contains ideas for working with children with auditory perception problems.

Karen's story

In addition to perceptual difficulties, students who struggle with mathematics may also have short-

Figure 1**Attributions survey**

Mark how much you agree or disagree with each of the following statements by circling one choice.

	SA strongly agree	A agree	D disagree	SD strongly disagree
Children who fail at mathematics will always fail at mathematics.	SA	A	D	SD
Children who are good at mathematics are born that way.	SA	A	D	SD
I control my successes in mathematics.	SA	A	D	SD
Even if someone fails at mathematics, with hard work she can change things.	SA	A	D	SD
If I work hard, I will succeed in mathematics.	SA	A	D	SD
Children who are good at mathematics work hard to get that way.	SA	A	D	SD
When it comes to mathematics, I cannot control what happens.	SA	A	D	SD
I succeed at mathematics because of strategies I use.	SA	A	D	SD
My teacher is the reason I fail at mathematics.	SA	A	D	SD
When it comes to mathematics, I'm just unlucky.	SA	A	D	SD
If someone is bad at mathematics, they will always be this way.	SA	A	D	SD
When it comes to mathematics, I feel out of control.	SA	A	D	SD

term memory deficits. Short-term memory is the system that stores information for fifteen to twenty seconds, so children with this type of memory problem have difficulty recalling information even a few seconds after they see or hear it (Baddely 2001). When copying from the board, these children forget what they are doing and never complete the task. When working on mathematics problems, they lose track of what they need to remember from the beginning to the end (Thornton et al. 1983).

Karen is a fifth-grade student who shows classic symptoms of short-term memory deficit. She forgets what she is doing midway through mathematics problems, which is becoming an issue because Karen's classmates are laughing at her forgetfulness and choosing not to work with her in cooperative groups. Karen's forgetfulness is a problem outside of school, too. Her mother is an accountant, and Karen wants to grow up to be like her. Unfortunately, Karen's dream will not become a reality if her ability and attitude do not improve.

When asked to tell her story about mathematics and herself, Karen tells one of humiliation and withered dreams. Karen attributes her failure to her lack of ability and feels there is nothing she can do to make things better. Karen wants to be good at mathematics so badly that she is becoming increasingly restless and unhappy with herself. Recently, when it was mathematics time, she hit her fists against her

desk and began crying. Needless to say, her teacher, Mr. Hector, is very concerned. He sees a girl in distress and knows that if he is going to help her, he must listen to her story to hear the attributions she is making. He must provide sound instruction to help Karen change her beliefs. To gain a clearer picture, Mr. Hector develops a brief survey of twelve questions (see **fig. 1**) and asks Karen to complete it during mathematics time.

After Karen completes the survey, Mr. Hector uses it as a springboard for conversation. Mr. Hector and Karen sit down and discuss how she feels about mathematics. Mr. Hector takes notes as she speaks and notices that several themes keep surfacing. Karen consistently blames her struggles in mathematics on her poor memory (an internal flaw) and believes there is nothing she can do to make things better (it is uncontrollable). Things will always be this way (it is stable). Karen dislikes who she is because she feels she will never achieve her future goals. Armed with this insight, Mr. Hector develops a plan that begins with reading *The Greedy Triangle* (Burns 1994). Mr. Hector chooses this book because he feels it contains an important message for Karen to learn.

In the beginning of the book, a triangle is happy just being itself. The triangle likes its shape because it can support roofs, make music, and become a slice of pie. But one day, the triangle feels dissatisfied with being a triangle and doing the same old things. It

wants excitement and more from life, so it goes to the shapeshifter to be transformed into a more interesting shape. The shapeshifter turns the triangle into a quadrilateral, and this new shape enables many new experiences. As a quadrilateral, the former triangle becomes a baseball diamond, computer screen, and picture frame. After a period of time, the triangle-turned-quadrilateral once again becomes unhappy. The same thing happens no matter what shape (heptagon, pentagon, decagon) the shapeshifter changes the triangle into. With each transformation, the triangle is happy for a while but eventually becomes restless, dissatisfied, and unhappy with whatever shape it becomes. After many shapeshifts, the triangle loses its angles and becomes circular. Not having a side to stand on, the triangle has a difficult time doing its favorite things. In the end, the triangle begs the shapeshifter to turn it back to its original shape. When the shapeshifter does, the triangle is happy again. It realizes it is happiest being itself.

Mr. Hector and Karen read the story several times so she will remember the plot and internalize its moral. Whenever Karen gets frustrated and wishes she were someone else, Mr. Hector reminds her of the greedy triangle. Mr. Hector also works with Karen to help her learn how to circumvent her limited memory space. Karen's mathematics instruction consists of a problem-based approach, so when Mr. Hector gives assignments, he makes a conscious effort to speak slowly and clearly so Karen can process what she must complete. In their classroom, Karen now has a quiet area to work free from distractions. She carries a mathematics notebook in which she draws pictures of concepts and writes down important information and facts she needs to recall. Whenever she works on problems, Karen uses manipulatives and checks her work with a calculator. Multiple strategies and cues are being used to help Karen. Some of these are listed in **table 1** (short-term memory).

These strategies are helping lessen Karen's anxiety and frustrations. Karen is learning to be happy with herself despite her limited memory. Her grade has risen from a D to a C. Karen has even been heard joking with her classmates that she is a triangle in a very round world. But that's okay with Karen because she knows that the world needs children of all shapes.

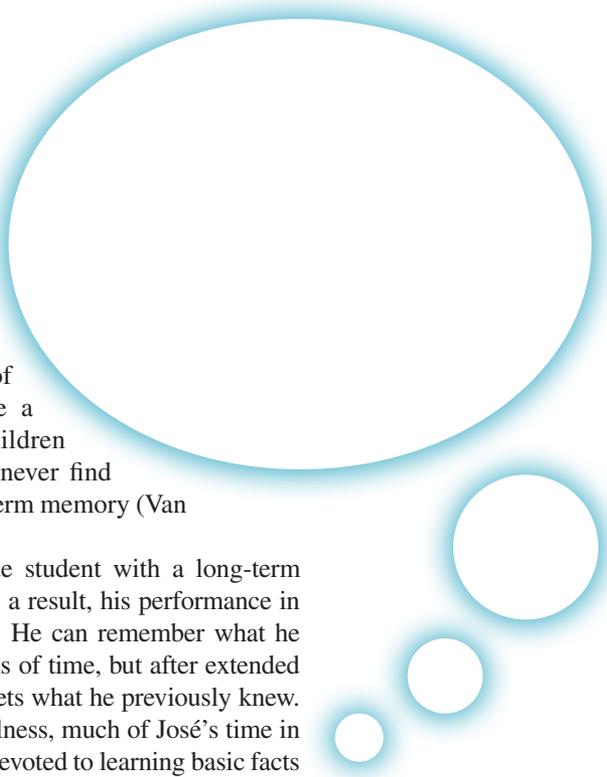
José's story

Another type of memory problem that children who struggle in mathematics often have involves their long-term memory. Children with this type of diffi-

culty initially show no immediate problem with learning new concepts. These students have problems when they try to recall information after time has passed. Mastery of basic facts would be a hallmark for these children because they just can never find the facts in their long-term memory (Van de Walle 2007).

José is a sixth-grade student with a long-term memory deficit, and, as a result, his performance in mathematics is uneven. He can remember what he learned for short periods of time, but after extended periods, he simply forgets what he previously knew. Because of his forgetfulness, much of José's time in mathematics has been devoted to learning basic facts over and over again. As a result, José thinks mathematics is nothing more than remembering facts. He sees no connection to real life or to his own personal needs. José is getting pretty bored. Whenever time for mathematics class approaches, José begins to withdraw. He feigns illness and asks to go to the nurse or simply puts down his head. Seeing a child who is struggling, his teacher, Miss Susie, decides to intervene. Wanting to understand how José feels and knowing that he loves to draw, Miss Susie asks José to draw a picture of himself doing mathematics. José gladly complies and draws a small character in a dark cave full of large numbers and operational signs. When Miss Susie asks José about his drawing, he explains that it shows his mind as a dark cave in which facts and answers seem to get lost. As they talk, it becomes clear that José feels incapable of success in mathematics, and this perception is causing him to feel hopeless and out of control.

To help José develop a positive story and better attributions, Miss Susie has him read *Math Curse* (Scieszka and Smith 1995). She chooses this book because it tells the perils of a child who lives in a world full of mathematics problems. When the child wakes up in the morning, getting dressed becomes an issue of knowing how much time to allot. Eating breakfast involves measurement. Lunch includes a fraction problem. Each school activity demands mathematics skills, too: English class is full of word problems, and P. E. requires solving many distance and measurement problems. Trapped in a world full of mathematics, the child is willing in the end to accept the facts and take on the challenge of



mathematics throughout the day. Miss Susie wants José to understand that mathematics is part of all our lives and that, regardless of his challenges, he can overcome them like the child in the story does.

José's parents and Miss Susie work together to help José create a more positive view. Miss Susie is enthusiastic whenever she teaches a lesson, and she models her use of mathematics throughout the school day. Attendance becomes a subtraction problem, and lunch orders become problems of estimation. Instead of focusing on mere recall, Miss Susie's lessons are all based on problem solving. Students work on applied problems and real-world mathematics. To help José do this, Miss Susie has taught him numerous strategies, and José now carries a calculator wherever he goes. José's parents are helping him see the use of mathematics outside of school. José has taken a particular interest in how his father uses mathematics in his construction job. José's parents have told him they hold high expectations that some day he will become a construction boss. As a result of these interventions, José's story of himself as a learner and doer of mathematics is improving. José now attributes his success to a better understanding of the practicality of mathematics and the use of external sources to extend his limited long-term memory space. His esteem is rising, as are his grades. More strategies used with José are presented in **table 1** (long-term memory).

Devonne's story

The final student we will meet is Devonne, a sixth-grade girl who can solve problems that rely on basic facts but falls short when higher-level thinking involving abstract concepts are needed. Devonne is a concrete thinker whose ideas come in bits and pieces instead of integrated wholes. When she works on problems, Devonne relies on immature strategies. Unfortunately, these challenges are causing great difficulties for Devonne in mathematics. When asked to tell her story of mathematics and herself, Devonne conveys exasperation, sadness, and loss. In the lower grades, she was good at mathematics, but now that the subject is getting more complicated, she attributes her failures to a weakness in herself—a weakness unlikely to change. In Devonne's mind, she was once a starring character, but now that mathematics has become

more demanding, she no longer plays a main role. Her poor self-concept is causing Devonne to give up when it comes to mathematics. At this point in her development, Devonne has learned helplessness and is completely closed to learning new ideas. To help Devonne regain pride, her teacher, Mr. Zavala, reads *The King's Chessboard* (Birch 1998).

Mr. Zavala chooses this book because it is about a wise old man who does a favor for a king just because he sees the need. Unfortunately, the king perceives the favor as recognition of his weakness. Because he is the ruler, the king does not want to be in debt to anyone and insists that the man accept a reward. So, the man asks that a grain of rice be placed on his chessboard and that every day the grain be double the amount of the day before. The first day, one grain of rice is placed on the chessboard, two the next day, four on the third day, eight on the fourth day, and so on. The story and illustrations show how rapidly the amount of rice increases. By the twenty-fourth day, four men carry a heavy sack of rice weighing over one hundred pounds. By the thirty-sixth day, sixteen wagons, each holding a ton of rice, are hauling away the man's reward. In the end, the royal mathematicians note that there is not enough rice in the whole world to carry out the man's request. Realizing this, the king goes to the man and admits that he cannot fulfill his promise. The man says it is not necessary because he is happy simply having done the favor for the king. He was satisfied without the rice and only took it at the king's insistence. He helps the king realize that even kings are human and must sometimes acknowledge their weakness. The king comes to understand that pride can make a fool of anyone, even a great king like himself.

After reading the book aloud, Mr. Zavala works to help Devonne understand that when it comes to mathematics, she sometimes needs help. Just as the man wanted to help the king, other people are available to provide support for Devonne. Mr. Zavala also provides instruction and strategies for Devonne by—

- encouraging her to restate problems in her own words;
- providing plenty of wait time to allow her to think;
- asking her to express her ideas in verbal, written, and pictorial form;
- requiring explanations and justifications of ideas;

- allowing time and opportunities for repetition and practice of new skills in unique ways (computers, performances, rhythm and rhyme);
- providing opportunities for Devonne to teach concepts to peers;
- using multiple presentations when he teaches a lesson (e.g., illustrations, words, drawings, concrete objects, action); and
- connecting mathematics to other classes, such as social studies and reading.

Used consistently, these strategies are helping Devonne's story change. She no longer sees herself as helpless but as capable. Devonne now volunteers in a second-grade mathematics class. She is very proud of being a peer tutor, and when she talks about herself and mathematics, she often refers to *The King's Chessboard*. Devonne claims that she is like the king in the story. She knows her limitations and is clever enough both to realize when she needs assistance and to ask for it.

Conclusion

NCTM's vision that every child can succeed in mathematics is profound. In this article, I have provided scenarios that reveal how this ideal can become a reality for students with specific disabilities in mathematics. When teachers listen to stories and the attributions they contain, they gain insight into the motivation and behavior of children. When teachers hear negative attributions, there is much they can do. They can model enthusiasm, hold high expectations for every child, teach children strategies, help children set realistic goals, and use assessment to show progress toward those goals. However, just as important is a classroom where a problem-solving focus is used. When students understand that mathematics is all around, makes sense, and is applicable to their lives, they form a new view of this important domain.

Children who struggle in mathematics face challenges just as important as children with any other type of disability (Hale and Fiorello 2004). Mathematics is such an important part of today's world that children, from an early age, recognize that mastering the subject is essential for success. When children feel they have no control over mathematics, become frustrated and sad about their lack of progress, and lose their future dreams, mathematics destroys self-worth and self-esteem. Fortunately, just as teachers learn from students' stories, stu-

dents can also listen and learn from the stories others tell. Listening to a story in a well-chosen storybook and identifying with its characters can help children who struggle gain a better image of themselves. Children like Justin, Karen, José, and Devonne can change their attributions and become stars in the stories of their lives. All students need a positive story of themselves as doers and thinkers of mathematics.

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Appendix

Book Titles, Plots, and Mathematical and Affect Components

Book Titles	Book Plots and Mathematical and Affect Components
<i>Grandfather Tang’s Story: A Tale Told with Tangrams</i> (Tompert 1990)	Grandfather Tang tells of two fox fairies that transform themselves into various animals. The story is about loyalty and bravery in the face of danger. As children listen, they can use tangram pieces to change the fox fairies into the various beasts. Working with tangram pieces is a good activity for children with visual-spatial difficulties.
<i>Seventeen Kings and Forty-two Elephants</i> (Mahy 1987)	Seventeen elephant-riding kings set out on a journey and encounter new creatures along the way. This story can be used as a basis for various math problems. It also can help children understand that mathematics is a journey full of challenges, fun, and new insight. Appropriate for children with all types of mathematics difficulties.
<i>Count on Your Fingers African Style</i> (Zaslavsky 1980)	This wonderful ethnic tale poses different finger-counting strategies from various African communities like the Kamila, Taita, and Masai. A good book to help children think about different cultures and the mathematics they use. Appropriate for children with all types of mathematics difficulties.
<i>No Fair</i> (Holtzman 1997)	Two children play games and experience the concept of being fair. This is an easy reader, written to help children gain a positive view of mathematics and learn a moral lesson as well. Appropriate for children with all types of mathematics difficulties.
<i>The Shape of Things</i> (Dodds 1996)	This book helps children understand shapes because it shows shapes in the world. Asking children to find and trace real-world shapes is a great hands-on experience for students with visual-spatial difficulties.
<i>Sir Cumference and the First Round Table: A Math Adventure</i> (Neuschwander 1997)	In the land of Camelot, people known as the Circumscribers are to be invaded. King Arthur calls upon his men to find a solution, but the table they sit at is rectangular, and this causes great communication difficulties. In the end, a circular table is built to help the knights discover that a peaceful solution is best. The book reveals problem solving at its best and can be used to encourage children to solve their own problems. Great for children with integrative difficulties.
<i>Mind-Stretching Math Riddles: Math for All Seasons</i> (Tang 2002)	Math riddles are all around, and this book poses many problems that can be seen every day. It also gives hints and strategies for solving the problems posed. A good book for rehearsing facts for students with memory difficulties, it also sharpens auditory skills for students with this type of math difficulty.
<i>One Good Horse: A Cowpuncher’s Counting Book</i> (Scott 1990)	A tale introducing readers to life on a cattle ranch, the final, panoramic view of the countryside allows readers to retrace the journey of two buckaroos and the scenes along the way. It also helps children understand that mathematics can be like a journey full of the splendor and beauty of the wild, wild West. Appropriate for children with all types of math difficulties.