

**CAUSES**



**CURES**

*in the* **CLASSROOM**

Getting to the Root  
of Academic and  
Behavior Problems



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# CAUSES & CURES

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## *in the* CLASSROOM

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# INTRODUCTION

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Whether our students leave our classrooms confident and goal-directed or frustrated and unfulfilled depends on our ability to do two things: diagnose their needs and deliver support. This dual challenge is daunting, especially if students come to school with weak vocabulary, shallow experience bases, and poor planning and organization skills. Our job becomes even more mind-boggling when students' brain development causes problems with memory, impulse control, and attention span.

Faced with such complicating issues, teachers often become baffled by what to do next. Many times, I have heard teachers say they have exhausted all the possibilities: "What can I do with a student who turns in half of her work, can't remember what we covered the day before, and insists on being the class clown? I have tried everything." The truth is, a teacher may have tried everything he or she already knows to do, but teaching hard-to-reach students often demands a broader perspective and base of knowledge and experience than one person can bring to bear. Teachers often struggle to solve tough student issues alone, when the magnitude of the problem calls for the support of a team of professionals and a solid framework for decision making. In this book, I lay out a problem-solving

protocol as well as practical interventions designed to help teams diagnose needs and deliver the best support to their students.

*Causes & Cures* is a guide for all educators. K–12 teachers, psychologists, administrators, and student service providers can all benefit from the book’s problem-solving process and apply it to any type of behavioral or academic problem at any grade level. The process and action options described in the following chapters take into account findings from both academic and neurological research and make the book much more than a simple listing of accommodations and interventions. The five-step protocol will lead you from observed problem or behavior to root causes to goals and intervention plans. You can use the same process when addressing problems at building and district levels, although the examples in this book focus on individual student issues, with some suggestions for large-group applications. Let’s look at the an encapsulation of the protocol.

### **The Five Basic Steps of Problem Solving**

1. *Know the traits of the student or group to be supported.* Teachers identify not only concerns about students but also student strengths. This balanced approach clarifies baseline data that will help in determining ways to measure the effectiveness of the interventions chosen.
2. *Analyze the root causes.* The strategy I recommend for this step is called the “Five Whys” analysis. This questioning technique is based on Toyota’s quality tools and is designed to go beyond symptoms to identify root causes.
3. *Set clear and measurable goals.* Measurable goals focus the action plan and serve as the basis for monitoring growth.
4. *Decide how to monitor and chart the student’s progress.* Close monitoring of student progress guides decisions. We know whether to adjust or fade the action plan based on results we see.
5. *Compose intervention options and select a plan.* The template used for this step serves as a guide for identifying viable research-based accommodation and intervention possibilities for action plans. Parents, the student, and faculty work together to select the ideas that are best suited to the identified student needs (Searle, 2007).



These five steps have helped hundreds of teachers solve difficult student problems, but the process is not for the faint of heart. Depending on how well your faculty already works in teams and willingly spends time searching for new approaches, this system may require some fundamental shifts in how you do business.

## What Will Move Us Forward

To tackle tough student issues effectively, we must examine and update our traditional practices. Three big changes are often needed to avoid the most common pitfalls in addressing student problems.

1. *Focus on what blocks student learning* before concentrating on which intervention to use. Grabbing a list of strategies and beginning interventions without taking the time to figure out the root causes of problems looks like a tempting shortcut but is an inefficient use of teacher time and energy that often results in high frustration.
2. *Minimize the guessing factor by staying informed* on current brain and educational research. Research helps identify common core causes as well as strategies proven to be effective for many students. Faculties often complain when asked to use team time to read and discuss research, but this step minimizes time wasted applying the wrong interventions to the wrong student for the wrong amount of time.
3. *Train for and monitor the implementation of interventions.* Professional development is needed for teachers to understand how strategies must be implemented to see a significant change in achievement. If research says the strategy works well when implemented in small-group instruction three days a week for four weeks in 20-minute sessions, we shouldn't be surprised when it doesn't show results after two weeks of 10-minute sessions done in a large group.

Implementation with fidelity is critical, and teachers need feedback from team members to make certain they are correctly interpreting what the research says. We are not talking about reinventing the wheel. Many effective strategies will be techniques some teachers already know about and use regularly. A team approach is fundamental to building capacity as all faculty members share ideas and support one another.

As Doug Reeves (2009) points out, working smarter with a new focus may create anxiety for some teachers and outright negativity on the part of others, but we must stay the course if we want positive results. Administrators and team leaders must address the issue of time and collaboration as teachers develop new skills. A proactive rather than a reactive approach to training and support is critical. We cannot become masterful at what we do when collaborative data meetings, critical conversations, and constructive feedback are considered invasions of privacy or low priorities on the school schedule. Figure A presents some important points to consider as you implement this problem-solving method.

## **What's Ahead**

Each chapter of this book addresses a specific area of behavior and academic problems and provides a case study that will walk you through the five problem-solving steps. Clear examples of individual student issues in a variety of subject areas and grade levels are the focus, but keep in mind that these models can be applied to groups as well as individuals.

Chapter 1 introduces new neurological research about possible root causes of many academic and behavior issues. We now know that delays in the maturity of brain processes known as executive functions can be at the core of what previously were often thought to be attitude and behavior problems. Without receiving support for these delayed functions, some students can try their hardest and still be unsuccessful in school.

Chapter 2 focuses on ways to support students who have trouble with planning and problem solving. Some of these students' key difficulties are initiating and finishing work, persevering when tasks get hard or boring, managing time, and self-monitoring. The academic area of emphasis is social studies.

Chapter 3 explores ways to merge executive function support and academic interventions needed by students who struggle with math because of poor memory skills and their inability to visualize and solve complex problems.

Chapter 4 discusses students whose poor organization and writing skills are causing both their grades and their self-confidence to suffer.

## A | What This Problem-Solving Method Is and What It Is Not

It Is	It Is Not
<p><b>It is teamwork.</b> Team members learn from one another. They make time to hear and see what master teachers who work down the hall are doing to get results. They also study and share what teachers who have participated in research studies are doing.</p>	<p><b>It is not trying to solve problems in isolation.</b> A team must continuously monitor student progress data to see which interventions match a specific student's or group's needs. Multiple perspectives help with the development of solid plans and adjustments based on data.</p>
<p><b>It is learning to diagnose deeply by investing time and effort.</b> This skill requires finding time for learning to do the "Five Whys" analysis as well as time for reading and discussing brain and educational research. Finding team time to do this is difficult but will pay off a hundredfold in the long run.</p>	<p><b>It is not assuming the obvious skill deficits are the core causes of student problems.</b> Using data and research to identify core causes of problems is the quickest and most efficient path to solving them.</p>
<p><b>It is analyzing which strategies are effective.</b> This requires becoming increasingly savvy in identifying when and with whom given interventions are likely to work based on the diagnosed root causes.</p>	<p><b>It is not using random interventions.</b> Simply trying a series of interventions from a website or reference book without first analyzing both the students' academic needs and their executive function skills wastes time and energy.</p>
<p><b>It is going beyond the one-size-fits-all approach for intervening and assessing.</b> Even the best interventions are not equally effective for all types of students with the same symptoms, so the team must consider a variety of assessments and interventions.</p>	<p><b>It is not grouping based on low performance.</b> We do not necessarily need another layer of testing, nor should we group kids by high, average, and low performance. We need to use our best assessment information to see why the problem persists in spite of our efforts and use short-term grouping based on specific needs.</p>
<p><b>It is a way of rethinking.</b> Sometimes the typical approaches to age-old problems of student achievement, motivation, attention span, and behavior are not the most effective.</p>	<p><b>It is not another program added to teachers' workloads.</b> If this process is done well, it will actually save instructional time and increase the focus on improving student learning.</p>

Chapter 5 concentrates on students whose weak attention and focusing skills interfere with reading comprehension and social skills.

Chapter 6 addresses causes and solutions for students who have difficulty controlling themselves at school. Science is the academic content example for this chapter.

My hope is that no matter what content or grade level you teach, you will see how each step of this process can help you maximize your potential to make a difference in the lives of your students.

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# 2

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## **PLANNING AND PROBLEM SOLVING: FAILURE TO LAUNCH AND FOLLOW THROUGH**

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*Faith has talked for two weeks about joining the high school student congress. She truly wants to join the group but has yet to get the packet of information about how to become a member from the social studies teacher. Her mom reminds her each day as she walks out the door, only to have Faith bark out, "I'm doing it! Stop bugging me!"*

*Shawn likes 4th grade but is having a hard time adjusting to the heavier workload. He has a social studies report due in five days that his teacher, Mrs. Warren, assigned at the beginning of last week. She has asked him for his outline twice, and both times Shawn told her he left it at home. The truth of the matter is, he hasn't even decided on a topic.*

*First grader José loves that he has finally learned to read. During class time, he readily does his worksheets and volunteers to read aloud in group; however, at home he is not so eager. When it comes to doing his homework, José is an unwilling participant. He dreads homework time because it always seems like it goes on for hours, even though the actual work would only take about 15 minutes if he would stop whining and stalling.*

What do these students have in common? Failure to develop and launch a plan of action. Many adults would peg the cause for this failure on procrastination or laziness, but is it laziness or something else? What we are often dealing with in the cases of students like Faith, Shawn, and José is not laziness but an underdeveloped set of executive skills for planning and problem solving. It is not uncommon for adults who work with students who have this type of executive delay to become frustrated and label these students as unmotivated or unwilling. The adults may resort to blaming and lectures, but these labels and “kicks in the pants” only make the problem worse. The real issue isn’t that these students *won’t* take action but that they *can’t*.

Executive dysfunction that looks like lack of motivation is often exacerbated when a student perceives the situation as threatening or blaming (Willis, 2010a). Instead of lecturing or punishing students for poor planning and problem solving, we need to search beneath the surface behavior or attitude for deeper causes for the stalled action. Then we must intentionally and consistently teach the missing initiation and follow-through skills.

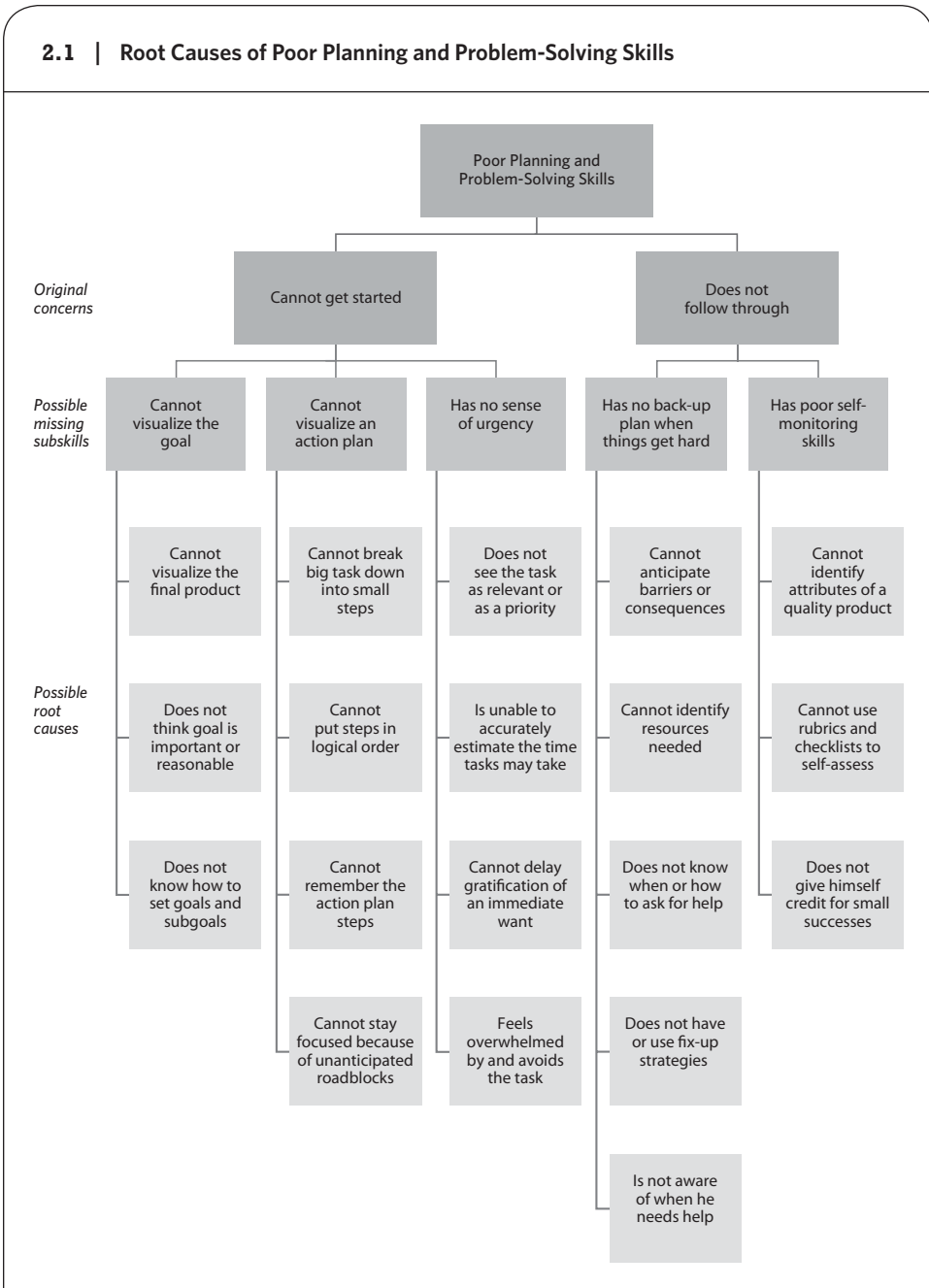
## Root Causes of Poor Planning and Problem Solving

Determining the root causes of problems is critical to helping the student. The more precise the diagnosis, the better the chances of providing the most effective support. Figure 2.1 p. 22 is a flowchart to help you analyze typical root causes of delayed executive function in the area of planning and problem solving so that you can choose the best plan of action. In this figure, the primary area of concern appears at the top of the chart and is followed by a listing of subskills to consider. By no means is this a list of all possibilities, but it is a representative sample of typical causes.

As I mentioned in the Introduction, I have found that the most useful way of getting at root causes is to use the “Five Whys” method. This process was developed by Toyota to diagnose problems and find solutions. Its fundamental premise is that it takes at least five iterations of asking “Why?” to get to a root cause. The method is most effective when used by a team of at least two people, one to take the role of questioner or coach and the other to act as the responder. The problem-solving coach asks a series of questions that leads the responder, most often a teacher, to delve into the student’s thinking and motivation concerning the problem. A possible question series might look like this:

- Why do you think the student does that?
- What would cause the student to think that way?

**2.1 | Root Causes of Poor Planning and Problem-Solving Skills**



- What skills do you think the student lacks that other students the same age understand and use?
- What is keeping the student from learning these skills?
- What should we concentrate on first?

Instead of focusing on the symptoms, coaching conversations attempt to get into the student's head to analyze the root causes.

The more familiar teachers are with what researchers have discovered to be common causes for problems, the more easily they can answer these questions without going out of their "circle of influence." Our circle of influence is any problem or circumstance over which we have some control. Issues like the need for medication, poor support from home, learning disabilities, and dysfunctional families definitely affect students and can make teaching harder, but teachers usually have little control over them. If we cannot control the issue, it is fruitless to waste time having a conversation about it during the analysis talk, even though it is contributing to the problem.

Let's take a closer look at the problems of our students Faith, Shawn, and José, using this questioning method in combination with the root causes chart to see if we can pinpoint more accurately what is holding each student back. We know they all find it hard to get started on the task at hand, but we may find that their reasons for not moving forward are somewhat different.

## Faith

Faith's "laziness" issue has less to do with her unwillingness to get started than with her inability to figure out how to approach problems, especially ones she finds scary, boring, or difficult. Her executive brain has a tendency to freeze when faced with taking the initiative, like approaching a social studies teacher for information or asking for help in math class. The analysis conversation between Faith's teacher and the problem-solving coach might sound like this:

*Coach:* You said Faith constantly procrastinates. Why do you think she does that?

*Teacher:* She's just lazy. Once she gets started, she's usually fine, so it isn't about the work being too hard.

*Coach:* What could be going through Faith's head that makes her choose not to start working?

*Teacher:* I don't know. Some students want attention, but that doesn't exactly sound like Faith. What else could it be?



*Coach [looking at the root causes chart]:* Let me throw out a few possibilities. Some students don't start because they feel overwhelmed. They can't get a clear picture of what the finished product should look like even when the teacher explains the task clearly. Occasionally, students have difficulty estimating how much time a task will take. They don't get going because they think they have plenty of time, or they procrastinate because they think the work will take forever. Do any of these things sound like Faith's root cause?

*Teacher:* Faith understands the assignments. I think it's her lack of motivation more than anything.

*Coach:* Could there be some missing skills that keep her from being motivated?

*Teacher:* Well, she can visualize the end product, but I'm not so sure she sees how to overcome obstacles along the way. When things look hard, her tendency is to get upset and then shut down.

*Coach:* What causes her to shut down?

*Teacher:* I think she may see asking for help as a sign of weakness, so when faced with a problem she can't solve she just quits.

As the conversation progresses, the teacher develops the hypothesis that Faith stalls out because she has limited success with predicting barriers and making adjustments when plans don't work out. She also has trouble using positive self-talk to get past her mental anxiety. These failure-to-launch problems have a different set of root causes than those Shawn faces.

## Shawn

Shawn, who appears to be a procrastinator, is extremely smart and typically does well in short daily assignments when a lot of writing isn't required. Longer assignments look so overwhelming to him that his brain goes into a complete stall every time he thinks about them. The teacher may as well ask him to construct a bridge as do a social studies report. Shawn doesn't have the planning skills to schedule his work in small, sequential steps over time. Couple this with his ability to entertain himself and others when he should be working, and you have a student in trouble academically and behaviorally. The questioning process between Shawn's teacher and the problem-solving coach might go like this:

*Coach:* What is it that prevents Shawn from handing in his assignments on time?

*Teacher:* One problem is that he can think of 99 things to do to delay getting started.

*Coach:* Why do you think he wants to delay the work?

*Teacher:* I don't know. He is capable but hates to write, and he's just a hot mess when it comes to staying on task. When he does get started, he works on one thing for a few minutes and then jumps to something else. Then he may forget that he didn't finish the first thing he was working on. His mind works like a pinball machine.

*Coach:* Why do you think he jumps around like that?

*Teacher:* Part of it is avoidance because he hates paperwork of any kind, and some of the problem is his disorganization and lack of focus.

*Coach:* What specific skills would help him get organized and focused?

*Teacher:* He needs to decide on a plan and finish one task before he starts another.

*Coach:* Why can't he do that now?

*Teacher:* I'm not certain he knows how to get a good work plan together. He probably doesn't have good self-monitoring skills, either.

This "Five Whys" conversation leads the teacher to see that Shawn's problem is not likely to go away unless she models planning strategies and helps Shawn practice these new techniques until they feel like second nature to him. Our third student, José, has similar problems but with a different emphasis, as we'll see his teacher discover.

## José

On the surface, José seems to be an avoider like Shawn. When his teacher asks him to stop working at the science center so he can get ready for math, José says OK but continues to explore the rocks, bugs, and science books he loves. When his mother says it is time to do homework, he promises that he will start as soon as his TV show ends, but he seldom remembers his well-intentioned promise because his executive brain constantly misjudges or loses track of time. José also has trouble switching his focus, especially for attacking work he doesn't enjoy.

During the "Five Whys" interview, the coach asks José's teacher, Mr. Lewis, "Why can't José stop one activity and start another as smoothly as his peers?" At first, the teacher says that José is being defiant. Then the coach asks, "What problem-solving skills might be missing?" Mr. Lewis responds that José can't set priorities and has difficulty stopping one activity to begin another. The coach then asks, "Why is it that José can switch from reading assignments to the science station without much trouble but generally cannot go from station work to getting

ready for math class?” Mr. Lewis starts to see that delaying gratification for fun and keeping track of time are other areas where José also needs help.

When “Five Whys” questioning leads to identification of specific skill deficits, the intervention possibilities become much clearer. When difficulties are seen as attitude problems, the most common adult response is to deal out some type of punishment, which results in students finding themselves in hot water when what they really need is guidance in developing problem-solving skills.

## **Interventions That Help with Planning and Problem Solving**

After analyzing root causes of a student’s stalled performance, the next step is planning what action you, other school staff, the student, and the student’s family will take to help the student progress. In this section, I offer intervention options to address some of the specific root causes, but just as the flowchart of causes is not exhaustive, the intervention options given here are a sampling of possible ways to support students as they cope with delayed executive function in problem solving and planning.

### **Visualizing Clear Goals**

Anxiety about getting started often stems from not having a clear vision of the end product or what steps to take to get there. Having unanswered questions like “Am I going to be able to do this?” or “What is this supposed to look like when I am finished?” is a common roadblock to positive thinking. On the other hand, if you can imagine yourself holding a finished product and feeling the satisfaction of doing quality work, you create a powerful incentive to begin.

All successful people start by creating a picture in their heads of the goal or target they want to reach. Football players see themselves running across the goal line. Dancers see themselves performing perfect moves to the music. Kids and parents see themselves having fun with their friends or checking off jobs on their “to do” list. Being successful at school works the same way.

Let’s use Faith’s social studies dilemma as an example. Faith really wants to participate in the student congress taking place at her high school, but she understands how challenging this competition is and is afraid she will not be chosen as one of the final delegates. To help Faith generate the courage and motivation to

try, she needs to be able to visualize herself going through the steps of applying and succeeding. If I am Faith's teacher, Faith and I begin by making a list of things she needs to do to make her dream actually happen. Then I need to help Faith picture herself being selected and doing the work as her classmates and family cheer her on. She would visualize how proud she would feel as she opened with an engaging attention grabber or as she delivered her arguments by clearly supporting her positions. We would also discuss the feeling of accomplishment knowing that she had stretched herself by giving it her best shot regardless of whether she was selected for the final team or not. This is the secret of champions.

### Staying Focused by Anticipating Roadblocks

When assignments don't go as planned, students often stop in their tracks. Stress builds if students think they will be blamed or criticized for work that goes wrong, and they may decide that hiding the problem is better than asking for help. Anticipating roadblocks in advance and talking about ways to overcome them serve as an ounce of prevention (Zins, Weissberg, Wang, & Walberg, 2004). One way of starting this conversation is to focus on someone else's problem that mirrors the same issues the student is likely to face. Because this approach minimizes feelings of threat, it enables a student to think through a back-up plan without becoming defensive or discouraged. A conversation with Faith about anticipating roadblocks might sound something like this:

Faith, let's imagine we are watching your friend Jake tackle the problem of trying out for the student congress. What would happen if he decided to wait until next week to ask for an application? OK. What would happen if he didn't ask anyone to check his application, and he found out he omitted an important piece of information? What if he waited until the week before tryouts to write and submit his legislation and arguments? Why would he decide to do that instead of getting started? Got it. Can you think of other traps that might prevent Jake from earning his position on the team? Right, if he doesn't have the courage to ask for help when he gets stuck, then he will stay stuck. What choices can he make? We know what kind of mess he can't afford to get into, right? So what kind of things will your friend Jake need to think about so he can put a plan together that gets the job done and relieves some of his stress? Right. How much of Jake's plan will work for you?

In this talk, I raised another issue that can stop a well-laid plan in its tracks. What if the student gets stuck and doesn't ask for help?

## Knowing When and How to Access Resources

Many students don't know what to do when they don't know what to do. Being able to identify resources that can help when they get stuck relieves stress and keeps students moving forward. Before Faith starts work, I will ask her two questions: "What will you do if you find you need help on this project?" and "Who and what should we put on a list of people and resources you might need?" The list might include people's names, study group opportunities, a timer, reference books, websites—whatever might support the work.

Some students are able to identify their resources but will need to practice how to approach people on their list. Role-playing is often the best way to get past this barrier. Here is how I might set up role-playing with Faith:

Faith, I'll be the student, and you be Mrs. Brown for a minute. Help me figure out ways to solve my own problems.

Let's say I don't remember all of the rules for the debate or presentations. How would I start a conversation with Mrs. Brown to let her know I need help? OK, let's try out that conversation by role-playing.

Now I am embarrassed that I don't know what to do in class, but I don't want to ask Mrs. Brown for help. Tell me what I could say to myself so I don't chicken out and just sit here? How does Mrs. Brown respond?

OK, this time I am a student who thinks the teacher is going too fast, and Jerry had my pencil during part of the lesson, so I missed some of the notes. How should I talk to myself about the reason why I don't have the notes? What should I say to Mrs. Brown then?

This time, Mrs. Brown is busy with another student, so I decide just to give up on asking for help because she got upset the last time I interrupted her. What would be some good choices for solving this problem?

Faith and students like her need to understand that asking for help can be hard for anyone. Our job is to help them see that no one wants to appear stupid in front of other people, but not asking for help when it's really needed is not a smart move and leads to more problems. Make the point that getting help is

part of being a responsible and successful person. Sometimes emotions and not knowing how to approach someone for help are the core causes of a student's reluctance to approach teachers, and sometimes the reason is the classroom environment.

Relationships and the culture of a classroom can be either an encouragement or a deterrent to students seeking needed assistance. If the teacher scowls and lectures kids who ask for help about the importance of listening the first time, they learn to back off. If students are allowed to make fun of peers who get things wrong or ask questions, the teacher won't get participation or questions from kids who struggle. However, teachers who praise students for being brave enough to ask questions and who set up systems for classmates to help one another solve problems are teaching collaboration skills, independence, and responsibility.

## Visualizing Specific Steps of the Action Plan

Each of our example students needs help visualizing not only what his or her end product should look like but also what sequence of steps will get him or her there. Guiding students through a process for solving their own problems is critical to teaching them to be independent. Let's consider Shawn's trouble getting started with his social studies paper. I might start guiding him to problem-solve like this:

Shawn, I get it when you say you just can't figure out how to get started on this big project. Every time I think of cleaning my attic, I suddenly want to take a nap or read a book instead. Everyone has those feelings at first when a job looks too big to tackle, but let's use a few tricks to make this job more manageable. We'll start by listing all the important steps for doing this "heroes of the frontier" report, and then we will plan to do one or two parts at a time so you still have time for fun.

With some help, Shawn should be able to come up with the steps for preparing the report. That might seem like enough, but many students also require help sequencing the steps.

## Putting Steps in Logical Order

Shawn often starts a job and then jumps from task to task, which usually results in poor task completion. He needs help listing his action steps in a logical order. Setting up a chart, timeline, or calendar for recording small steps is

helpful because visualization of the process is key to good implementation. Having specific steps written down in a sensible order, however, doesn't necessarily mean Shawn will know how to do each one. It is helpful to ask him clarifying questions, such as

- What materials will you need for this?
- How long do you think this step will take you?
- How do you plan to get started?
- In what order will you do these things?
- What will you do if you get stuck and don't know what to do?

Verbalizing the plan's details provides a mental rehearsal. Initially, Shawn may need someone to work beside him on the same task in order to internalize and reinforce the problem-solving steps. Providing the correct level of support reduces stress and leads to success. Figures 2.2 and 2.3 are examples of a school chart and a home planning chart that can help Shawn learn to plan and execute his work.

Occasionally students become overwhelmed when they see all the steps of a plan at once, so you may have to cover up parts of the calendar or list. Because students' executive skills of problem solving are still developing, it is important to adjust the amount of scaffolding or support you provide. Too much support is as harmful as too little. Start with plenty of modeling and corrective feedback, and then fade the adult support as soon as the students demonstrate the ability to put their own goals into action. The ultimate goal is to enable the students to become more confident and independent; "Support, don't enable" is the motto.

## 2.2 | Planning Checklist for Social Studies Paper

Steps	What order?	How long?	What materials?
Brainstorm interesting topics	Today	3 min.	
Find two articles on the selected topic	Today	15 min.	Journals in media center
Read articles and take notes	Tomorrow	30 min.	Note cards or computer
Decide what other pieces of information I need and where I can find them	Tomorrow	5 min.	Teacher and media specialist help on this
Start my outline	Thursday	30 min.	Get my graphic organizer

### 2.3 | Planning Checklist for Cleaning Room

Steps	What order?	How long?	What materials?
Gather all dishes, food, and trash and take them to the kitchen	1	10 min.	Trash bag
Put clean clothes on hangers or shelves	2	5 min.	Hangers
Put dirty clothing in the laundry basket	3	2 min.	Laundry basket
Find a home for anything still on the floor that shouldn't be there	4	10 min.	
Sweep	5	5 min.	Sweeper

## Accurately Estimating Time

Like most students his age, José has a hard time visualizing and judging time. He can't get his head around when 10 minutes or half an hour is up. It is the awareness of a deadline that helps people feel a sense of urgency to get started. Teachers and parents need to provide support in this area. Giving students an analogy, like "This will take you about the same amount of time as it takes you to walk to Tom's house or to eat lunch" can help make the concept of time concrete. Once students get the idea of relating minutes to time frames they are familiar with, you can ask them to come up with their own analogies.

Poor pacing also contributes to problems with time management. Students often underestimate how long it will take to do each part of a task. For example, José might plead to wait until after his TV show to start his homework or chores with the full belief that he can get everything accomplished. Helping him put estimated times to each step and setting a timer to see how close his estimates are to reality will serve as good feedback for future planning.

## Delaying Gratification

José has difficulty making transitions partly because he can't put fun on hold and get to work. Addressing both the task and the student's emotional objective for fun is important when setting goals. To stay focused on the goal, students need to see that there will be a balance between work and fun. It is normal for children and adults to want to play before work. Children often try



to convince you that there will be plenty of time to work after play, but this can be a bad habit to foster.

For beginning goal setters, it is wise to start with tasks that are concrete and challenging but doable within a short time—within the class period for early elementary students or within a day or two for older students. Some good beginning questions to ask the student include

- What do you need to accomplish?
- When will you have this completed?
- What steps do you need to do right now, and what can wait until tomorrow or later?

With these answered, the student can set a clear goal for the work. A goal might sound like this: “I will start my homework before the timer goes off, and I can finish by 7:00,” “I will write down three key ideas for my report in the next five minutes,” or “I will submit my application in two days.”

We now have covered forming a solid plan with the goal, steps, time, and materials visualized, and some back-up ideas for addressing barriers. The skill that will keep a student’s plan in motion is self-monitoring.

## Building Self-Monitoring Skills

Self-monitoring is the ability to observe and record our own growth and behavior and use those data to make the adjustments that will improve results. This skill builds responsibility and independence. It gives us control over our own thinking by acting as our error-detection and fix-up system. Self-monitoring is effective in developing more appropriate behaviors, like increasing on-task behavior in the classroom, boosting completion of homework assignments, improving both academic performance and social skills, and reducing disruptive behavior (Hallahan & Kauffman, 2000). Five-year-olds start to develop the skill to reflect, but it steadily becomes more sophisticated given good modeling, direct teaching, and practice (Veenman, Wilhelm, & Beishuizen, 2004). Here are a few favorite self-monitoring techniques to use with interventions.

**CHECKLISTS AND RUBRICS.** Checklists and rubrics are important tools for students who struggle with goal setting. They help students visualize not only the end product and the steps to accomplishing that goal, but also the issues they need to consider for judging quality along the way. Providing in-class modeling and practice in how to use age-appropriate rubrics to score model papers,

projects, or videoed performances is powerful. The more students practice matching their own evaluations to the teacher’s scoring, the more likely they are to produce quality work, assuming they possess the skills to do the work. This matching process makes the criteria for quality very clear.

My son and I often went to war over whether he had “cleaned” his room. Although he claimed he had cleaned, I saw very little evidence of it. The problem wasn’t that he hadn’t done any cleaning. The problem was our different visualizations of what the finished product should look like. Once we agreed on a clear list of what constituted “clean,” a great part of the problem was solved. I did have to start slowly with only two requirements—nothing on the floor and only seven things on the dresser. Figure 2.4 is our first cleaning rubric. The next week, I saw that we needed to add “no clothes on the bed or chairs.” By working together, a specific visual list emerged that resulted in a satisfactory compromise between us.

**SELF-EVALUATING AND CELEBRATING SMALL SUCCESSES.** Conversations that regularly celebrate small steps that go well and reflect on ways to adjust what isn’t working develop executive function skills. Students need lots of modeling and verbal interactions in order to learn the strategy of self-talk that enables people to monitor and adjust their plans. A conversation modeling this kind of self-evaluation for Shawn might sound like this:

So as you look at your planning checklist, what parts of your plan to get this social studies report finished are on target? Good, the first two steps are completed. Feels good to say that, doesn’t it? That question about whether the pioneers were really heroes or villains will really catch attention. Is the timing working out the way you thought it would? That’s

**2.4 | Work Plan Rubric Example**

	Perfect	One thing was overlooked	Several things need to be taken care of
Nothing on the floor that does not belong on the floor	✓		
Only seven things can be on the dresser			✓

OK. People often underestimate the time needed for a new task. Don't let that stress you out. Just make sure you adjust and keep going. The estimate doesn't have to be spot-on the first time. How will you use what you learned to help you make a closer estimate next time? Great. Do you want to adjust some of your time estimates for the next two steps, or will your plan still work? The difference between successful and unsuccessful people is not how many mistakes they make; it's how well they learn from their mistakes. You are right on target for learning how to plan your work and estimate your time, and that will help you in all your classes. What, other than adjusting time estimates, will you keep doing to meet your goal? Anything else you want to change to make your plan work even better?

Recognizing patterns of thinking and behaving that work well and seeing their own growth both serve to fuel students' future achievement. Having a list of small tasks written down gives a student the reward of having something to check off. Comparing time estimates with the reality of how long something actually takes helps the brain become more aware of both timing and pacing.

Building step-by-step plans and anticipating tough issues are essential for students with executive function delays. Remember, they will need ongoing guidance and corrective feedback for a long time as these skills develop.

## **Five-Step Problem-Solving Case Study: Poor Planning and Problem Solving**

Now that we have explored root causes of failing to formulate and launch a plan and possible interventions, let's take a look at the whole five-step problem-solving process (Searle, 2007). The steps of this protocol will take you all the way from first spotting a problem to choosing an action plan to solve it. Although we'll be focusing on one case study student, Sara, the five steps can be used for any student, at any grade level, for any academic or behavioral problem. Let's meet our student and teacher and begin.

*Sara is in social studies class and has had four reminders to start her assignment.*

*Each time her teacher, Mrs. James, walks by, Sara is either reading her novel or doodling.*

*When Mrs. James asks Sara why she is not doing the assignment, Sara sighs and*

gets out her paper. When the teacher leaves her desk, Sara just stares at the paper. No writing gets done.

### Step 1. Know the Student

Mrs. James is frustrated by Sara’s behavior. She repeatedly has this problem with her. She decides to meet with the problem-solving coach about Sara’s failure to respond in class. Mrs. James and the coach start by identifying Sara’s strengths and areas of concern and listing them in a table (Figure 2.5). This step gives them a balanced picture of the student to start from and helps the teacher to spot connections. The table will also be useful in building an action plan for Sara and will provide a baseline for measuring her progress.

### Step 2. Analyze the Root Causes

Focusing on the behavior of most concern, Mrs. James and the coach begin their root cause analysis. As they talk, they use the iterative “Five Whys” questioning method and their knowledge of the subsets of causes to help get closer to what is really going on in Sara’s head. The coach is careful to keep the conversation

2.5   Strengths and Concerns Chart for Sara	
<b>Name:</b> Sara Torres <b>Grade:</b> 10	
<b>Academic concerns:</b> <ul style="list-style-type: none"> <li>• Poor writing fluency</li> <li>• Weak in math problem solving</li> <li>• Cannot answer extended-response questions</li> <li>• Getting an <i>F</i> in social studies</li> </ul>	<b>Behavior concerns:</b> <ul style="list-style-type: none"> <li>• Procrastinates on assignments</li> <li>• Does not complete 45 percent of her assignments</li> <li>• Gives the teacher attitude when corrected</li> <li>• Has defeatist attitude (says that no one in her family writes well or likes social studies)</li> </ul>
<b>Strengths to build on:</b>	
<ul style="list-style-type: none"> <li>• Good reader</li> <li>• Likes reading and drawing</li> <li>• Has several good friends</li> <li>• Relates well to most people</li> <li>• Talented in art</li> </ul>	<ul style="list-style-type: none"> <li>• Attendance is regular</li> <li>• Seems to be paying attention in class and answers questions when asked</li> <li>• Can add and subtract accurately (but is slow at it)</li> <li>• Fluent in math computation</li> </ul>

focused on areas within their circle of influence and avoids trying to solve the problems before they know what the root causes are.

*Coach:* Why do you think Sara just sits there when you ask her to work in social studies class?

*Mrs. James:* She has this attitude that she doesn't think she can do the work, so there is no sense in trying. Social studies is her least favorite subject.

*Coach:* What causes that attitude, in your opinion?

*Mrs. James:* Her family has the same attitude. She says no one in her family likes or is good at social studies.

*Coach:* That certainly can contribute to the problem, but her family's attitude is out of our control. We do know, however, that not all students whose families have negative attitudes toward a subject react like Sara does. What are some other things that happen in class that might exacerbate this problem of poor attitude?

*Mrs. James:* I can think of two things. She is slow as a snail with written work, and she consistently gets low grades because she piddles around and doesn't finish her assignments.

*Coach:* We can talk about her problem with writing skills next, but let's start with analyzing why she doesn't get to work and finish her assignments. Why do you think she does that?

*Mrs. James:* I really don't know.

*Coach [referring to Figure 2.1]:* Let me list some possibilities for you, and you can select any that fit Sara. Some students cannot focus during instruction, so they really don't know what to do. Others become overwhelmed by what they are asked to do, especially when they see a big assignment. Some students don't feel a sense of urgency, so they dawdle instead of getting started. Others cannot even visualize a way to get started or a plan to attack the work, so their brain freezes in its tracks. Do any of these seem to fit Sara?

*Mrs. James:* Sara does focus during class. I don't think that's the issue, but being overwhelmed when she sees writing assignments and feeling no sense of urgency certainly fit her. Let's start there.

*Coach:* So we need a plan that helps Sara break down big tasks to help her not feel overwhelmed, and we need to have her develop a timed schedule so she feels a sense of urgency. Do you think this will make a difference in her work?

*Mrs. James:* It's a start. Let's give it a try.

This coach just helped Sara’s teacher see Sara’s “attitude” problem through the new lens of weak executive functioning, which means Mrs. James will most likely be open to new approaches for solving the problem, especially since she made her own diagnosis.

### Step 3. Set a Clear and Measurable Goal

Now that Mrs. James and the coach have identified the root causes of Sara’s problem, they can use that information for setting a measurable goal. There are two parts to intervention goal setting. The first is stating a hypothesis that identifies what new tactic the teacher will use to solve the problem and what new outcome is expected from the student as a result. For Sara, Mrs. James and the coach decide on the following:

**Hypothesis:** If we teach Sara to break down big tasks and to develop her own work schedule, she will complete more assignments on time.

The second part of the goal is the time frame and benchmark that will tell the teacher if the intervention is effective. Mrs. James and the coach arrive at the following for the second part of setting a clear and measurable goal for Sara:

**Time frame and measurement benchmarks:** Within five weeks, Sara will be able to break down tasks, sequence the steps, and track her own successful completion rate. Sara will go from finishing 45 percent of her social studies assignments to finishing 75 percent on time and earning a minimum grade of *C*.

### Step 4. Decide How to Monitor Student Progress

Mrs. James will need data to determine how well Sara is using the new skills and moving toward her goal. The data must specifically show whether Sara is breaking big tasks down into smaller segments and setting estimated time goals and whether these strategies are effective. If these practices are not helping Sara learn to plan her work or develop a sense of urgency to get work done, then the team will revamp its plan. Mrs. James and the coach agree on charting work completed with a minimum grade of *C* as the measurement strategy that will track whether the problem of incomplete work is being solved.

Sara will self-record on the chart, so gathering the data will create very little extra work for Mrs. James. Sara will track three things: how long it took her to get started, how many times she accurately estimated her work time, and how many completed assignments she hands in that result in a grade of *C* or better (see Figure 2.6). All Mrs. James needs to do, other than model the skills, is spot-check Sara's self-monitoring and give her praise and corrective feedback.

Self-charting is actually part of the intervention because a student's use of time typically improves as a result of being more aware of on-task behavior (Hallahan & Kauffman, 2000). When time estimates and actual task times are included, students also improve in their ability to estimate how much time given types of work take as they discuss reasons why their estimates were either accurate or not. Student reflection on the patterns the chart shows and reasons for improvement or lack of it are essential to the process. Don't bother collecting data you don't intend to use for improvement.

The next step in the process is to design the specific action plan that addresses Sara's executive function delays and social studies problem.

2.6   Sara's Self-Monitoring Chart					
Sara's chart for the week of February 6	Monday	Tuesday	Wednesday	Thursday	Friday
I broke down my assignment into chunks	Yes No	Yes No	Yes No	Yes No	Yes No
I started within a minute	Yes No	Yes No	Yes No	Yes No	Yes No
Estimate for completing the first part of the paper/assignment:	__ min.	__ min.	__ min.	__ min.	__ min.
Actual time:	__ min.	__ min.	__ min.	__ min.	__ min.
Estimate for completing the second part of the paper/assignment:	__ min.	__ min.	__ min.	__ min.	__ min.
Actual time:	__ min.	__ min.	__ min.	__ min.	__ min.
Estimate for completing the last part of the paper/assignment:	__ min.	__ min.	__ min.	__ min.	__ min.
Actual time:	__ min.	__ min.	__ min.	__ min.	__ min.
Work completed with a grade of C or better	Yes No	Yes No	Yes No	Yes No	Yes No

## Step 5. Select an Action Plan from a List of Options

Mrs. James and the coach move on to selecting interventions appropriate for the root causes and goals they have identified for Sara. They choose breaking down tasks, sense of urgency, and visualizing plans as skills to work on. Sara's action plan (see Figure 2.7) indicates which strategies are done with the teacher, which are done by Sara herself, and which are done with her parents at home.

To help Sara meet her goal, teachers and parents must give her the proper amount of support. In the beginning, support needs to include repeated modeling followed by the gradual release of adult guidance.

A solid instructional practice uses a “first me, then we, then you” procedure to guide the student through the initial learning process. This approach is commonly known as a *gradual release of responsibility* (Fisher & Frey, 2008).

In the first phase, the adults take on the major workload by modeling rather than explaining the process of breaking a problem down and setting time estimates. At this step, the teacher's thinking needs to be as transparent as possible to the student. Often a process called a “think-aloud” is the most effective way to model the skill to be learned (Lewis, 1982). This technique involves teachers saying aloud whatever they are thinking and feeling as they model the strategy. For Sara, Mrs. James provides the following think-aloud:

OK, Sara, I am going to pretend that I am a student in this class. I want you to watch me as I decide how to make a plan for completing my social studies assignment. When I am finished, you will take your own paper and use the same thinking I just modeled so you see if this strategy can work for you. We may need to change something here or there to make it fit your own style.

Let's see, on my paper, I have four true-false questions to answer, one extended response, and then a challenge problem at the end of the page. I know I have about 20 minutes to work on this, so I will divide the work into smaller chunks. I like challenge problems better than the true-false or extended response, so I think I will start there. I think I can finish this problem in about five minutes if I get right on it. Maybe I can ask the teacher if I can use a timer to see if I can play “Beat the Clock” on this part. Next, I will do the true-false questions, but I might need a one-minute mental break before I do that. I think those problems will take me about eight minutes. That leaves about seven minutes to do the extended-response question. I think this will work for me because it is easier for me to think of three small



## 2.7 | Action Plan for Sara

Skills Needed	Teaching Strategies	Student Responsibilities	Suggestions for Parents
<b>Breaking down tasks</b>	<ul style="list-style-type: none"> <li>▪ Model the process of deciding how much to do in three minutes. Mark an X on the paper where you might take a small break.</li> <li>▪ Model how to think of big jobs as a set of smaller tasks.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Break each assignment down into doable pieces or steps before starting and plan mini-breaks between segments.</li> <li>▪ Discuss with your teacher how you can get back on task after breaks.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Help Sara break down home chores into mini-tasks.</li> </ul>
<b>Sense of urgency</b>	<ul style="list-style-type: none"> <li>▪ Model how to set estimates for time needed to do a task.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Estimate your work segments and check those estimates against the actual time the work takes her.</li> <li>▪ Explain to your teacher how you might adjust your estimates or work habits to make the estimates and actual times match.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Make estimates and set a timer to see if Sara can complete chores in the time she sets for herself.</li> </ul>
<b>Visualizing plans</b>	<ul style="list-style-type: none"> <li>▪ Model how to create a visual checklist for the steps needed to complete work. Include scheduled mini-breaks.</li> <li>▪ Brainstorm a list of mini-break choices (stand and stretch, get a drink, etc.).</li> <li>▪ Help Sara create a chart or graph to monitor her progress.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Create your own checklists and work plan.</li> <li>▪ Update your list of mini-break choices and check with your teacher or parent to see if they are appropriate.</li> <li>▪ Chart your progress and present your findings to your teacher with plans for how you intend to keep improving.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Create checklists that describe the steps for things like taking out trash, brushing the dog, and straightening her room, so she knows what the job entails and can visually check the steps off when they are completed.</li> <li>▪ Show Sara ways you use lists and charts to do your daily work (grocery lists, checkbooks, etc.).</li> </ul>

chunks of work rather than one big paper. It will be fun to see if I guessed right on how long each part will take, especially since I am only playing the game with myself and there is no penalty for being wrong. I like that.

In the second step of gradual release, the teacher does less of the work, and the student attempts to use the modeled strategy with some teacher guidance. Mrs. James tells Sara it is her turn: “All right, now you show me how you can use what you just saw me do. You may make different choices for breaking your work down, but try to use the same kind of thinking. I will help you if you get stuck.”

Once Sara seems comfortable, after repeated practice using this strategy with teacher support, she needs opportunities to practice with a peer who is working on this same skill. Only when peer work looks stable will the teacher move to the last level and expect Sara to apply the skill independently.

This think-aloud technique can be used in any content area (see specific examples for math in Chapter 3 and for reading in Chapter 5) and for learning any new skills.

## **Large-Group Application**

The first time I implemented a full-blown intervention plan like the one developed for Sara, I felt a bit of panic at the thought of all the other students in my room who might also need interventions before the end of the year and the extra workload that accommodating them all might entail. It wasn't until the school counselor suggested not thinking in terms of one student at a time that I realized there wasn't a student in any of my classes who wouldn't benefit from some form of guidance in planning and scheduling their work.

I began providing a choice of planning checklists like Sara's to help other students set their own goals and schedules for assignments. Not all students needed ongoing modeling and corrective feedback to carry out these tasks, but several in every class did. I immediately noticed a marked improvement in both the quality and timelines of the work I received from my students. I also had fewer phone calls from parents begging for extensions.

Another problem-solving strategy that worked beautifully for me was practicing with rubrics before giving students a new type of work. We did whole-class practice applying a rubric to a model paper or project that was similar but not the same as their upcoming assignment. I didn't want them to simply copy the model.

First, the students would independently use the rubric to score a model paper or project on a scale of 1–100. Next, they would compare their results with the scores of a partner and come to consensus on any scores where there was more than a 5-point difference. This resulted in some lively arguments. Sometimes, I would have each pair of students compare results with another pair, which rekindled the debates. Having to justify their scoring pushed students to think through the rubric, not just choose a number. This process was worth every minute of class time spent on it.

Finally, the students would compare their results with the score my teaching team had agreed on. At times, the teachers would reconsider and adjust their own scoring based on issues students raised. Because these discussions were open and not done for a grade, students said they felt safe expressing opinions and ideas. The process clarified for teachers and students alike what constituted quality work and why. The quality of the assignments I received from students improved significantly every time I implemented this process.

Teaching problem solving using careful goal setting, planning, and self-monitoring ended up not only benefiting the students academically and emotionally but also saving me time in the long run. I spent less time chasing down assignments and regrading papers and projects that had to be redone because of missing pieces or poor quality.

## Summary

It is normal and natural for students to experience some level of difficulty with problem solving, planning, initiating, and self-monitoring because the part of their brain that controls this type of thinking does not mature until they reach their early to mid-20s. Students with executive dysfunctions often appear to be lazy and unmotivated when they repeatedly fail to complete and hand in assignments, but the problem is often as much an “I can’t” as an “I won’t” issue. Adults must have tons of patience and provide lots of modeling, practice, and encouragement to support the development of good planning and problem-solving skills.

**WHAT WORKS:** Helping students set clear goals and visualizing action plans with small steps and detailed timelines; anticipating trouble spots before they happen and developing a back-up plan; identifying resources and ways to access them; using checklists, rubrics, and self-questioning to reflect on actions; replaying experiences and analyzing why things happened the way they did; providing direct feedback and checking it with their perceptions.

**WHAT DOESN'T WORK:** Challenging students' excuses for actions rather than redirecting their efforts; assuming they are repeating mistakes to be obstinate or lazy; assigning work that is too difficult for their skill level or work that is not challenging enough; waiting too long to provide corrective feedback; not providing modeling followed by opportunities to recover from mistakes; doing planning *for* them rather than *with* them.

Adults who can keep student brain development issues in perspective will have an easier time being supportive and patient, especially with students whose executive control functions lag behind those of their peers.

## **On Your Own**

Try out the five-step problem-solving process using one of the following case studies. Remember to (1) know the student, (2) analyze the root causes, (3) set a clear and measurable goal, (4) decide how to monitor student progress, and (5) select an action plan from a list of options that involves home, school, and the student working together. Blank forms for each step can be downloaded at [www.ascd.org/ASCD/pdf/books/searlefivesteps2013.pdf](http://www.ascd.org/ASCD/pdf/books/searlefivesteps2013.pdf).

**Case study 1.** *On Tuesday, Benson's study hall teacher asks why he is sleeping when he knows he has studying to do. Benson assures her that nothing is due until Friday so he doesn't have anything to do today. Last week it was the same story, and he ended up in a panic Thursday night trying to slap together his science paper, due Friday morning.*

**Case study 2.** *Jimmy likes to linger in the block center when his teacher announces that it is time to clean up and come to circle. Even though his teacher reminds him repeatedly to put the materials away, he gets distracted by whatever center he is working in. He also has a hard time sitting still and listening during circle time.*

**Case study 3.** *Julia sits and stares at her art project even though she normally enjoys this type of work. She knows that when she finishes the project, she has to make a presentation on her techniques to the whole class, and that thought scares her to death.*

## BIBLIOGRAPHY

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- Alloway, T. P., & Alloway, R. G. (2010). Investigating the predictive roles of working memory and IQ in academic attainment. *Journal of Experimental Child Psychology, 106*, 20–29.
- Alton-Lee, A., Nuthall, G., & Patrick, J. (1993, Spring). Reframing classroom research: A lesson from the private world of children. *Harvard Educational Review, 63*(1), 50–85.
- Anderson, V. (1998). Assessing executive functions in children: Biological, psychological, and developmental considerations. *Neuropsychological Rehabilitation, 8*(3), 319–349.
- Barkley, R. A., Murphy, K. R., & Fischer, M. (2008). *ADHD in adults: What science says*. New York: Guilford Press.
- Berninger, V. W., Rutberg, J. E., Abbott, R. D., Garcia, N., Anderson-Youngstrom, M., Brooks, A., et al. (1996, February). Tier 1 and tier 2 early intervention for handwriting and composing. *Journal of School Psychology, 44*(1), 3–30.
- Blair, C. (2002, February). School readiness: Integrating cognition and emotion in neurobiological conceptualization of children's functioning at school entry. *American Psychologist, 57*(2), 111–127.

- Brown, T. E. (2005). *Attention deficit disorder: The unfocused mind in children and adults*. New Haven, CT: Yale University Press.
- Burchers, S., Burchers, M., & Burchers, B. (1997). *Vocabulary cartoons: Building an educated vocabulary with visual mnemonics*. Punta Gorda, FL: New Monic Books.
- Clark, R. C., Nguyen, F., & Sweller, J. (2006). *Efficiency in learning: Evidence-based guidelines to manage cognitive load*. San Francisco: Pfeiffer.
- Cleveland Clinic. (2013). *Mind-body exercises: Harnessing the power of the mind-body connection*. Retrieved February 10, 2013, from <http://my.clevelandclinic.org/heart/prevention/alternative/bodymind.aspx>
- Cooper-Kahn, J. D., & Dietzel, L. C. (2008). *Late, lost, and unprepared: A parents' guide to helping children with executive functioning*. Bethesda, MD: Woodbine House.
- Darch, C., Carnine, D., & Gersten, R. (1984, July–August). Explicit instruction in mathematics problem solving. *Journal of Educational Research*, 77(6), 351–359.
- Dean, C. H., Hubbell, E. R., Pitler, H., & Stone, B. J. (2012). *Classroom instruction that works: Research-based strategies for increasing student achievement* (2nd ed.). Alexandria, VA: ASCD.
- Diamond, A. (2002). Normal development of prefrontal cortex from birth to young adulthood: Cognitive functions, anatomy, and biochemistry. In D. T. Stuss & R. T. Knight (Eds.), *Principles of frontal lobe function* (pp. 466–503). New York: Oxford University Press.
- Dweck, C. (2006). *Mindset: The new psychology of success*. New York: Random House.
- Elliott, J. G. (2010). An evaluation of a classroom-based intervention to overcome working memory difficulties and improve long-term academic achievement. *Journal of Cognitive Education & Psychology*, 9(3), 227–250.
- Fisher, D. & Frey, N. (2008). *Better learning through structured teaching: A framework for the gradual release of responsibility*. Alexandria, VA: ASCD.
- Flood, J., Lapp, D., & Fisher, D. (2005). Neurological impress methods PLUS. *Reading Psychology*, 26(2), 147–160.
- Frayer, D., Frederick, W. C., & Klausmeier, H. J. (1969). *A schema for testing the level of cognitive mastery*. Madison, WI: Wisconsin Center for Education Research.
- Fuchs, D., Fuchs, & L. S., & Burish, P. (2000, June). Peer-assisted learning strategies: An evidence-based practice to promote reading achievement. *Learning Disabilities Research & Practice*, 15(2), 85–91.
- Fuchs, L. S., & Fuchs, D. (1986, November). Effects of systematic formative evaluation: A meta-analysis. *Exceptional Children*, 53(3), 199–208.

- Fuchs, L. S., Fuchs, D., Prentice, K., Burch, M., Hamlet, C. L., Owen, R., et al. (2003, June). Explicitly teaching for transfer: Effects on third-grade students' mathematical problem solving. *Journal of Educational Psychology, 95*(2), 293–305.
- Gathercole, S. E., Pickering, S. J., Knight, C., & Stegmann, Z. (2004, January). Working memory skills and educational attainment: Evidence from national curriculum assessments at 7 and 14 years of age. *Applied Cognitive Psychology, 18*(1), 1–16.
- Gawande, A. (2010). *The checklist manifesto: How to get things right*. New York: Metropolitan Books.
- Gersten, R., Beckmann, S., Clarke, B., Foegen, A., Marsh, L., Star, J. R., et al. (2009). *Assisting students struggling with mathematics: Response to intervention (RTI) for elementary and middle schools*. (NCEE 2009-4060). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences.
- Gibson, S. A. (2012). *Strategy guide: Write alouds*. Retrieved July 27, 2012, from <http://www.readwritethink.org/professional-development/strategy-guides/write-alouds-30687.html>
- Glasser, W. (1998). *Choice theory: A new psychology of personal freedom*. New York: Harper Collins.
- Goleman, D. (1995). *Emotional intelligence*. New York: Bantam.
- Graham, S., Bollinger, A., Booth Olson, C., D'Aoust, C., MacArthur, C., McCutchen, D., et al. (2012, June). *Teaching elementary school students to be effective writers: A practice guide*. (NCEE 2012-4058). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences. Retrieved July 16, 2012, from <http://ies.ed.gov/ncee/wwc/PracticeGuide.aspx?sid=17>
- Graham, S., Harris, K. R., & Loynachan, C. (2012). *The basic spelling vocabulary list*. Retrieved July 18, 2012, from <http://www.readingrockets.org/article/22366/>
- Graham, S., & Weintraub, N. (1996, March). A review of handwriting research: Progress and prospects from 1980 to 1994. *Educational Psychology Review, 8*(1), 7–87.
- Hallahan, D., & Kauffman, J. M. (2000). *Exceptional learners: Introduction to special education*. Boston: Allyn and Bacon.
- Hasbrouck, J., & Tindal, G. (2005). *Oral reading fluency: 90 years of measurement*. Eugene, OR: University of Oregon.
- Hattie, J., Biggs, J., & Purdie, N. (1996, Summer). Effects of learning skills interventions on student learning: A meta-analysis. *Review of Educational Research, 66*(2), 99–136.

- Holmes, J., Gathercole, S. E., Place, M., Dunning, D. L., Hilton, K. A., & Elliott, J. G. (2010, September). Working memory deficits can be overcome: Impacts of training and medication on working memory with children with ADHD. *Applied Cognitive Psychology, 24*(6), 827–836.
- Honig, B., Diamond, L., & Gutlohn, L. (2008). *Teaching reading sourcebook* (2nd ed.). Novato, CA: Arena Press.
- Hseuh-chao, M. H., & Nation, P. (2000). Unknown vocabulary density and reading comprehension. *Reading in a Foreign Language, 13*(1), 403–430.
- Hughes, M., & Searle, D. (1997). *The violent E and other tricky sounds: Learning to spell from kindergarten through grade 6*. Portland, ME: Stenhouse Publishers.
- Lambert, N. M., & McCombs, B. L. (Eds.). (1998). *How students learn: Reforming schools through learner-centered education*. Washington, DC: American Psychological Association.
- Levine, M. (2002). *A mind at a time*. New York: Simon & Schuster.
- Lewis, C. H. (1982). *Using the "thinking aloud" method in cognitive interface design*. Yorktown Heights, NY: IBM.
- Locke, E. A., & Latham, G. P. (2002, September). Building a practically useful theory of goal setting and task motivation: A 35-year odyssey. *American Psychologist, 57*(9), 705–717.
- Marzano, R. J., Pickering, D. J., & Pollock, J. E. (2001). *Classroom instruction that works: Research-based strategies for increasing student achievement*. Alexandria, VA: ASCD.
- Meichenbaum, D. H., & Goodman, J. (1971). Training impulsive children to talk to themselves: A means of developing self-control. *Journal of Abnormal Psychology, 77*(2), 115–126.
- Meyer, B. J., Young, C. J., & Bartlett, B. J. (1989). *Memory improved: Reading and memory enhancement across the life span through strategic text structures*. Hillsdale, NJ: Erlbaum.
- Miller, S. P., & Mercer, C. D. (1993, Spring). Using data to learn about concrete-semiconcrete-abstract instruction for students with math disabilities. *Learning Disabilities Research & Practice, 8*(2), 89–96.
- National Institute of Child Health and Human Development, National Reading Panel. (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction*. (NIH Publication No. 00-4769). Washington, DC: Author.
- Nauert, R. (2010, November 18). *Brain fatigue from living in the city?* Retrieved February 1, 2012, from <http://psychcentral.com/news/2010/11/17/brain-fatigue-from-living-in-the-city/20993.html>



- Project EXSEL. (2004, May 14). *What is emotional hijack?* Retrieved February 8, 2013, from <http://pd.ilt.columbia.edu/projects/exsel/aboutsel/hijack.htm>
- Reehm, S. P., & Long, S. A. (1996, May). Reading in the mathematics classroom. *Middle School Journal*, 27(5), 35–41.
- Reeves, D. B. (2009). *Leading change in your school: How to conquer myths, build commitment, and get results*. Alexandria, VA: ASCD.
- Roberts, M. (2001, July). Off-task behavior in the classroom: Applying FBA and CBM. *NASP Toolkit*. Retrieved February 1, 2013, from <http://www.nasponline.org/communications/spawareness/Off-Task%20Behavior.pdf>
- Sadoski, M., & Paivio, A. (2001). *Imagery and text: A dual coding theory of reading and writing*. Mahwah, NJ: Erlbaum.
- Schunk, D. H., & Cox, P. D. (1986). Strategy training and attributional feedback with learning disabled students. *Journal of Educational Psychology*, 78(3), 201–209.
- Searle, M. A. (2007). *What to do when you don't know what to do: Building a pyramid of interventions*. Perrysburg, OH: Searle Enterprises.
- Searle, M. (2010). *What every school leader needs to know about RTI*. Alexandria, VA: ASCD.
- Sikström, S., & Söderlund, G. (2007, October). Stimulus-dependent dopamine release in attention-deficit/hyperactivity disorder. *Psychological Review*, 114(4), 1047–1075.
- Sousa, D. A. (1998). *How the brain learns*. Thousand Oaks, CA: Corwin Press.
- St. Clair-Thompson, H. L., Stevens, R., Hunt, A., & Bolder, E. (2010, March). Improving children's working memory and classroom performance. *Educational Psychology*, 30(2), 203–219.
- Szalavitz, M. (2003, July/August). Tapping potential: Stand and deliver. *Psychology Today*, 50–54.
- Tannen, D. (1998). *The argument culture: Moving from debate to dialogue*. New York: Random House.
- Tournaki, N. (2003, September/October). The differential effects of teaching addition through strategy instruction versus drill and practice to students with and without learning disabilities. *Journal of Learning Disabilities*, 36(5), 449–558.
- U.S. Department of Education. (2004). *Teaching children with attention deficit hyperactivity disorder: Instructional strategies and practices*. Washington, DC: Office of Special Education and Rehabilitative Services, Office of Special Education Programs.
- Veenman, M. V., Wilhelm, P., & Beishuizen, J. J. (2004, February). The relation between intellectual and metacognitive skills from a developmental perspective. *Learning and Instruction*, 14(1), 89–109.

- Vygotsky, L. (2012). *Thought and language* (Rev. and expanded ed.). Cambridge, MA: MIT Press.
- Willis, J. (2010a, May 9). Want children to “pay attention”? Make their brains curious! [Blog post] Retrieved June 23, 2012, from <http://www.psychologytoday.com/blog/radical-teaching/201005/want-children-pay-attention-make-their-brains-curious>
- Willis, J. (2010b). *Learning to love math: Teaching strategies that change student attitudes and get results*. Alexandria, VA: ASCD.
- Wolfe, P. (2001). *Brain matters: Translating research into classroom practice*. Alexandria, VA: ASCD.
- Wright, J. (n.d.a). *School-wide strategies for managing . . . Study skills/organization*. [Web page]. Available: <http://www.interventioncentral.org/academic-interventions/study-organization/school-wide-strategies-managing-study-skills-organization>
- Wright, J. (n.d.b). *Sentence combining: Teaching rules of sentence structure by doing*. [Web page]. Available: <http://www.interventioncentral.org/academic-interventions/writing/sentence-combining-teaching-rules-sentence-structure-doing>
- Zimmerman, B. J., & Schunk, D. H. (Eds.). (2001). *Self-regulated learning and academic achievement: Theoretical perspectives* (2nd ed.). Mahwah, NJ: Erlbaum.
- Zins, J., Weissberg, R., Wang, M., & Walberg, H. J. (Eds.). (2004). *Building academic success on social and emotional learning: What does the research say?* New York: Teachers College Press.