

with Executive Functioning

by Joyce Cooper-Kahn, PhD, and Laurie Dietzel, PhD

ow can we improve the chances that children and adolescents with executive weaknesses meet with success in life? Parents and teachers have two primary roles in helping kids with executive weaknesses. The first is to help children to be successful in their daily lives. The second is to teach the skills and approaches that allow the children to be independent in the long run. If we only provide temporary supports, we may be reinforcing overdependence and learned helplessness. However, if we don't offer adequate short-term support while our kids build better executive skills, they may experience a range of negative academic and emotional consequences with long-term effects.

Short-term goals: Building a prosthetic environment

Just as we provide prostheses for someone who cannot walk otherwise, children with executive weakness need adults to adapt their environment and tasks when they do not yet have sufficient executive competence to succeed on their own. For this reason, Dr. Russell Barkley refers to the process of accommodating kids as building a "prosthetic environment."

External support, limits, and supervision can all be types of prostheses. The supports that are

needed change over time and, hopefully, eventually may not be needed at all.

All of these short-term strategies are designed to lighten the load on the executive system. We do this by modifying the nature of the task and/or by providing support and supplementing the child's executive system. This allows the child to be more successful in daily life. Although we call these strategies shortterm, it is important to understand that many kids may need support for years, not weeks or months, with the goal of having them eventually learn how to independently manage tasks and demands.

Helping a child to be more successful on a daily basis reduces the risk of serious secondary problems, such as depression, anxiety, and low self-esteem. These secondary problems can arise from the constant demoralization caused by failure to meet expectations day after day. In addition to increased vulnerability to emotional difficulties, people with weaknesses in impulse control, monitoring, and judgment are at higher risk for substance abuse and risky behavior. We encourage parents to enforce tighter limits and to provide closer supervision for adolescents with these risk factors.

Parents who provide appropriate supports for their children with executive weaknesses may be accused of trying to protect them from the realities of life. We think it makes sense to provide a level

Joyce Cooper-Kahn, PhD, is a clinical child psychologist who specializes in learning and attention disorders. She is the parent of an adult son with AD/HD and executive skills weaknesses. **Laurie C. Dietzel, PhD,** is a clinical psychologist with expertise in neuropsychological assessment and the diagnosis of AD/HD, learning disabilities, PDD, and other neurodevelopmental disorders.

Executive Functions

The authors list and define the following as executive functions:

- 1. Inhibition—the ability to stop one's own behavior at the appropriate time, including stopping actions and thoughts.
- 2. Shift—the ability to move freely from one situation to another and to think flexibly in order to respond appropriately to the situation.
- 3. Emotional Control—the ability to modulate emotional responses by bringing rational thought to bear on feelings.
- 4. Initiation—the ability to begin a task or activity and to independently generate ideas, responses, or problemsolving strategies.
- 5. Working Memory—the capacity to hold information in mind for the purpose of completing a task.
- 6. Planning/Organization—the ability to manage current and future- oriented task demands.
- 7. Organization of Materials—the ability to impose order on work, play, and storage spaces.
- 8. Self-Monitoring—the ability to monitor one's own performance and to measure it against some standard of what is needed or expected.

of protection and a buffer from demands when a child does not yet have the skills to independently manage them. If we do not provide this, even very bright, talented kids may come to view themselves as incompetent and ineffective. Depending upon temperament, they may become overly self-critical or give up due to their inconsistent performance. Without appropriate expectations and supports to even the playing field, these youngsters may experience academic underachievement, underemployment, and interpersonal problems.

By experiencing success when the supports are in place, children learn that it is possible to succeed. With the guidance of adults, children can begin to understand the kinds of supports they need and where to find them so that, over time, they can learn to put these into place and use them as appropriate.

For most of the people we have worked with, the self-awareness and maturity to recognize the need for help and to seek appropriate support comes late in the game. Often, parental guidance continues to be needed into high school and, for some, into the college and young adult years. This guidance must be balanced with the need to allow the emotional and practical independence that our adolescents and young adults are seeking. That is no easy balance! It is important that adults evaluate on an ongoing basis whether they can scale back their direct involvement.

Going the distance: Building executive skills

If we only focus on short-term goals with our kids, then we are only doing half of our job. It is also important to provide the explicit teaching and the practice vital to increasing their executive competence. Building skills can be done with help from parents, teachers, tutors, therapists, and other important adults.

Long-term interventions focus on strengthening the executive system and building a repertoire of effective self-management skills to compensate for executive weaknesses. These interventions allow our children to be competent as they move out into the world on their own.

One of the most effective ways of building executive skills is by developing habits and routines that eventually become automatic. Building habits requires repetition, repetition, and more repetition. Here's the good news: Once you no longer have to think about doing something, you largely bypass the executive system. Here's the bad news: It really does require repetition, ad nauseum, for kids with executive weaknesses to internalize these behaviors. Remember, this is not a knowledge problem. As with adults who are trying to change their behavior

(have you ever tried to lose weight?), kids often know what they should do, but tend to revert to their old ways. Once behaviors become automatic, they no longer require conscious effort.

Until that point, independent performance of the desired behavior is likely to be inconsistent. This is why it is so important to provide the prosthetic environment while the skills are still developing.

Teach the child to repeat directions several times in her head in order to lock in the information.

to Help a Child Who Has **Trouble Following** Directions (from Chapter 14,

Strategies

"Helping Children Handle Working Memory Issues")

- **1.** Modify the presentation of information so that it is more easily remembered. For example:
 - Organize and simplify the directions.
 - Organize the information in a manner that creates bullet points to aid in recall. ("Remember, you have three important points to write about: What was the problem, how did the people solve it, and what was the outcome. Remember, I want to see three points." Or "Johnny, this morning we have some clean-up chores to do around the house before we can go swimming. You have three things you need to get done. Here they are: First, put all the dirty clothes into your hamper. Second, bring the hamper down to the laundry room. Third, put your super-hero guys away. Got it? There are three things on your list. Do you remember what they are? You tell me so I am sure you've got them all.")

Simplify the directions so that the most important information stands out.

• Simplify the directions so that the most important information stands out. "Jackie, I want you to get your coat, get your library books from the dining room table, and come back here to the kitchen. Got that? Coat. Library books. Kitchen. Go."

Tip:

To organize and simplify directions, you need to distill the most important information to convey to your child. This means that you must eliminate extraneous information, such as what it means for your child's long-term development if she does not clean her room, how what she does reflects on her character, or how you had to walk four miles through the snow to get to school when you were a child. Okay, we know that's an exaggeration of the process, but you get the point. Simplifying the message is a good thing because otherwise your child will get lost in the words and in the complex emotions and worries that you convey. Focus on the here-and-now, and you automatically narrow in on the most important information.

2. Use multisensory strategies to aid recall. Multisensory teaching is the process of connecting multiple sensory inputs to the material to be learned. This is done using strategies that connect new learning with input from the eyes, ears, voice, and/or hands. For example:

- "Let's sing the directions."
- "Tap the table for each step you need to do."
- "Let's make a picture list of all the things we need to get done before Grandma and Grandpa get here."



POWERS / DREAMSTIME

Try This!

Set your simplified directions to song, rhythm, or dance steps. If you have a playful style to begin with, capture that occasional, spontaneous silliness to punctuate your serious parental efforts. A few verses of "Shoes, coat, cha-cha-cha" with the accompanying dance steps may help you all get out the door with smiles on your faces!

- **3.** Teach strategies and techniques to compensate for working memory weaknesses. For example:
 - Teach the child to visualize. "So you have to pack for your ski trip. Imagine yourself walking through a whole day of vacation and think about what you will need from the time you wake up until you go to bed and then get each item as you think about it." You might even suggest that the child make a list while she's sitting there visualizing, and then have her collect each item and check it off the list. If your child is younger or needs more support, offer to be the list-maker while she dictates the list. You can check off each item as she packs it.
 - Teach the child to repeat directions several times in her head in order to lock in the information. ("Turn to page fifteen and get out my notebook and pencil. Page fifteen, notebook, pencil. Page fifteen, notebook, pencil.")
 - Teach the student to read the directions softly to herself both before and after completing the assignments. ("After you complete your test, reread all of the directions and make sure you have done all that is expected.")
 - Teach your child to use mnemonic devices in the form of short rhymes or special words to recall lists. ("You can remember the line notes in the treble clef by repeating 'Every good boy deserves fudge." Or, "Remember the list of stuff I'd like you to pick up at the store by thinking of the word "beam": bread, eggs, apples, milk.")
- **4.** Provide templates for procedures or routines that are repeated. A template lays out the standard steps to complete a repetitive task and can be useful for a variety of home and school demands. Templates are particularly helpful for those who have trouble with planning/organizing in addition to working memory weakness. The templates can be faded out when the procedure becomes automatic. However, this should be monitored carefully so that the template can be brought back if it appears that it was faded too soon. For example:
 - Use chore cards to keep your child on task, as suggested by Dr. Russell Barkley. These index cards list the steps to complete a particular job. You and your child can create a chore card together when you first introduce a new job. A simple numbered list of all the parts of a task works well. For example, to clean up the child's room:
 - 1. Throw away trash
 - 2. Put dirty clothes in hamper
 - 3. Put clean clothes away
 - 4. Books on bookshelf
 - **5.** Toys in correct put-away place
 - 6. Make bed

Then, at chore time, you hand the child the card for the chore to complete. "Byron, here is your chore card for this morning. Just follow the steps on the card. Bring the card back to me when you finish the chore."

- Provide a template for specific academic skills. For example, create a template that lays out the steps for long division. This relieves the student of needing to remember the steps at the same time that she is trying to understand the process of division.
- For daily routines, create checklists. This can be helpful for kids
 who tend to leave out steps when packing their backpacks, doing their basic morning hygiene routines, settling into the classroom, or packing up materials that will be needed at home.
- **5.** Teach the use of concrete external storage systems to take the burden off of the internal working memory. For example:
 - For young children, make a to-do list or schedule using pictures. This can also help kids who have trouble keeping track of steps in their morning and evening routines. These can even be laminated so the child can use a dry erase marker to check off each step as it is completed. This visual component illustrates competence to the child and ulti-







The written information becomes a concrete cue that can be reinspected whenever necessary after oral recall fades. For example:

- Marina, I need you to run into the grocery store and get a few things while I pick up the dry cleaning next door. Do you have some paper? Great! Here are the four things we need. Write them down."
- "Richard, I agree that you need a new notebook. You also mentioned yesterday that you need some socks. Write the things you need on the white board in your room so you will remember to pick them up when we next go shopping."
- Teach your child or teen to jot down a few notes as the teacher is giving oral directions. Writing down a few key words can ensure that she is doing the requested problems and not wasting her time on the wrong page.
- Use technology to compensate for weak working memory. For example, "When you think of something you need to do, record a message on your cell phone, send yourself a reminder email, or call your voicemail and leave a message."
- Ask your child's teachers if they are okay with having their lectures recorded. For a child who has difficulty focusing on what is being said while writing notes, having a recording that can be stopped and started can be a big help.
- 6. Accommodate working memory weaknesses by providing reasonable supports. For example:
 - Expect to repeat the directions, as necessary, and do so in a patient, sensitive manner.
 - For adolescents, ask how you can provide reminders or cues without bugging them. Be flexible and willing to try any reasonable way of helping.
 - Prompt for good listening skills. ("I am going to give you the directions. Please look at me so I know that you are focusing.")
 - Request accommodations in the classroom that focus on creating back-up for your child's weak memory. These could

include such interventions as having the teacher provide a written copy of directions and assignments, and having the teacher review and initial the student's agenda book to indicate that the assignment has been written down fully and correctly and that nothing has been omitted.

- Teach your child the importance of having the phone numbers of at least two students in the class so she has someone to call if she needs to check on an assignment. Teach your child to select kids who are good students, not necessarily a best buddy if the buddy also forgets what the buddy was supposed to do!
- Offer understanding and support when the child experiences frustration or failure, for example:
 - "It is hard to keep track of doing so many things at once. Would it help if I make a list so you can check off each step?"
 - > "Sometimes it is hard to manage complicated directions. Let's read these aloud and then take it one step at a time."
 - "I am sorry that you spent so long and worked so hard on your project, but your teacher pointed out that you didn't complete the essay. Let's see if she will give you a second chance to finish it."

Strategies to Help a Child Who Does Homework but Doesn't Turn It In

(from Chapter 15, "Helping Children Plan and Organize")

1. Walk through the process with the child. For example:

vour child.

- There are many different ways that someone can get off-track in the process of getting homework from home to the teacher. Talk through the process with the student. Is the homework getting lost at home? Is the homework getting lost in the bottom of the backpack or the bottom of the locker? Is it in the proper notebook, but forgotten in the process of settling into the classroom? Once you have identified the sticking point, consider what needs to be added to the routine to get past it.
- For those who lose track of homework at home, consider instituting the following routine (from Enabling Disorganized Students to Succeed, by Suzanne Stevens): "Homework is not done until your homework is in its proper folder or notebook, the folders and notebooks are packed into your backpack, and your backpack is on its launching pad." Try different ways of organizing homework to find the one that best suits your child. Some students do best with a separate homework folder so that everything that needs to be turned in is organized into one place. Others do better when they organize the homework by subject. If the teachers have set up a system that does not work for your child, talk with them about allowing alternatives. This can also be done as part of a formal individualized plan, like a 504 plan.
- **2.** Develop templates of repetitive procedures. For example:
 - Teachers can create a checklist of things to be done upon entering or leaving the classroom.
 - Parents can create written checklists or photo charts for com-

Executive Functioning



pleting chores, preparing to catch the bus in the morning, gathering necessary stuff for sports practice, etc.

- **3.** Provide accommodations. For example:
 - Involve your child's teacher(s) in building in reminders until the desired pattern of behavior (e.g., turning in homework as soon as the student walks into the classroom) becomes a habit. Teachers understandably balk at the idea of taking on responsibility for your child's job of turning in his work. However, repeated performance of a behavior is what makes it a habit; once the behavior is automatic, then the burden is lifted from the executive system. If you help the teacher to see this as a step in the process of building independent skills, with the prospect of fading out the teacher's prompting, it may encourage the teacher to get on board.
- **4.** Teach the use of tricks and technology that help compensate for organizational weaknesses. For example:
 - If the agenda book is the primary organizing tool for tracking assignments, it could also serve as a way to remind the student to turn in assignments. For example, after completing an assignment, the student could be taught to enter a note into the next day's assignments block for that subject. Then, at the end of class, when the student enters that night's homework assignment, he will see the reminder to turn in what is due that day.
 - Several versions of watches are available that can be set to vibrate

- and show a reminder phrase at the programmed time. "Turn in homework" can be a programmed reminder set to go off at the beginning or end of the class period. Cell phones often have an alarm function, as well, that can be set for reminder alarms. If this trick works for your child, talk to your child's teachers about allowing cell phones in the classroom for this explicit function only.
- When the student prints out an assignment at home, prompt the child to also email it to the teacher and the child's own web-based email account. Then, if the hard copy is misplaced, the child can print it out during class (with the teacher's permission) or during free time.

Try This!

Few problems are as frustrating for parents and kids as not receiving credit for homework that was actually completed on time but never turned in! One tried and true behavioral strategy to remedy this is to link an already established habit to one that your child needs help acquiring. To illustrate, Ivan is a seventh grader who forgets almost everything—except his peanut butter and jelly sandwich!—when he leaves home in the morning to catch the school bus. With daily reminders from his parents, he puts his homework folder on top of his lunch in the refrigerator before going to bed each school night. Then, putting the folder in his backpack, along with his PB&J, is a "no-brainer." Ivan not only gets credit for his completed work but also learns how to creatively generate ways to manage his weaknesses.