

Back to School RI: Supporting Executive Functioning in Distance Learning and Hybrid Learning Models

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RIDE Rhode Island
Department
of Education

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[Resources on Executive Functioning and helping students who struggle](#)

[Understanding Executive Functioning Issues, Stephanie Carlson, Ph.D.](#)

[Online Assignments: Best Practices for Teachers to Use with Students](#)

[Helping Kids Who Struggle with Executive Function](#)



Executive Functioning by level (elementary, middle school, high school)

Elementary

Foundational Executive Function skills include:

- Self-regulation - managing emotions and inhibiting impulsive behaviors
- Attention - sustaining focus, especially for multi-part tasks
- Task Initiation - starting a non-preferred task
- Organization - maintaining materials
- Planning - mapping out multi-step tasks

Children with executive function at this age have difficulty with:

- Managing behavior and/or emotions - lacking self-control, easily frustrated, anxious, difficulty settling down to do work
- Academic challenges - lack persistence, not starting or completing even small assignments or having trouble locating materials for schoolwork

How to help students at this age (elementary):

- Help them learn about their brains and how emotions affect learning
- Help them become increasingly independent with daily routines
- Learn and practice methods to cope with strong emotions
- Learn and apply strategies to get work started and persist with challenging work
- Learn strategies to stay on task and maintain attention
- Develop personalized systems to organize backpacks and work areas
- Learn how to break down assignments into smaller parts and how to plan when work will be done
- Learn how to gain awareness of expected behaviors in group settings
- Develop self-reflection skills to help them take ownership of new habits
- Help them with using technology that can assist with skill development



Middle School

Middle school Executive Function skills:

- Self-regulation - managing strong emotions and inhibiting impulsive behaviors
- Attention - sustaining focus, especially for lengthy or challenging tasks
- Task Initiation - starting a non-preferred task
- Organization - keeping track of materials at home/school; organizing ideas and information for projects, essays and research papers
- Planning and prioritizing - mapping out multi-step tasks such as long-term class projects and judging which assignments are most important to tackle first and which assignments matter most
- Time Management - allocating an appropriate amount of time for work and other commitments

Children with executive function at this age have difficulty with:

- Organization - difficulty organizing physical space and materials (backpack, desk), difficulty with multi-step directions for class assignments, forget to turn in homework
- Behavior or emotion management - impulsive or easily frustrated, cannot resist online distractions, difficulty settling down to do work and persisting with tasks, strained peer relationships
- Time management - student leaves work until the last minute causing panic and stress
- Academic - lacks persistence or often does not complete or even start assignments, may do poorly on tests due to ineffective study habits, may lose credit for late assignments

How to help students at this age (middle school):



Students at this age are starting to gain greater self-awareness and understanding of who they are as a learner (metacognition). Help them understand how their brains and emotions affect learning. Help them:

- Understand their brains and how emotions affect learning
- Learn and practice methods to cope with strong emotions
- Learn and apply strategies to stay on task and maintain attention
- Learn how to get started on work and how to persist when the work is challenging
- Develop personalized systems to organize materials and work areas
- Develop systems to start and complete writing assignments
- Make the abstract more concrete
- Break longer-term assignments into smaller parts and plan how to get the work done
- Develop self-reflection skills to take ownership of new habits
- Gain insight into what motivates them and use that knowledge to be productive
- Advocate for themselves with teachers
- Participate in peer mentoring and peer coaching to learn executive function skills
- Bookmark teachers' websites to more easily check assignments
- Fade support only once student is demonstrating independent success - don't assume that just because a teacher or parent "covered it" means that the student can independently engage in a skill related to any of the executive functioning skills covered
- Develop routines for organization and problem solving with strategies for self-management to build independence over time
- Discuss with the teacher personalized plans or strategies for engaging in and completing assignments; allow the student to brainstorm ideas that s/he feels comfortable with doing
 - Help students reflect and set their own goals. Encouraging students to create goals builds lifelong skills. Here are 6 steps for effective goal setting:
 - Take ownership - brainstorm with student the challenges s/he faces
 - Keep it simple - focus on one goal area at a time, such as: organization, managing time, staying focused, planning ahead.
 - Develop SMART (specific, measurable, achievable, realistic, and time-bound) goals
 - Track progress - with measurable goals, each week ask student:
 - Have you stuck to your goal? If not, what is holding you back?
 - Is it a realistic goal or does a change need to be made to make it more attainable?
 - What specifically will you do next to be more successful?



- Celebrate accomplishments - students should be recognized for accomplishing goals
- Continue to own the new habit - once a student accomplishes a goal, help them to keep it as a habit as this is a lifelong skill

High School

High School Executive Function Skills:

- Self-regulation - managing strong emotions and inhibiting impulsive behaviors
- Attention - sustaining focus, especially for lengthy or challenging tasks that have many components
- Task Initiation - starting a non-preferred task and overcoming a desire to procrastinate
- Organization - keeping track of materials at home/school; organizing ideas and information for projects, essays and research papers
- Planning and prioritizing - mapping out multi-step tasks such as long-term class projects and judging which assignments are most important to tackle first and which assignments matter most
- Time Management - allocating an appropriate amount of time for work and other commitments
- Cognitive flexibility - taking the perspective of teachers and peers and formulating different solutions to problems
- Metacognition - the ability to reflect on one's own learning and have self-awareness that drives good choices

Children with executive function at this age have difficulty with:

- Organization - difficulty organizing physical space and materials (backpack, desk), difficulty with multi-step directions for class assignments, keeping track of and turning in homework, or approach writing assignments and long-term projects
- Behavior or emotion management - may have poor relationships with teachers, unable to resist distractions, difficulty settling down to do work or give up easily on challenging or tedious tasks



- Time management - student leaves work until the last minute causing panic and stress, may overschedule self
- Academic - lacks persistence or often does not complete or even start assignments, may do poorly on tests due to ineffective study habits, may lose credit for late assignments, may not know how to take good notes.

How to help students at this age (high school):

Help them:

- Practice methods to cope with strong emotions and stress
- Learn and apply strategies to stay on task and maintain attention
- Learn how to get started on work and how to persist when the work is challenging
- Develop personalized systems to organize materials and work areas.
- Develop systems to start and complete writing assignments
- Learn how to break assignments into smaller parts and plan when to do work
- Develop self-reflection skills to take ownership of new habits (provide scripts for students to follow with help initially, with the purpose of fading support)
- Gain insight into what motivates them and use that knowledge to be productive
- Advocate for themselves with teachers
- Recognize how their posture impacts their receptiveness to information they consider boring. Sitting upright gets more oxygen into their lungs. Focusing on paying attention is a self-regulation strategy.
- Encourage students to find a method for taking notes that works best for them:
 - Hand-written or typed?
 - Use of keywords or diagrams
 - Connecting discussion points to real-life examples/scenarios
 - Having a variety of templates
- To help with procrastination, set up a to-do list. This could be hand-written or through an on-line app (which can be set with reminders).
- Develop personalized systems to organize materials and work areas (including online folders and physical work space).
- Utilize timers (stopwatch, visual countdowns) to assist with time spent engaged with tasks and when taking breaks
- Bookmark teachers' websites to more easily check assignments
- Fade support only once student is demonstrating independent success - don't assume that just because a teacher or parent "covered it" means that the student can



independently engage in a skill related to any of the executive functioning skills covered

- Develop routines for organization and problem solving with strategies for self-management to build independence over time
- Discuss with the teacher personalized plans or strategies for engaging in and completing assignments; allow the student to brainstorm ideas that s/he feels comfortable with doing
 - Help students reflect and set their own goals. Encouraging students to create goals builds lifelong skills. Here are 6 steps for effective goal setting:
 - Take ownership - brainstorm with student the challenges s/he faces
 - Keep it simple - focus on one goal area at a time, such as: organization, managing time, staying focused, planning ahead.
 - Develop SMART (specific, measurable, achievable, realistic, and time-bound) goals
 - Track progress - with measurable goals, each week ask student:
 - Have you stuck to your goal? If not, what is holding you back?
 - Is it a realistic goal or does a change need to be made to make it more attainable?
 - What specifically will you do next to be more successful?
 - Celebrate accomplishments - recognize students for accomplishing goals
 - Continue to own the new habit - once a student accomplishes a goal, help them to keep it as a habit as this is a lifelong skill

Tips to support students with Executive Functioning challenges when engaged in virtual learning and hybrid models

Tips to support students with Executive Functioning challenges when engaged in virtual learning:

- Organize the home work space to the best extent possible:
 - Recommend, if possible, a consistently utilized space for online learning
 - Is there good lighting and comfortable seating?
 - Are there fidgets available?



- Is there a location available where distractions are limited (e.g., away from television where a younger sibling may be viewing)
 - Keep all physical items in one place, such as chromebook/laptop, paper books, writing utensils, writing paper, paper folders (organized by subject and items that are in progress and items that are completed/ready to turn in)
- Provide a visible daily schedule for students with:
 - Manageable work time (be realistic about expectations of how much can be accomplished)
 - Frequent breaks
 - Less preferred activities followed by highly preferred activities
 - Check-boxes to mark off when items have been completed
 - Choice opportunities for scheduling those items that have flexibility (when applicable)
 - Make printable for those who are able to print at home
- Consider how materials needed for school work are stored:
 - Electronic files should be easy to manage, consider:
 - Are they in one place? (organize folders, links, resources, materials, etc. in a central location with the same starting point)
 - Use conventions that are the same for each folder or subject--for instance, name each subject folder and within that folder have the same subfolder sections, such as new assignments, assignments in process, completed assignments)
 - Provide help to students with the setup of their electronic systems:
 - frequently check-in with their use of the system
 - provide constructive feedback and reminders to use system
 - Give positive praise/reinforcement for increasing use of their system (don't expect they can master after one initial review--this will take repeated re-visiting)
 - When new assignments/tasks begin, explicitly identify what the student will need to engage in the task. Consider breaking this into the categories:
 - What I need before I begin the assignment,
 - What I need during the assignment
 - What I need to do to complete the assignment/before it's turned in (e.g., checklist to ensure all aspects of assignment are included, reminders for proofing or editing)

- Consider what tangible items may be needed for student to engage in a task or activity, such as a printed checklist, reference materials (e.g., a number line, calculator, graphic organizer, book)
- Color code and clearly label subjects and electronic folders. [Example](#) of how to do this in google folders.
- Regularly “clean out” materials - remove items no longer needed, ensure assignments are filed in the correct location, loose papers are discarded
- Consider how the student can ask for assistance (consistency for how to access):
 - From a teacher: Does the student know when the teacher is available? Does the student know what type of questions to ask for teacher assistance?
 - From a parent: Is this an easy procedural question? Is this a question that will help me stay on track? Is this specific to content from the teacher and better suited as a teacher question?
 - From a peer or other student: How can I access my peers--for academic purposes? For social purposes? Is there a peer that I have worked with before who can help me? Are there opportunities set up by the teacher to ask my peers a question? What types of help can my peers give me?
- Provide explicit instructions for how to ask for particular types of assistance (from teacher, parent, peer)
- Particularly for long-term assignments:
 - Use a weekly homework planner and update it consistently (this can be online or paper)
 - Provide check-ins with students for this task specifically
 - Highlight important due dates in a noticeable color
 - Write “no homework” or “no assignment” next to the day/block for a subject when nothing is required. This helps to build the strategy to check for tasks and a blank space is a reminder to investigate that subject for that day.
 - In a tangible planner, use a paper clip or binder to bookmark a page to flip to in a hurry
 - In a tangible pocket file, divide work by subject/class. Within each pocket, a student can file tasks by stages of completion
- Provide outlines of lessons/activities/tasks (put in a consistent location/online folder)
- Create a daily to-do list (online or on paper)
- Provide simple, clear and step-by-step directions (in text and recorded--video or audio)
- Create personalized videos to connect with students who have disengaged

- Use attention getting phrases in lessons/activities, such as “this is really important”
- Allow use of speech-to-text for writing activities
- Materials to help students should be easily accessible and defined. Consider if these are a separate materials folder or if each subject has needed materials in a location within the subject folder. Examples include, but are not limited to:
 - Graphic organizers for writing
 - Checklists for completion of specific tasks
 - Modified assignments
 - Social stories for working through anxiety
 - Positive self-talk strategies
 - Note-taking templates (printed for handwritten notes and online for typed)
 - Larger assignments broken down by detail and in order (if a particular sequence is important)



UDL: Challenges for students in the area of Executive Functioning and how to provide virtual accommodations to support

Distance Learning: 6 UDL Best Practices for Online Learning (Understood.org)	Challenges for students with Executive Function Issues	Virtual Accommodations
<p>1. Explicitly teach expectations and engagement - students have a wide range of ability for online learning</p>	<ul style="list-style-type: none"> ● May have more difficulty predicting what the teacher expects ● Lack of ability to watch other students as models for behavioral expectations ● May identify the wrong details on screen/in the lesson 	<ul style="list-style-type: none"> ● Post (positively stated) expectations online ● Review expectations more frequently ● Send reminders about expectations to students prior to sessions ● Keep consistent routine for your online sessions ● Follow up after sessions/lessons to assess what was challenging (surveys, exit tickets, virtual 1:1 or small group meeting)
<p>2. Allow for asynchronous learning - record any live learning instruction for access at a later time</p>	<ul style="list-style-type: none"> ● May be hard to keep up with what's happening in real time ● Format could be overwhelming 	<ul style="list-style-type: none"> ● This will help students review what they may have missed in real time ● Knowing it will be accessible later could reduce anxiety about missing important parts of lesson or activity
<p>3. Assign note-takers (or provide notes) - for older students (middle and high school) responsibility can be shared</p>	<ul style="list-style-type: none"> ● May have difficulty keeping up with what's on screen and take notes ● May take notes on the wrong points or details 	<ul style="list-style-type: none"> ● Provide notes with key points and details that should not be missed from live sessions ● Provide transcript; use app or tool that enables automatic function ● Post notes taken by other students



<p>4. Make materials accessible - this includes visuals and documents, as well as directions that require additional processing or time for students to collect/ access materials</p>	<ul style="list-style-type: none"> ● May have a more difficult time putting together needed materials or items needed for a lesson or activity ● May need more explicit, step-by-step directions to be able to engage in a task or activity 	<ul style="list-style-type: none"> ● Provide written descriptions for visuals ● Ensure students have access to any needed documents, materials, resources before or at the beginning of lesson ● Allow additional time (e.g., start a lesson 5 minutes earlier for students requiring additional assistance or provide recorded instructions ahead of time)
<p>5. Embrace students as teachers - let students know the intention of lesson/activity and ask for feedback on your plans; some students are “digital natives” and have more fluency with online communication than some teachers</p>	<ul style="list-style-type: none"> ● May not be able to flexibly respond to in-the- moment changes to planned activities (which may cause stress or anxiety) ● Will likely have great difficulty adapting to a variety of different teachers’ online teaching preferences and styles ● May have experienced online activities in a different manner and have hard time adapting to a particular teacher’s online style 	<ul style="list-style-type: none"> ● Ask students what will help them during an online lesson or activity (e.g., survey, exit ticket) ● In future lessons, respond with what you’ve received for feedback and how you are making adaptations ● Provide more frequent check-ins with students who struggle with Executive Functioning. If they do not respond initially, follow-up (these students are less likely to be organized in a way to respond as quickly as other students--don’t take lack of response as disinterest).
<p>6. Actively build a supportive community - build time into your learning to focus on social connections to</p>	<ul style="list-style-type: none"> ● May be more anxious about online learning environment ● May be missing the meaning of lessons due 	<ul style="list-style-type: none"> ● Provide more frequent virtual check-ins ● Encourage involvement in online learning with positive praise for efforts



<p>decrease feelings of social isolation and increase feelings of belonging</p>	<p>to distractibility or difficulty following lessons at a particular pace (such as live time sessions) leading to stress or fears of failure</p> <ul style="list-style-type: none"> • May be less likely to feel like they are a meaningful member of the learning community 	<p>and constructive, supportive feedback for future learning</p> <ul style="list-style-type: none"> • Record the online lesson to replay for review • Provide SEL strategies to assist areas of need (such as positive self-talk scripts, self-regulation strategies)
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References

- Beyondbooksmart.com
- Child Mind Institute, childmind.org
 - Helping kids who struggle with executive dysfunctions, retrieved from: <https://childmind.org/article/helping-kids-who-struggle-with-executive-functions/>
- Understanding executive functioning issues, Stephanie Carlson, Ph.D., retrieved from YouTube: <https://www.youtube.com/watch?v=Cyi2EzPkErs>
- National Center for Learning Disabilities
 - Executive function fact sheet, retrieved from: <http://www.ldonline.org/article/24880/>
- Removing Barriers to Effective Distance Learning by Applying the High-Leverage Practices: Tips and Tools, CEEDAR Center, Sept. 2020, retrieved from https://cedar.education.ufl.edu/wp-content/uploads/2020/10/20-12820-CEEDAR-Leveraging-04537.003.06_v06-lvr-FNL.pdf
- Understood, [understood.org](https://www.understood.org)
 - Classroom accommodation for executive functioning issues, retrieved from: <https://www.understood.org/en/school-learning/partnering-with-children/school/instructional-strategies/at-a-glance-classroom-accommodations-for-executive-functioning-issues>
 - Online assignments: best practices for teachers to use with students, retrieved from: https://www.understood.org/en/school-learning/for-educators/partnering-with-families/online-assignments-best-practices? ul=1*1gfy4p3*domain_userid*YW1wLVdqck1iSXhYaUM5Q3ljcEw1WDZpWVE
 - UDL best practices for distance learning, Understood, retrieved from: https://www.understood.org/en/school-learning/for-educators/universal-design-for-learning/video-distance-learning-udl-best-practices? ul=1*1e9s5bh*domain_userid*YW1wLVdqck1iSXhYaUM5Q3ljcEw1WDZpWVE
 - Helping students cope with change and disruption, retrieved from: https://www.understood.org/en/school-learning/for-educators/empathy/helping-students-cope-with-change-and-disruption? ul=1*1yjz76i*domain_userid*YW1wLTJlcnUtaGhmTVExRDg2Q1hleTNKemc

