

STRATEGIES FOR EXECUTIVE
FUNCTION AND TOOLS TO SUPPORT
STUDENT ACHIEVEMENT

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impulse control/self-regulation






Through Your Child's
Eyes

Executive Function Challenges

- ❑ organization
- ❑ memory
- ❑ time management
- ❑ flexible thinking




The diagram shows a blue silhouette of a human head facing left. Inside the head, there are several gears of different colors (red, yellow, blue). Labels are placed around the head: 'MINDFULNESS' at the top, 'EXECUTIVE FUNCTION' in the center, 'MEMORY' on the left side, 'FLEXIBLE THINKING' on the right side, and 'SELF-CONTROL' at the bottom. The background is white with light blue floral patterns.

Six Executive Functions

Metacognition	Working Memory	Goal-Directed Attention and Focus
Self-Control	Goal-Directed Persistence	Cognitive Flexibility/Shift

Elements of Metacognition




- ❑ goal setting
- ❑ time management
- ❑ goal-directed attention
- ❑ planning and strategizing
- ❑ set shifting
- ❑ task initiation
- ❑ self-monitoring
- ❑ sequencing/ordering
- ❑ task persistence
- ❑ working memory

Strategies and Tools to Support Metacognition


Color Coding

- calendars
- school subjects
- homework reminders
- note taking
- to-do lists




Low-Tech Essentials


zipper/velcro binder with pockets and tabs



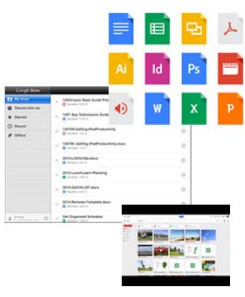
in-binder hole punch



separate binder / folders for each subject




Google Apps for Education



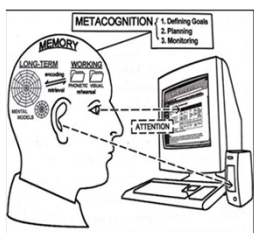
- ❑ store any type of file
- ❑ upload files and access from anywhere/from any device
- ❑ create documents and spreadsheets directly from the iPad
- ❑ share documents and work simultaneously
- ❑ upload and share a photo
- ❑ make items available offline
- ❑ free(15 GB)

AudioNote

- ❑ note-taking and voice recording app (synchronized) – PC, iOS, and Android
- ❑ visual tracking for audio feedback
- ❑ allows students to type text, write, highlight, draw, and insert photos
- ❑ FCPS approved
- ❑ \$9.99 & free lite version



Working Memory




- Relating one idea to another
- Relating what you're reading now to what you just read
- Relating what you are learning now to what you learned earlier

Strategies and Tools to Support Working Memory

Graphic Organizers

Help with:


- structuring writing
- problem solving
- planning research
- brainstorming
- study skills
- decision making

Term	Definition	Picture	Example
			<p>The hamburger program</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p>

Inspiration/Kidspiration Software

Helps students:

- develop strong thinking skills
- strengthen reading and writing skills
- build math concepts



Picture View
Pupils create maps, diagrams and webs.

Maths View
Pupils use visual maths tools to understand essential maths concepts.

Writing View
Pupils expand their ideas into written expression.

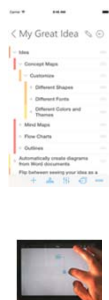
Integrated Picture and Writing Views

Inspiration Maps

- ❑ iPad version of Inspiration
- ❑ allows user to create in diagram view and outline view
- ❑ can be exported to other apps including iBooks, Evernote, Google Drive
- ❑ can be sent to Dropbox
- ❑ \$9.99



Ideament (Idea Sketch)



- ❑ ideal for secondary students and above
- ❑ creates concept maps, flow charts, converts to a text outline
- ❑ great resource for planning projects, making lists, developing outlines or creating charts
- ❑ import content from other apps, documents or emails & share "sketches" with others
- ❑ free or upgrade for \$3.99

Quizlet

- ❑ study tool app – web & iOS
- ❑ improve working memory
- ❑ various study modes – flashcards, learn, speller, test, scatter & space race
- ❑ create new sets, search for already made sets, share sets
- ❑ free



Flashcards*

- ❑ easy-to-use studying app for web, iOS & Android
- ❑ create new decks of flashcards or download pre-made decks from Quizlet
- ❑ use multiple devices to edit cards
- ❑ store or share decks
- ❑ free



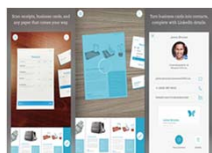
Dropbox

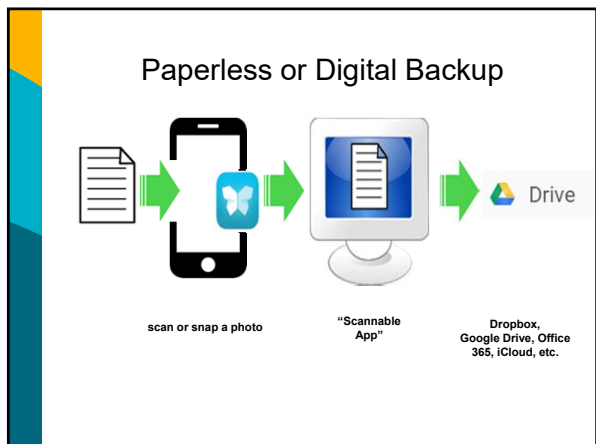


- ❑ post files, images, videos
- ❑ access files from any device, anywhere
- ❑ seamless syncing
- ❑ data is secure
- ❑ offers a safe backup option
- ❑ Dropbox files are private by default
- ❑ free

Scannable

- ❑ by Evernote
- ❑ scan any paper doc
- ❑ save or share, send docs via email or text, or export as PDF and JPG files to Evernote or other apps
- ❑ automatically capture high-quality scans
- ❑ free





Claro PDF

- reading & study PDF tool
- annotate, mark up & save PDF files
- have accessible text PDF files read back
- free lite version
- \$6.99 version with additional features

claro

My name is Colin

I live in Springfield

I go to school at Sangster elementary

Today I feel:

😊 😞 😴

Match the fraction to the decimal

1/2 — .50


3/4 — .75

Circle the odd numbers below:

1 5 9 13 17 21 25 29


Goal-Directed Attention and Focus

- ability to filter out distractions and sustain concentration in order to think, listen, or watch with interest



Strategies and Tools to Support Goal Directed Attention and Focus

Checklists



on-line Visual Checklist Creator
<http://pbchecklist.4teachers.org/checklist.shtml>


- create student specific checklists
- choice of grade level
- choose from writing, oral presentation, multimedia, or science projects
- ability to personalize & print

Microsoft Word

- use the forms feature to create checklists

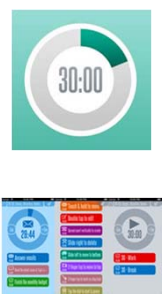
Time Timer

- ❑ for iOS devices
- ❑ displays time as a red disk that quietly gets smaller as time elapses
- ❑ helps students feel relaxed, independent and engaged
- ❑ helps students see and understand the passage of time, making transitions less stressful
- ❑ \$2.99



30/30 for iOS

- ❑ set up a list of tasks to accomplish and the length of time to complete them
- ❑ lets you know when to move on to the next task
- ❑ build in break times into tasks
- ❑ allows students to see when they need to work faster or when it's almost break time!
- ❑ free

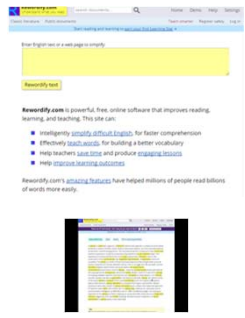


Rewordify

Helps students:

- ❑ interact with text
- ❑ simplify text to increase understanding
- ❑ build vocabulary

<https://rewordify.com/>

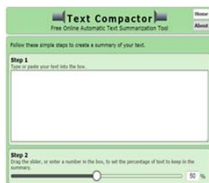


Text Compactor

Helps students to:

- ❑ find main ideas
- ❑ interact with text (may help students focus)
- ❑ pre-read summary materials

<http://textcompactor.com/>



Self-Control

The ability to manage emotions in order to achieve goals, complete tasks, or control and direct behavior.



Social/Emotional Regulation

Response Inhibition/Impulse Control

- Involves inhibiting one's immediate response to environmental stimuli
- Involves subordinating one's immediate interests for the sake of achieving a goal

Emotional Control

- Low control over one's experience of emotions, but rather one's expression of and response to emotions

Adaptability

- Adapting to changes in routine and coping with thwarted expectations or desires


Strategies and Tools to Support Self Control

Self Management Checklist

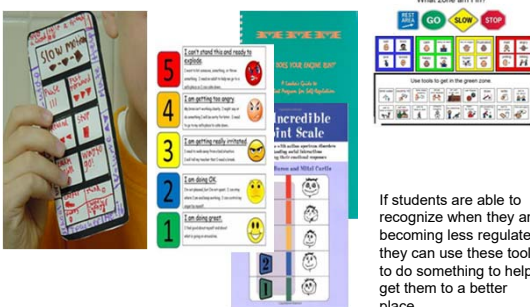
Self-Check Behavior Checklist Maker

- quickly create checklists that students can use to monitor their behavior in the classroom.
- helps students manage their behaviors in academically demanding and least-restrictive settings

<http://www.interventioncentral.org/tools/self-check-behavior-checklist-maker>



Self Management Low-tech Tools



If students are able to recognize when they are becoming less regulated, they can use these tools to help get them to a better place.


Apps for Self Management

The Adventures of Super Stretch - Free




60 different yoga poses by animated characters. Kids have fun & get fit while learning to manage their behaviors.

Breathe, Think, Do with Sesame Street - Free



This is a resource app for teachers & parents to share with your child to help teach skills such as problem solving, self-control, planning, and task persistence.


Zones of Regulation - \$5.99





A framework for thinking as well as a curriculum geared toward helping students gain skills in consciously regulating their behaviors, including the management of their emotions and level of alertness. This, in turn, leads to increased self-control and problem solving abilities.

Video-Modeling for Self-Management

- visual teaching method
- watch a video of someone modeling a targeted behavior or skill
- imitate the behavior/skill watched
- Pinnacle Studio & iMovie (iOS)
 - apps to create video models for students
 - \$12.99 & \$5.99



Goal-Directed Persistence


Goal Setting	<ul style="list-style-type: none"> • Identifying a goal, then holding that desired outcome in mind • Memory for the future
Planning/Strategizing	<ul style="list-style-type: none"> • Allows for the achievement of goal objectives • Quality and specificity of plans/strategies determines whether people achieve goals
Time Management	<ul style="list-style-type: none"> • Planning and organization • Sense of time
Task Initiation	<ul style="list-style-type: none"> • Getting started on a task and avoiding procrastination • Involves organizing one's thinking to make decisions about where and how to begin

Strategies and Tools to Support Goal Directed Persistence



Schedules

Agendas & Visual Schedules

- provide structure & predictability
- make abstract time concepts such as "later", "next", or "last" more concrete
- help with transitions
- provide a point of reference for students with attention issues
- help students plan ahead
- foster independence

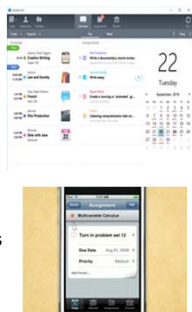


To-Do/Checklist Apps

<p>Wunderlist</p>  <p>A simple to-do list and task manager app. This app makes it easy for you to capture, share, and complete your to-dos!</p> <p>Free</p>	<p>First Then Visual Schedule</p>  <p>Create your own visual schedule checklist using photos or internet images, as well as record your voice to the images. You can share, email and print out schedule.</p> <p>\$9.99</p>
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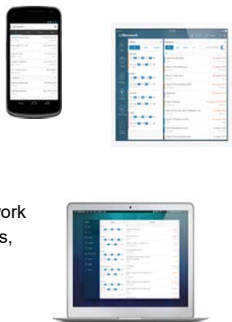
IStudiezPro for iOS

- ❑ electronic student planner
- ❑ interactive calendar
- ❑ assignments review
- ❑ sends notifications
- ❑ calculates GPA
- ❑ syncs across all iOS devices
- ❑ \$2.99



myHomework

- ❑ electronic student planner
- ❑ syncs between devices
- ❑ tracks classes, homework, projects, tests, etc.
- ❑ supports block & traditional schedules
- ❑ provides due date reminders
- ❑ grants rewards for doing homework (KIPP rewards, music downloads, movie tickets, etc.)
- ❑ free Lite Version / \$4.99 for ads free premium



Cognitive Flexibility/Shift

- ❑ ability to take perspectives, make connections, think flexibly and move freely from one situation to another
- ❑ enables individuals to generate new ways to problem solve, adapt to changes, and adjust to the unexpected



Strategies and Tools to Support Cognitive Flexibility/Shift

Vibrating Watch

WatchMinder

- simple wristwatch that can easily be programmed to set up discreet vibrating reminders throughout the day



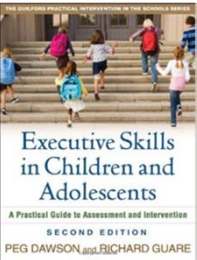
Choiceworks for iOS




- social Behavior & scheduling app
- three boards available:
 - 1) schedule
 - 2) waiting
 - 3) feelings
- \$6.99



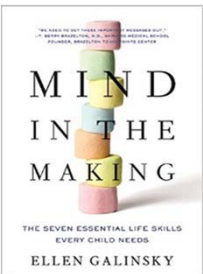
Resources



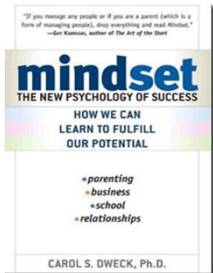
- ❑ provides an overview of executive function skills
- ❑ teacher, student, and parent questionnaires for assessment
- ❑ includes a planning guide for interventions
- ❑ provides specific teaching routines



- ❑ executive function intervention
- ❑ targets flexibility and goal setting for students
- ❑ classroom-based approach for high-functioning students ages 8–11
- ❑ companion book for parents - Solving EF Challenges



- presents research on what we should be teaching children
- provides information for parents
- identifies seven essential life skills important for early learning



- presents research on how mindset impacts success and achievement
- explores how to grow the brain's capacity to learn and to solve problems

Website Resources

- ATS Website: <https://www.fcps.edu/node/32610>
- ATS Executive Functioning Google Site (presentation available here) <https://sites.google.com/site/execfunction/>
- Loudoun County Executive Functioning Website <http://lcps.org/Page/1662>
- Understood.org <https://www.understood.org/en>
- Iris Module <http://iris.peabody.vanderbilt.edu/module/ss2/#content>
- WATI <http://www.wati.org/>
- Metacognition and Learning <http://thelearningcoach.com/learning/metacognition-and-learning/>
- What is Executive Function Video <https://www.youtube.com/watch?v=lfKLMqpfjWs>
