

# Executive Function Skills and Its Effects on Student Performance - Elementary Level

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## Learner Outcomes

- Increase understanding of the 11 Executive Functioning Skills
- Will review strategies to support development of executive function skills through a PBIS Framework

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## A Career Life Changing Perspective



- IQ test scores, under optimal test conditions, account for 40% to 50% of current expected achievement.
- Thus, 50% to 60% of student achievement is related to variables "beyond intelligence".

Source: National Center on Educational Outcomes, Synthesis Report 55, 2003

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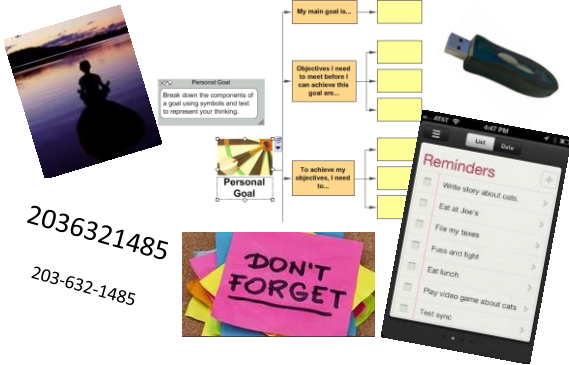
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## How many of us use...




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## What are Executive Function Skills?

- Set of intrinsic skills or mental processes
- Develop gradually
- Needed for academic and social success
- Observable behaviors
- Can be explicitly taught




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## Types of Executive Function Skills

Skill Type	The ability to...
Impulse Control	Resist the urge to say or do something allowing time to evaluate situation
Working Memory	Hold information in mind and use it to complete a task
Emotional Control	Manage feelings in order to achieve goals, complete tasks, or control behavior
Sustained Attention	Maintain attention to a situation or task in spite of distractions, fatigue, or boredom
Task Initiation	Begin projects without undue procrastination, in an efficient or timely fashion
Planning/Prioritizing	Create steps to reach a goal and make decisions about what to focus on
Organization	Create and maintain systems to keep track of information or materials
Time Management	Determine how much time have, how to allocate it, and how to stay within time limits
Flexibility	Adapt plans in face of obstacles, setbacks, new information, or mistakes
Goal-Directed Persistence	Have a goal, follow through to completion, and not be put off or distracted by competing interests
Self-Monitoring	Observe oneself in situation; monitor and evaluate how problem-solve

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## Strategic Instruction Process



<https://smarts-ef.org/curriculum/executive-function-curriculum/>

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## Integrating EF into Daily Instruction

- What are the general EF skills needed to engage in the learning?
- What are the critical EF skills for completing the designed learning activity?



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- Past Practices
- Where are we now?

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## A Case Study

- 4<sup>th</sup> Grade Student:
  - DRA2 Fall Benchmark = 28 (GLE 40)
  - ELA Performance Task
    - Open Ended Response = 0/5
    - Writing = 3/10
  - Spelling (Words Their Way ESI)
    - 8/25 Words Spelled Correctly
    - 37/62 Feature Points
  - Math District Benchmark = 18/101
    - Fact Fluency: Addition (21/30), Subtraction (18/30), Multiplication (9/30), Division (11/30)
  - Receives Reading and Math Interventions

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## A Case Study, Continued

- Teacher Observations
  - Strengths:
    - Gets along with peers
    - Demonstrates leadership qualities
  - Weaknesses:
    - Difficulty following multi-step directions
    - Needs reminders for daily routines
    - Difficulty keeping track of belongings
    - Difficulty staying on task

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## A Case Study, Continued

- What did we do?
  - Our SRBI Team met to review data and current academic interventions
  - Teacher shared concerns regarding difficulties in the classroom
  - Team completed Executive Skills Questionnaire
  - Results Indicated:
    - Student’s Executive Skills Strengths (Highest Scores)
      - Emotional Control, Planning/Prioritizing, Sustained Attention
    - Student’s Executive Skills Weaknesses (Lowest Scores)
      - Task Initiation, Metacognition, Time Management, Goal Directed Persistence

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## A Case Study, Continued

Student's Executive Skills Weaknesses	Strategies Implemented
Task Initiation	<ul style="list-style-type: none"> <li>• One task/assignment at a time</li> <li>• Reminders/Cueing to begin assignments promptly</li> <li>• Positive Praise</li> </ul>
Metacognition	<ul style="list-style-type: none"> <li>• Self-monitoring checklist</li> <li>• Teacher check-in</li> </ul>
Time Management	<ul style="list-style-type: none"> <li>• Use of timers</li> <li>• Set time limit goals</li> </ul>
Goal Directed Persistence	<ul style="list-style-type: none"> <li>• To-Do checklist for areas of difficulty</li> </ul>

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Where do we want to go from here?

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## Resources

- Dawson, P. & Guare, R. 2009. Smart but Scattered: The Revolutionary "Executive Skills" Approach to Helping Kids Reach Their Potential. The Guilford Press. NY, NY.
- Dawson, P. & Guare, R. 2010. Executive Skills in Children and Adolescents: A Practical guide to Assessment and Intervention, 2<sup>nd</sup> ed. The Guilford Press. NY, NY.
- Meltzer, L. 2010. Promoting Executive Function in the Classroom. The Guilford Press. NY, NY.
- Kuypers, L. M. 2001. The Zones of Regulation: A Curriculum Designed to Foster Self-Regulation and Emotional Control" Thinking Social Pub. Santa Clara, CA.

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## Contact Info

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SERC

The SERC Library ([www.ctserc.org/libran](http://www.ctserc.org/libran)) offers more than 10,000 resources for educators and families, including:

- books;
- instructional materials;
- tests;
- journals;
- DVDs;
- online databases and topical Lib Guides; and
- children's books.

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