Definition:
A group of three skills that enable people to organize, plan and carry out a set of tasks in an efficient manner
Three Skills of Executive Function

- Working Memory
- Cognitive Flexibility
- Inhibitory Control
Children aren’t born with these skills—they are born with the potential to develop them.

-Understood.org
Working Memory

What is it?
The ability to remember and use relevant information while in the middle of an activity

Examples

- Remembering steps in a recipe
- Recalling rules of a game
- Following instructions
Let’s Play
“Simon Says”
What do we do or can we do to help children build working memory?
# Ideas for Working Memory

<table>
<thead>
<tr>
<th><strong>BABIES (0-18 Months)</strong></th>
<th><strong>TODDLERS (18-36 Months)</strong></th>
<th><strong>PRESCHOOLER (3-5 Years Old)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>● Peek a boo</td>
<td>● Songs with actions</td>
<td>● Build background knowledge</td>
</tr>
<tr>
<td>● Hide toys</td>
<td>● Games that copy actions</td>
<td>● Let children tell stories</td>
</tr>
<tr>
<td>● Sing songs</td>
<td>● Fingerplays</td>
<td>● Songs that add movements</td>
</tr>
<tr>
<td>● Fingerplays</td>
<td>● Imaginary play</td>
<td>● Cooking!</td>
</tr>
<tr>
<td>● Naming objects</td>
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</table>
Cognitive Flexibility

What is it?

- Helps people shift gears and think about things in different ways
- It’s a key part of problem solving
- Helps in planning tasks

Examples

- Routine at school is different than home routine
- Multiple ways of solving a math problem
- Rules to a game they play are a little different
Read the words

RED GREEN PURPLE
BLUE ORANGE PINK
YELLOW GRAY BLACK
Say the colors

RED   GREEN   PURPLE   BLUE   ORANGE   PINK
YELLOW   GRAY   BLACK
Which was easier?
What do we do or can we do to help children build cognitive flexibility?
Ideas for Cognitive Flexibility

**BABIES (0-18 Months)**
- Modify peekaboo games
- Change the words to songs
- Do silly things with objects
- Build together

**TODDLERS (18-36 Months)**
- Change the motions for songs
- Do things "incorrectly"
- Make predictions
- Matching and sorting games

**PRESCHOOLER (3-5 Years Old)**
- Use found objects for play
- Make up a story together
- Use complex movements and rhythms for songs
- Puzzles
Inhibitory Control

What is it?

- Being able to ignore distractions and resist temptation
- Helps children to regulate emotions and keep from acting impulsively

Examples

- Marshmallow test
- Not checking your phone immediately when it buzzes
- Holding onto a shaker egg without shaking it
The Marshmallow Test
What do we do or can we do to help children build inhibitory control?
Ideas for Inhibitory Control

**BABIES (0-18 Months)**
- Bounces that start at stop
- Focus on one activity at a time
- Practice waiting
- Don’t give in!

**TODDLERS (18-36 Months)**
- Change the speed in songs
- Books with movement
- Talk about feelings
- Don’t give in!

**PRESCHOOLER (3-5 Years Old)**
- Freeze games
- Take turns talking
- Activities that require focus
- Don’t give in!
How does this all affect us long term?
## Skills that show success

<table>
<thead>
<tr>
<th>KINDERGARTNERS</th>
<th>ADULTS</th>
<th>EXECUTIVE FUNCTION SKILLS</th>
</tr>
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<tbody>
<tr>
<td>● Get along with others</td>
<td>● Communication</td>
<td>● Pay attention</td>
</tr>
<tr>
<td>● Follow directions</td>
<td>● Organization</td>
<td>● Organize, plan and prioritize</td>
</tr>
<tr>
<td>● Identify and regulate emotions</td>
<td>● Emotional Intelligence</td>
<td>● Stay focused until task is complete</td>
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<tr>
<td>● Resolve conflicts</td>
<td>● Negotiation</td>
<td>● Understand different points of view</td>
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<tr>
<td>● Persist on tasks</td>
<td>● Critical Thinking</td>
<td>● Regulate emotions</td>
</tr>
<tr>
<td>● Engage in conversation and play</td>
<td>● Focus</td>
<td>● Keep track of what you’re doing</td>
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<tr>
<td>● Interpret others’ behavior and emotions</td>
<td>● Teamwork</td>
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<tr>
<td><a href="http://www.msue.msu.edu">http://www.msue.msu.edu</a></td>
<td>● Confidence</td>
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<tr>
<td>Lifehack.org, American Management Association and Forbes</td>
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What do you notice about all these skills?
When do we start learning EF skills?

Executive Function Skills Build Throughout Childhood and Adolescence

A range of tests measuring different forms of executive function skills indicates that they begin to develop shortly after birth, with ages 3 to 5 providing a window of opportunity for dramatic growth in these skills. Growth continues throughout adolescence and early adulthood; proficiency begins to decline in later life.

How do kids best learn these skills?
What does this look like?

- It’s scaffolded
- Establishes routines
- Models social behavior
- Creates and maintains supportive relationships
- Fosters creative play
- Develops social connection
- Teaches how to cope with stress

All while decreasing adult supervision over time!
What additional things did you think we do or could do?
Questions?
Comments?
Last thoughts?
Resources

- Harvard Center for Developing Child

  Center on the Developing Child

  Activities to Develop EF Skills

- Understood for Learning and Attention Issues