

## Problems with Problem-Solving: Breaking down the skills needed to solve problems and build skills

Amy Carlson, Ed.D. CCC-SLP WV ECPBIS Coordinator

Kate Morris, MA CCC-SLP

Southern EC Behavior Support Specialist





### Agenda for this Session



- Dig deeper into problemsolving as an executive function skill
- Introduce the idea of executive functions as skill deficits much like learning disabilities
- Discuss ways to promote and teach executive function skills
- -Focus on teaching problemsolving skills



## Executive Function --- By Definition--- What does it mean to me?

- Executive function and self-regulation skills are the mental processes that enable us to plan, focus attention, remember instructions, and juggle multiple tasks successfully.
- Executive function refers to the ability to execute appropriate actions and to inhibit inappropriate actions for the attainment of a specific goal. Research has shown that this ability develops rapidly during the preschool years.
- Executive functions help children develop skills of teamwork, leadership, decision-making, working toward goals, critical thinking, adaptability, and being aware of our own emotions as well as those of others.
- Executive functions or self-regulation serves as the foundation for life-long functioning in such areas as critical thinking and problem-solving, planning, decision making and executing tasks.

Sources: Harvard University Center for the Developing Child and The Administration for Children and Families



#### **8 EXECUTIVE FUNCTION SKILLS**



#### NEEDED TO STAY ON TASK AT SCHOOL

#### TASK INITIATION

- Begins the task without reminding
- Finishes task without procrastination

#### **EMOTIONAL CONTROL**

 Can control emotions and feelings on their own or with selfregulation tools.

#### **SELF-MONITORING**

 Child understands how to evaluate how they are doing as they go in school or at home.

#### **ORGANIZATION**

- · Keep things in order
- · Keep track of things.



#### **WORKING MEMORY**

 Helps kids store and keep information they can use anytime.

#### **FLEXIBLE THINKING**

 Allows kids to adjust to the unexpected in the "real world."

#### **IMPULSE CONTROL**

 Allows child to process information before acting.

### PLANNING & PRIORITIZATION

 Helps child set goals and know the actions to take to achieve those goals.

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# Show me a challenging kid, and I will show you they fall somewhere on this list...

Language and communication skills

Attention and working memory skills

Emotion and self-regulation skills Cognitive flexibility skills Social thinking skills

(Ablon, J.Stuart. 2016...Research on Skill Deficits)



#### Unconventional Wisdom-It's a Learning Disability

• Research in neurosciences has shown these kids are delayed in the development of crucial skills or have significant difficulty applying these skills when they are most needed.



## Unconventional Wisdom: It's a Learning Disability

- Flexibility/Adaptability
- Frustration Tolerance
- Problem-Solving

These all lead to Regulation Skill Deficits



#### **Challenging Traditional Notions**

- Motivation will not change the behavior (Why?)
- We can't MAKE kids want to do well
- Do we really think kids aren't trying hard enough?
- Motivate compliant behavior through rewards, punishments, consequences, ignoring = Over simplified solution



### Rewards, Punishments, and Ignoring

Do:

Teach basic lessons

Provide external motivation

Don't

Teach complex thinking skills

Help kids stay regulated



#### How to Teach These Executive Functions

Flexibility

Problem-Solving

**Frustration Tolerance** 



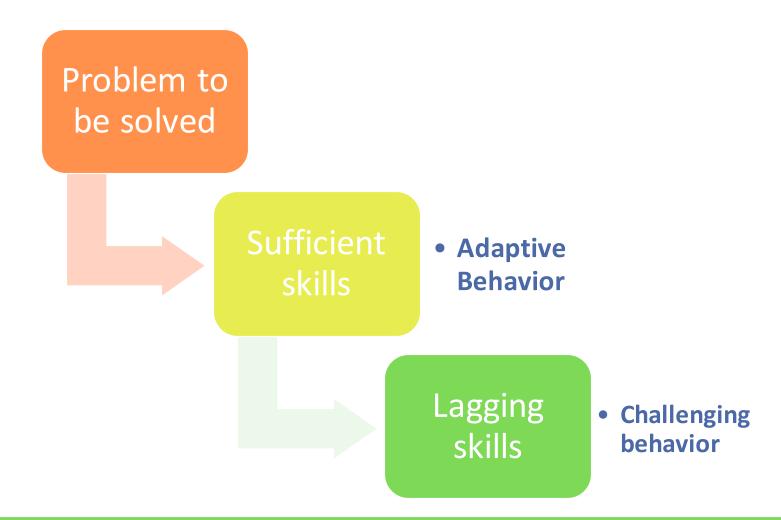
### **Collaborative Problem Solving**

- We teach all 3 through collaborative problem-solving approach (-Ablon)
- Through collaboration, not power and control.
  - Maintain authority and compliance via collaboration rather than power and control.
  - Help youth and adults build skills
  - Build a helping relationship

 Important to remember --- Specificity Principle of Neuroplasticity - "artificial circumstances don't generalize because different neuro networks are utilized in real-world problem-solving."



#### **Assessment**





#### 3 Plans – Really have only 3 options

• Plan A: Impose adult will

• Plan B: Solve the problem collaboratively

Plan C: Drop it (for now, anyways)



### Plan B: Collaborative Problem-Solving

• Empathize – Clarify child concern.

• Share- Adult concern. Not sharing a solution.

• Collaborate- Brainstorm, assess and choose solution.

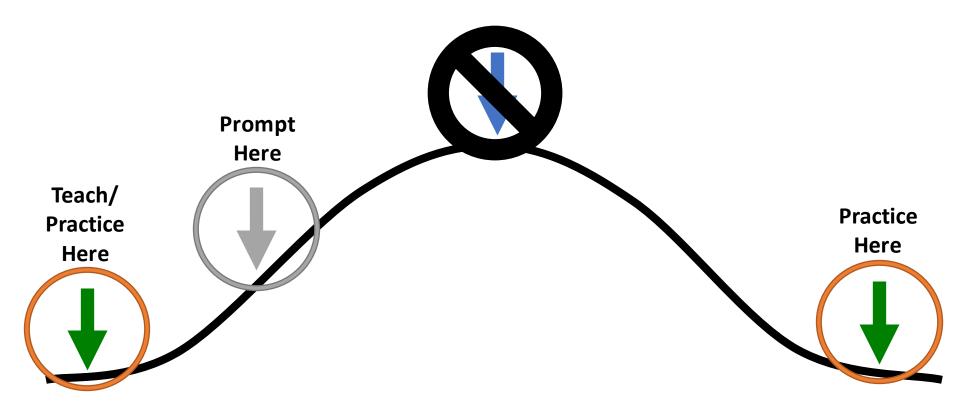


#### Plan B: Is the Skills Training

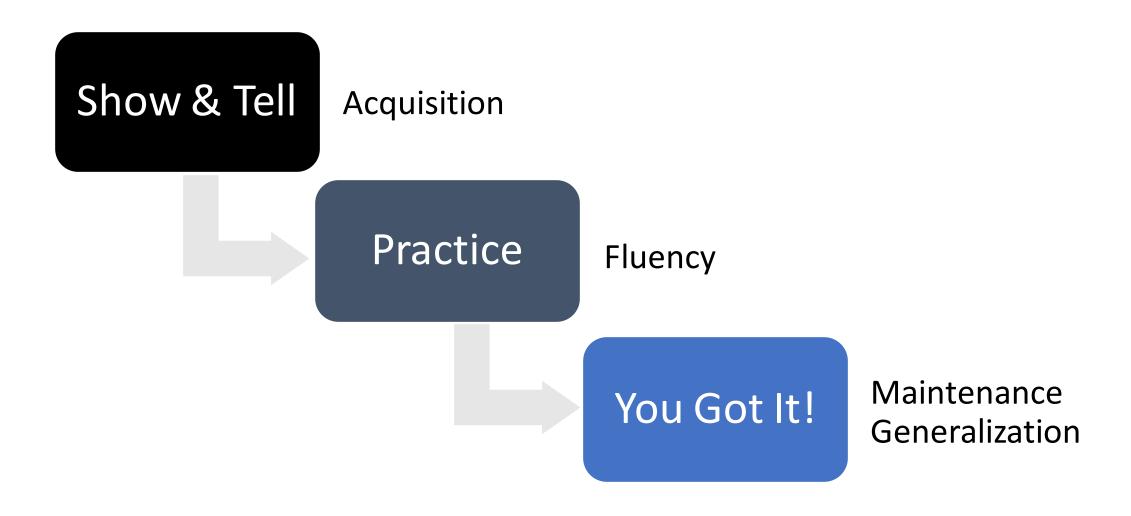
- Empathize: Clarify Child Concern regulating emotions, expressing concerns, identifying emotions.
- Share Adult Concern –Perspective taking, recognizing impact on others, empathy.
- Collaborate Brainstorm, assess, and choose solution generating solutions, reflecting on multiple thoughts, considering outcomes, moving off original idea/flexibility.

#### When Do We Teach Social-Emotional Skills?

Planning Lessons (Teaching Skills Ahead of Time)



### Stages of Learning Any New Skill



## What Problem-Solving Skills to Teach?

- Identify a problem has occurred in a social situation (is it a big or little problem)
- Think of multiple solutions
- Understand that solutions have consequences
- Understand that when one solution does not work, they can try another solution to solve the problem



#### Problem-Solving Practice in Small Group

Planned and Intentionally Embedded Opportunity



## Embedding Problem Solving into Daily Routines

- Plan an activity where children must share or take turns to complete the project
- Make snack time a problemsolving time
- When reading a story, allow children to provide solutions for the character's problem before finding out what happens next



## Supporting Young Children with Problem Solving in the Moment

### There are five steps to enhance problem-solving skills:

- 1. Anticipate—plan ahead
- 2. Proximity—be close to prompt children through problem-solving steps
- **3. Support**—without solving the problem for the children, use tools to remind
- **4. Encourage**—good solutions don't always work, encourage to keep trying
- **5. Promote**—"in the moment" problem solving to reinforce success



## Teaching Matrix: Problem Solving All Day, Everyday!

|                              | Arrival   | Large Group  | Center Time  | Small Group  | Outside   | Snack  | Departure   |
|------------------------------|---|--|--|--|---|--|---|
| Problem<br>Solving<br>Skills | Assign helper of the day to help children find their names and complete emotion check-ins when they arrive. | Teach problem-solving steps by using visuals. Role play problem solving with children. | Teach children where the solution kit is in center areas. Practice using it. | Create a solution kit with children. Have children illustrate and demonstrate each solution. | Place problem- solving visuals in one place where children can go to resolve conflicts. | Problem: limit the number of utensils to be passed out. Ask the children for help solving the problem. | Reflection time: Discuss and reflect on children's use of problem- solving skills throughout the day. |

### Supporting Problem Solving in the Moment

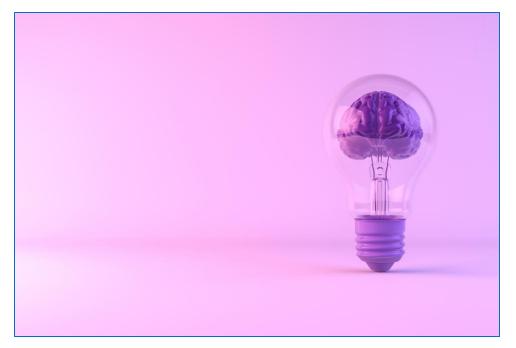


## Problem Solving: What Do Maintenance and Generalization Look Like?

- Children begin to recognize when there is a social conflict that can be solved
- Children generate solutions with peers independently or with minimal adult support
- Children recognize others who problem solve
- Children celebrate the conflict resolution together
- Families report children using problem-solving skills at home or in the community



# Spend some time thinking about these ideas...



If you teach a child that someone always has to win and someone always has to lose, when does she/he learn the skill of problem solving?

If you teach a child that "winning" depends on being bigger and stronger, what do you do when he/she is bigger and stronger than you?

If you teach a child that adults are the only ones with good ideas, when does the child learn the she/he has good ideas?



## Thank you!

morriska@marshall.edu - Kate Morris

amy.carlson@marshall.edu - Amy Carlson

www.marshall.edu/bmhtac

