

Assessment Considerations and Resources for Children with Multiple Disabilities, including Visual Impairments and/or Deafblindness

Home and School Inventory of Problem Solving Skills

Session 2

Dana Frankland, Education Specialist, ESC 20

Mari Garza, Education Specialist, ESC 2

Twinkle Morgan, Education Specialist ESC 1



2020-2021 Design to Learn Collaborative Project

Hands-On Problem Solving for Children with Multiple Disabilities

A Guide to Assessment and Teaching Strategies

Charity Rowland, Ph.D.
Philip Schweigert, M. Ed.



2020-2021 Design to Learn Collaborative Project

Introduction

- One aspect of early development is the ability to initiate actions upon objects, structures and spaces
- A child needs to learn how to activate a toy, open a container, open and close a door, maneuver obstacles/barriers to get to a desired location or object
- Children develop these skills through observation, trial and error and practice
- These are problem solving skills that a child must have opportunities to develop
- A child learns how to interact upon objects and develop an understanding of how they relate to their world



2020-2021 Design to Learn Collaborative Project

3

Introduction

continued

- By developing problem solving skills, the child begins to develop his/her own independence
- Can develop those skills that will in turn help one to explore their world,
- Therefore it is necessary that a student with complex disabilities, may be hindered in terms of them developing those skills
 - With sensory issues, child cannot see or hear what is going on in his/her environment
 - One with orthopedic issues, may hinder reaching and exploring those objects around him
 - Cognitive challenges, may limit ability to integrate all of the sensory experiences



2020-2021 Design to Learn Collaborative Project

4

Purpose of Instrument

- Assess early cognitive development of children
 - with severe multiple disabilities (including deafblind)
 - Who are not able to speak
- Previous assessments
 - developed for children with good sight and good motor skills - children with multiple disabilities do not perform well, regardless of cognitive development
 - older children tend to rely on verbal skills - inappropriate for nonverbal child
- Instrument that shows how well children with multiple disabilities
 - Understand their physical environment
 - Know how to solve problems that arise in it



2020-2021 Design to Learn Collaborative Project

5

Problem Solving Assessment

These tools come in 3 different manuals

- Hands-On Problem Solving for Children with Multiple Disabilities:
A Guide to Assessment and Teaching Strategies
- School Inventory of Problem Solving Skills
- Home Inventory of Problem Solving Skills (English and Spanish)



2020-2021 Design to Learn Collaborative Project

6

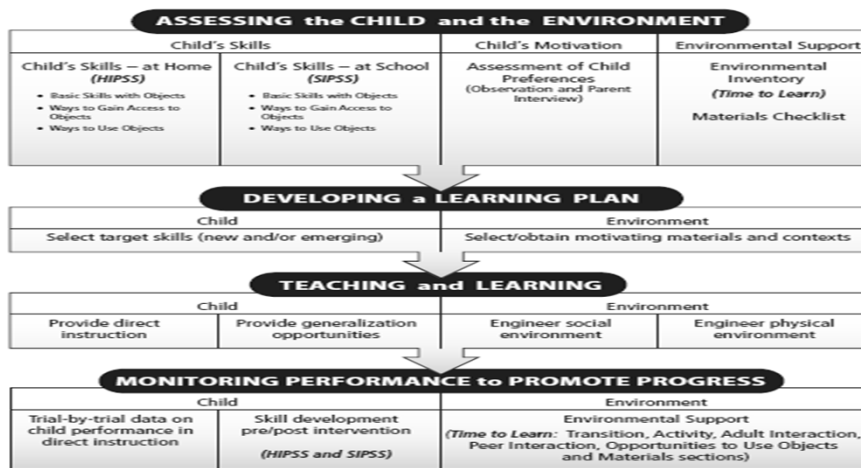
Problem Solving Assessment

The Assessments are divided into 3 categories

- Basic Skill
- Ways to Gain Access to Objects
- Ways to Use Objects



2020-2021 Design to Learn Collaborative Project



Model for Hands-On Problem Solving

Model for Assessing, Developing, Teaching and Monitoring Progress (Rowland, Schweight, 1997)



2020-2021 Design to Learn Collaborative Project

School Inventory of Problem Solving skills

SIPSS



2020-2021 Design to Learn Collaborative Project

9

Scoring Criteria

Mastered- The child can do at least three examples of something similar OR demonstrates one example with at least three different sets of materials. Usually performs this skill independently when given the opportunity.

Mastered with Limitations- Clearly understands what needs to be done, but physical limitations prevent the child from doing this independently. However, with some physical assistance or adaptation, s/he can do at least three of these examples or something similar OR demonstrate one example with at last three different sets of materials.



2020-2021 Design to Learn Collaborative Project

10

Criteria cont.

Emerging- The child is just beginning to understand what needs to be done, but only demonstrates this skill under very limited circumstances. S/he can do at least one of the examples or something similar, but with only one or two sets of materials and may be inconsistent

Not Present- The child doesn't seem to understand what needs to be done and doesn't attempt to perform the skill.



2020-2021 Design to Learn Collaborative Project

11

Basic Skills with Objects

- Approaches Desired Objects
- Avoids Objects
- Holds Objects
- Releases Objects
- Picks Up Objects
- Uses Simple Actions on Objects
- Explores Objects
- Holds Two Objects
- Transfers Objects



2020-2021 Design to Learn Collaborative Project

12

Examples

- Reaches for desired object
- Pushes away object
- Places object on floor or table top
- Mouths objects
- Pokes at an object



2020-2021 Design to Learn Collaborative Project

13

Ways to Gain Access to Objects

- Makes detours
- Removes Barriers
- Goes Over/Under Barrier
- Locates Objects
- Conducts Simple Search
- Conducts Complex Search for Objects
- Takes Out of Open Containers
- Opens Simple Containers
- Opens Complex Containers
- Uses Simple Tools to Gain Access
- Uses Complex Tools to Gain Access



2020-2021 Design to Learn Collaborative Project

14

Examples

- Opens shower curtain to look in shower
- Crawls under blanket to get toy
- Turns knob and pulls opens door
- Uses hanger to knock object of tall shelf



2020-2021 Design to Learn Collaborative Project

15

Ways to Use Objects

- Uses objects according to their function
- Orients objects
- Puts into open container
- Turns on/off
- Operates complex objects
- Adjusts planes
- Uses One Object to Act on Another in a Simple Manner
- Matches Objects by Manipulation
- Matches Objects According to Perceptual Features
- Puts Together
- Constructs/Assembles
- Uses Containers to Carry Objects



2020-2021 Design to Learn Collaborative Project

16

Examples

- Put trash in trash can
- Plays with remote control car by using remote
- Tips cereal box to pour cereal
- Dresses doll in whole outfit
- Uses a pocket to carry items



2020-2021 Design to Learn Collaborative Project

17

Scoring

After calculating the score and following instructions on the scoring document you will have an idea of where the student falls in relation to objects, ideas for activities to grow their skills and what skills are mastered



2020-2021 Design to Learn Collaborative Project

18

Breakout Sessions

Please click on the link below:

<https://bit.ly/2JLec0X>

- Please go to the slide in the Jamboard that corresponds to the group number you are in. (Top column middle of page)
- Please brainstorm examples of ways students can demonstrate this skill. (Fourth icon down on the left is a sticky note, click it and begin writing your ideas here).
- Select a spokesperson for the group



2020-2021 Design to Learn Collaborative Project

19

Sharing is Caring

Time to Share



2020-2021 Design to Learn Collaborative Project

20

Home Inventory of Problem Solving Skills



2020-2021 Design to Learn Collaborative Project

21

Objective

Interested in intentional behavior that reflects the child's awareness of the outcome of their behavior

Understanding of relationship not the physical ability to perform an action with the object



2020-2021 Design to Learn Collaborative Project

22

intentional behavior

<https://www.youtube.com/watch?v=LNfAk1rjlac>

<https://www.youtube.com/watch?v=Jb5DtDo-VAQ>



2020-2021 Design to Learn Collaborative Project

23

Use of HIPSS

Designed to be administered at home by either

- Family member
- Professional who interviews family members and observes the child in the home



2020-2021 Design to Learn Collaborative Project

24

Assessment

- Provides the skill being assessed
- Provides a brief description of what the examiner is looking for in the skill
- Provides a line drawing of what the skill should look like
- Provides an area to add comments or other examples
- Provides skill statement that best describes the child's skill



2020-2021 Design to Learn Collaborative Project

25

Parent/Guardian/Caretaker

- Looks at skill
- Marks the child's skill behavior
- May add comments or other examples
- Check the skill level that best describes the child's skill



2020-2021 Design to Learn Collaborative Project

26

Let's score it

- Remain in your same groups
- Refer to your handout and turn to your section
- Review your section
- Watch the video and score your section based on what you can observe

Group 1 Basic Skills with Objects - pgs 1-5

Group 2 Ways to Gain Access to Objects - pgs 6-9

Group 3 Ways to Use Objects - pgs 10-18



2020-2021 Design to Learn Collaborative Project

27

Summary Report Out

What were you able to observe?

Group 1 Basic Skills with Objects - pgs 1-5

Group 2 Ways to Gain Access to Objects - pgs 6-9

Group 3 Ways to Use Objects - pgs 10-18



2020-2021 Design to Learn Collaborative Project

28

WRAP IT UP

Session III

January 13, 2021

Hands On Teacher's Guide

Hands On School

Hands On Home



2020-2021 Design to Learn Collaborative Project

Stay Safe
Stay Well
Be Merry!



2020-2021 Design to Learn Collaborative Project