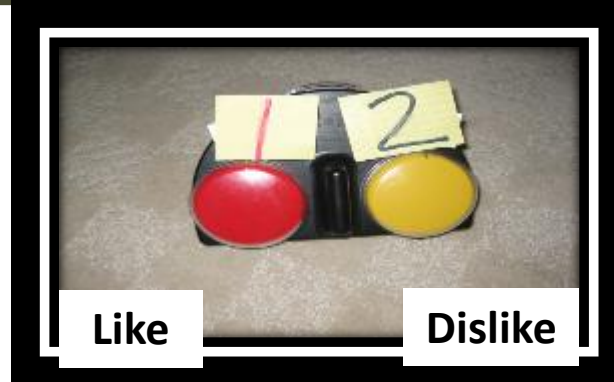


# Expanding Opportunities for Student Action and Response Supported with UDL Application



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**AbleNet University Webinar**

**February 22, 2017**

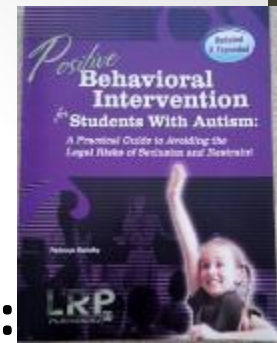
# Session Focus

- Gain skills in Universal Design for Learning (UDL) application to remove barriers impacting learners with complex and diverse needs and promote their “action and expression”.
- The session will illustrate how to:
  - Facilitate active participation and response of students with significant disabilities in the academic curriculum aided with instructional and technology supports.
  - Use multiple means to inspire students to navigate through information and activities and demonstrate what he/she knows.



# Author & Educational Consultant

[www.infinitepossibilities-sped.com](http://www.infinitepossibilities-sped.com)

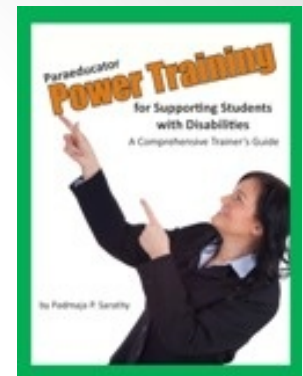


- **Positive Behavior Strategies for Students with ASD: A Practical Guide to Avoiding the Legal Risks of Aversives, 2013.** Publisher: LRP Publications, ([www.shoplrp.com](http://www.shoplrp.com))
- **Autism Spectrum Disorders: Seven Steps of Support, 2015.** A quick reference laminated guide; Publisher: National Professional Resources, Inc. ([www.nprinc.com](http://www.nprinc.com))
- **Serving Students with Severe and Multiple Disabilities (Second Edition), 2014:** A Guide to Strategies for Successful Learning (Publisher: LRP, [www.shoplrp.com](http://www.shoplrp.com))
- **Sarathy, P., 2017. Students with Significant Disabilities: At the Crossroads of IDEA and ESSA.** LRP Publications. Recently released.

# Books and Products

## ■ Paraeducator Training DVD and Trainee Manual, 2013.

(Legal Digest - [www.ed311.com](http://www.ed311.com))



- A 'Trainer of Trainers ' DVD with multiple training units
- Paraeducator trainee manual with pre and post assessment for each unit, quizzes, checklists and role-play activities

## ■ From Early Intervention... to Preschool Program... and School-Age Services: A Parent's Guide, 2006. (LRP Publications, [www.shoplrp.com](http://www.shoplrp.com))

## ■ Together We Succeed: Building a Better System for Transitioning Preschoolers with Disabilities , 2004. (LRP Publications).

## ■ STEM Teaching Strategies for Young Learners.(2016). A quick reference laminated guide. Legal Digest - [www.ed311.com](http://www.ed311.com)

## ■ Magical Musical Transitions (2009). A Music CD for assisting children with Autism Spectrum Disorders. Marketed by [www.nprinc.com](http://www.nprinc.com)



# Participant Poll

Let us know the role you play in advancing student learning. Are you...

- Administrator?
- Special Education Teacher?
- Occupational/Physical Therapist?
- Speech Therapist?
- Other Support Staff?
- Parent?

# Universal Design for Learning (UDL) Implementation: The Instructional Framework

***Serving Students  
with Significant  
Cognitive,  
Communication  
Behavioral and  
Motor Needs to  
Access and Attain  
Academic  
and  
Functional  
Outcomes***

## UDL Application

During the Lesson Design Phase  
To Minimize Barriers and  
Reach all Learners with Diverse Needs

Engaging and Interactive Delivery  
for Active Engagement and Learning

Optimal Challenge  
with Technology and Other Supports  
Vary demands and provide learner-specific  
supports. Incorporate Mainstream and  
Assistive Technology Aids.

Partial Participation  
To Facilitate Learner Action & Response

# Universal Design for Learning (UDL)

- UDL principles consider the range of user abilities at the design stage of the curriculum and incorporates accommodations at that point.
- Reaching all learners applying principles of UDL
  - Principle I - Multiple Means of Representation
  - Principle II - Multiple Means of Action and Expression
  - Principle III - Multiple Means of Engagement
- UDL offers "built-in" access for a wide range of users. (Center for Applied Special Technology –CAST: <http://www.cast.org/research/udl/index.html>)

# Multiple Means of Action and Expression

## Principle II - Provide Multiple Means of Action and Expression:

- **“Provide options for physical action”**: Think about...
- What kind of options do you provide in the mode of physical response?
- What kind of options do you provide your learner in the means of navigation?
- What kind of options are available for your learner for accessing tools and assistive technologies?

- **Source URL:**

[http://www.udlcenter.org/aboutudl/udlguidelines/udlguidelines\\_graphicorganizer](http://www.udlcenter.org/aboutudl/udlguidelines/udlguidelines_graphicorganizer)



# Multiple Means of Action and Expression

## Principle II - Provide Multiple Means of Action and Expression:

- **“Provide options for expressive skills and fluency”:**
- Do you offer your learners options in the media for communication?
- Do you provide options for your learners in the tools for composition and problem solving activities?
- Do you have options available for your learners in the scaffolds for practice and performance?
- **Source URL:**  
[http://www.udlcenter.org/aboutudl/udlguidelines/udlguidelines\\_graphicorganizer](http://www.udlcenter.org/aboutudl/udlguidelines/udlguidelines_graphicorganizer)

## Learner Response: Action and Expression

- Offer a variety of formats - flexible methods - for student to respond, navigate through information and activities and demonstrate what he/she knows.
- **Student can respond in a variety of ways:**
  - Use sentence strips to present information or steps of a process.
  - Create a collage or a drawing on a topic.
  - Respond by making a choice given an array of selections.
  - Use response-participation cards (Yes/No or Like/Dislike) to participate in group activities.
  - Respond with eye gaze at objects attached to a mini-board and/or activate a switch
  - Manipulate objects attached to a mini-board, word wall or a timeline (paired with real items).

# Response Participation Tools

- **'Response Participation Cards'** to enable increased participation and engagement in activities:
  - **'Yes/No'** cards paired with photos to represent 'Yes/No' response.
  - **Like/Dislike** cards to enable expressing feelings, opinions about stories, activities, food items, etc.
  - **Happy/Sad** cards to express personal feelings



## Personalized Supports: Partial Participation

- Promote action and expression through partial participation if student cannot perform the entire task independently.
- Learner may learn to perform several steps or only one step in the task and may be assisted during all the other steps. The adult no longer has to perform it for student.
- Promote exposure and access to activities even if the participation is extremely limited.
  - *Responding to questions with selecting from 2 or 3 choices programmed into an AT device.*
  - *Turn on a CD player with an environmental control unit.*
  - *Learn to roll the dice in a board game.*
  - *Open/close the microwave door in cooking activity.*

# How do you promote learner engagement?

- **Identify the one strategy that you use the most to promote learner engagement:**
  - ***Provide multi-sensory and concrete items (incorporating visual, auditory & tactile representational materials)***
  - ***Use novelty to increase and sustain motivation***
  - ***Provide choices to promote sense of control***
  - ***Offer group projects with hands-on activities***
  - ***Provide opportunities for roleplay and drama***

# Learner Engagement - Survey

- Identify the most used strategy to promote engagement:
  - *Multi-sensory and concrete items*
  - *Novelty items*
  - *Choices*
  - *Role-play and drama*
  - *Hands-on projects*

# Learner Response: Action and Expression

- **Student can respond in a variety of ways:**
  - Use mainstream technology and assistive technology to:
    - Respond to questions, contribute to a group discussion with sharing ideas and communicate and interact with peers.
    - Communicate about the story by pointing to concrete representational items or pictures fastened with Velcro-backing to an adapted book or a story board.
    - Make a response aided with the activation of a voice output device.

# Enable Action and Expression with AT



A **BIG Step-by-Step with Levels** is a sequential communicator that plays each message you record in sequence. For example, it can be used for a series of instructions, recipe directions or for group activity participation.

A **Quick Talker** is a communication device that has a number of message locations with five levels. It comes with overlays that can be customized to meet specific communication needs that a student may have in a classroom/home setting.

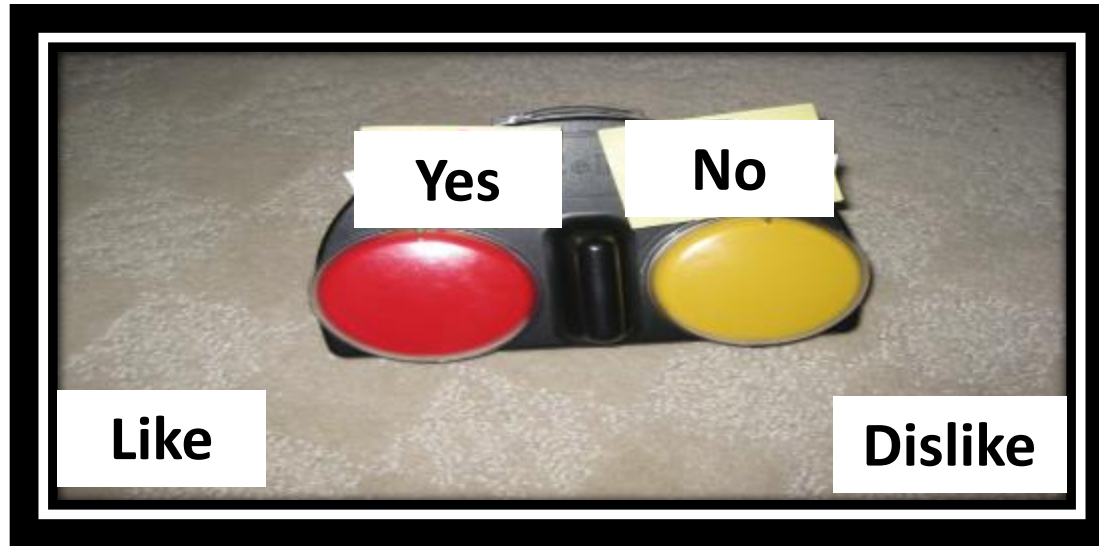


A **Book Worm** is a literacy tool. Using the Book Worm, you can transform a book into a switch-adapted audio book in a few minutes.

[Downloaded photo with permission on 3/12/12 from www.ablenetinc.com/Suppleries](http://www.ablenetinc.com/Suppleries)



## Making Choices (e.g., Yes/No response) aided with AT



**iTalk2 Communicator** is a dual message communicator that facilitates choice-making. Students can use the device to make choices between:

- ✓ **Two Activities**
- ✓ **Two Food Choices**
- ✓ **Yes/No response**
- ✓ **Like/Dislike response**
- ✓ **Two picture choices**

# Writing Aided with Technology

- Use an iTalk2 Communicator for making a picture or an object choice to fill in the blanks.



The boy asks for \_\_\_\_\_ .

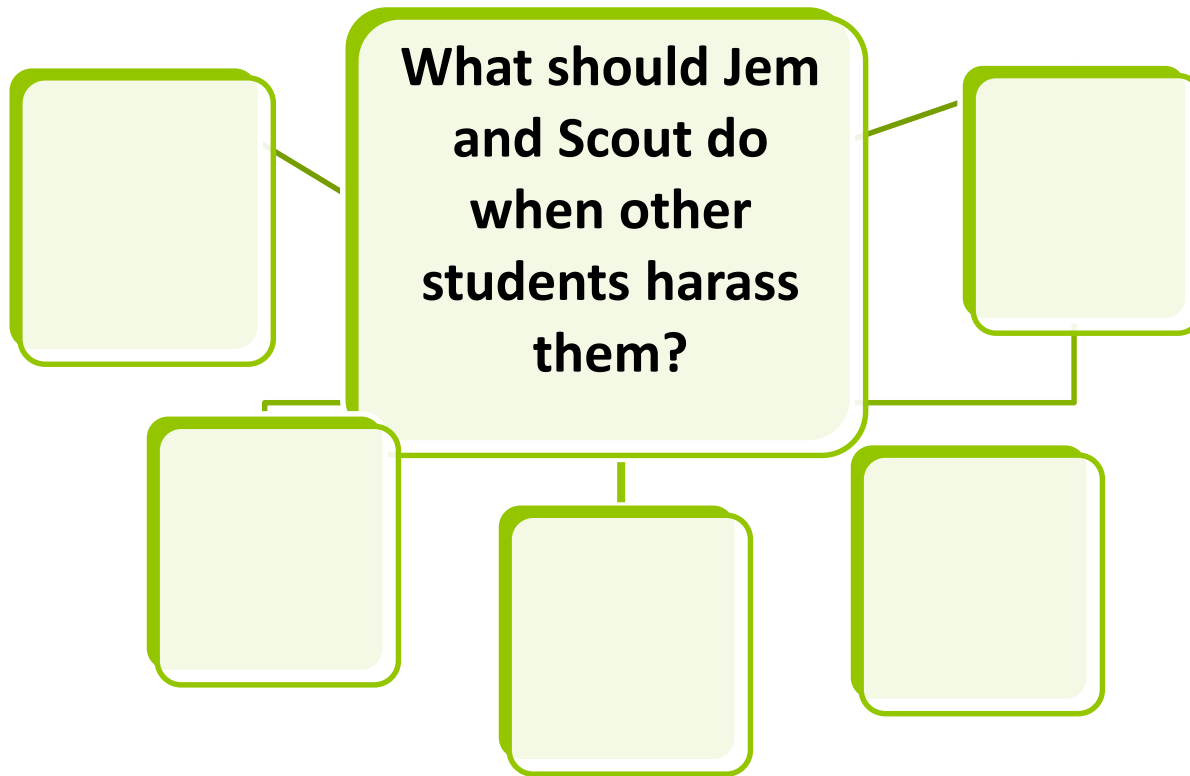
The tree gives \_\_\_\_\_ .

# Learner Scenario - 1

- *Jordan has a diagnosis of autism spectrum disorders. Capable of good verbal skills, he communicates using single words/phrases.*
  - *He does not initiate much communication with peers.*
  - *Exhibits tantrum behavior when asked to stop a preferred activity or change to a new activity.*
- 
- What are some tools and techniques that will enable Jordan to demonstrate his action and expression ?
    - Adapted summaries of text
    - Graphic Organizers (Concept map, Venn-diagram, etc.)
    - Writing templates to write stories aided with a word bank
    - Frame sentences to write stories aided with a word bank
    - Drama and Role Play to increase communication with peers
    - Collaborative projects with an assigned peer mentor
    - On-going behavior supports (visual supports - e.g., If-then cards)

# A Graphic Organizer for a class discussion

**'To Kill a Mockingbird'**  
Begin with brainstorming to  
generate discussion.



Jordan works with a peer partner assisting him to participate and respond during discussion. He may express his idea (opinion) with a words/phrases aided with the visual organizer.

# Diverse Response Options for Learners

## Using UDL multiple means of expression

- Example: A group project is assigned - Develop a **recipe book**.
- Students work together as a group and Jordan benefits from peer support.
- Learners have different tasks assigned and have opportunity to respond in diverse ways:
  - Assists with developing the text (step-by-step directions for the recipe).
  - Identifies all the ingredients needed for the recipes included in the recipe book.
  - Identifies two food pictures that go with the recipe.
- *A checklist is provided to Jordan to assist with the recipe book activities.*

# Action and Expression

## using UDL multiple means of expression

- A Checklist for the Group Project:

1.	Do you have a <u>title</u> for your recipe?
2.	Do you have <u>ingredients</u> listed?
3.	Do you have <u>step by-step directions</u> for preparing the recipe?
4.	Have you added <u>pictures</u> to your recipe?
5.	Did you <u>check your recipe for any errors</u> and correct them?

- A checklist is provided to Jordan (and his group) to assist with the creation of the recipe book.

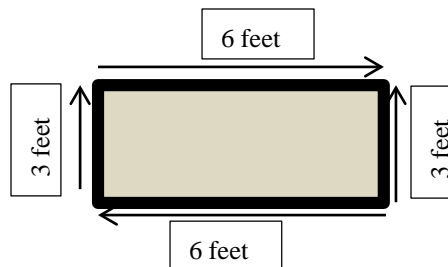


# Mathematics – Measurement Unit

## Jason's Action & Expression



- The group is working on measurement unit making observations, estimations and calculations.
- Jordan's participation is to assist with one of the group projects – comparing inside/outside temperatures and keeping temperature log for a week with peer support.
- Jordan matches measurement tools with their function. With the aid of assistive technology, IntelliKeys keyboard, Jerod responds to questions on the functions of tools.
- Jordan assists with measuring the area/perimeter:





# Role Play and Drama



## Role play and drama:

- Have students present a dramatic presentation of the story playing the roles of the characters from the play.
- Use AT voice output devices and props to aid the 'role play and drama' presentation.
  - Have peers record the script for students who do not use verbal communication.



## *Learner Scenario - 2*

- Ana has visual impairment and also has ADHD. She is verbal, can use limited words but tends to perseverate.*
- Loves to listen to music and sings to herself frequently.*
- Has difficulty comprehending when new concepts are presented; reading the text and processing the information.*
- Likes to move around the room, and becomes aggressive (pushing away the adult) when asked to return to her desk.*

## *Learner Scenario - 3*

- Increase access, engagement and sustain interest with tactile alternatives and concrete items.
- Use novelty (using novel items connected with familiar songs/music) to motivate her and assist with working memory and understanding.
- Have Ana manipulate the items (make a choice/ touch the correct item) to indicate her response.
- Use 'Rule Cues' cards (made with Wikki-stix) to remind her about returning to seat (with soft whispering).
- Pair Ana's photo and name along with a preferred item at her desk.

# Interactive story props – Velcroed foam story pictures. Learner responds with identifying and placing the representational (tactile) items in the story map.

Charlotte's Web  
E. B. White

by E.B. White

## Story Map Organizer Tool

- Story title:



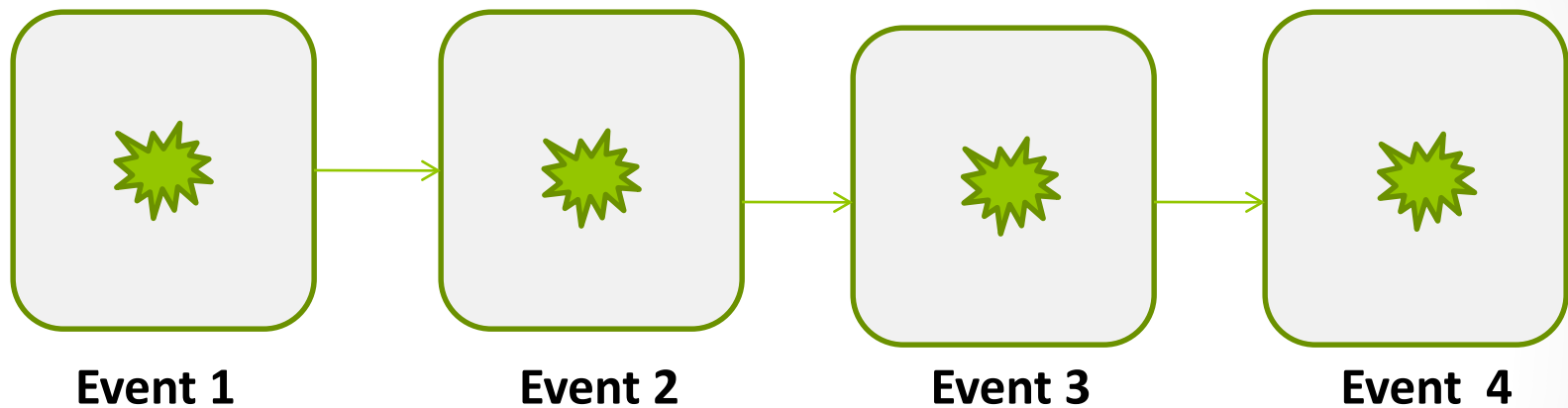
# Content Area: ELA – Reading

## The Wizard of Oz

Dorothy and her friends face various obstacles and events in their journey.

The Yellow Brick Road: Sequencing A Timeline of Events

### A horizontal sequence chart



- Materials: An adapted story summary or an easy level book; A blank timeline chart; representational objects or photos for the events
- Student Expression: manipulates photos/pictures in the correct sequence to demonstrate comprehension and event sequence.

# Student Response - Writing

- The students write a story about 'Trees' using teacher prepared frame sentences.
- Students place an object or a photo in the blank from the Object/Photo Word Bank below to complete the frame sentence to build the story:

**The trees are part of nature. Trees have \_\_\_\_\_ and branches. They help people in many ways. Trees give \_\_\_\_\_ build houses and \_\_\_\_\_ to eat.**

## Object/Photo Word Bank

**wood**



**leaves**



**money**



**apples**



# Mathematics

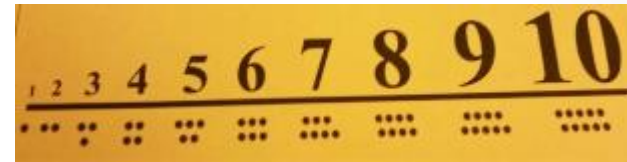


## Math - Patterns

Continuing a pattern given choices to select from



Increase Action and Expression with Visuals and Multi-sensory items.



## A Graduated Number Line

Attach it to desk for student to gain visual understanding of abstract concept and make a response.

Fasten with concrete items if needed for tactile input, gain concept knowledge and make a response.

# Action and Expression

- Among the following options, identify the **one most commonly available option for Action and Expression** for your student to demonstrate what he/she knows (For a learner with significant cognitive and communication needs):
  - **Graphic organizer aided with visuals**
  - **A writing framework with a word bank**
  - **Assistive Technology devices**
  - **Group response cards: Yes/no, True/False or Like/Dislike**
  - **T-Chart to make selections**

# Action and Expression Survey

- Identify one of the most commonly available response option:
- **Graphic organizer aided with visuals**
- **Writing framework with word bank**
- **Assistive technology devices**
- **Group response cards**
- **T-chart to make selections**



# Multiple Means of Action and Expression

(continued)

## Principle II - Provide Multiple Means of Action and Expression:

- **“Provide options for executive functions:**
- options that guide effective goal-setting
- options that support planning and strategy development
- options that facilitate managing information and resources
- options that enhance capacity for monitoring progress.”
  
- Source URL:
- [http://www.udlcenter.org/aboutudl/udlguidelines/udlguidelines\\_graphicorganizer](http://www.udlcenter.org/aboutudl/udlguidelines/udlguidelines_graphicorganizer)

# Self-Calming and Self-monitoring

- Assist in providing a relaxation corner in the classroom for the student to have a break and to escape from the current anxiety-causing situation.
  - Get student to move to a Safe Space independently when feeling agitated or fidgety. Student sets the timer.
  - The relaxation corner will provide a place to calm down for the student or an area that provides preferred sensory input.
  - Help to ensure that the student uses the designated Safe Space consistently and appropriately. (Lytle and Todd, 2009)
- Teach self-monitoring and calming techniques when agitated or feeling anxious

## Resources

- Lytle, R., & Todd, T. (2009). Stress and the Student with Autism Spectrum Disorders: Strategies for Stress Reduction and Enhanced Learning. *Teaching Exceptional Children*, Vol. 41, No. 4, pp. 36-42.
- Sarathy, P. (Second Edition, 2014). *Serving Students with Severe and Multiple Disabilities: A Guide to Strategies for Successful Learning.*,. LRP Publications, PA ([www.lrp.com](http://www.lrp.com))
- **Sarathy, P., 2017. Students with Significant Disabilities: At the Crossroads of IDEA and ESSA.** LRP Publications. New book recently released.
- *Teaching Literacy to Students with Significant Disabilities.*, Downing, J.E. (2005). Corwin Press, CA
- UDL website: (Center for Applied Special Technology (CAST)) <http://www.cast.org/research/udl/index.html>



**THANKS.**

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