

# TRI-STATE WEBINAR SERIES

## Transdisciplinary Practice for Navigating Communication-Verbal Behavior

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# Tri-State Autism Spectrum Disorder Webinar Series



This material was developed under a grant from the Colorado Department of Education. The content does not necessarily represent the policy of the U.S. Department of Education, and you should not assume endorsement by the Federal Government.

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# Welcome



## Jodi LeGray

Clinical Doctorate in Speech-Language Pathology (SLP)

CDE Autism Specialist

Aurora Public Schools

Rocky Mountain University of Health Professions

## Kelly Tousley

Masters in early childhood special education (ECSE)

Registered Behavior Technician (RBT)

Graduate Student of Applied Behavior Analysis

Uncompahgre BOCES Autism Specialist





## Objectives; Participants will...

- ◎ Understand how behavior and communication are connected
- ◎ Identify the overlaps that occur between speech-language pathology and behavior analysis
- ◎ Recognize the benefits that occur with a transdisciplinary approach



The background features several decorative elements: a large orange ring in the top left, a yellow circle below it, a pink circle to the right, a green circle with a dashed border in the bottom left, a large teal ring in the bottom right, and a large teal circle with a dashed border in the bottom right. A large teal number '1' is centered within a large dashed circle.

1

# Connection Between Communication & Behavior





## Definition of Communication:

a process by which  
information is **exchanged**  
between individuals through  
a **common system** of  
symbols, signs, or behavior



# Language

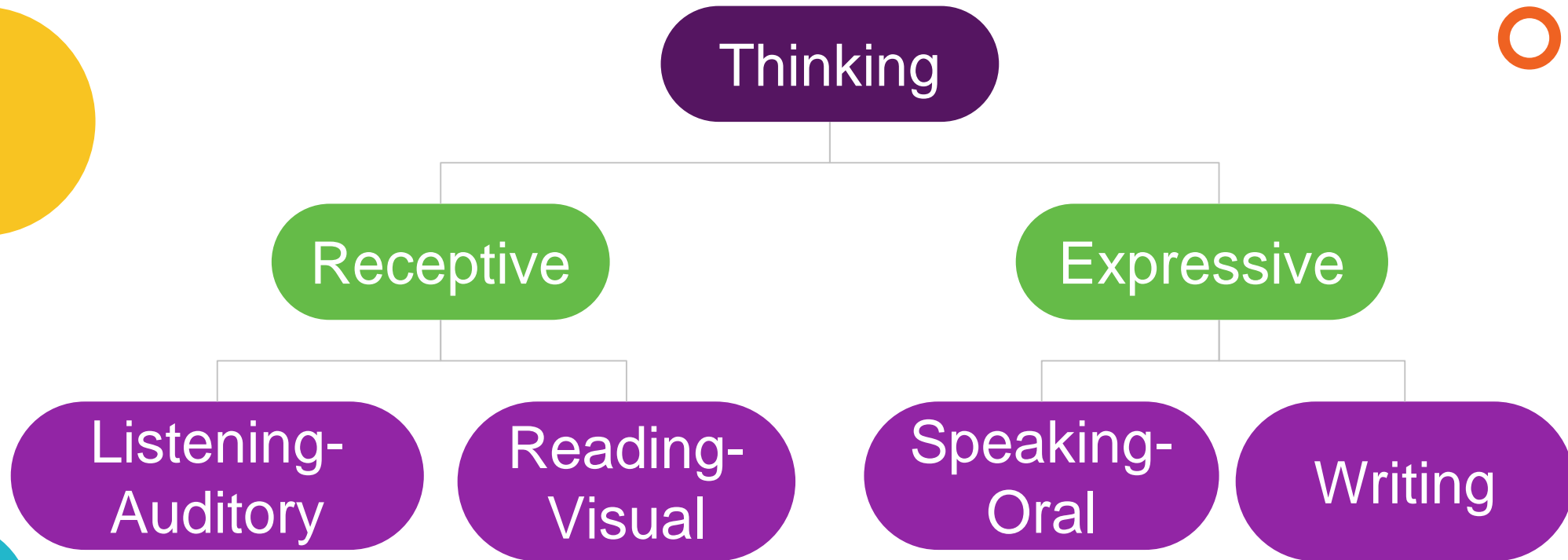
**Content:**  
Semantics  
(vocabulary)

**Form:**  
Phonetics (sounds)  
Syntax (grammar, word  
order)  
Morphology (units of  
meaning, word  
endings)

**Use:**  
Pragmatic  
Language (social)

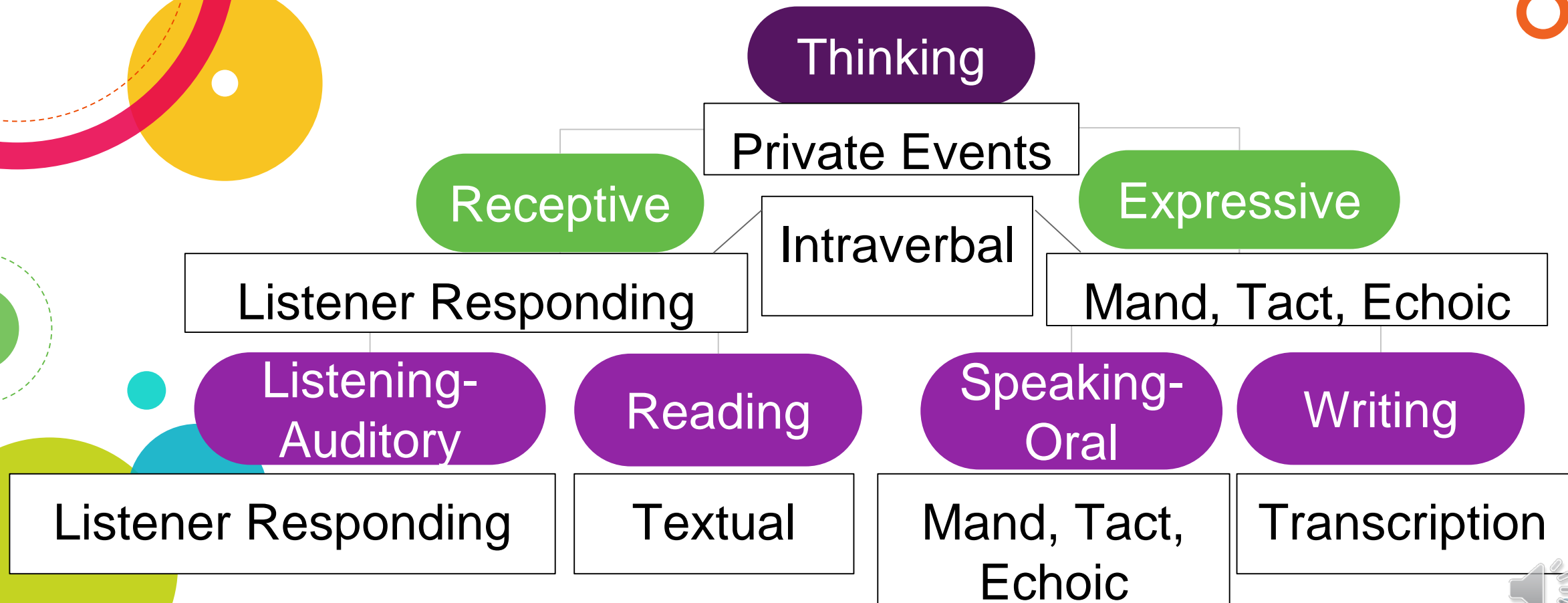


# 5 Processes for Communication





# Where Verbal Behavior Overlaps





## Definition of Behavior:

The activity of living organism's; human behavior includes everything that people do.

Cooper, J., Heron, T. & Heward, W. (2007).  
*Applied Behavior Analysis: Second Edition*. Upper  
Saddle River, New Jersey: Pearson Education, Inc.



# Definition of Verbal Behavior

Behavior whose reinforcement is mediated by a listener; includes both vocal-verbal behavior and nonvocal-verbal behavior.

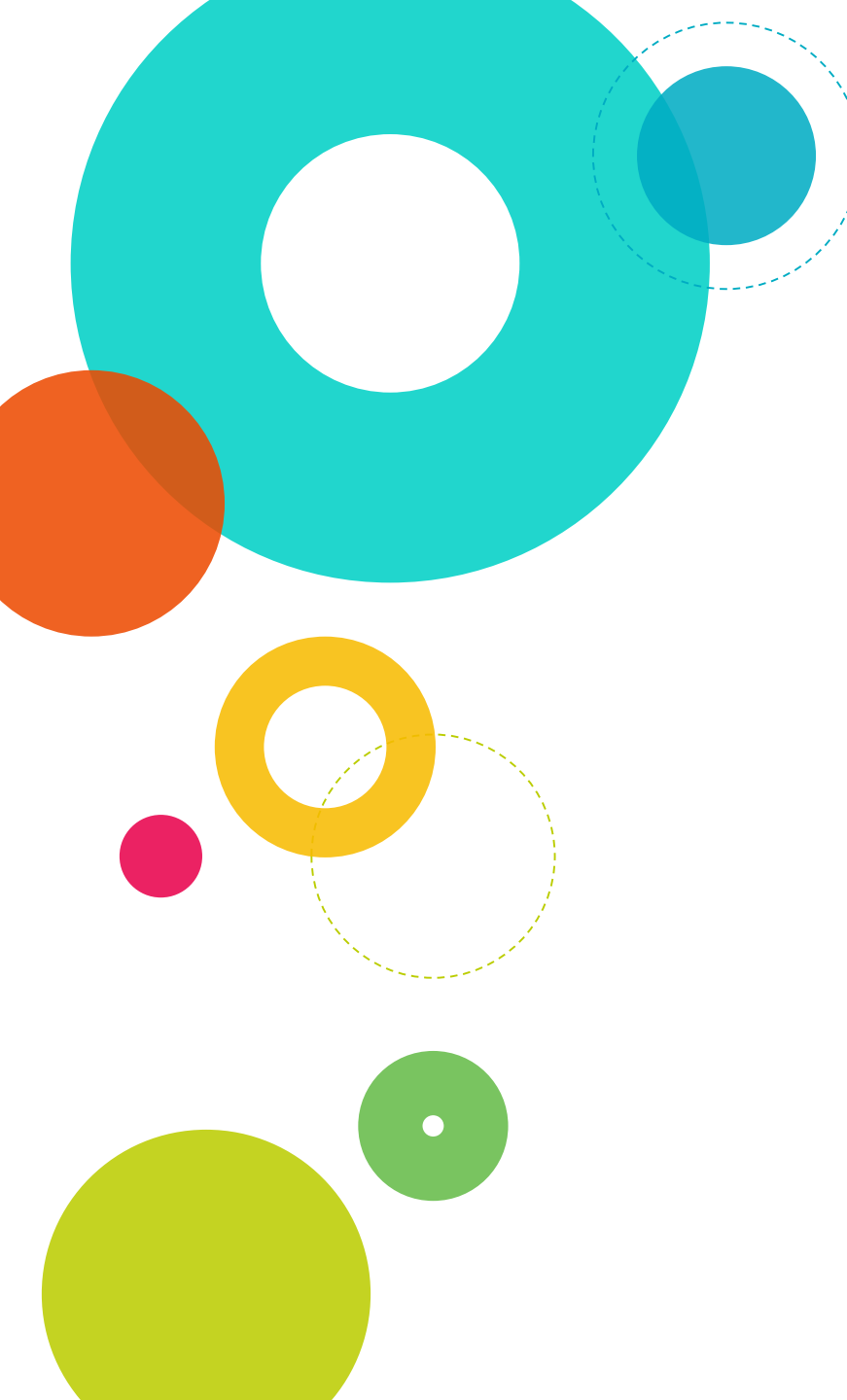
Cooper, J., Heron, T. & Heward, W. (2007).  
*Applied Behavior Analysis: Second Edition*. Upper Saddle River, New Jersey: Pearson Education, Inc.



# Basic Verbal Operants

<b>Mand</b>	Asking for reinforcers that you want. Saying <i>shoe</i> because you want a shoe
<b>Tact</b>	Naming or identifying objects, actions, events, etc. Saying <i>shoe</i> because you see a shoe
<b>Echoic</b>	Repeating what is heard. Saying <i>shoe</i> after someone else says <i>shoe</i>
<b>Intraverbal</b>	Answering questions or having conversations in which your words are controlled by other words. Saying <i>shoe</i> when someone else says, <i>What do you wear on your feet?</i>
<b>Textual</b>	Reading written words. Saying <i>shoe</i> because you see the written word <i>shoe</i> .
<b>Transcription</b>	Writing and spelling words spoken to you. Writing <i>shoe</i> because you hear <i>shoe</i> spoken.



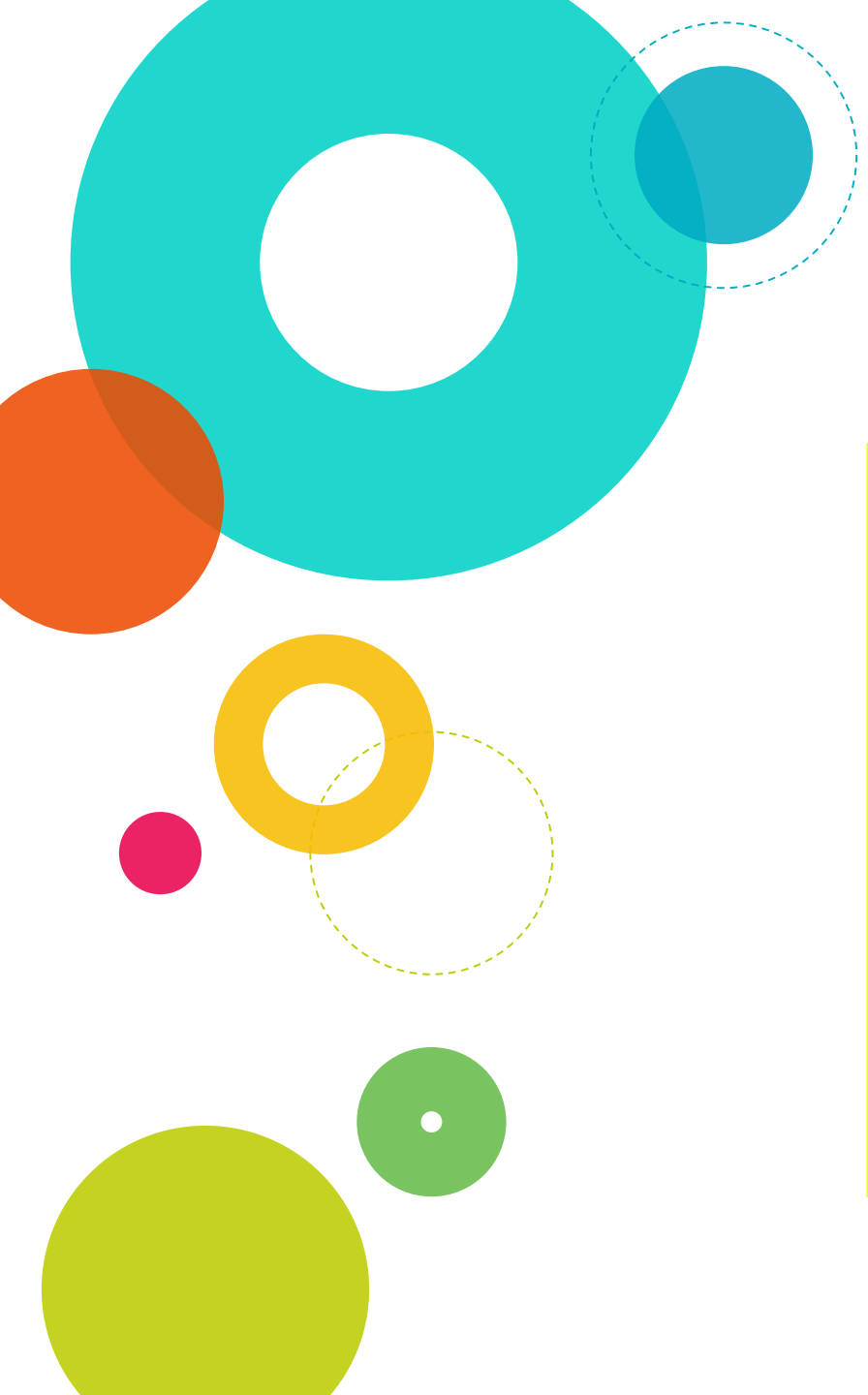


# Question 1: Connection between communication and behavior

True/False:

If you can see it and you can measure it, it's considered a behavior.





# Question 1: Connection between communication and behavior

**True:**

If you can see it and you can measure it, it's considered a behavior.

All forms of communication are also forms of behavior.





# 2

## Speech-Language Pathology (SLP) & Behavior Analyst (BA/BCaBA/BCBA)

Roles and Training



## Semantics (Vocabulary):

<b>SLP</b>	<b>VB-MAPP</b>
Request	Mand
Label	Tact
Action, Sound, Word Imitation	Echoic, Motor Imitation
Cloze Phrases, WH questions	Intraverbal
Receptive vocabulary	Listener responding
Pragmatics	Social & independent play







## Case Study: Carlos

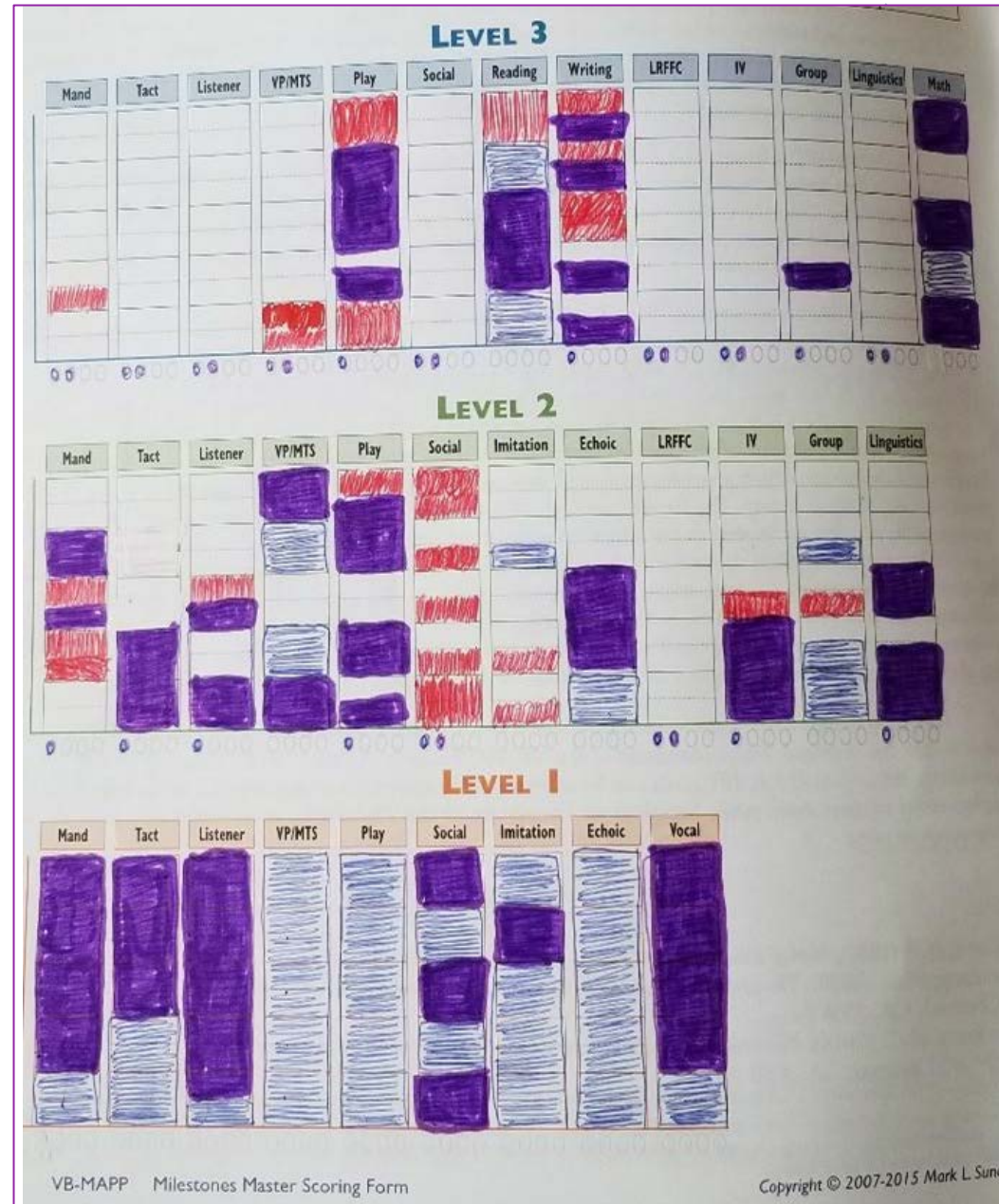
- **Culturally & Linguistically Diverse Home**
- **Brief Part C Services**
- **Educational Identification of ASD**
- **Started in school 36m**
- **Currently in Kindergarten**
- **Started school with less than 20 spoken words, now strongly verbal communicator**



# Carlos

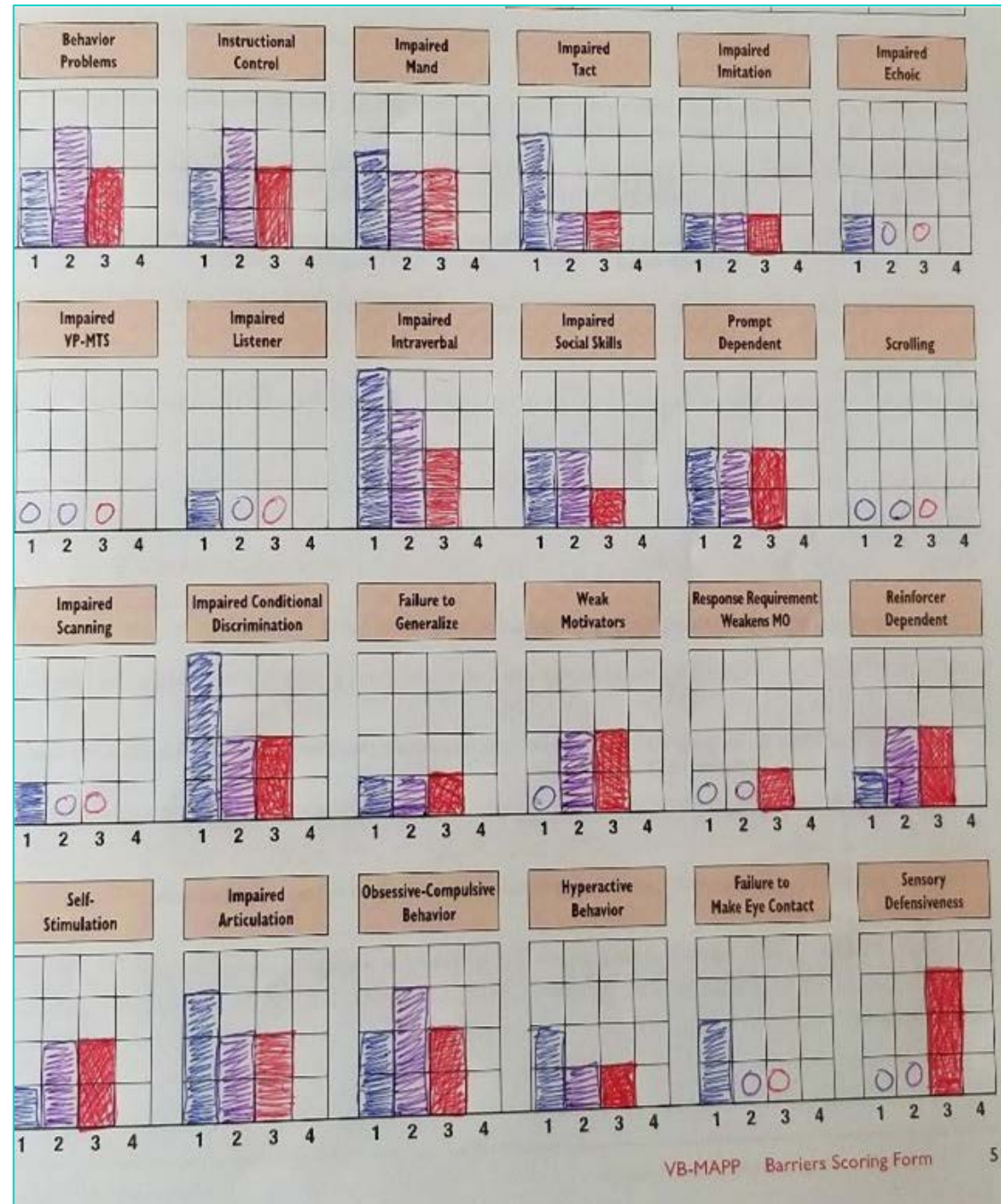
## VB-MAPP Milestones


- Blue 5m of school
- Purple 12m of school
- Red 24 m of school



Carlos

# VB-MAPP Barriers

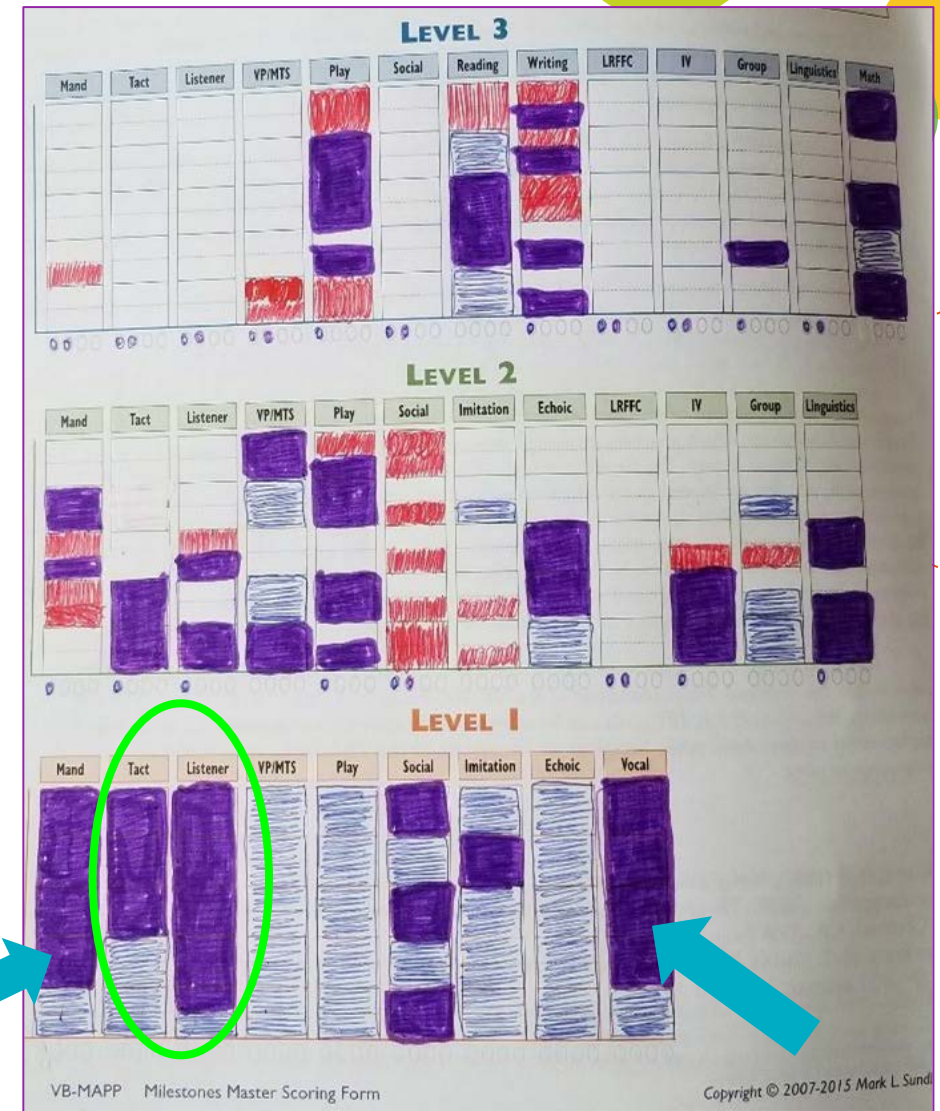


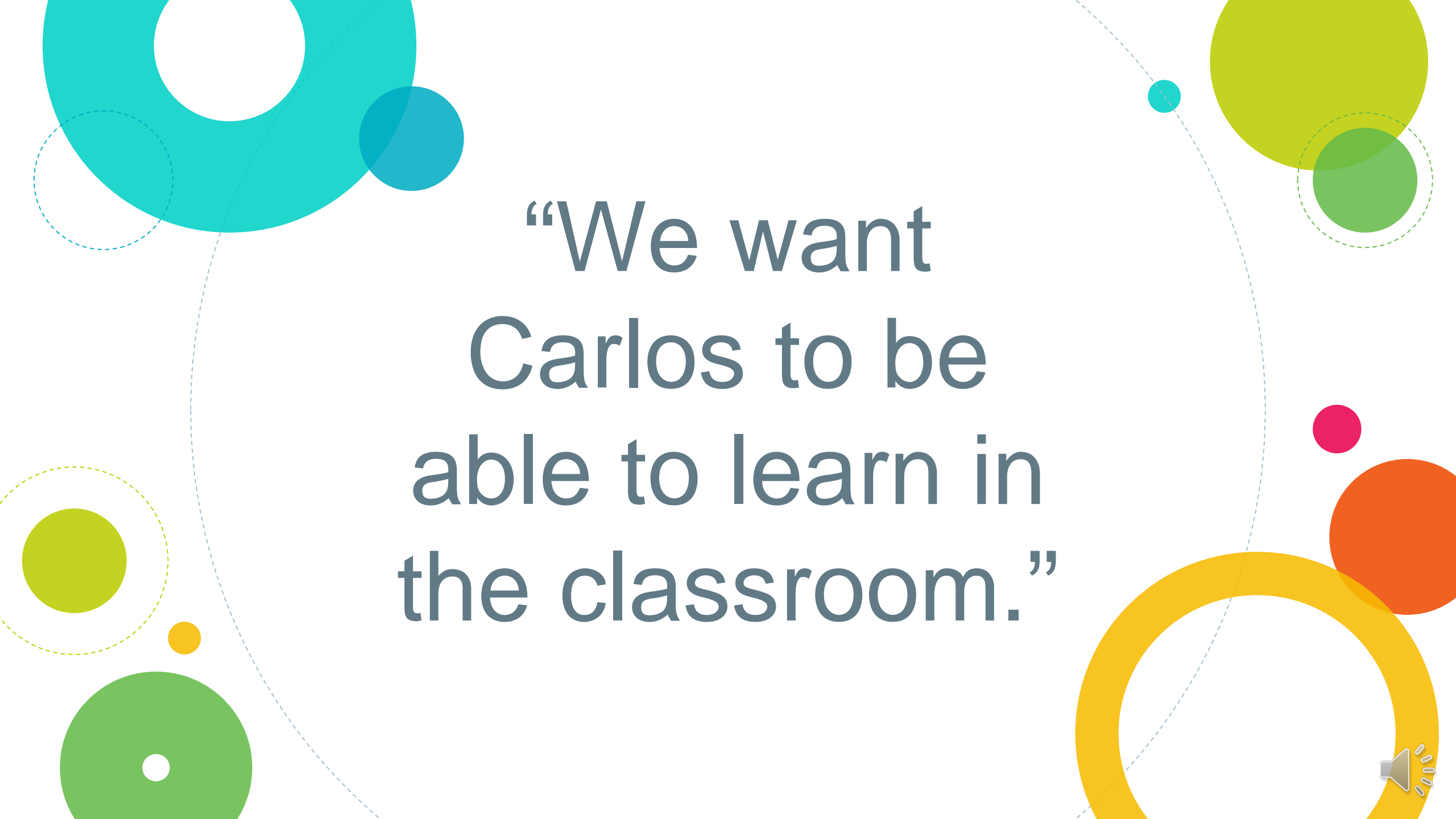
The background features a large, light blue dashed circle that frames the central text. Various solid-colored circles in shades of teal, lime green, orange, and pink are scattered around the page. A thick yellow ring is positioned at the bottom right. A small speaker icon is located in the bottom right corner.

“We want  
Carlos to  
understand and  
respond to  
others”

Where we started in the classroom:

- Targeted receptive prompting
- Used visuals to move to multi word utterances
- Held high expectations
- Had high reading and math skills, used as reinforcement for lower level milestones



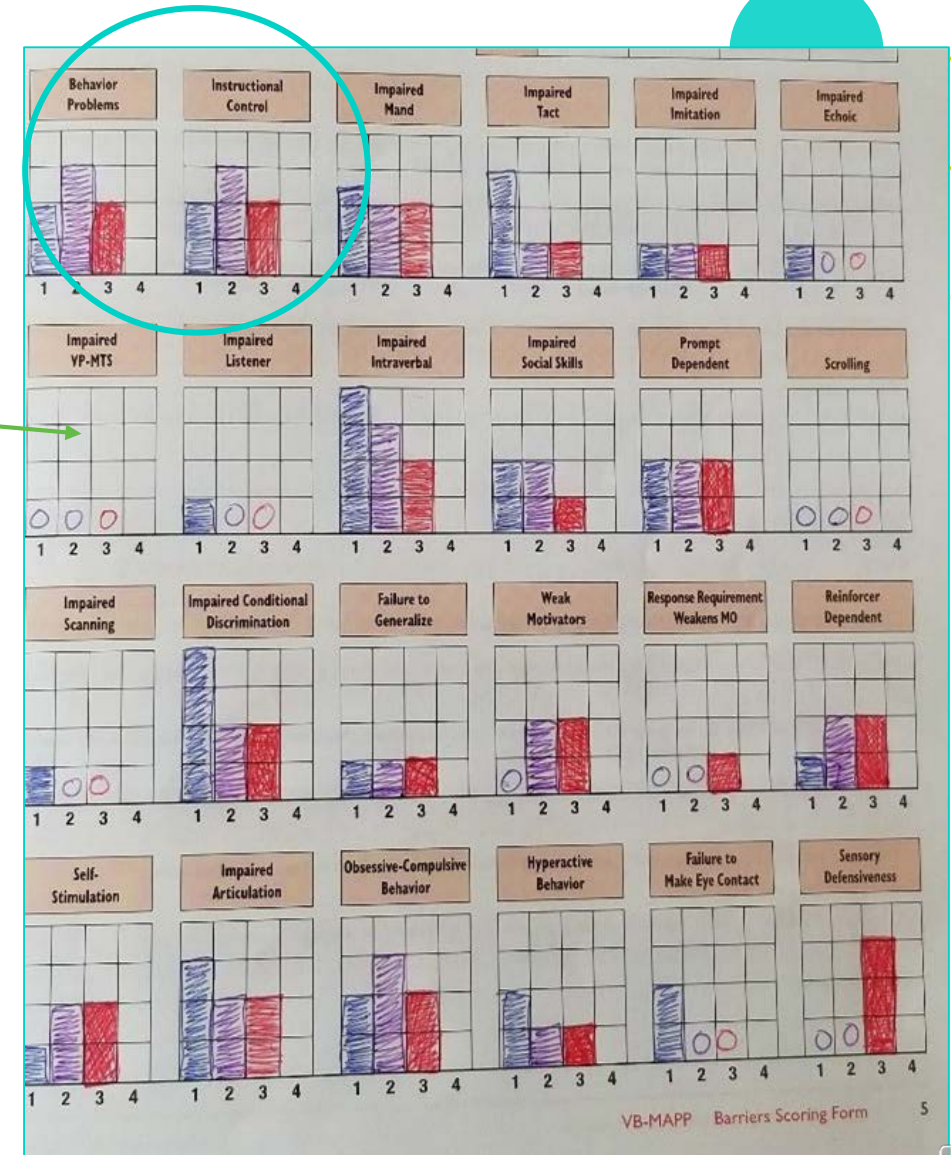
The background features a white background with a large, light blue dashed line forming a partial circle. Various colorful circles are scattered around: a large teal circle with a white center in the top left, a smaller teal circle next to it, a large lime green circle in the top right, a smaller green circle below it, a large orange circle in the middle right, a small pink circle above it, a large yellow circle in the bottom right, a large green circle with a white center in the bottom left, a smaller green circle above it, and a small orange circle to the right of the green circle above it.

“We want  
Carlos to be  
able to learn in  
the classroom.”



# Environmental Support

- Routine
  - Same expectations
- Visuals
  - Schedule
  - Provide response options
  - Timer
- Room Lay out
  - Defined spaces with purpose
- Reduced rigidity by:
  - Prompting through alternatives\*
  - Fading prompting across people, time and space\*\*



## Case Study: Johnny

- **Educational Identification: ASD**
- **Received Part C Services**
- **Transitioned to Part B Services @ 36m**
- **2<sup>nd</sup> Grade**
- **Communicates using AAC**





# Johnny VB-MAPP Milestones

## Level 3

	Mand	Tact	Listener	VP/MTS	Play	Social	Reading	Writing	LRFFC	IV	Group	Linguistics	Math
15													
14													
13													
12													
11													■

● ● ● ● ● ● ● ● ● ● ● ● ○

## Level 2

	Mand	Tact	Listener	VP/MTS	Play	Social	Imitation	Echoic	LRFFC	IV	Group	Linguistics
10												
9												
8												
7				■								
6												

● ● ● ○ ● ● ● ● ● ● ● ●

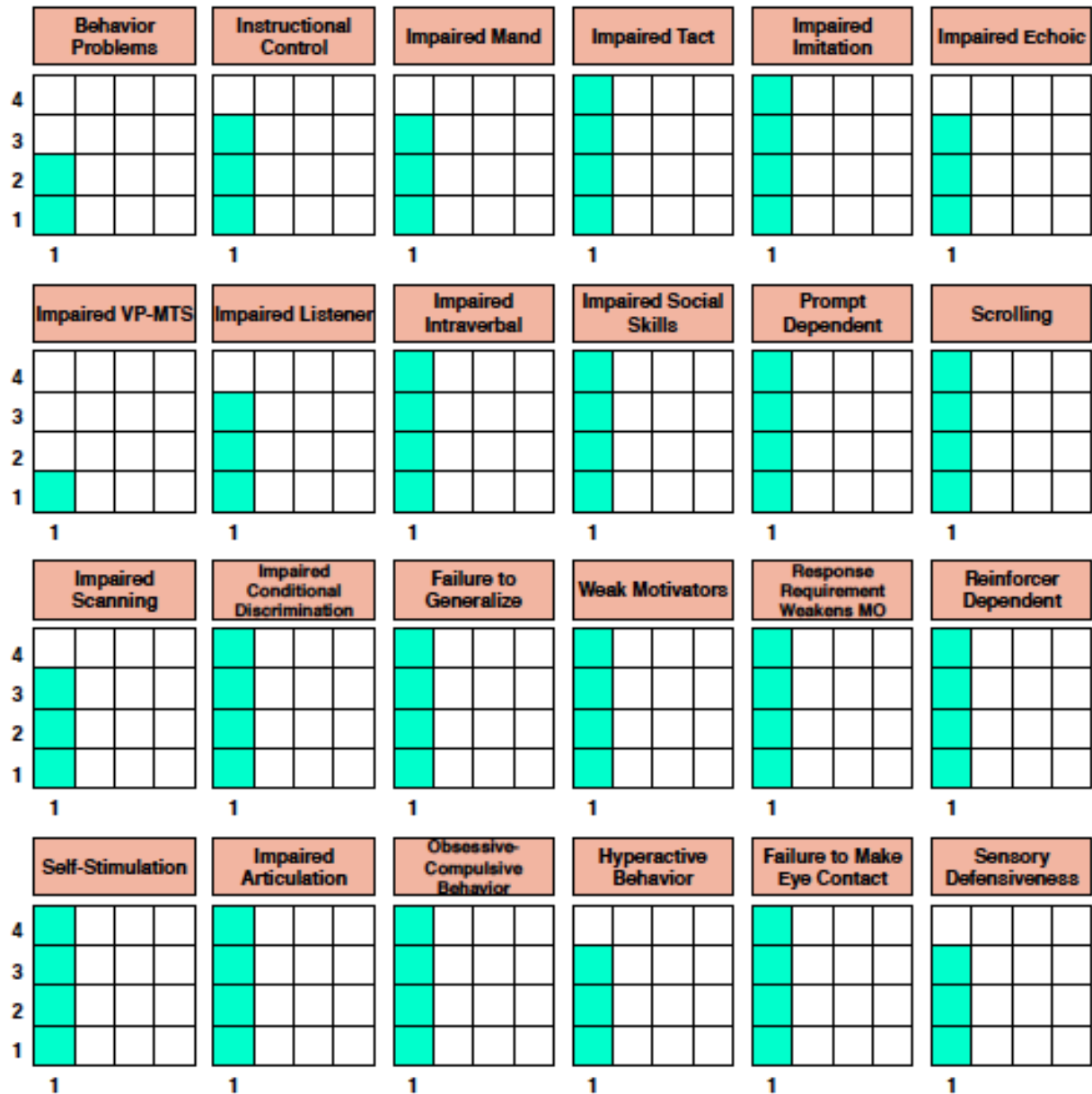
## Level 1

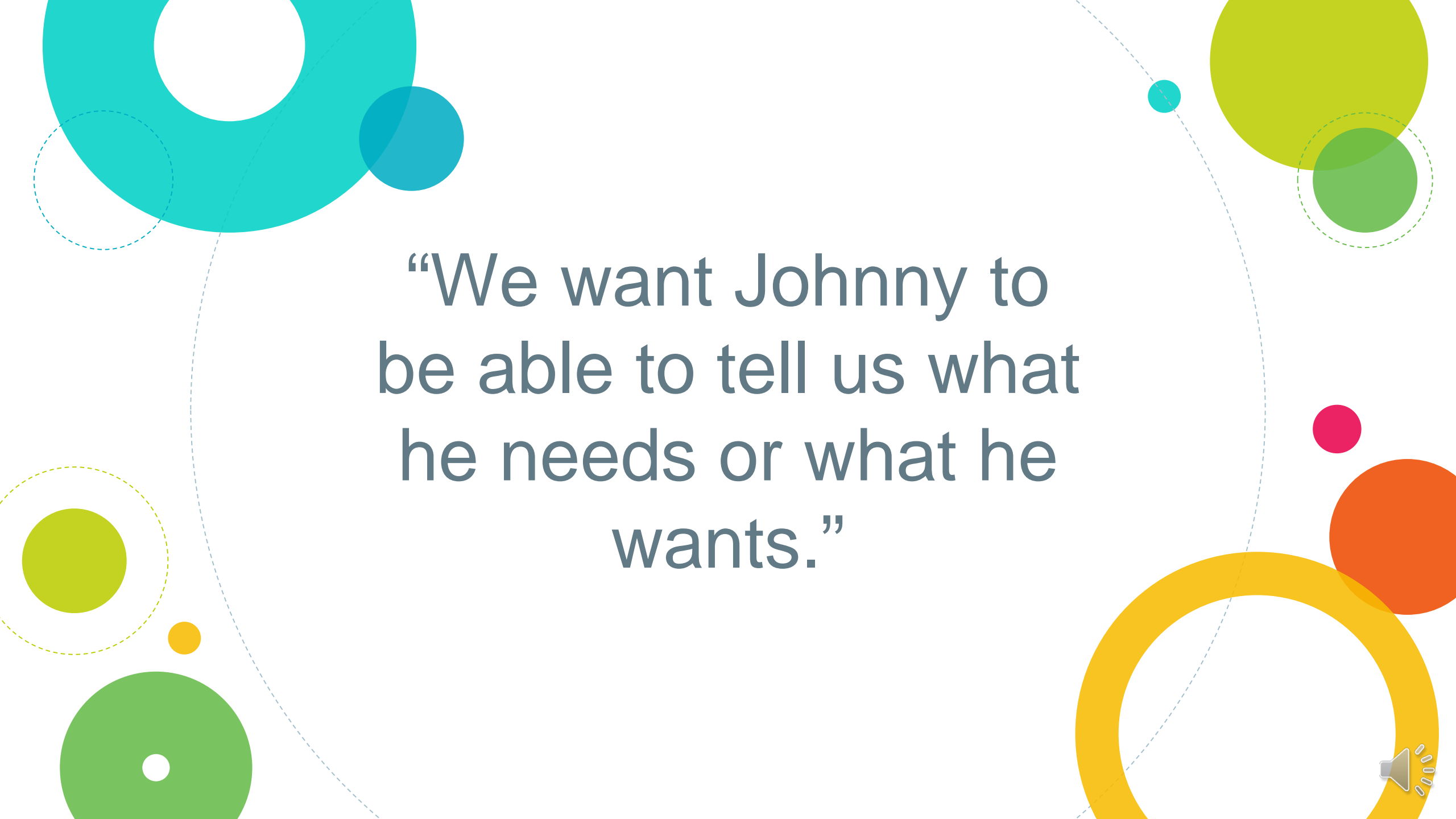
	Mand	Tact	Listener	VP/MTS	Play	Social	Imitation	Echoic	Vocal
5				■					
4	■			■	■				
3	■		■	■					■
2				■		■			■
1	■			■					■

○ ● ○ ○ ○ ○ ● ● ○



# Johnny VB-MAPP Barriers



The background features a white space with a large, light blue dashed line forming a partial circle. Various colored circles are scattered around: a large teal circle with a white hole in the top left; a smaller teal circle below it; a large lime green circle in the top right; a smaller green circle below it; a large orange circle in the bottom right; a smaller pink circle above it; a large green circle with a white hole in the bottom left; a smaller yellow circle above it; and a large yellow circle with a white hole in the bottom right. A small grey speaker icon is located in the bottom right corner.

“We want Johnny to be able to tell us what he needs or what he wants.”

# Considerations With "Requesting"

See an object &  
wants it



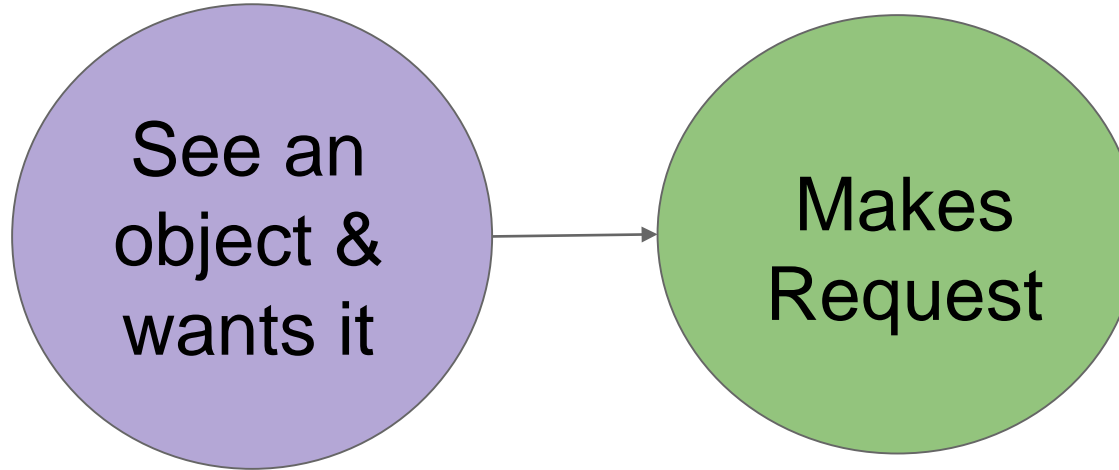
Makes  
Request



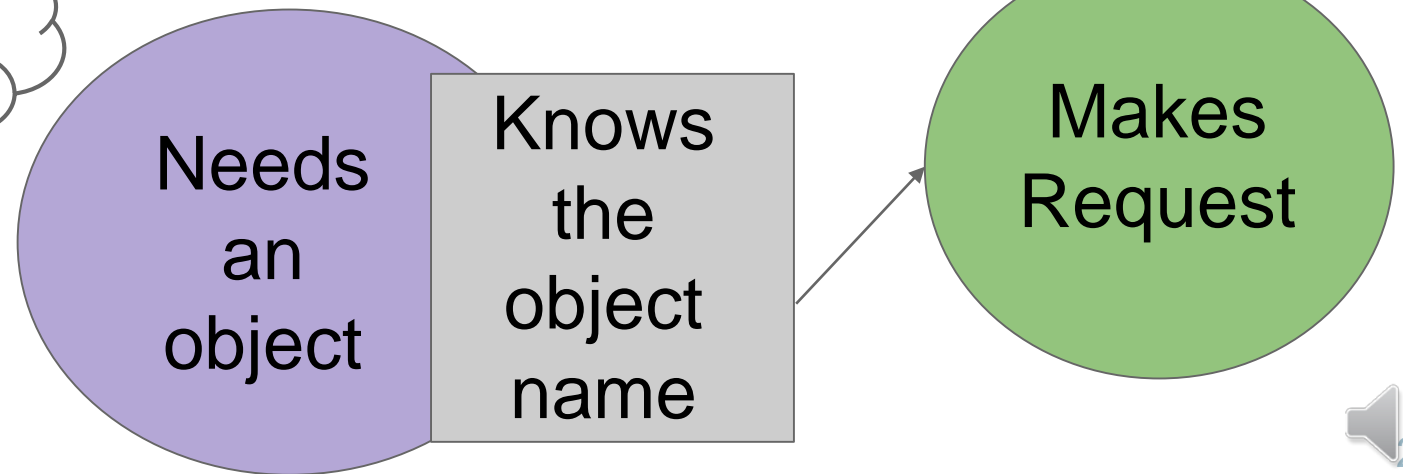
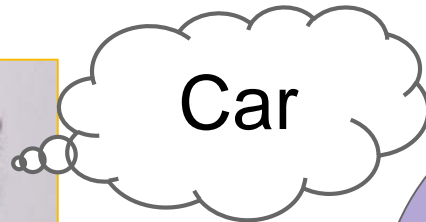
Car



# Considerations With “Requesting”



But what if the object isn't present?



# A Typical Exchange

Child is crying and banging toys

Teacher asks, "What's wrong?"

Intraverbal

Missing toy

Mand L2

Tact

Knows the name of the toy

Gets toy

Makes Request

Mand L1



# Johnny VB-MAPP Milestones

**Level 3**

	Mand	Tact	Listener	VP/MTS	Play	Social	Reading	Writing	LRFFC	IV	Group	Linguistics	Math
15													
14													
13													
12													
11													

**Level 2**

	Mand	Tact	Listener	VP/MTS	Play	Social	Imitation	Echoic	LRFFC	IV	Group	Linguistics
10												
9												
8												
7												
6												

**Level 1**

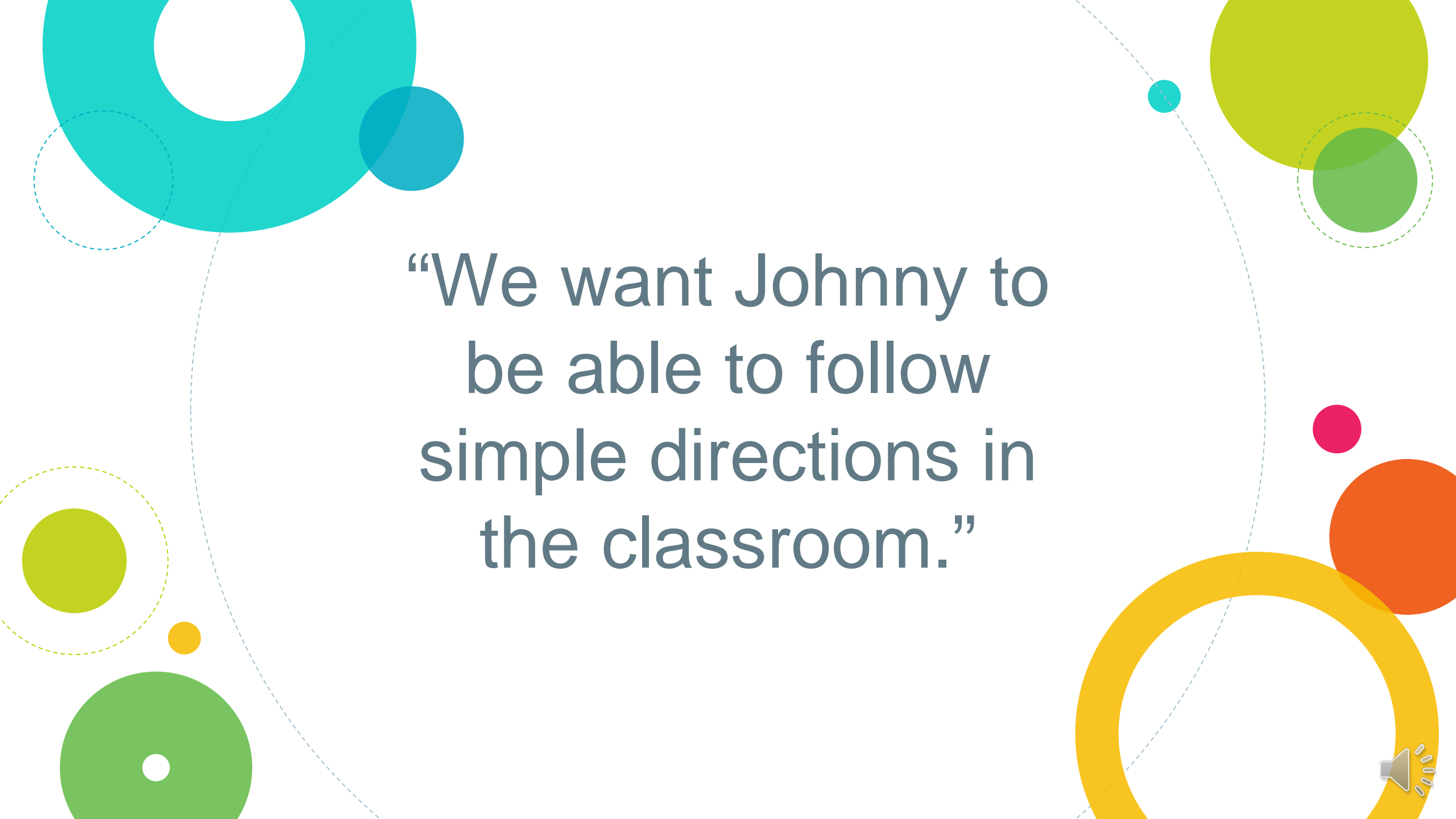
	Mand	Tact	Listener	VP/MTS	Play	Social	Imitation	Echoic	Vocal
5									
4									
3									
2									
1									

Can request missing items

Is consistently responding

knows the name of object



The background features a white background with a large, light blue dashed line forming a partial circle. Various colorful circles are scattered around: a large teal circle with a white hole in the top left, a smaller teal circle below it, a large lime green circle in the top right, a smaller green circle below it, a large orange circle in the bottom right, a large green circle with a white hole in the bottom left, and a small yellow circle near the bottom left. A small grey speaker icon is located in the bottom right corner.

“We want Johnny to  
be able to follow  
simple directions in  
the classroom.”



# Considerations With Listener Responding

Teacher gives direction

Point to

Cat

Touch the

Ball

Give me

Frog

Child Responds Correctly

Reinforcement





# Summary & Connections

- ◎ Overlaps occur across both disciplines in “what” we teach
  - ◎ Differences arise in “how” we approach the learning
- ◎ Communication and behavior are often synonymous



## Question 2:

Reflect on your personal practice. In what ways do you overlap with other professionals on “what” you teach but differ in “how” you approach the subject.



## Question 2:

Reflect on your personal practice. In what ways do you overlap with other professionals on “what” you teach but differ in “how” you approach the subject.

### Example: Use of AAC

- SLP: language development and use for communicating
- OT: physical access, self-help vocabulary
- Special Educator: accessing academic targets
- BCBA: rate of reinforcement





3

# Transdisciplinary Approaches

To serving children with ASD



# SLPs & BCBA's

Topics  
and Areas  
we share

Points of  
Conflict

Resolution  
of Conflicts



## Topics and Areas SLPs and BCBAs share:

- **Communication**
- **Similar Language and social goals**
- Objective Data for measuring growth
- Cueing levels and hierarchy (prompt) for shaping behavior
- Caregiver Training



# Points of Conflict between BA & SLPs

## Overall lack of understanding & wholehearted belief in misconceptions

- ◎ Theoretical issues
- ◎ Interpretation of Evidence Based Practice
- ◎ Naturalness of Strategy implementation
- ◎ Scope of practice
- ◎ Differing priorities
- ◎ Naturalness of strategy implementation





# Resolution to conflicts between BAs & SLPs

- ◎ **Open communication-** share perspectives in honest and respectful way
- ◎ Listening to understand one another's perspectives
- ◎ **Compromise**
- ◎ **Child Focused-** work together to bring perspectives to support a particular child's goals
- ◎ Collaboration
- ◎ Modeling





## Definitions:

Two or more disciplines bring perspectives to the work and.....

<b>Multidisciplinary</b>	<b>Interdisciplinary</b>	<b>Transdisciplinary</b>
maintain discipline specific roles and responsibilities	integrate some of the other disciplines' principles or practices	role release between disciplines to create holistic service



# Characteristics of a transdisciplinary team

**Communication**

**Child Focused**

**Time**

**Trust**

**Healthy Conflict**

**Humility**





## Question 3:

Reflect on your team practice.

What is one Characteristic of a Transdisciplinary Team that is a strength and what characteristic do you want to build?





### Question 3:

Reflect on your team practice.  
What is one Characteristic of a  
Transdisciplinary Team that is a strength  
and what characteristic do you want to  
build?

### Example:

- Strength: Time
- Build: Healthy conflict



# Success...



...for a child with ASD requires a transdisciplinary team that can include: caregivers, friends, educators, OTs, PTs, Mental Health Providers, SLPs & BAs.



## References:

ASHA Practice Portal: <https://www.asha.org/Practice-Portal/Clinical-Topics/Spoken-Language-Disorders/Language-In--Brief/>

Barbera, M. (2009). *Getting started with the verbal behavior approach*.  
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Sundberg, M., & Michael, J. (2001). The benefits of Skinner's analysis of verbal behavior for children with autism. *Behavior Modification*, 25 (5), 698-724.

# THANK YOU!

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