

# Introduction to the National Autism Conference 2018

August 6, 2018  
National Autism Conference  
Amiris Dipuglia



# Welcome to the National Autism Conference!



# This Session

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- Will provide a review of some basic information related to technical terminology you may hear across many sessions
- Will provide a review of the conference schedule and highlights related to areas of interest

# Focus of the Conference...

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- The National Autism Conference is about instruction and autism
- It is probably the largest education conference in the world focused on education and the needs of students with autism
- Many of the sessions are focused on issues related to systematically building complex social and verbal skill sets!

# What is Autism?

- Let's look at the definition found in DSM V
- That's DSM 299.00 in case you were wondering!
- Keep in mind that no child is “autism”: each child is an individual
- “You’ve met one child with autism, you’ve met one child with autism” P. Gerhardt

# What Are Autism Spectrum Disorders? (DSM V Summary)

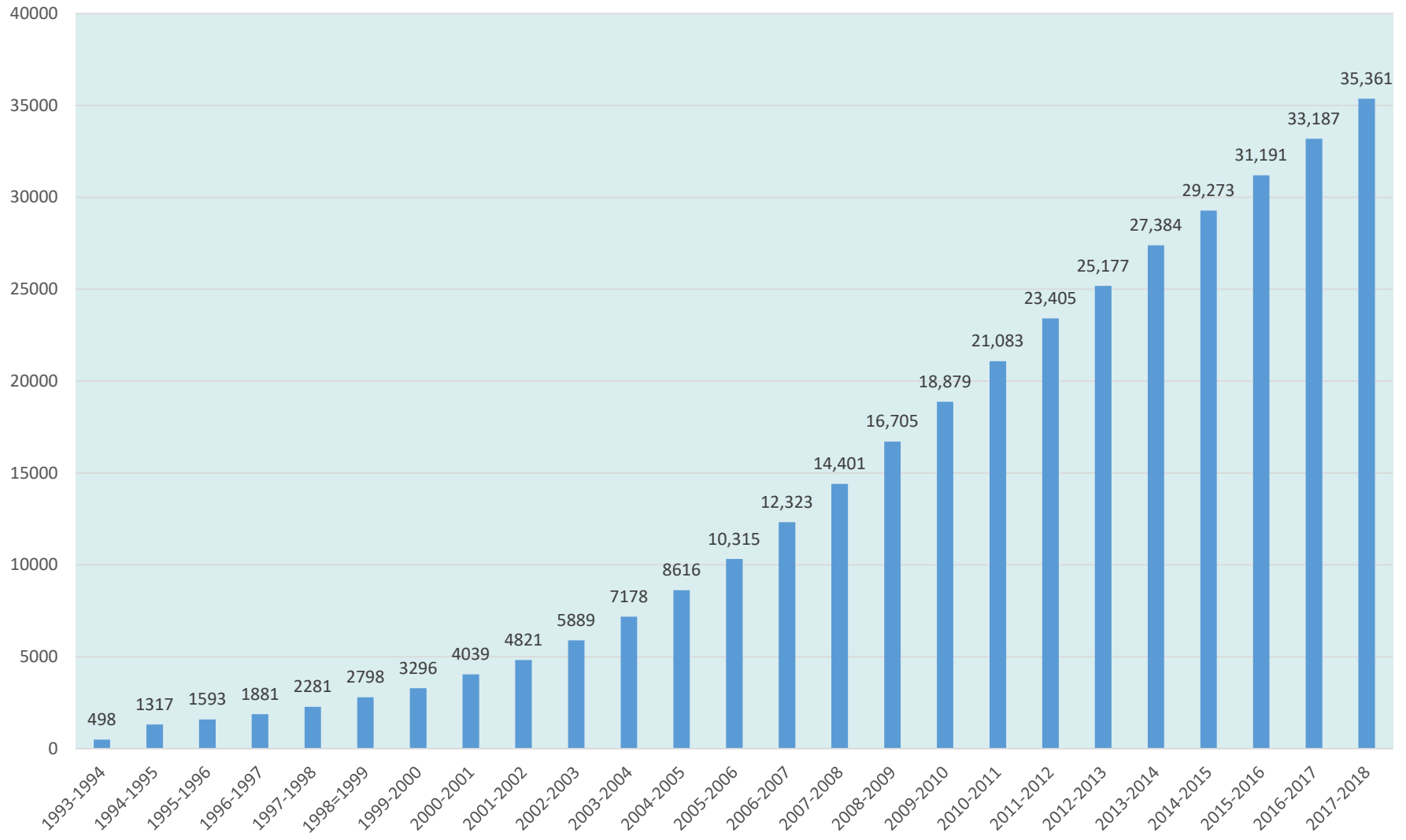
- **Social-Communication Deficits and Repetitive Behaviors:**
  - responding inappropriately in conversations
  - misreading nonverbal interactions
  - having difficulty building friendships appropriate to their age
  - may be overly dependent on routines, highly sensitive to changes in their environment, or intensely focused on inappropriate items
- The symptoms fall on a continuum (from mild to severe)
- Variations in symptoms and behaviors from person to person
- Symptoms occur from early childhood, even if those symptoms are not recognized until later
- Adapted from:  
<http://www.dsm5.org/Documents/Autism%20Spectrum%20Disorder%20Fact%20Sheet.pdf>



# What are Autism Spectrum Disorders?

- Developmental Disability
- Diagnosis derived from behavior
  - No brain scan or blood test
  - Assumed biological disorder most likely of genetic origin characterized by qualitative differences in:
    - Social communication
    - Repetitive and stereotyped behaviors

# PDE Child Count Data: Students Eligible for IEPs Under Definition of Autism, Ages 3-21





# What does the literature say about effective instruction and autism?

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- National Autism Center Standards Reports (2009; 2015) probably provides the most thorough and relevant summary

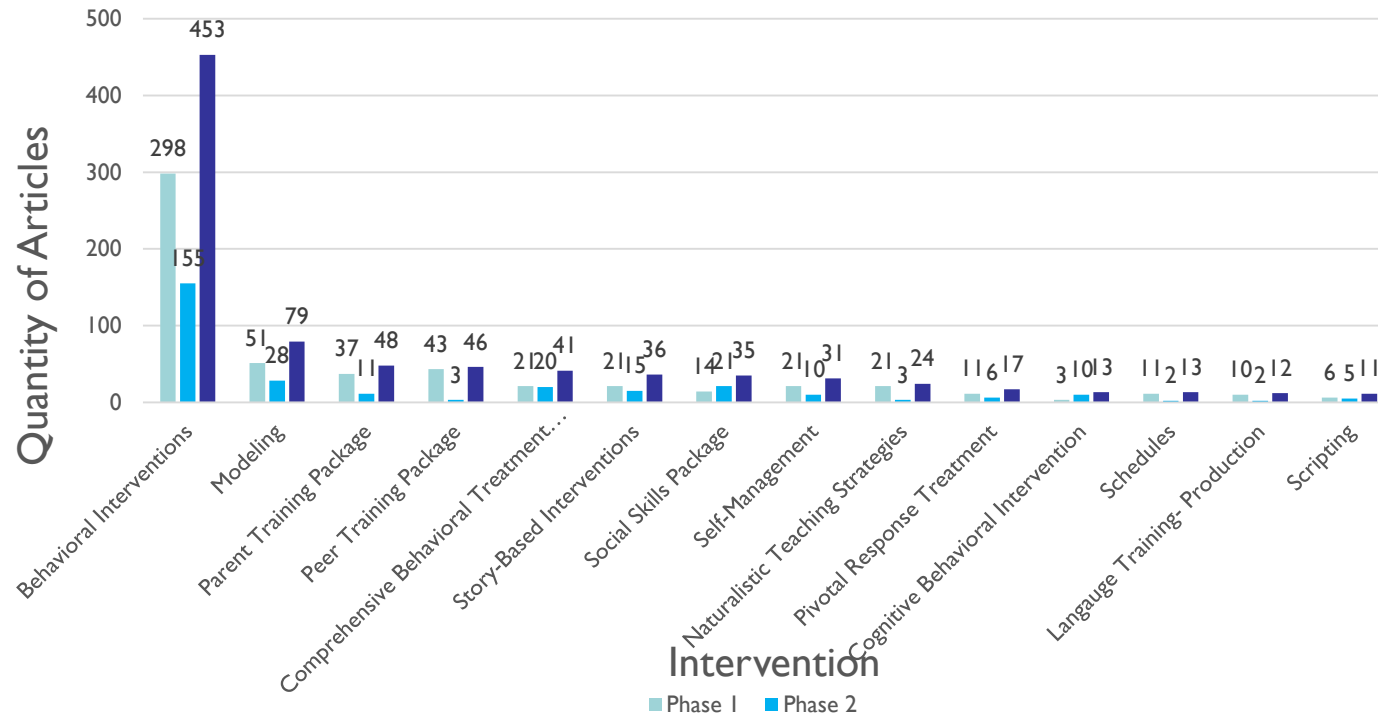
# National Autism Center Standards Report

## Phase 2:

- “The National Autism Center has adopted the definition of evidence-based practice offered by David Sackett and his Colleagues: evidence based practice as ‘the integration of best research evidence, professional judgment, and values and preferences of clients.’” p.80
- “The combined results of NSPI and NSP2 include data from more than 1000 studies. This is the largest review of its kind for individuals with ASD.” p. 80
- The report and evaluation methods can be retrieved from:  
<http://www.nationalautismcenter.org/national-standards-project/phase-2/>

# Evidence-Based Interventions by Quantity of Findings

SMRS Research Findings  
Interventions by Quantity



# NAC Standards Report Conclusions (2009):

- Approximately two-thirds of the Established Treatments were developed **exclusively** from the behavioral literature (e.g., applied behavior analysis).
- Of the remaining one-third of the Established treatments studies are derived **predominantly** from the behavioral literature.
- This pattern of findings suggests that treatments from the behavioral literature have the strongest research support at this time
- PATTAN Autism Initiative focuses primarily on interventions derived from or relying on principles of ABA

# Further Evidence for ABA and Autism Treatments

- National Autism Center Standards Report
- Maine Administrators Report
- Missouri Autism Guidelines
- Numerous research articles published in a wide range of behavioral, educational and disability focused peer reviewed journals
- Student level data: probably the strongest argument for ABA

# Autism “A fad magnet” (Metz and Mulick, 2005)

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- Be wary of quick fix interventions: some examples..
  - Sensory Integration
  - Facilitated communication
  - Vaccines/Mercury cause Autism
  - Rapid prompting
  - Certain biomedical interventions (chelation; diets)
  - And on and on....

# Sessions on Evidence and Implications

- 10 & 17-Eb Blakely, Lindsey Wright, and Amber Lampert: Health and Safety Programs: ABA Procedures and Outcomes (Monday PM & Tuesday AM-intermediate)
- 11-Mike Miklos: Review of Evidence-Based Practices for Parents (Monday AM)
- 41-Panel Discussion: Perspectives on the Importance of a Behavior Analysis in Educational programs for Students with Autism Spectrum Disorders (Tuesday PM)



# Sessions on Evidence and It's Implications

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- 57B Kara Vollmer & Ginette Drabert: Autism Services in Rural Areas: Two Examples of Integrated Intensive Programming
- 87-David Roth: Stimulus Control and its Role in Errorless Learning (Thursday PM-all participants)

# Don't Forget the Archives!

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- Numerous sessions archived over several years

<http://legacy.wpsu.org/live/archive/>

# Quality Educational Programs: Key Features

- Focus on addressing core deficits of autism
- Provide high rates of active student responding
- Build Skills: explicit instruction
- Use of positive reinforcement/skill building
- Honor student interests, personality and skills
- Data driven
- Collaborative!

Video Harrisburg case studies

# Sessions on Quality Instruction

- 13 & 27-Barry Morgenstern: Strategies for Making Inclusion Successful- (Tuesday Am & PM- all participants)
- 15-Ivy Chong: Teaching Procedures and Programs for Learners Diagnosed with Autism (Monday AM-intermediate)
- 35-Laura Yates: Instruction Basics (Tuesday PM- all participants)
- 36- Dita Chapman and Helena Vadurova: International Applications Derived from PaTTAN's Autism Initiative (Tuesday PM-Intermediate)

# Sessions on Quality Instruction

- 50-Jared Campbell & Amiris Dipuglia: Mathematics in Autism Interventions Topic (Wed AM-intermediate)
- 52-Aimee Miller: Teaching Basic Early Learning Skills to Naive Learners ( Wed AM- all participants)
- 63a/63b-Promising Practice: Effective Instructional Practices (Wed PM-all participants)
- 65a/65b-Promising Practice: Making the Impossible – Possible! (Wed PM-all participants)
- 66a/66b-Promising Practice: Effective Group Instruction Across the Curriculum (Wed PM-all participants)

# Sessions on Quality Instruction

- 73-Amiris Dipuglia: Sequence of Instruction from Basic to Complex Skill Sets for Children with ASD (Thursday PM- Intermediate)
- 83-Lori Chamberlain: The Role of Fluency in Programming for Students with Autism (Thursday AM-intermediate)
- 93-Aimee Miller and Ashley Harned: Direct Instruction Workshop (Thursday PM-all participants)

# A Brief Review of ABA

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- ABA is not a thing or a procedure
- It is a system of evaluating how the behavior of individuals systematically changes in relation to the ongoing and past situations in which the person behaves.



# So What is ABA?

- The application of science of learning to socially significant human behavior
  - Applied: socially significant
  - Behavior: relation between environmental events and what people do
  - Analysis: uses scientific methods to establish and evaluate applications
  - It is a process, not necessarily a procedure
- Any intervention/method can use ABA; however, not all interventions do!

# ABA and Board Certification

(Behavior Analysis Certification Board)

- What is a BCBA?
- What is a BCaBA?
- What is a RBT?
- Why are they helpful?

Session 12: An Update on Ethics from the  
Behavior Analyst Certification Board  
Immediately after this session (all participants)

# Applied Behavior Analysis

- Builds skills to help people be more independent
- Helpful across:

***education, business, health practices*** (e.g. smoking cessation, weight loss, reducing obsessions, etc), ***animal training*** (e.g. pouched rats and land mines), ***environmental sustainability*** (e.g. towel reuse in hotels and litter reduction), ***occupational safety, gun safety, transportation safety, and more....***

# ABC Analysis

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- A =Antecedent (before behavior)
- B = Behavior (what a person does: observable and measureable)
- C = Consequence (after behavior)

video ABC analysis

# Behavior Analysis Key Terms

- Antecedent
  - Motivating Operation
    - Unlearned (UMO)
    - Transitive (CMO-T)
    - Reflexive (CMO-R)
  - Discriminative stimulus (Sd)
    - Stimulus control
    - Instructional control
  - Prompt

# Behavior Analysis Key Terms

- Consequence
  - Reinforcement
  - Positive Reinforcement
  - Negative Reinforcement
  - Punishment
  - Extinction
  - Schedules of Reinforcement (for instance, continuous, variable ratio, interval)

# Why an ABC Analysis is Helpful

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- It avoids having to guess about un-observable events (what is going on “inside the person”)
- It is optimistic!
- It allows for checking to see that interventions really work!



# Some Educational Applications of ABA

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- Mand Training
- Discrete Trial Training
  - Errorless Teaching
  - Error correction
- Direct Instruction
- Social skill building
- Altering a school culture

# Sessions on Behavior Analysis

- 18 & 32-Tim Hackenberg: Token Reinforcement: Bridging the Gap Between Science and Application (Tuesday AM & PM-intermediate)
- 19 & 33-Tim Vollmer: Differential Reinforcement as a Way of Life (Tuesday AM & PM-intermediate)
- 25-Lori Chamberlain & Rebekah Houck: Daily Ethical Considerations for Behavior Analysts (Tuesday PM-intermediate)
- 29- Ilene Schwartz: Ethical Dilemmas and Realistic Solution: Grappling with the Challenges of Practicing Behavior Analysis in the Real World (Tuesday PM-intermediate)

# Sessions on Behavior Analysis

- 6 & 39-David Wilder: Integrating OBM Procedures into ABA Service Provision (Monday PM & Tuesday PM-intermediate)
- 51-Judah Axe: Motivating Operations: Practical Lessons from the Applied Research (Wed AM-intermediate)
- 76 & 89-Wayne Fuqua: Ethics (Thursday PM-advanced)
- 79 & 85b-Amy Naccarelli and Rebekah Houck: From Discrete Trial to Real Life Applications- Parts 1 & 2- full day session Thursday-all participants)
- 91-Rachel Kittenbrink: Supervision and Professional Mentorship (Thursday PM-intermediate)

# Social Communication and Autism

- The Basic Verbal Operants
- Speaker Skills
  - Mand
  - Tact
  - Intraverbal
  - Echoic
  - Imitation (with sign language)
- Listener Skills
  - Listener Responding (Receptive)
- And Complex Skills
  - Multiple control
  - Atomic repertoires!!! (Palmer, 2012)

# Sessions on the Analysis of Verbal Behavior and Complex Language

- 14 & 28-Vince Carbone: Teaching Advanced Verbal Behavior (Tuesday Am & PM-intermediate)
- 9- Charles Catania: Stimulus Control: Implications for Verbal Behavior, Social Contingencies and Education (Monday PM- all participants)

# What is a Mand? Common Terms:

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- Request
- Asking for something
- A question
- Demanding
- Inquiring
- Commanding

# A Functional Approach to Language

Mand: Asking for something (A preferred toy, activity, information, etc.)

Tact: labeling what you see, hear, smell, taste, or touch

Echoic: repeating what has been said

Intraverbal: responding with words to things that have been said (conversation, answering questions, word associations)



# A Functional Approach to Language

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Listener responding/receptive: Following directions, selecting things named or otherwise behaving as a listener without speaking

Motor Imitation: Doing the same thing someone else does.

Match to Sample: Putting an item or picture in proximity of something with shared characteristics.

Introduction to Mand Training video

Video Sharae and Mike

# Sessions on Mand Training

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- 21-Ryan Delaney: Mand Training 101 (Tuesday AM-all participants)
- 82b-Mike Miklos: Advanced Mand Training (Thursday PM-intermediate)
- 84- Sarah Knaus, Katelyn Schulmeister, Meghan Foust and Maureen Archer: Mand Training from Elementary to High School (Thursday AM-all participants)

# Some Words About Data

- Key aspect of ABA: understanding some of this may help you at this conference!
- Human memory is quite fallible
- Data helps us remember what happened
- Data helps us see patterns of performance and behavior change
- One might not need data on every behavior, but without data people often end up guessing
- Data systems should not interfere with instruction, rather they should support teaching and learning

# Types of Data

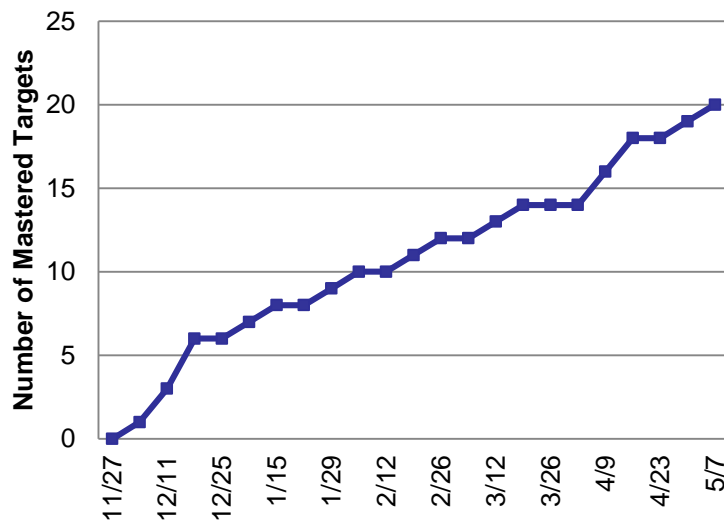
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- Counts
- Timings
- Continuous
- Sampled
- Skill Probes
- Cumulative responses or skills acquired

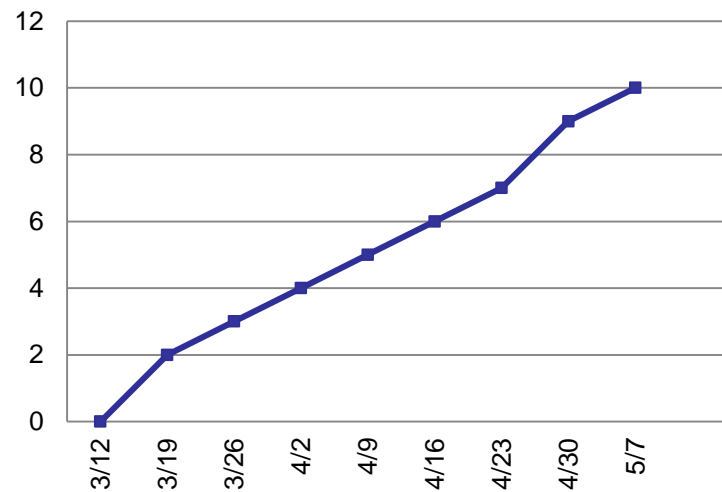
# The Analysis: Functional Relations

- Graphs are very valuable
  - They allow a quick check of how a program or intervention is working
- Tests to determine if things are working:
  - If I change the way I teach, does it consistently change what the student does?
  - Does the intervention function to change behavior?

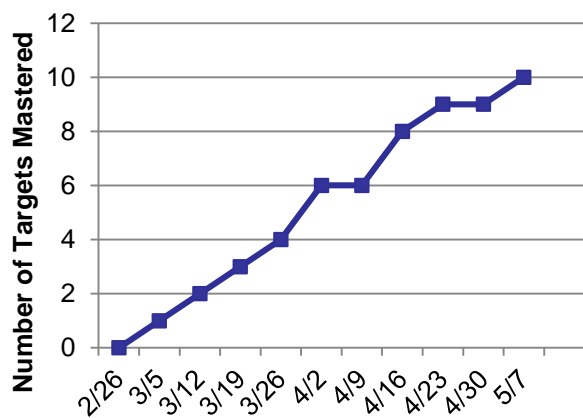
**Dylan: Cumulative Mands**



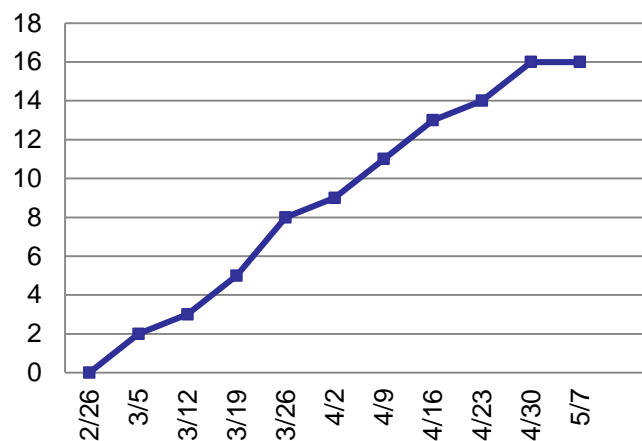
**Dylan: Cumulative Tacts**



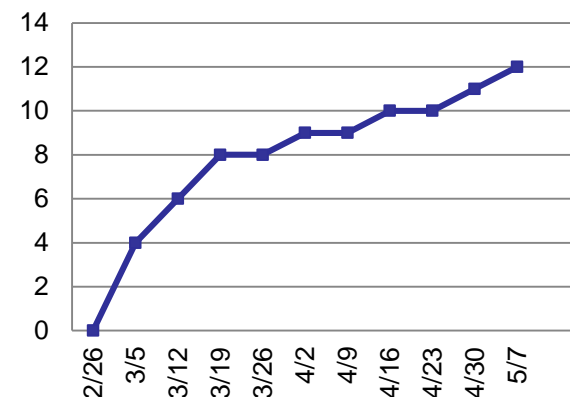
**Dylan: Cumulative Echoic Skills**



**Dylan: Cumulative MTS Skills**

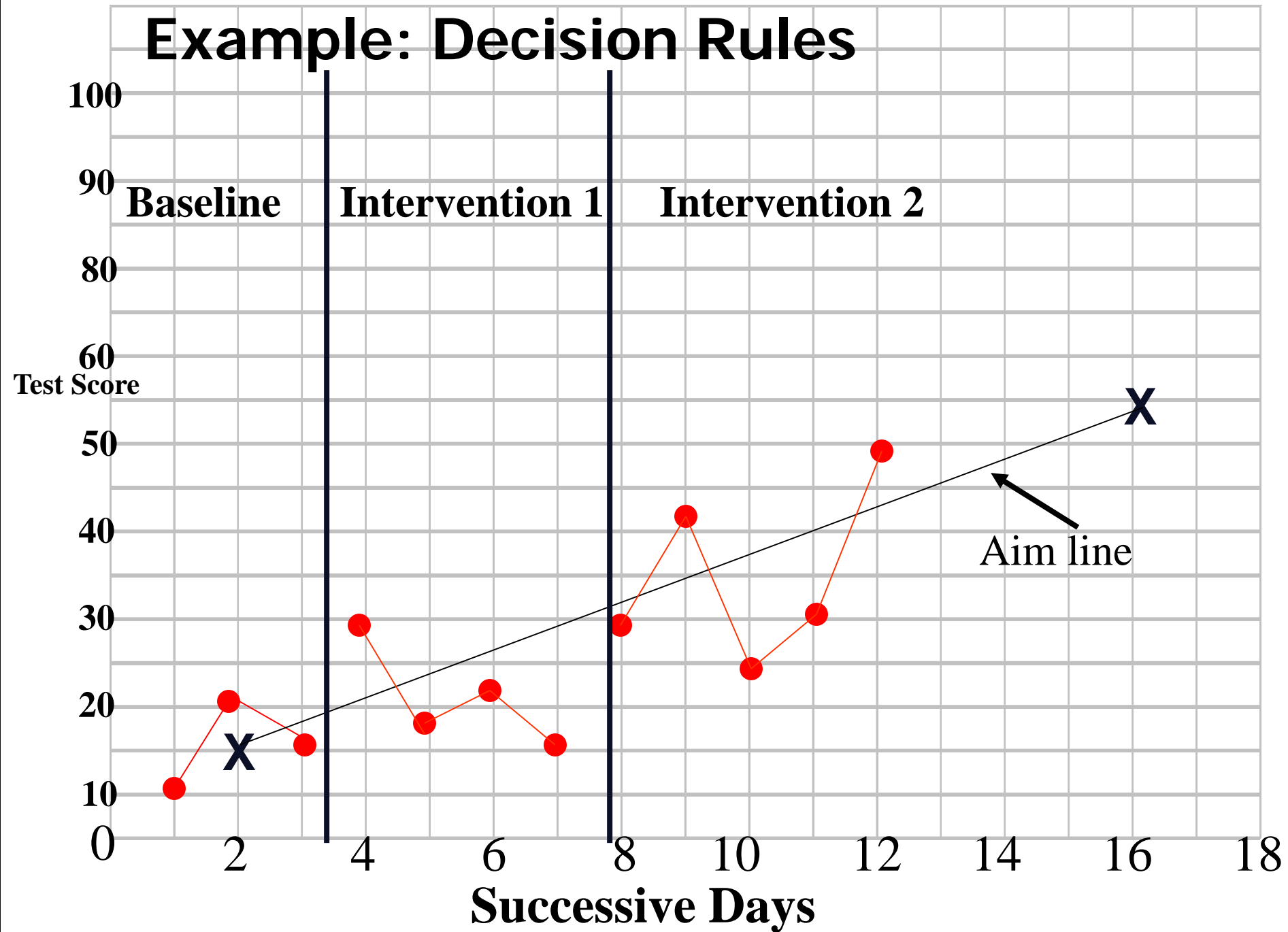


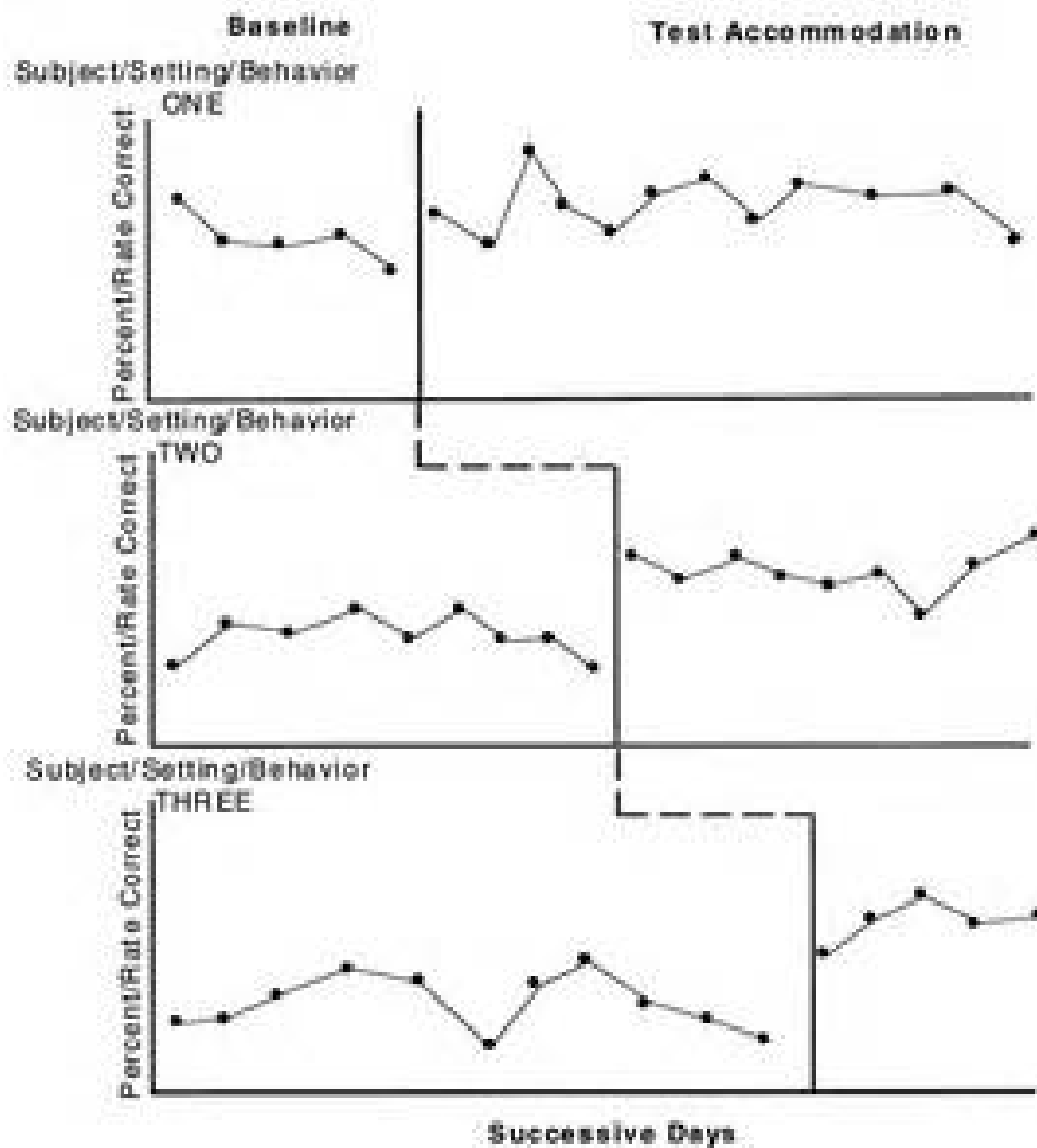
**Dylan: Cumulative Imitation Skills**



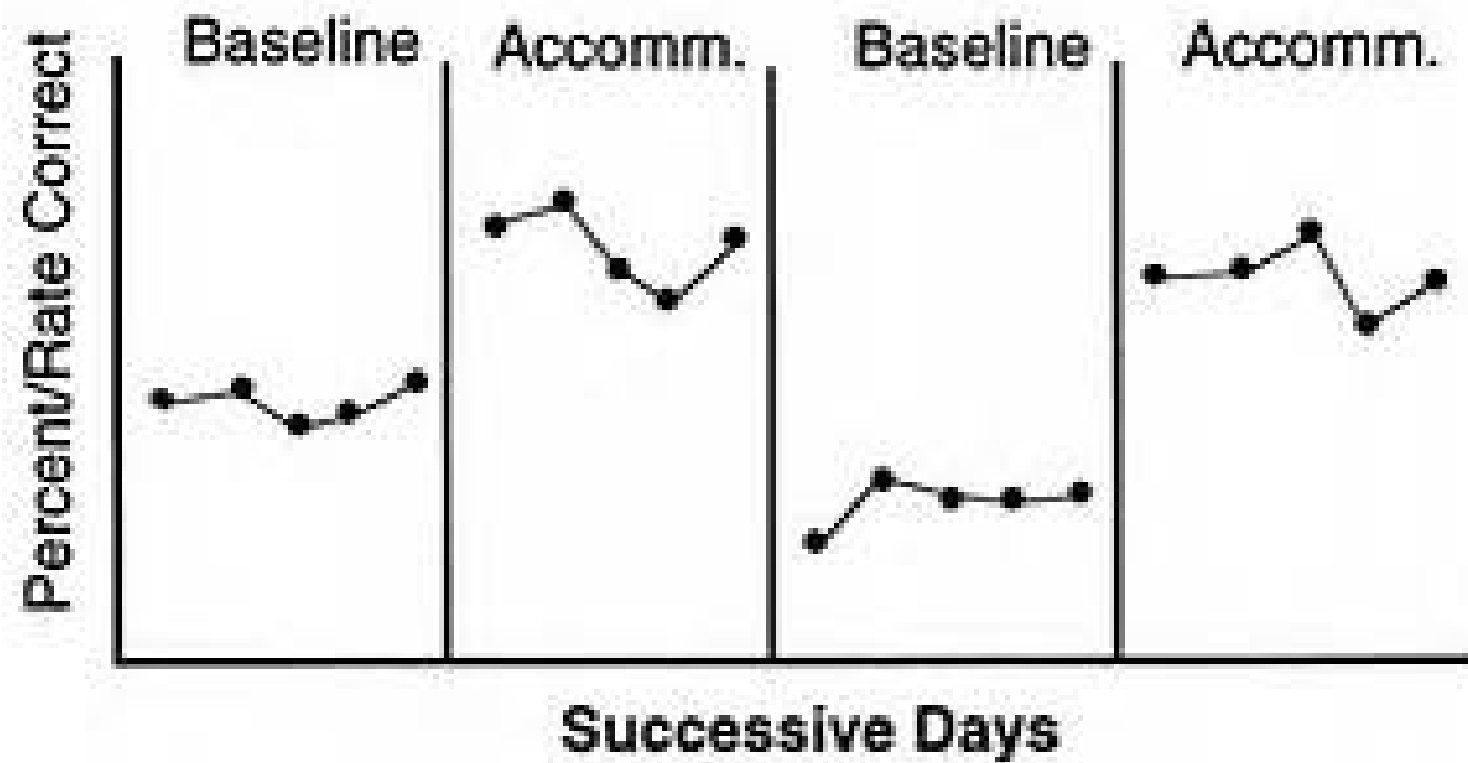
**Total Cumulative Skills in 20 weeks: 68 (20 Mands)**

# Example: Decision Rules









# Sessions on Data Analysis

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- 42-Rick Kubina: Three Pillars of all Effective Interventions: Defining Behavior, Dimensional Measurement and a Standard Visual Display (Wed Am-all participants)
- All instruction focused sessions will also include data systems and data analysis

# Treatment Fidelity and Staff Training

- Instruction and data will only result in good outcomes if interventions are implemented with fidelity
- Fidelity of implementation is accomplished through:
  - Competency-based training
  - On site guided practice/feedback
  - Verification of treatment fidelity

# **Motor Imitation Procedural Fidelity Checklist**

**Date:** \_\_\_\_\_ **Instructor:** \_\_\_\_\_ **Student:** \_\_\_\_\_

**Observer 1:** \_\_\_\_\_ **Observer 2:** \_\_\_\_\_ **IOA %** \_\_\_\_\_

		YES	NO	N/A
Organization	1. Is instructional area neat and sanitized?			
	2. Does instructor have all materials needed for instruction organized and ready?			
	3. Does instructor have a variety of valuable reinforcers available?			
Teaching Procedures	4. When teaching, does instructor present the S <sup>D</sup> and prompt the correct response?			
	5. Once the student complies with the prompt, does the instructor re-present the S <sup>D</sup> with no prompt or a faded prompt (transfer trial)?			
	6. Is transfer trial followed by distractor(s)?			
	7. Following distract trials, does the instructor re-present the S <sup>D</sup> with no prompt or a faded prompt as presented in transfer trial (check trial)?			
	8. Does instructor model the action to be performed for the prompt, transfer and check trials?			
	9. Does instructor reinforce at set VR schedule? VR: _____			
	10. Does instructor use a prompt that results in correct response?			
	11. Does instructor differentially reinforce (better reinforcement) target responses?			
Error Correction	12. Does instructor end the trial and ensure student is in neutral position (use ready hands if needed)?			
	13. Does instructor re-present the S <sup>D</sup> and prompt the correct response?			
	14. Does instructor prompt student if no response occurred within 2 seconds for a previously mastered item?			
	15. Does instructor model the action to be performed for the prompt, transfer and check trials during error correction?			
Notes:		<div style="text-align: right;"> <b>____/15</b>            Percentage of Y's:         </div>		

# Session on Treatment Integrity and Staff Training

- 64a/64b- Promising Practice: The Role of an Effective Internal Coach in Autism Support Classrooms (beginner – all participants)
- 70a/70b-Promising Practice: Effective Staff Training (Wed-PM-all participants)
- 80- Audrey Banzhaf: Internal Coaching (Thursday AM- intermediate)

# Family Engagement

- Meaningful family engagement is associated with:
  - Better School Attendance
  - Higher Test Scores
  - Higher Grades
  - Better Social Skills
  - Better adaptation to School
  - Post Secondary Education more likely
- Parental goals, perspectives and concerns should be considered in educational planning
- Caveat: parent preference is not always consistent with evidence base
- Parent training and communication

# Family/Parent Focused Sessions:

- 11-Mike Miklos: Review of Evidence-Based Practices for Parents (Monday AM-all participants)
- 31-Rachel Kittenbrink: Social Communication and Reinforcement in the Home (Tuesday PM-all participants)
- 54-Laura Yates: Individualized Educational Plan (IEP) Basics for Parents (Wed-AM- all participants)

# Family/Parent Focused Sessions:

- 56-Amiris Dipuglia: Parenting, Education and the Long View... (Wed PM-all participants)
- 58- Kerry Smith: An Adult Sibling Talks With Parents (Wed PM- all participants)
- 96-Jen Shade: Toilet Training in Public Schools: A Collaborative Effort Between Parents and Schools (Thursday PM- all participants)



# Social Skills

- Most social skills involve communication
- Language instruction is social skill training
- Peer to Peer manding often a place to start
- Evidence based methods of addressing complex social skills is important
- Look for interventions that avoid rote learning.

# Sessions on Social Skill Training

- 16 & 30-Alice Shillinsburgurg: Strategies to Promote Complex Social Communication Skills in Children with Autism and Significant Language Delays (Tuesday Am & PM-advanced)
- 26- Rene Jamison: Sex Matters: The Unique Presentation of Autism in Females and Overview of the Girls Night Out Model (Tuesday AM- all participants)
- 37-Tamara Kasper- Social Skills and ABA: Using a Functional Assessment and Conceptual Analysis to Guide Treatment (Tuesday PM-intermediate)

# Sessions on Social Skill Training

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- 43 & 73-Francesca Degli Espinosa: Early Social Responding and Verbal Behavior: An Analysis of Current Applications (Wed AM & Thursday AM-intermediate)
- 55- Jolin Jackson: Social Skills Instruction (Wed AM-all participants)
- 69a/69b- Promising Practice: Watching and Sharing: Using Video Visual Scene Display Technology to Support Communication (Wed PM- all participants)

# Behavior management

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- FBA
- PBSP
- Function Based
  - Motivation
  - Competing skill
  - Making PB ineffective and inefficient

Video

# Sessions on Behavior Management

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- 48 & 61-Greg Hanley: Toward Meaningful Outcomes from Dignified Processes: A Tutorial on the Practical Functional Assessment and Skill-Based Treatment Process for Problem Behavior (Wed AM & PM- full day session-intermediate)
- 92b- Willow Hozella: Behavior Protocol Workshop (Thursday PM-all participants)

# Life skills and Activities of Daily Living

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- Functional Approach
- These are critical skills: becoming toilet trained, for instance, alters likely trajectory
- Safety skills

# Sessions on Life Skills and Activities of Daily Living

- 62-Promising Practice: Teaching Job Skills – Activities of Daily Living (Wed PM- all participants)
- 24-Sandy Jin: Treating Sleep Problems in Children with Autism (Tuesday AM- intermediate)

# Transition Programming

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- As children enter middle and high school it is critical to begin planning for the transition to life, career and education opportunities beyond public education.
- Programming for these opportunities remains rooted in evidence base.



# Sessions Related to Transition and Career and College Ready

- 40- Laurie Ackles: College to Career: Navigating the Path to Professional Employment for Those on the Autism Spectrum (Tuesday PM- all participants)
- 53- Jane T. Brown and Cherie Fishbaugh: Social Success in College and Beyond: Can ABA and Positive Psychology Work Together? (Wed AM- intermediate)
- 59- Mike Minor and Diane Funsten: How to Plan to Increase Graduation Rates for Students with Disabilities in Pennsylvania (Wednesday PM- all participants)

# Sessions Related to Transition and Career and College Ready

- 78-Vanessa Bethea-Miller, Alicia Waranis and Kristen Csizmadia: Topic of Middle/High School Aged Kids of Average Intelligence (Thursday AM- all participants)
- 81 & 94-Peter Gerhardt: Older Students and Transition (Thursday AM & PM- all participants)
- 85- Jane T. Brown and Kristin Starosta: In Their Own Words: College Students with Autism(Thursday AM- all participants)

# Sessions on Early Intervention

- 44- Valerie Postal and Donna Miller: Implementing Speech Generating Devices Within A Behavior-Analytic Framework (Wed AM- all participants)
- 47- Mary Mikus and Shelley Chaplin: How Can I Include My Young Child with ASD in Preschool and Community? A Family Forum on Evidence-Based Practices (Wed AM- all participants)
- 57- Andrea Algatt and Susan Zeiders: OCDEL's Reduction of Expulsion and Suspension in Early Childhood Programs in Pennsylvania – What it Means for Children with ASD (Wed PM- all participants)

# Sessions on Early Intervention

- 67a/67b- Barbara Weber and Merle Crawford: LEAP Preschool Model: Pre-planned, Targeted Strategies for Active, Meaningful Engagement (Wed PM- all participants)
- 68a/68b-Nancy Draftina: Adding the Early Start Denver Model into Part C Service Delivery: The Experience of Two EI Providers (Wed PM- all participants)
- 98-Caitlin Kirkwood: Caregiver Training for Pediatric Feeding Disorders (Thursday PM-all participants)

# Teaching Speech and Articulation Skills

- 22-Tamara Kasper: Speech Production and Applied Behavior Analysis: Using a Conceptual Analysis to Teach Phonetic Hand Cues to Shape Speech Production (Tuesday AM-intermediate)
- 75 & 88-Dave Palmer: The Role of Automatic Reinforcement in Shaping Speech (Thursday AM & PM-advanced)
- 77 & 90-Barbara Esch: Vocal Training Basics: Tips for Target Selection and Application (Thursday AM & PM-intermediate)
- 97- Amy Foor and Heather Forbes: Vocal Training Workshop (Thursday PM-all participants)

# Don't Forget!!

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- Panel Discussion: Perspectives on the Importance of a Behavior Analysis in Educational programs for Students with Autism Spectrum Disorders – Tuesday 4:30
- Poster Session - Wed 3:30
- Session : Closing Keynote: Behavior Analysis and Adults with Autism: A Focus of Bigger Skills and Better Outcomes - Thursday after PM sessions

Remember: PATTAN staff are here to help! If you have any questions or concerns, please ask!

Thank you for attending this session.

Have a productive and enjoyable conference experience!

*“If you don’t have the time to do it right, when will you have the time to do it over?”*

*John Wooden*

# Contact Information

[www.pattan.net](http://www.pattan.net)

Amiris Dipuglia

[adipuglia@pattan.net](mailto:adipuglia@pattan.net)

717 901-2214



**Commonwealth of Pennsylvania**  
Tom Wolfe Governor