Social Skills
Research Validated Interventions

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National Autism Conference
Rachel Kittenbrink, Ph.D., B.C.B.A

Pennsylvania Training and Technical Assistance Network

Why Social Skills?

- Autism Spectrum Disorder as in DMS-V (American Psychological Association, 2013)
- Persistent deficits in social communication and social interaction as evidenced by...
  - Deficits in social/emotional reciprocity (eye contact, back & forth conversation, emotions, failure to initiate or respond to social situations)
  - Deficits in developing, maintaining, and understanding relationships

Problems with Teaching Social Skills

- Frequent assumption that children have pre-requisite skills to participate in instruction that are missing.
- Frequently social skills programs do not take motivation or stimulus control into consideration.
- Over use of script training without attention to the relevant controlling variables of social interactions may produce immediate results, but issues with generalization are highly likely.

Issues Teaching Social Skills

- Generalization is often not achieved.
- Often treatment packages/programs have many variables and simplification of procedures (component analysis) can show controlling variables.

Language and Social Interaction

- Language is social interaction. Communication is social behavior.
- When teaching learners with limited language skills expanding the verbal repertoire will be a priority.
- Learners need to develop the basic communication in order to be able to develop more advanced social skills.

ASSESSMENT

Assessment and Skill Sequences

- Early Start Denver Model Curriculum Checklist for Young Children with Autism (Rogers & Dawson, 2007)
- Social Skills Solutions: A Hands on Manual for Teaching Social Skills to Children with Autism (McKinnon & Krempa, 2002)
- Skillstreaming (McGinnis, 2011)
- Verbal Behavior Milestones Assessment and Placement Program (Sundberg, 2008)
- Within program curriculum-based assessments

ESDM **EARLY START DENVER MODEL CURRICULUM CHECKLIST FOR YOUNG CHILDREN WITH AUTISM**

Sally J. Rogers and Geraldine Dawson

Name:

Date:

Assessor:

Parent(s) interviewed:

Others interviewed:

Early Start Denver Model Curriculum Assessment

- Criterion-Referenced Assessment
- Four levels with basic developmental categories
  – Level 1(98 skills assessed): receptive language, expressive communication, SOCIAL SKILLS, imitation, cognition, play, fine motor, gross motor, behavior, personal independence (eating/dressing/grooming/ chores)

Early Start Denver Model Curriculum Assessment

- Level 2 (122 skills assessed): adds joint attention as category for assessment, splits social behaviors into those observed with adults & peers, and splits play into representational and independent.
- Level 3 (101 skills assessed) & 4 (125 skills assessed) covers the same general assessment areas, but has more advanced skills based on developmental sequences.
- Scored as pass (consistently observed), pass/fail (inconsistently), fail (not observed)
- Allows for parent report, teacher report, or direct observation, & provides an opportunity to record prompt levels if needed.

Sample Social Skills Covered

- Level 1

	Social Skills				
1	Accepts brief sensory social activities and touch.				
2	Uses motor prompt to initiate or continue a sensory social routine.				
3	Attends briefly to another person with eye contact.				
4	Maintains engagement in sensory social routines for 2 minutes.				
5	Responds to preferred objects/activities via gaze, reach, smiles, and movements.				
6	Watches and engages with imitative adult during parallel toy play activities.				

Level 2 Sample Skills

	Joint Attention Behaviors				
1	Responds to "Look" and offered object with gaze shift, body turn, and looks at offered object.				
2	Responds to "Look" and point by orienting to the indicated distal object/person.				
3	Gives or takes object from other person coordinated with eye contact.				
4	Responds to "Show me" by extending object to adult.				
5	Spontaneously "shows" objects.				
6	Spontaneously follows point or gaze (no verbal cue) to look at target.				
7	Spontaneously points to interesting objects.				
	Social Skills: Adults or Peers				
1	Initiates and maintains eye contact for communication.				
2	Verbally requests or physically initiates familiar social games.				
3	Returns affection behaviors: hugs, kisses to familiar others.				
4	Uses gesture or words to attain adult's attention.				
	Social Skills with Peers				
11	Gives object to peer when peer requests.				
12	Joins in with familiar songs/finger plays in a group setting.				
13	Continues with activity when peer joins in parallel play.				
14	Responds appropriately to peer's greetings.				
15	Takes turns with peer with simple action toys when peer requests; gives and takes back.				
16	Sits in group with peers and attends to adult's familiar instructions.				
17	Takes object from peer when peer offers.				

Level 3 Sample Skills

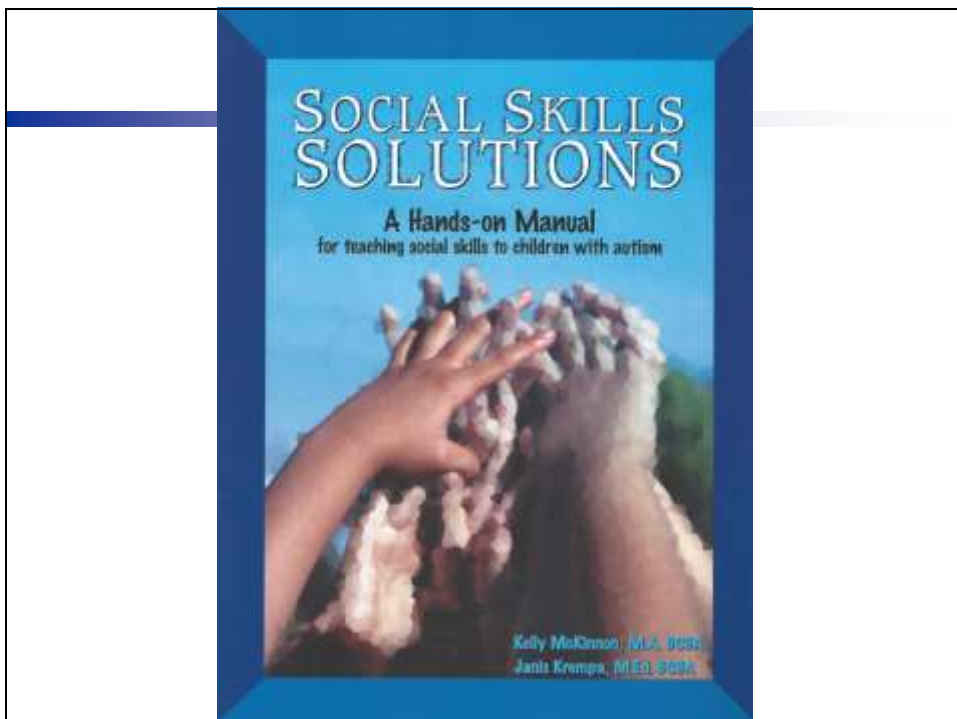|	Social Skills: Adults and Peers				
1	Plays simple gross motor games (e.g., ball, "Hide and Seek," "Ring-around-the-Rosy").				
2	Shares and shows objects when partner requests.				
3	Imitates and carries out novel songs/finger plays in group situation.				
4	Responds appropriately to simple requests/instructions from peers.				
5	Initiates interactions and imitations of peers.				
6	Plays in familiar dramatic play routine with peer in parallel play.				
7	Takes turns with simple board games.				
8	Uses politeness terms: "Please," "Thank you," "Excuse me."				

Level 4 Sample Skills

	Social Skills				
1	Invites peers to play.				
2	Uses polite forms such as "Excuse me," "Sorry."				
3	Seeks out others for comfort in a group situation.				
4	Expresses own feelings appropriately.				
5	Takes turns in informal play independently.				
6	Describes an event or experience to peer.				

Social Skills Assessment: ESDM

- Provides detailed social skill sequence for some of the earliest learners.
- Provides clear break down of skills assessed.
- Provides general sequence with levels of assessment.
- Provides opportunity for family as well as professional input.
- Has corresponding curriculum to guide teaching.

SOCIAL SKILLS SOLUTIONS

A Hands-on Manual
for teaching social skills to children with autism

Kelly McKinnon, M.A. BCBA
Janis Krempa, M.Ed. BCBA

Social Skills Solutions


Social Skills Solutions

- Categories assessed: joint attention, greetings, social play, self-awareness, conversation, perspective taking, critical thinking, advanced language, friendships, & community skills.

- Provides broad strategies for how to potentially teach skills.
  - Instructors would need to have strong general training in behavioral principles to apply procedures that are likely to result in success.

Social Skills Solutions

- Provides an opportunity to score as present or absent skills in 1:1, in group, or in the natural environment.

Breaking down of Social Skills Solutions

- User/family friendly, jargon-free
- Skill sequence covers a broad range of skills including those that need to be developed by the earliest learners.
- Provides general sequence with levels of assessment.
- Caution: some skills significantly differ within range of a particular level.
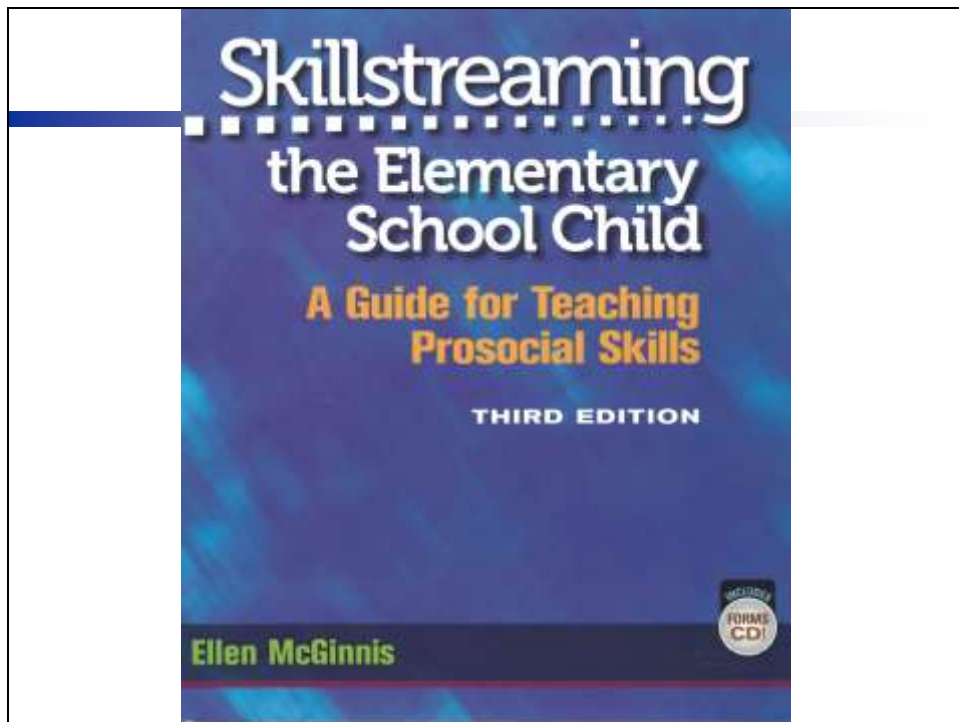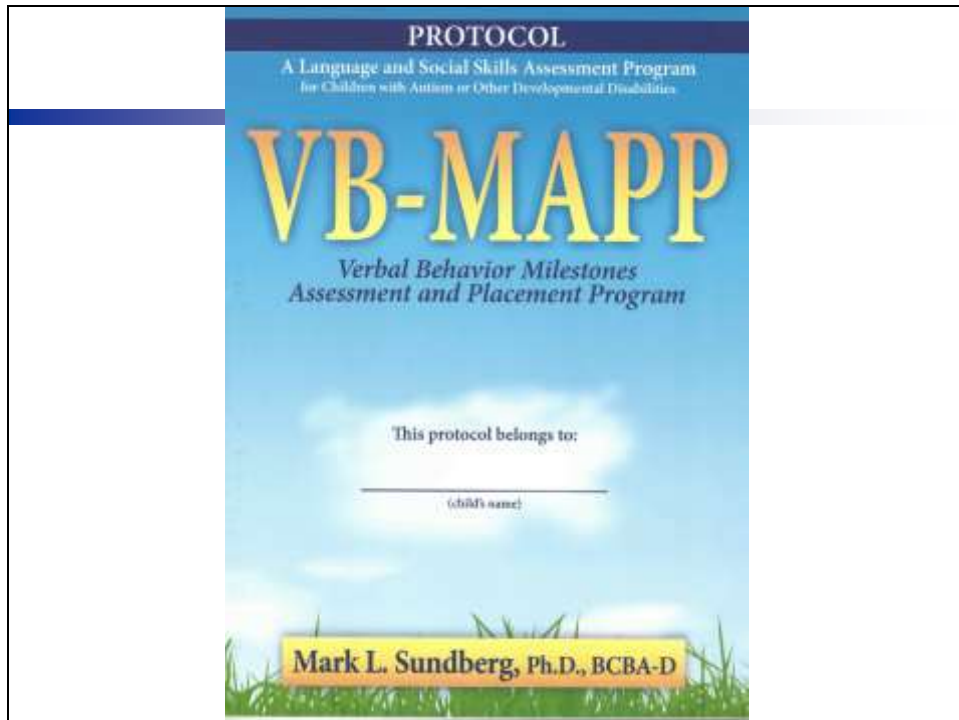
Skillstreaming

- Assessment and behavioral skills training program.
- Provides teacher, student (self), and parent assessments.
- Assessments include 60 questions each and raters score based on likert scale.
    - 1= almost never good at using this skill, 2 = seldom " ", 3 = sometime " ", 4= often " ", always " "
  - Items focus on intermediate and more advanced social behaviors.

Skillstreaming

- Examples of skills covered include:
  - Relaxing, dealing with group pressure, making decisions, asking for help, saying thank you, etc.
- Assessments and programs available for early childhood, elementary, and secondary learners.
- Learners in this program benefit significantly from having rule-governed behavior.
  - Assessment not well suited for students with significant language impairments/early learners.

Verbal Behavior Milestones Assessment & Placement Program (VB-MAPP)

- Behaviorally-based criterion referenced assessment that assesses developmental milestones acquired by typical learners from birth to 48 mths (3 levels).
  - 0-18 mths:
    - Social behaviors assessed include: eye contact to adults & peers, observing approach behaviors, etc.
  - 18-30 mths:
    - Social behaviors assessed include: peer manding, responding to mands from peers, sustained social play w/ peers.
  - 30-48 mths:
    - Social behaviors assessed include: intraverbal responses to peers, mands for information, intraverbal responses w/ peer on-topic for multiple exchanges.

VB-MAPP

- Provides general milestones and task analysis for more specific skills.
- Some instructors may consider breaking down skills into smaller components if need is indicated.
  - See within program based assessments.

Sample Social Skills Sequence- Draft

*** Skills tracking sheet for each program skills would need to be constructed in specific detail with clear targets.

Phase 1- Social Interaction w/ Adults		
Targeted Skill/ Program Areas	Date Program Introduced	Date Program Mastered
1. Readily approaches adults/ adults as conditioned reinforcers (3-5 approach behaviors during 5 minute observation).		
2. Condition/ strengthen a variety of reinforcers that have generally strong motivation and are of relatively similar strength to other items in grouping (8-10 items).		
3. Mands to adults in contrived sessions for variety of items (10-20 total mastered/maintained) and sustains motivation in mand session for 15 minutes.		
4. Mands to adult in natural environment with minimum of 10-20 mands (Continue basic mand programming with adults)		
5. Generalizes skills 1-4 in a variety of settings (in & out of classroom) & with a variety of instructors.		

Phase 2- Conditioning Peers as Reinforcers		
Targeted Skill/ Program Areas	Date Program Introduced	Date Program Mastered
6. Accepts reinforcers from peer with thinned schedule of differential reinforcement for acceptance of reinforcer absent of PB.		
7. Accepts reinforcer delivered by peer without PB (no differential reinforcement).		
8. Prompted delivery of peer reinforcement with differential reinforcement on thinned schedule.		
9. Unprompted delivery of peer reinforcement on thinned schedule of differential reinforcement.		
10. Prompted orienting towards peer delivery.		
11. Unprompted orienting towards peer delivery.		

Phase 3- Peer Manding Skills (reinforcers intended different peers)		
Targeted Skill/ Program Areas	Date Program Introduced	Date Program Mastered
12. Prompted mands for item from peer with thinned schedule of differential reinforcement.		
13. Unprompted mands for items with thinned schedule of differential reinforcement		
14. Unprompted mand (items present), no differential reinforcement		
15. Fade distance of instructor/adult (5-20 feet)		

Phase 4- Peer Mands for Attention		
Pre-requisite: Mands for attention with adults.		
Targeted Skill/ Program Areas	Date Program Introduced	Date Program Mastered
16. Responds to name w/ orienting response to adult w/ thinned schedule of differential reinforcement (no Sr+ distract).		
17. Responds to name w/ orienting response to peer w/ thinned schedule of differential reinforcement (no Sr+ distract).		
18. Responds to name w/ orienting response to peer absent of differential reinforcement (no Sr+ distract).		
19. Masters skills 16-18 with increasingly high levels of MO items accessible/ distracters... until mastered with high level MO item in control of student.		
20. Prompted mand for peer with name when MO present w/ thinned schedule of differential reinforcement.		
21. Unprompted mand for peer with name when MO present w/ thinned schedule of differential reinforcement.		
22. Unprompted mand for peer with name when MO present		
23. Prompted orients to peer and fulfils peer mand w/ high-level Sr+ accessible w/ thinned schedule of differential reinforcement.		

Phase 5- Mand Actions		
Pre-requisite: Mands for actions w/ adults.		
Targeted Skill/ Program Areas	Date Program Introduced	Date Program Mastered
27. Prompted interacts with items using specific LR actions w/ thinned schedule of differential reinforcement.		
28. Unprompted interacts with items using specific LR actions w/ thinned schedule of differential reinforcement.		
29. Unprompted interacts with items using specific LR actions.		
30. Unprompted delivery of action mand requested by peer.		
31. Prompted mand for actions to peer w/ thinned schedule of differential reinforcement.		
32. Unprompted mand for actions to peer w/ thinned schedule of differential reinforcement.		
33. Mand for actions to peer (no differential reinforcement)		
34. Prompted contrives MO with items w/ thinned schedule of differential reinforcement.		
35. Unprompted contrives MO with items w/ thinned schedule of differential reinforcement.		
36. Contrives MO interacting with items in engaging/ novel/diverse ways (no differential reinforcement).		
37. Generalization of mand action skills across items, peers, environments.		

Other intermediate social skills to consider

Phase 6- Additional Play Skills		
Targeted Skill/ Program Areas	Date Program Introduced	Date Program Mastered
38. Introduce shared MO items (competing high MO for both students).		
39. Increased duration of play		
40. Distance approach		
41. Selects gathers reinforcers for play		
42. Multiple component mands		
43. Mands for information		
44. Spontaneous mands		
45. Learns to wait for delivery of reinforcer.		
46. Learns appropriate repeated request		
47. Accepts no when denied access by peers		
48. Initiates multiple peer play		
49. Enters multiple peer play		
50. Teaching social commenting (tacting actions...)		

Assessment Tools

- A variety of assessment tools on the market.
- Selecting the most valuable combination of assessment tools requires consideration for the learner, the skills he/she has, and the skills that he/she is likely to develop next based on developmental/ instructional progressions.

TEACHING SOCIAL SKILLS

Before you begin teaching…

- Does the student have the pre-requisite skills for this type of instruction?
- Does the student have the language skills to participate in this type of instruction?
- Is this the most simplistic, research supported, and systematic way of teaching these skills?
- Are these skills being introduced under the ideal conditions to promote proper stimulus control & skill generalization?

Instructional Level

- Research validated instructional skills must be based on the instructional level of the learner.
  - Conditioning attention as reinforcer
  - Joint Attention
  - Manding
  - Peer manding
  - Intermediated and advanced peer manding
  - Behavioral skills training for rule-governed behavior
- Additional interventions supported include peer-support strategies.

Early Learners:

ESTABLISHING BASIC SOCIAL BEHAVIORS

Early Social Skills

- Conditioning attention as a reinforcer/ developing approach behaviors
- Joint Attention
- Manding

Conditioning Attention as a Reinforcer/ Approach Behaviors

- Teaching more formal social skills prior to developing attention as a conditioned reinforcer is not likely to result in generalized appropriate social skill development.
- Teaching social skills through pairing known reinforcers with neutral stimuli (people) can result in attention as conditioned a reinforcer (Taylor Santa, Sidener, Carr, & Reed, 2014; Dozier, Iwata, Thomason-Sassi, Worsdell, Wilson, 2012).

How to develop attention as Sr+

- 1st must have known reinforcing items/activities/edibles for learner
  - Conduct formal and informal preference assessments and take changes in MO into consideration.
  - Ongoing re-evaluation of these items is needed.
- Two types of pairing procedures
  - Stimulus-stimulus pairing
  - Response-stimulus pairing

Joint Attention

- One of the earliest forms of social communication
  - Coordinated attention between social partner and object/ event in the environment (Taylor & Hock, 2008).
  - Two Elements (Taylor & Hock, 2008)
    - Responding to another's bid for joint attention
    - Initiations for joint attention from others

Video of Joint Attention

- Non verbal video
  https://www.youtube.com/watch?v=ZQcIGmJdR2A

Manding to Adults

- Early communication from most young children starts with requests.
- Mands are social behaviors that directly result in improving conditions.
- Mands are key pre-requisite skills for other more advanced social skills.
- People responding to the learner's mands increases their value.
  - Necessary for developing more advanced social skills (conditioning attention/people as reinforcers).
- Students need to be proficient manders with adults before working on manding with other kids.

Adult Manding- Key Reminders

- Identify reinforcers from various categories keeping in mind that items included in sessions may change due to changes in motivation.
- Instructors must control access to reinforcers during manding sessions.
- Teach mands when motivation is strong.
- Teach mands across multiple exemplars, environments, and instructors.
- Target multiple mands at one time.
- Practice mands in discrimination.
- Initial teaching often requires many presentations.

Video of Manding Session

- Mike Miklos
  http://www.pattan.net/Videos/Browse/Single/?code_name=mand_training_example_mand_training3

Mands & Other Language Skills

- After a basic mand repertoire is established with adults, attention will need to be given to establish intermediate and advanced manding with adults.
  - Ex: mands for actions, mands for attention, mands for information, multiple component mands, etc.
- To prepare students for intermediate and advanced social skills you will need to build other verbal repertoires (tacting actions, tacting adjectives, tacting prepositions, multiple component tacts, etc.)

The Intermediate Learner

TEACHING SOCIAL BEHAVIORS

The Journey

- Baseline
- Generalization Dyad 1

Peer Manding & Reinforcer Delivery

- Receiving preferred items from others increases the likelihood that learners will approach and interact with others.
- A pre-requisite for other social skills is peers serving as conditioned reinforcers.
- It is hypothesized through teaching peer manding and peer reinforcer delivery that peers will become conditioned reinforcers.

Literature on Peer Manding

- Taylor, Hoch, Potter, Rodriguez, Spinnato, and Kalaigan (2005)
  - EO Manipulation
- Pellecchia and Hineline (2007)
  - Instructors, parents, siblings, peers
- Paden, Kodak, Fisher, Gawley- Bullington, and Bouxsein (2012)
  - PECs blocked adult mands and prompt peer
- Kodak, Paden, and Dickes (2012)
  - PECs + extension blocked adult mands and prompt peer + distance approach with novel peer
- Lorah, Gilroy, and Hineline (2014)
  - Listeners and speakers, PECs users mands for puzzle through interrupted chain, generalization to novel peer

Research Questions

- Will the introduction of a peer-to-peer manding treatment package consisting of the use of differential reinforcement and time delay procedures effect the rate of unprompted peer mands in individuals with autism/ IDD?

- Will the use of time delay procedures and differential reinforcement effect the rate of the deliveries of preferred items to peers in individuals with autism/ IDD?

Primary Participants

Student	Age	Gender	Primary Class-	VB-MAPP Score at Study Onset
Bella	9	Female	Autism	124.5
Calvin	9	Male	Autism	117.5
Mark	7	Male	Autism	86
Caleb	6	Male	Autism	88.5
Isaiah	7	Male	Autism	129.5
Carter	10	Male	IDD	96.5

* All had minimum of 20 mands for items/actions, all had skills between 18-30mths on VB-MAPP (Sundberg, 2007), all vocal responders, all could receptively identify 50 different pictures of items with 3 different exemplars when presented in an array of 8 (VB-MAPP, LR-7).

Other Participants

Student	Grade Level	Gender	Class-
Zoe	3rd	Female	None
Sam	5th	Male	None
Adam	4th	Male	None

- **Each peer support was partnered in play sessions with two primary participants for 5-6 play sessions.**

Instructor Participants	Role	Years Receiving ABA Consultation
Denise	Para Educator	.5 years
Karly	Teacher	4.5 years
Olivia	Teacher	4.5 years
Kelly	Para Educator	4.5 years
Zia	Para Educator	.5 years

Experimental Design

- Multiple probe across dyads design (Horner & Baer, 1978; Kennedy, 2005)
- Phases: Baseline, intervention, follow up, generalization phases, and maintenance probes.

6.5 hours of training prior to baseline (1.5 video)

Peer to Peer Manding Teacher Competency Checklist

Competencies 1-10: Participants will demonstrate skills with accuracy; tally marks will be marked in each skill box to indicate the number of demonstration attempts needed to achieve mastery.

Competency 11 is based on meeting IOA scoring criteria.

Skill	Demonstrated Mastery
1. Multiple Stimulus Preference Assessment without Replacement	YES NO
2. MO check	YES NO
3. MAND: no MO	YES NO
4. MAND: MO + no vocal response	YES NO
5. MAND: MO + unprompted mand	YES NO
6. MAND: MO + error/reach/ PB	YES NO
7. Sr+ Delivery: No delivery following 3 s TD	YES NO
8. Sr+ Delivery: Delivered within 3 s	YES NO
9. Sr+ Delivery: Incorrect delivery, Prompt partner mand & delivery of Sr+	YES NO
10. Teaching Session Competency Conduct Session- must include following components: • Prompt mand • Prompt delivery of reinforcer • Deliver differential reinforcement for unprompted mand • Deliver differential reinforcement for unprompted Sr+ delivery • Error Correct for mand and reinforcer delivery as indicated.	YES
11. Scoring Competency • Minimum of 95% agreement on each measure independently	YES
Skills Demonstrated to Mastery	___ / 11

All instructors had to get 95% or greater IOA scoring sample 4 min video sessions

Measures

- DV: frequency of unprompted mands
- DV: frequency of unprompted Sr+ deliveries

- Other measures collected (via video):
  - Frequency of PB
  - Prompted mands and prompted Sr+ deliveries

Independent Variable

- Intervention (12 min play sessions, 4 min materials reset)
 - Time Delay (TD) + differential reinforcement (DR) for unprompted mands and unprompted Sr+ deliveries
  - Error Correction

Incorrect Mand	Incorrect Delivery of Sr+	Problem Behavior
5 sec pause →echoic prompt	Not placing within reach Not delivering Incorrect item delivered →prompt peer mand 0 sec grad guidance physical prompt	Prompt mand

Conditions

Condition	Modifications
Baseline	IV P: Adding praise w/ tangible for unprompted mands (Isaiah)
	IV 1 : Delivery of DR for prompted deliveries (Caleb)
	IV2: Block on free deliveries (Mark & Caleb)
Intervention	IV3: IV1 + IV2 (Mark & Caleb)
	DR for unprompted responses + 3 sec time delay on mand and SR+ delivery behaviors
Follow up	No prompts and differential reinforcement
Generalization	Same as follow up with general education peer partner
Maintenance Probes	Original partners 1 x/ week for at least 2 weeks
Reintroduce Intervention	Only as indicated

RESULTS

Unprompted Peer Mands/ Minute

Unprompted Sr+ Deliveries/Min.
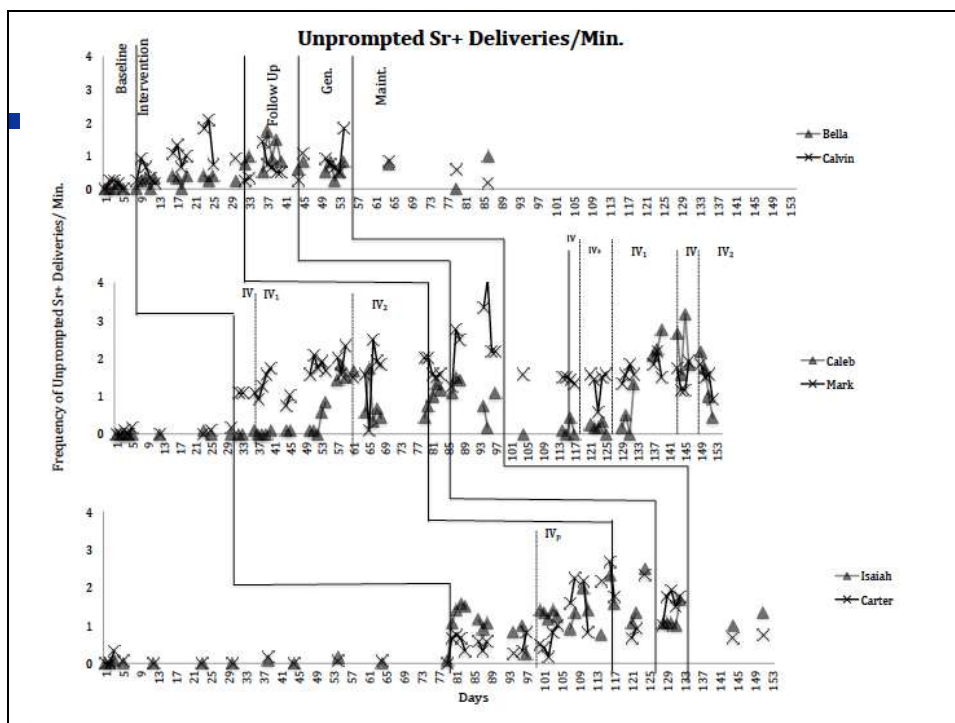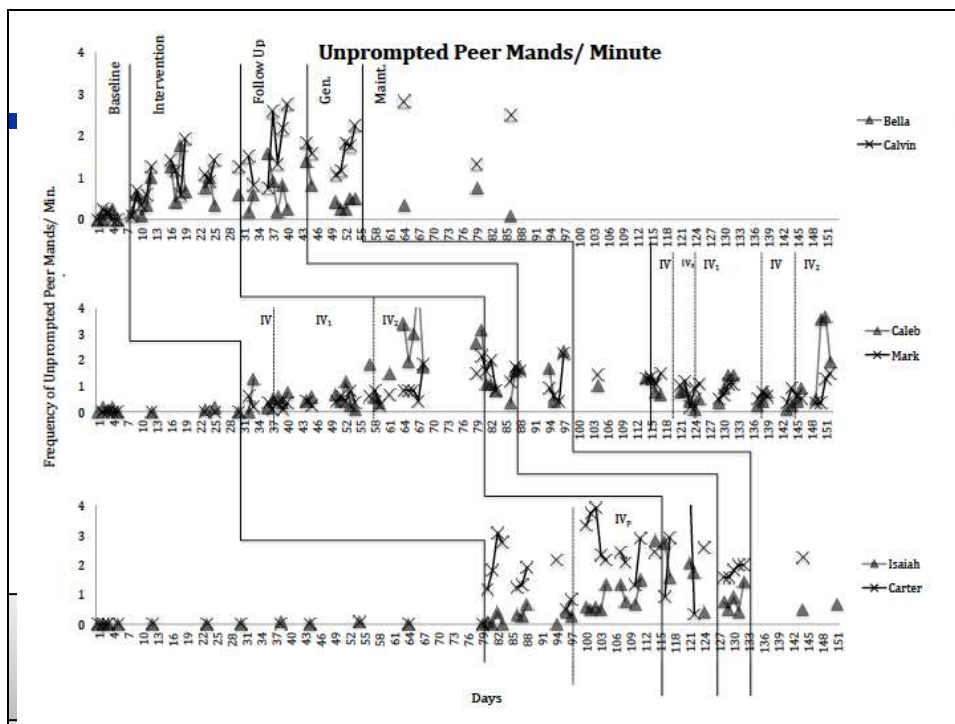
Results

Functional Relation	Bella	Calvin	Mark	Caleb	Isaiah	Carter
Basic IV on Unprompted Mands	+	+	+	+	-	+
Basic IV on SR+ deliveries	+	+	+	-	+	+
Follow Up	+	+	+	+	+	+
Maintenance	+	+	+	–	+	+

Isaiah & Caleb both demonstrated increased responding with minor modifications to the IV tx procedures

Bella demonstrated lower rates of unprompted mands & Sr+ deliveries but rates were above baseline levels and PB levels indicated a change in program may be needed.
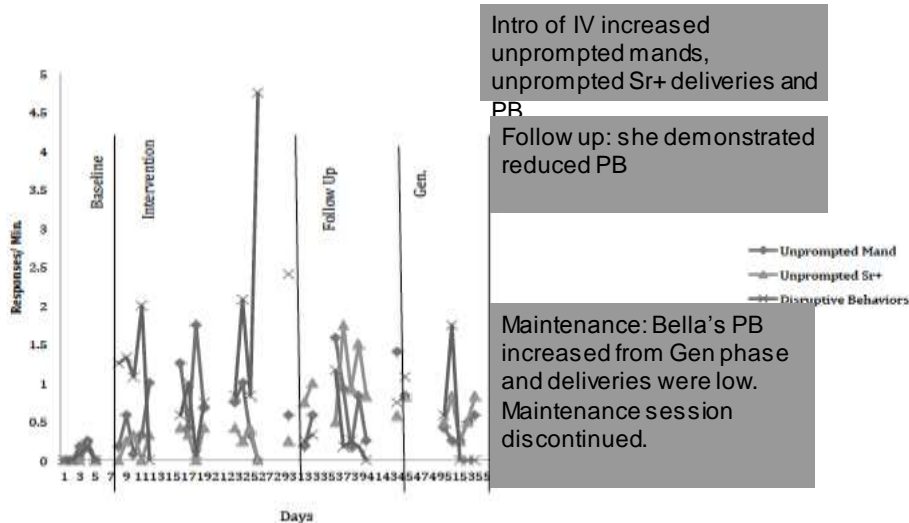
Bella's Sr+ response rates increased in the follow up phase.

Reintroduction of IV for Caleb

- All participants demonstrated some maintenance of skills in the maintenance phase with the exception of Caleb who only delivered 1 reinforcer to his peer during maintenance sessions.

Problem Behavior- Bella

Intro of IV increased unprompted mands, unprompted Sr+ deliveries and PB

Follow up: she demonstrated reduced PB

Maintenance: Bella's PB increased from Gen phase and deliveries were low. Maintenance session discontinued.

Interobserver Agreement (IOA)

- Collected on 97.9% of sessions
  - Calculated using total Agreement Formula (smaller total number divided larger total number multiplied 100).
  - If agreement was below 90%, training occurred.
- Total interobserver agreement across participants and measures was 99.5%.
- Early sessions for Bella had lowest agreement levels.

Participants	% Agreement Unprompted Mands	% Agreement Unprompted Sr+ Deliveries
Bella	78	92
Calvin	94	95
Mark	98	97
Caleb	98	92
Isaiah	99	96
Carter	93	99

**IOA conducted through video recordings by the PI.

Procedural Integrity & Social Validity

- Procedural Integrity was conducted on 55% of sessions throughout all phases of the investigation and across all dyads.
- The average procedural integrity for all sessions was 99.9%.
- Retraining occurred if procedural integrity dropped below 90%
    - This only occurred on one instance early in the investigation
- Limitation: Did not develop procedural fidelity checklists for modifications to the IV
- Social Validity→ 5/10 pt likert scales for adult & peer participants

Discussion

- Functional Relation Mands & S^{r+} Deliveries
    - The almost immediate increases in unprompted mand & Sr+ delivery levels when introduced to the intervention indicate a functional relation between the intervention and peer manding & Sr+ delivery behaviors.

- Maintenance & Generalization
    - The maintenance of these skills across follow up, generalization, and maintenance probes indicate that the intervention was successful in developing a sustained skill likely to maintain for the participants across time and with other peers.

Differences from previous research

- All vocal participants
- Controls for MO
- Use of DR
- General Education Peer Partners
- Ecological validity
- Discriminative listener behavior

Limitations

- Modifications to Procedures
  - IV-1, IV-2, IV-3, IV-P
- Participant Selection
  - Further testing needed, large range of participants
  - Rate of unprompted mands observed in instructional day, participant reinforcer diversity, overall VB –MAPP scores (Sundberg, 2007), giving up reinforcers and responses to graduated guidance physical prompts
- **Articulation Assesment**
- **Instructor Scoring**
- **Motivation- Controls for responding to maintain MO, combat competing MO**
- **Co-variation of Measures/Participants**
- **No generalization probe in baseline condition**
- **Immediate Fade vs. Withdrawal of Intervention**
- **Design Limitation: Intervention on two measures at the same time**

Implications for Practitioners

- Promising outcomes for all participants
- Provides practical procedures for replication (staff training required)
- Provides potential modifications for limited responders
- Maintenance of skills and reduced levels of responding may indicate that sessions should be continued for a longer period of time, or elements of the intervention should have been systematically faded (Rusch & Kazdin, 1981).
- Could modify the procedures to focus on teaching one of the two skills first
- Potential to assess many other vital communication and social skills in the play sessions.
    - Mands for attention, mands for information, generalized motor imitation during play activities, social commenting, peer eye orienting responses, and eye contact.

Intermediate to Advanced Learners

TEACHING SOCIAL BEHAVIORS

Intermediate Peer Mands

- After intermediate mands are mastered with adults peer manding sessions should focus on cultivating motivation for intermediate as well as basic mands with peers.
- Instructors may target these skills through interrupted chains or action-based activities.
- When teaching intermediate peer mands, deliver prompts and differential reinforcement only for targeted intermediate peer mand.

Teaching

ADVANCED SOCIAL SKILLS

Rule-Governed Behavior

- Rule-governed behavior: "behavior is controlled by verbal antecedents rather than more directly by its particular consequences" (Catania, Shimoff, & Matthews, 1989, p.119).

- When instructions accurately represent the contingencies in place it can increase the rate of behavior acquisition (Hackenberg & Joker, 1994).

Rule Governed vs. Schedule Control

- If learners contact higher rates of reinforcement through behaviors that are not socially acceptable more efficiently than they may contact reinforcement for socially appropriate rule-following behavior, reviewing rules for behavior is not likely to result in improvement in socially appropriate behaviors.

Language Skills Needed

- For learners to benefit from social skills instruction that is guided by rules for responding in particular situations they must...
  - Have proficient language skills to respond and participate in rule-governed instruction.
    - If students do not have proficient language skills based on behavior-based language assessment, participation in a formal rule-based social skills curriculum is not likely to be beneficial.

Teaching Rule-Governed Behavior

- If students have language skills, but rule-governed behavior is not established as a generalized repertoire, additional procedures may need to be put in place to establish generalized rule-governed behavior.
  - Strategies: target basic rules, providing explicit prompting and differential reinforcement for rule-following and systemically fade differential reinforcement & prompts, allowing the direct natural contingencies to support maintenance of the behavior.
  - This may be needed before teaching more complex social multi-step rule sequences.

Chaining as an Alternative

- If students do not have rule-governed behavior or limited social behavior, but a learner needs to develop a socially-appropriate sequence for a given situation skills can be taught through chaining procedures.

Behavioral Skills Training

- Research validated treatment package used to effectively teach a variety of skills to a variety of populations.
  - Ex: Gun safety, abduction prevention techniques, safety skills, training school professionals to work with students, training parents to improve feeding techniques with children, behavior profesionals to conduct FAs, etc.
  - Core elements: instruction, modeling, rehearsal, feedback

(Buck, 2014)

Skillstreaming

- Assessment, instructional guide, curriculum, and resources grounded in behavioral skills training to teach a variety of basic social skills.
- Materials: behavior skill cards, student manual, instructor manual, video models, lesson plans & activities.
- Reinforcement: initially instructors will likely need to apply explicit reinforcement which will later need to be faded systematically.

Skillstreaming

- Each skill is broken into small steps. Steps are are formally taught through behavioral skills training.
- Homework is assigned after
- Recommendation: Structure Natural Environment Teaching (NET) opportunities to practice skills

Skillstreaming- Behavioral Skills Training

- Step 1: Define skill
- Step 2: Model skill
- Step 3: Establish student need for skill
- Step 4: Select the 1st role player
- Step 5: Set up the role play
- Step 6: Conduct role play
- Step 7: Provide performance feedback
- Step 8: Select the next role-player
- Step 9: Assign skill homework

PEER SUPPORT PROGRAMS

Peer Support Programs

- Peer support programs are structured systematic opportunities for peers to participate in social interactions and educational experiences with students that may have different educational needs.

- A number of studies support the effectiveness of peer support programs in the development of social and other academic skills.

Teaching Activities of Daily Living

Research Support for Peer Social Interventions
(Hughes & Carter, 2008)

- Peers have assisted with teaching how to
  - Identify peers by name (Hunt, Alwell, & Goetz, 1991),
  - Express anger appropriately (Presley & Hughes, 2000),
  - Increase social interactions with others in the school (Hughes, Killian, & Fischer, 1996),
  - Respond to common social greetings presented by peers (Ninetimp & Cole, 1992),
  - Demonstrate improved social behavior in lunch and recess (Morrison, Kamps, Garcia, & Parker, 2001),
  - Interact appropriately between classes and in structured social activities (Haring & Breen, 1992),
  - Maintain conversations with their schoolmates (Hughes et al., 2000).

Community Based Instruction

Program Development

- Develop course description or system to organize potential peer participants.
- Determine what opportunities within the school day will be available and when peer supports will be able to participate.
- Determine how these opportunities will be presented to potential peer partners/buddies.
- If developing course sequence develop assignments, grading structure, observation data sheets, etc.
- Develop assessment for matching students with interests, experience levels, and comfort with PB.

Before you start!

- Organize training for school staff involved.
  - Para educator & support teacher training
    - How to support peer buddies in developing age-appropriate social relationships
    - How to score observations of peer supports in different environments.
- Organize peer support/ buddy training
  - Key elements: safety, roles/responsibilities, responding to problem behavior of peers, disability awareness, logistics, course management, and team building.

Training Typical Peers

- Training Video

Contact Information   www.pattan.net

Rachel Kittenbrink
rkittenbrink@me.com

pennsylvania
DEPARTMENT OF EDUCATION
Bureau of Special Education
Pennsylvania Training and Technical Assistance Network

Commonwealth of Pennsylvania

Tom Wolf, Governor

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC:
- Buck, H. (2014). The efficacy of behavior skills training: A literature review. Southern Illinois University Carbondale, 1-40.
- Carbone, V. (2016). Select Topics in Behavior Analysis and Teaching Children with Autism, Presentation, PaTTAN, Harrisburg, April 2016.
- Catania, C. Shimoff, E. & Matthews, B. (1989). An Experimental Analysis of Rule-Governed Behavior. In Rule-Governed Behavior Cognition, Contingencies, and Instructional Control. Plenum Press, New York, p.119.
- Dozier, C. L, Iwata, B.A., Thomason-Sassi, J., Worsdell, A.S., & Wilson, D.M., (2012). A comparison of two pairing procedures to establish praise as a reinforcer, Journal of Applied Behavior Analysis, 45, (4), 721-735.

References

- Hackenberg, T. & Joker, V. (1994). Instructional control versus schedule control of humans' choices in situations of diminishing returns, *Experimental Analysis of Behavior*, 62 (3), 367-383.
- Horner, R., & Baer, D. (1978). Multiple-probe technique: A variation of the multiple baseline. *Journal of Applied Behavior Analysis, 11*, 189-196.
- Hughes, C. & Carter, E. (2008). Peer Buddy Programs for Successful Secondary School Inclusion. Brookes Publishing Co. Baltimore, MD. 1-199.
- Kennedy, C. H. (2005). *Single-case designs for educational research.* Boston, MA: Allyn and Bacon.
- Kodak, T., Paden, A., Dickes, N. (2012). Training and generalization of peer-directed mands with non-vocal children with autism. *The Analysis of Verbal Behavior, 28*, 119-124.
- Leaf, J.B., Kassardjian, A., Oppendheim-Leaf, M.L., Cihon, J.H., Taubman, M., Leaf, E., McEachin, J. (2016) Social Thinking: Science, Pseudoscience, or Antiscience? *Behavior Analysis in Practice, 9*: 152-157.

References

- Lorah, E. R., Gilroy, S. P., & Hineline, P.N. (2014). Acquisition of peer manding and listener responding in young children with autism, *Research in Autism Spectrum Disorders, 8*, 61-67.
- McGinnis, E. (2011). Skillstreaming the Elementary School Child: A Guide for Teaching Prosocial Skills. 3rd Ed. Champaign, IL: Research Press.
- McKinnon, K., & Krempa, J. (2002). Social Skills Solutions: A Hands-On Manual for Teaching Social Skills to Children with Autism. New York, NY: DRL Books, Inc.
- Melott, K.(2013). Social skills for higher functioning children. National Autism Conference, State College, PA. August.
- Paden, A., Kodak, T., Fisher, W., Gawley-Bullington, E., & Bouxsein, K., (2012). Teaching children with autism to engage in peer-directed mands using a picture exchange communication system, *Journal of Applied Behavior Analysis, 45*, 425-429.
- Pellecchia, M., & Hineline, P. N. (2007). Generalization of mands in children with autism from adults to peers. *The Behavior Analyst Today. 8,* 483-491.

References

- Rogers, S.J., & Dawson, G. (2009). Early Start Denver Model Curriculum Checklist for Young Children with Autism, The Guilford Press.
- Sundberg, M. L. (2007) The Verbal Behavior Milestones Assessment and Placement Program Protocol. *Advancements in Verbal Behavior Press.* Concord, CA, 1-72.
- Taylor, B. & Hock, H. (2008). Teaching Children with autism to respond and initiate bids for joint attention. *Journal of Applied Behavior Analysis, 41,* 3, 377-391.
- Taylor, B.A., Hoch, H., Potter, B., Rodriguez, A., Spinnato, D., & Kalaigian, M. (2005). Manipulating establishing operations to promote initiations towards peers in children with autism. *Research in Developmental Disabilities,* 26, 385-392.
- Taylor-Santa, C., Sidener, T., Carr, J. & Reeve, K., (2014). A discrimination training procedure to establish conditioned reinforcers in children with autism. *Behavioral Interventions, 29,*2, 157-176.

References

- Test, D.W., Richter, S., Knight, V., Spooner, F. (2011). A comprehensive review and meta-analysis of the social stories literature. *Focus on Autism and Other Developmental Disorders, 26,1, 49-62.*