Mand Training Across the Grades

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Pennsylvania Training and Technical Assistance Network

PaTTAN's Mission

The mission of the Pennsylvania Training and Technical Assistance Network (PaTTAN) is to support the efforts and initiatives of the Bureau of Special Education, and to build the capacity of local educational agencies to serve students who receive special education services.

PDE’s Commitment to Least Restrictive Environment (LRE)

Our goal for each child is to ensure Individualized Education Program (IEP) teams begin with the general education setting with the use of Supplementary Aids and Services before considering a more restrictive environment.

What is a mand? Common terms:

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

- Teaching students to make requests is a central focus of interventions guided by ABA

The Mand and Autism

- The mand requires:
  - Social approach and initiation
  - Interactions with other people as having value
  - Flexible and specific verbal responses (communication)
- The required skills directly compete with the core deficits of Autism Spectrum Disorders.

What is a Mand?

- In simple terms, it is a request.
- We ask for something we want

“Want it, say it, get it”

The Mand

- Antecedent: Want it (motivation)
- Behavior: Saying what you want
- Consequence: Getting what you want
- Examples:
  - Hungry, Say, “Banana,” Someone gives you a banana
  - Need door opened, Ask for key, Someone gives key
  - Lost, Ask for directions, Someone gives directions

Mands are important to teach

- Highly preferred items – basic needs and wants
- Actions
- Attention / social interactions
- Missing items needed to play or complete an activity
- Information
- To begin and continue social interactions
- Etc.

How you teach mands is important

- Basic Mand Training
- Play and Activity-Based Mand Training
- Natural Environment Mand Training
- Mand Frequency
- Peer-to-peer Mand Training
- Mand Training during leisure and community-based instruction
- Mand Training during vocational activities

Response Forms

- Mand Training should occur regardless of response form of student
- Training of mands should consider the student's natural environment

Elementary School Mand Training

Why is manding important at the elementary level?

- The mand repertoire is essential for early language learners. It increases the probability of obtaining access to specific items, activities, actions, information, etc. when access to those desired stimuli is delivered or controlled by another person.
- Young children with autism have limited abilities to request their wants and needs. This can lead to disruptive behaviors that have gotten them these wants/needs in the past.

(Albert, Carbone, Murray, Hagerty, Sweeney-Kerwin, 2012)

Why is manding important at the elementary level?

- Because the reinforcer for a mand corresponds precisely with the child's motivation, the mand is directly beneficial to the speaker and may foster the development of a communicative repertoire.
- Manding is where it all begins. In addition, manding helps establish the reciprocal speaker and listener roles that are essential for increasing verbal competence. The benefits of mand training can be life changing for children and families.
- Manding opens doors of communication and will start to make language functional for children. I talk, I get idea. Mands help the student control their environment and interactions. Makes social interactions more valuable.
- Motivation in manding and developing new reinforcers can reduce value of repetitive/stereotyped actions. Mand training leads to acquisition of other verbal operants. Should be easy and fun for all involved!!

(Albert, Carbone, Murray, Hagerty, Sweeney-Kerwin, 2012)

Elementary focus begins with NET

- Based on student MO and preferences, student driven.
- Hart and Risley (1968, 1974, 1975, 1980) used an "incidental teaching" procedure to train more appropriate mands, with disadvantaged children. This procedure was relatively unstructured in the sense that teaching interactions were child-initiated and occurred in the natural environment.
- Children first made rudimentary mands for presumed reinforcers (establishing operations were not manipulated) which were visible but out of reach. They were then imitatively prompted to improve or elaborate their manding topographies, and specific reinforcers were provided.
- As a result of this training, the children demonstrated stronger mand repertoires. It’s important to create an environment conducive for language training and rich with opportunities to mand and access reinforcement. If a child has access to all of the food and reinforcers they need, there is not a need to make requests. Environmental and instructional control need to be established.
- (Hall, Sundburg, 1987)

Importance of antecedent strategies

- Antecedent strategies consist of all the teaching procedures that are implemented before an individual emits a response.
- They are used to increase the likelihood that an individual will emit the target response so that the behavior can be reinforced.
- Antecedent strategies can be broken down into three types: assessing MOs, manipulating MOs, and prompting.

(Albert, Carbone, Murray, Hagerty, Sweeney-Kerwin, 2012)

Assessing MO

- Observe child in natural environment, look for things like how they engage with items, how long they engage with items, preference assessment.

- Example 1: https://youtu.be/b7_4Gz4Oo78

Manipulating MOs

- We need to predict and control verbal behavior.
- Instructors contrive or sustain MO in a variety of ways. Withhold reinforcers, provide access then remove/block items, insert into the game, engage/interact to create opportunity for mands for actions.

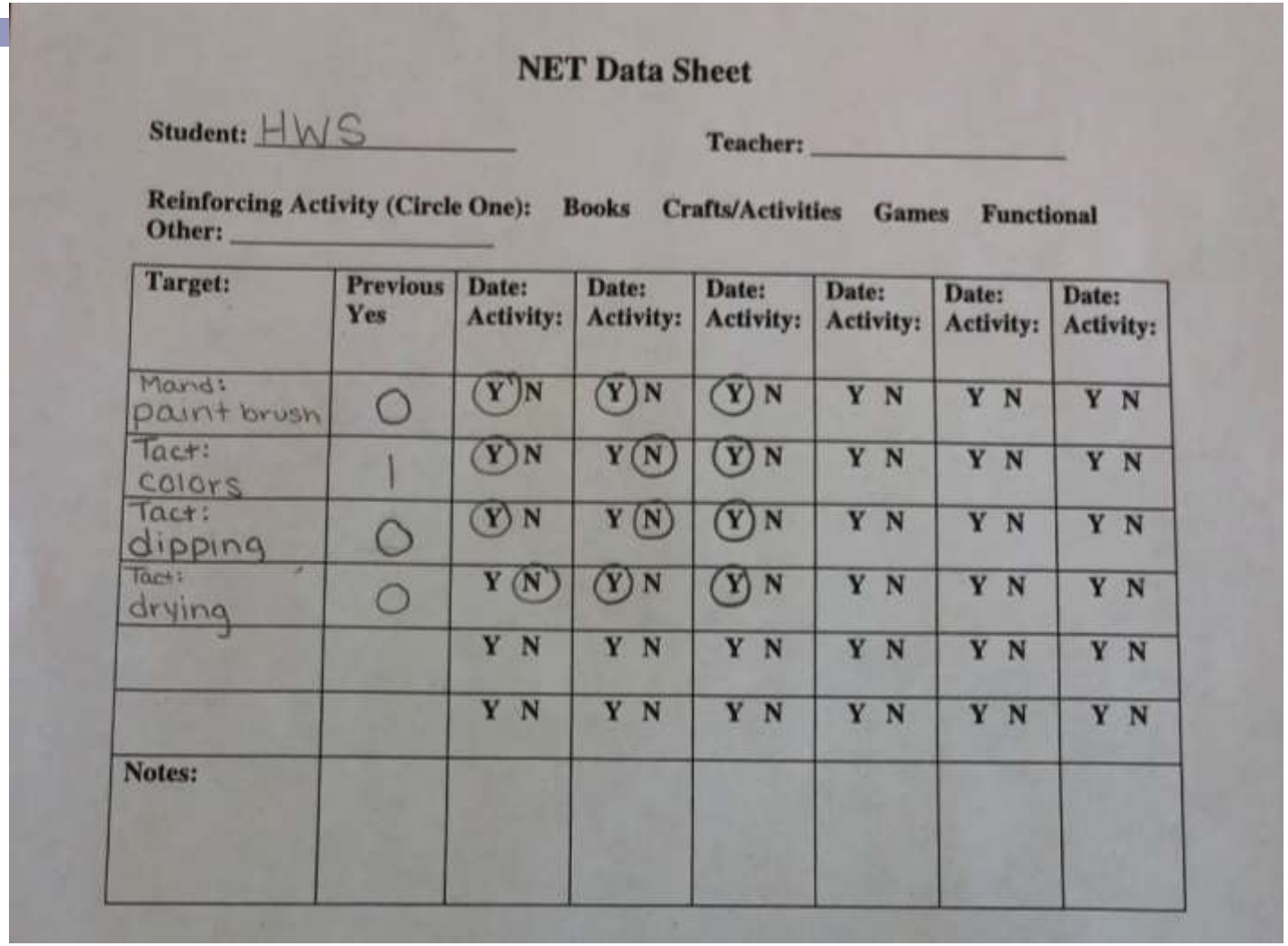
- Example 1: painting

Prompting:

- When teaching manding using a vocal response form, vocal prompts and prompt fading are used.
- This process leads to independence and generalization with manding.
- When teaching manding using sign language, PECS, full and partial physical prompts and prompt fading are used.

- https://youtu.be/Eg0vBvkrIz4

Data Collection



NET Data Sheet

Student: HWS **Teacher:** _____

Reinforcing Activity (Circle One): **Books** **Crafts/Activities** **Games** **Functional**
Other: _____

Target:	Previous Yes	Date: Activity:	Date: Activity:	Date: Activity:	Date: Activity:	Date: Activity:	Date: Activity:
Mand: paint brush	0	(Y) N	(Y) N	(Y) N	Y N	Y N	Y N
Tact: colors	1	(Y) N	Y (N)	(Y) N	Y N	Y N	Y N
Tact: dipping	0	(Y) N	Y (N)	(Y) N	Y N	Y N	Y N
Tact: drying	0	Y (N)	(Y) N	(Y) N	Y N	Y N	Y N
		Y N	Y N	Y N	Y N	Y N	Y N
		Y N	Y N	Y N	Y N	Y N	Y N
Notes:							

Assessing MO

- Observe child in natural environment, look for things like how they engage with items, how long they engage with items, preference assessment.

- Example 2: paper airplanes

Manipulating MOs

- Instructors contrive or sustain MO in a variety of ways. Withhold reinforcers, provide access then remove/block items, insert into the game, engage/interact to create opportunity for mands for actions.

- Example 2: paper airplanes

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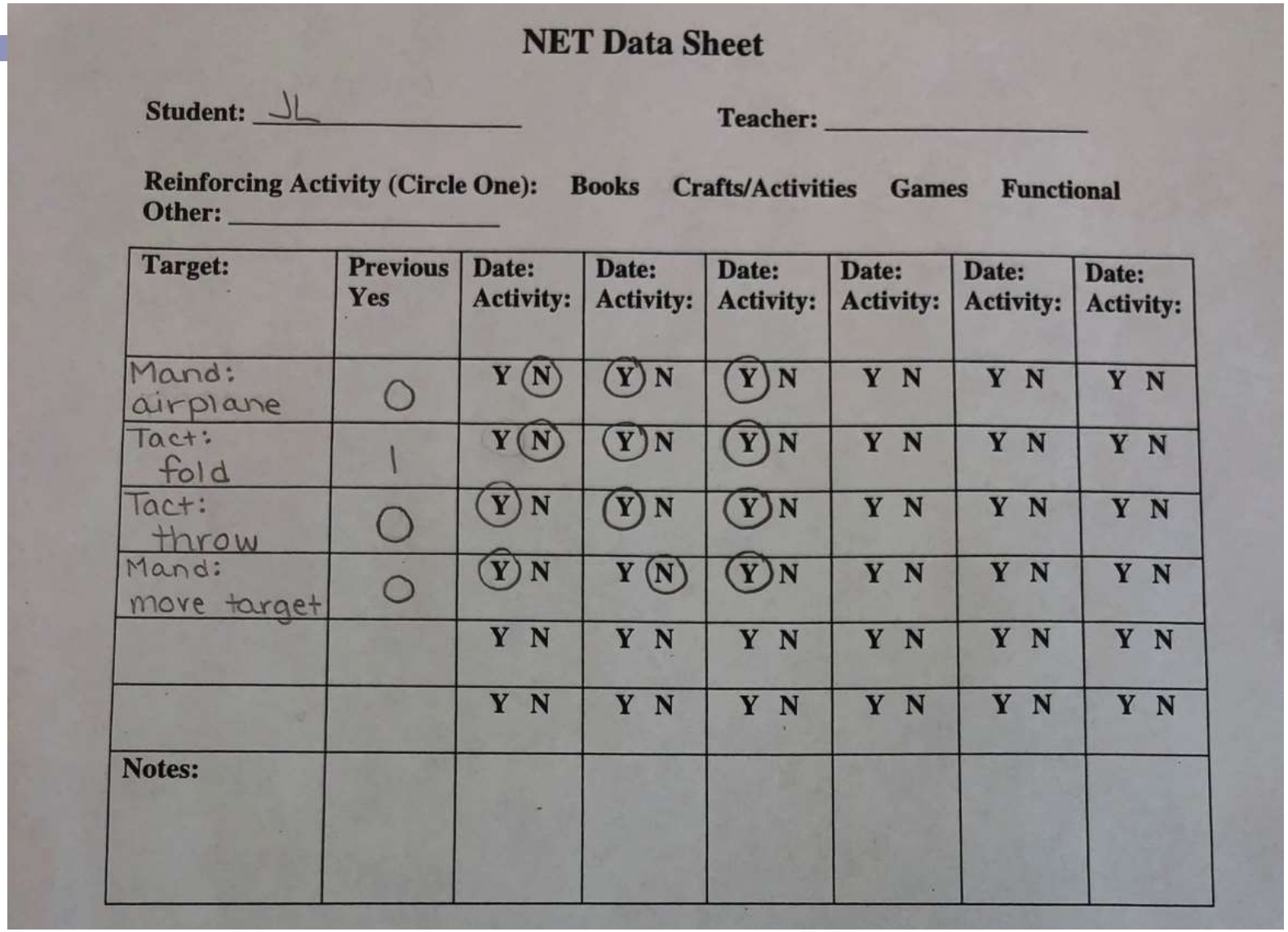
- Example 2: https://youtu.be/9zbKlTPC6sU

Data Collection



NET Data Sheet

Student: JL _____ **Teacher:** _____

Reinforcing Activity (Circle One): **Books** **Crafts/Activities** **Games** **Functional**
Other: _____

Target:	Previous Yes	Date: Activity:	Date: Activity:	Date: Activity:	Date: Activity:	Date: Activity:	Date: Activity:
Mand: airplane	0	Y (N)	(Y) N	(Y) N	Y N	Y N	Y N
Tact: fold	1	Y (N)	(Y) N	(Y) N	Y N	Y N	Y N
Tact: throw	0	(Y) N	(Y) N	(Y) N	Y N	Y N	Y N
Mand: move target	0	(Y) N	Y (N)	(Y) N	Y N	Y N	Y N
		Y N	Y N	Y N	Y N	Y N	Y N
		Y N	Y N	Y N	Y N	Y N	Y N
Notes:							

Assessing MO

- Observe child in natural environment, look for things like how they engage with items, how long they engage with items, preference assessment.

- Example 3: Legos

Manipulating MOs

- Instructors contrive or sustain MO in a variety of ways. Withhold reinforcers, provide access then remove/block items, insert into the game, engage/interact to create opportunity for mands for actions.

- Example 3: Legos

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- When teaching manding using sign language, PECS, full and partial physical prompts and prompt fading are used.

- Example 3: https://youtu.be/7-TQ7KInpt4

Data Collection

NET Data Sheet

Student: AT Teacher: _____

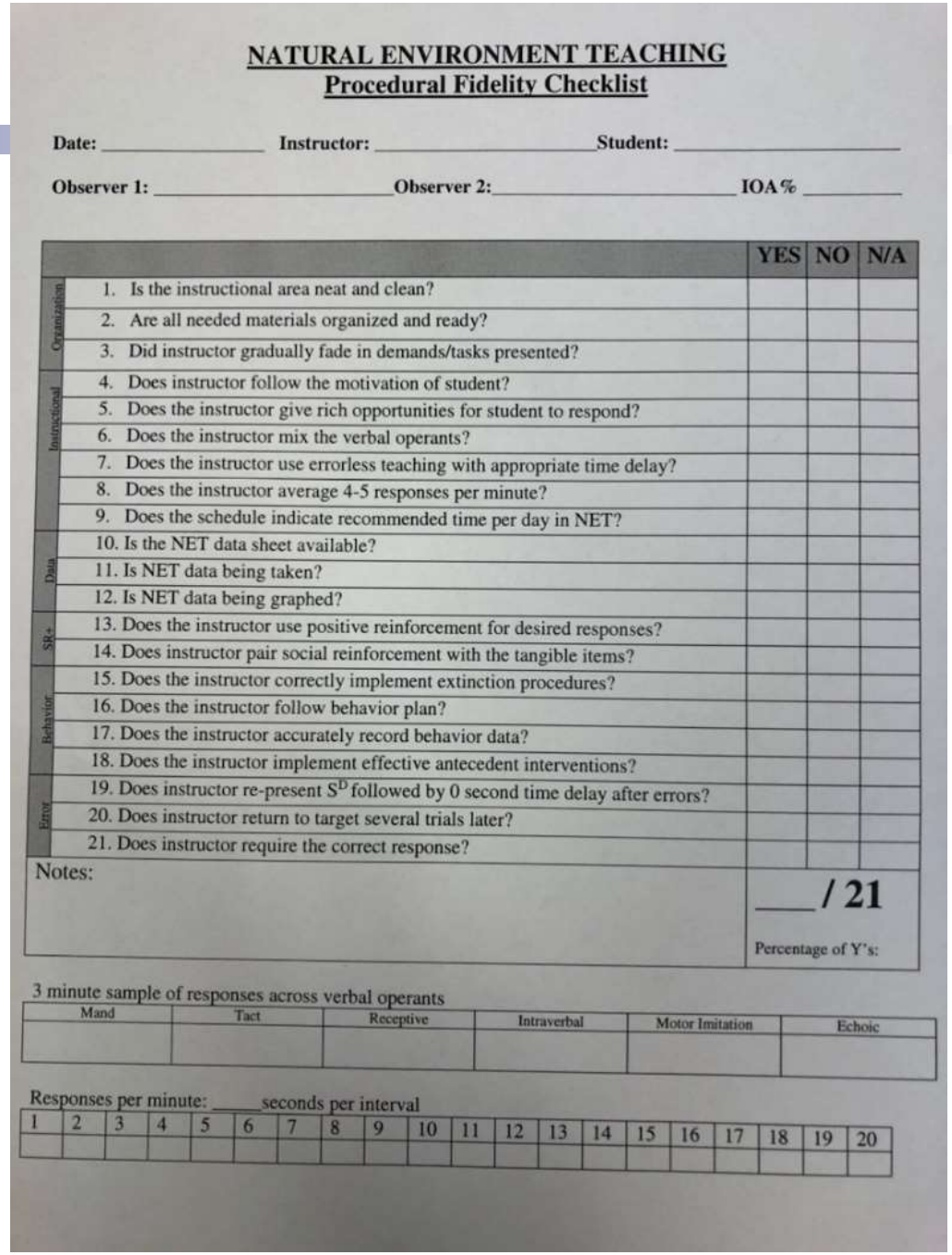
Reinforcing Activity (Circle One): Books Crafts/Activities Games Functional
Other: _____

Target:	Previous Yes	Date: Activity:	Date: Activity:	Date: Activity:	Date: Activity:	Date: Activity:	Date: Activity:
Tact: build	0	(Y) N	(Y) N	(Y) N	Y N	Y N	Y N
Tact: colors	0	(Y) N	Y (N)	(Y) N	Y N	Y N	Y N
Mand: lego	1	Y (N)	(Y) N	(Y) N	Y N	Y N	Y N
Tact: stack	0	Y (N)	(Y) N	Y (N)	Y N	Y N	Y N
		Y N	Y N	Y N	Y N	Y N	Y N
		Y N	Y N	Y N	Y N	Y N	Y N
Notes:							

Consequences

- Given the defining features of a mand, the one consequence strategy that is consistently implemented is contingent delivery of reinforcers specific to the MO and the mand topography. In addition to delivering specific reinforcement, you can also use differential reinforcement to enhance the manding experience.

Procedural Fidelity



NATURAL ENVIRONMENT TEACHING
Procedural Fidelity Checklist

Date: _____ **Instructor:** _____ **Student:** _____

Observer 1: _____ **Observer 2:** _____ **IOA %** _____

		YES	NO	N/A
Organization	1. Is the instructional area neat and clean?			
	2. Are all needed materials organized and ready?			
	3. Did instructor gradually fade in demands/tasks presented?			
Instructional	4. Does instructor follow the motivation of student?			
	5. Does the instructor give rich opportunities for student to respond?			
	6. Does the instructor mix the verbal operants?			
	7. Does the instructor use errorless teaching with appropriate time delay?			
	8. Does the instructor average 4-5 responses per minute?			
	9. Does the schedule indicate recommended time per day in NET?			
Data	10. Is the NET data sheet available?			
	11. Is NET data being taken?			
	12. Is NET data being graphed?			
SR+	13. Does the instructor use positive reinforcement for desired responses?			
	14. Does instructor pair social reinforcement with the tangible items?			
Behavior	15. Does the instructor correctly implement extinction procedures?			
	16. Does the instructor follow behavior plan?			
	17. Does the instructor accurately record behavior data?			
	18. Does the instructor implement effective antecedent interventions?			
Error	19. Does instructor re-present S^D followed by 0 second time delay after errors?			
	20. Does instructor return to target several trials later?			
	21. Does instructor require the correct response?			
Notes:		____ / 21 Percentage of Y's:		

3 minute sample of responses across verbal operants

Mand	Tact	Receptive	Intraverbal	Motor Imitation	Echoic

Responses per minute: _____seconds per interval

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20

Parent communication

As children begin to develop their language repertoire it is important to keep positive communication between teachers and parents.

Communication methods

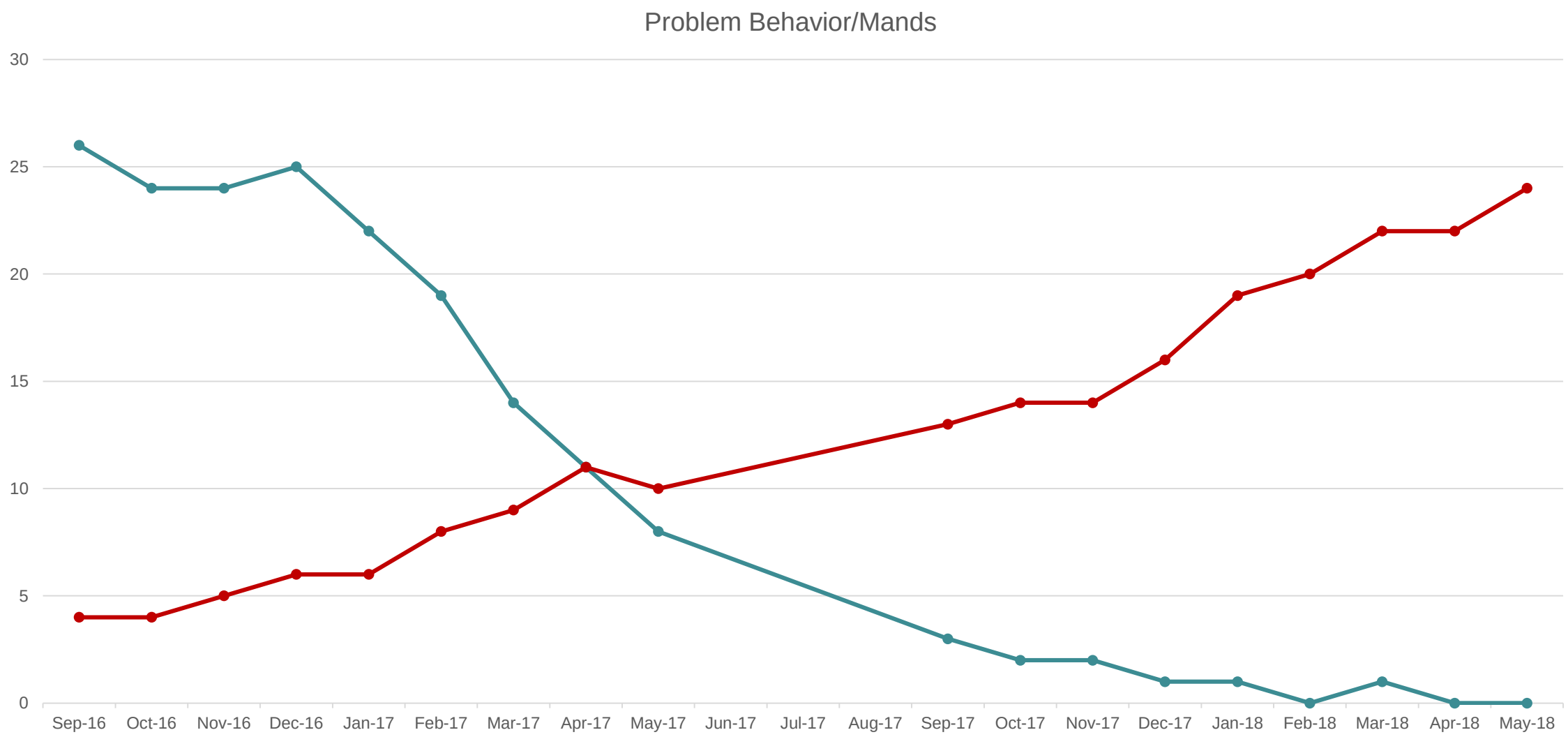
- Weekly or monthly skills mastered sheet
- NET activity ideas newsletter
- Daily sheets

Middle School Mand Training

Middle School

- Description of school
- Students – 9 students in program; 2 have moved into Learning Support due to progress with ABA program
- Grades – 5-8
- VB-MAPP ranges - 84-165.5
- Response Forms – all vocal

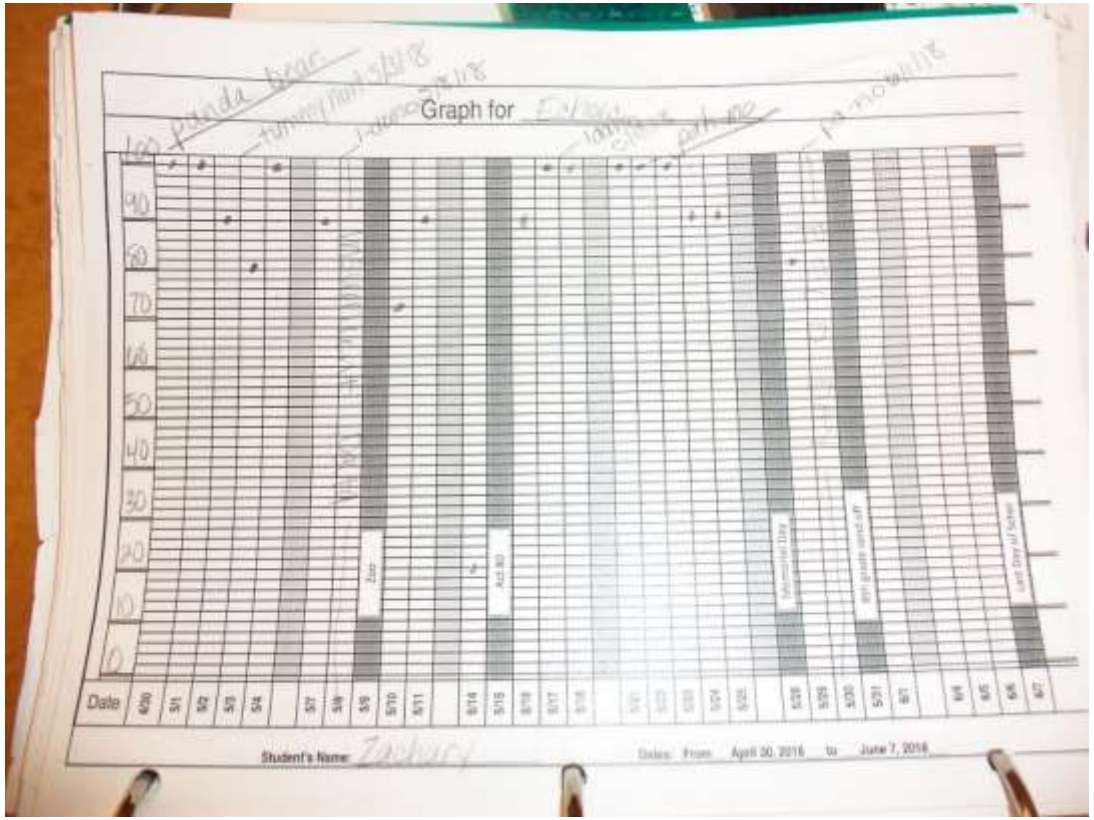
Middle School

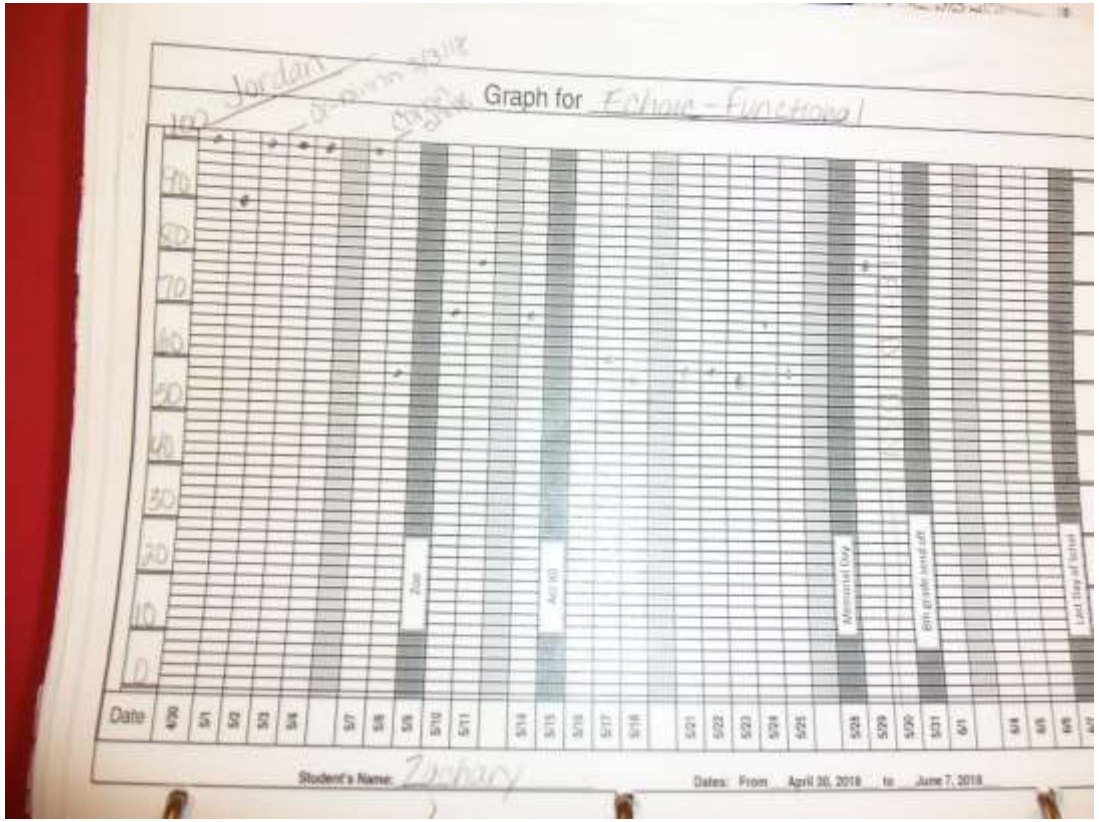


Middle School

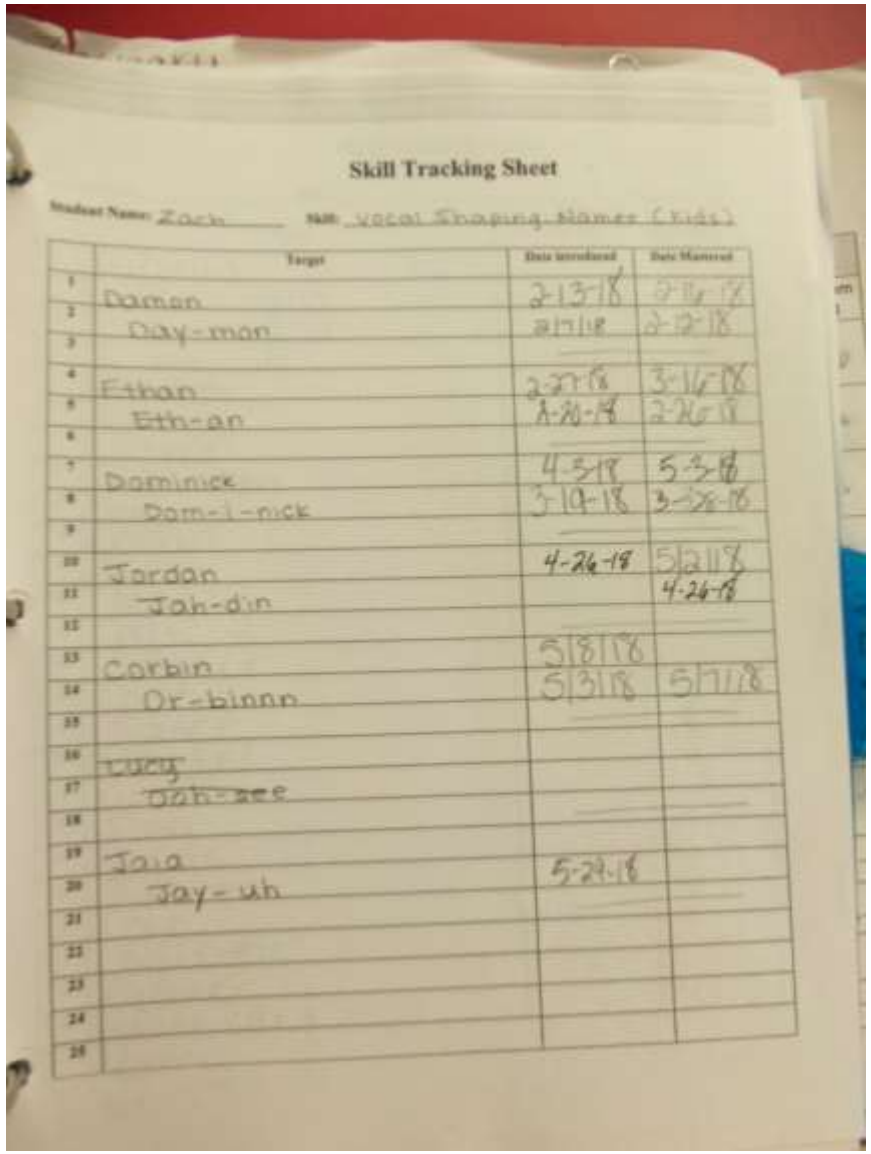
- Vocal Shaping related to mands
- Rather than just doing vocal shaping related to Kaufman Kit targets, include names and functional items

Middle School





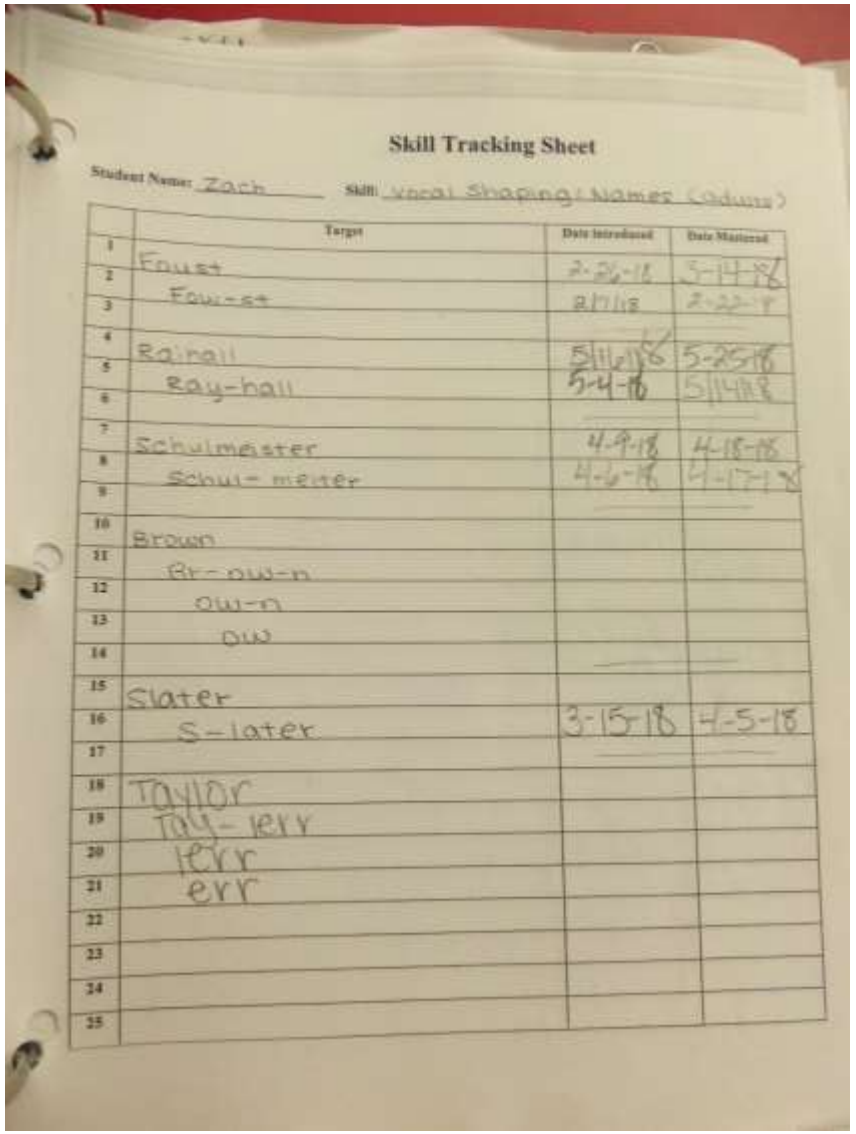
Middle School



Skill Tracking Sheet

Student Name: Zach Skill: vocal Shaping- Names (Kids)

	Target	Date Introduced	Date Mastered
1	Damon	2-13-18	2-16-18
2	Day-mon	2-17-18	2-22-18
3			
4	Ethan	2-27-18	3-16-18
5	Eth-an	3-20-18	3-26-18
6			
7	Dominick	4-3-18	5-3-18
8	Dom-i-nick	3-19-18	3-28-18
9			
10	Jordan	4-26-18	5/2/18
11	Joh-din		4-26-18
12			
13	Corbin	5/8/18	
14	Or-binnn	5/3/18	5/7/18
15			
16	Lucy		
17	Ooh-see		
18			
19	Jaya	5-24-18	
20	Jay-uh		
21			
22			
23			
24			
25			



Skill Tracking Sheet

Student Name: Zach Skill: vocal Shaping/ Names (adults)

	Target	Date Introduced	Date Mastered
1	Faust	2-26-18	3-14-18
2	Fow-st	2/7/18	2-22-18
3			
4	Rainall	5/11/18	5-25-18
5	Ray-hall	5-4-18	5/14/18
6			
7	Schulmeister	4-9-18	4-18-18
8	Schul- meiter	4-6-18	4-17-18
9			
10	Brown		
11	Br-ow-n		
12	ow-n		
13	ow		
14			
15	Slater		
16	S-later	3-15-18	4-5-18
17			
18	TAYlOr		
19	Tay- lerr		
20	lerr		
21	err		
22			
23			
24			
25			

Middle School

- Peer to Peer manding moves from basic manding to manding for:
  - Attention
  - Turn-taking
  - Social comments
- Insert P2P video—Cornhole video

Middle School

NET/Mand data

Student's Name: _____ WEEK OF: _____

NET-Mark with a check if spontaneously observed

DATE	Motivating Activity	LR Joint Control	Tact object	Tact action	Tact Prep	Intra-wh	Features	Function	Class	Errors	%age
Monday											
Tuesday											
Wednesday											
Thursday											
Friday											

NET Mand

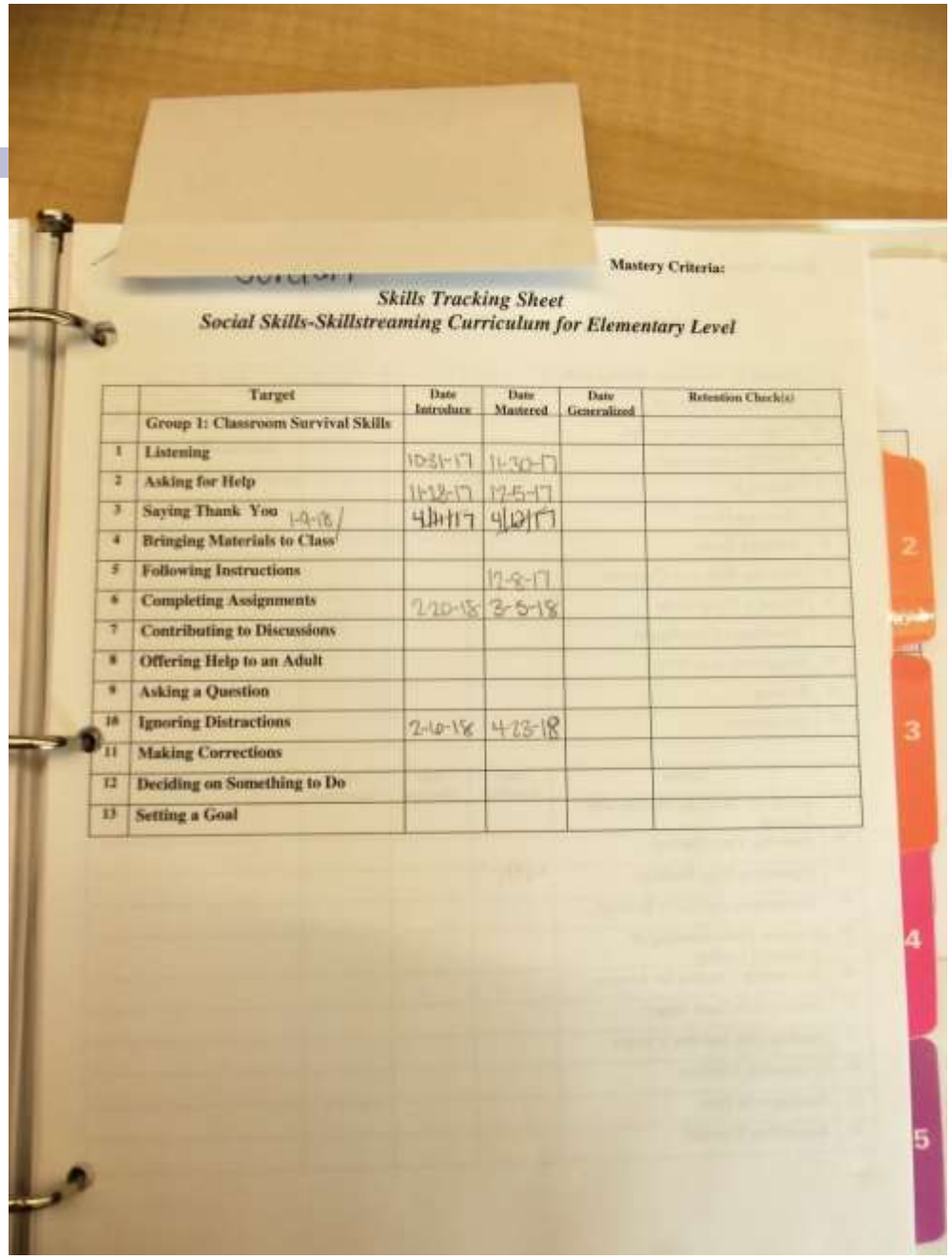
Date	NET Mands Unprompted	NET Mands Prompted	Mands to Peers Prompted	Mands to Peers Unprompted
Monday				
Tuesday				
Wednesday				
Thursday				
Friday				

Middle School

- What is Skillstreaming?
- When are they ready for Skillstreaming?

Middle School

- Skillstreaming Skills Tracking Sheet



Mastery Criteria:

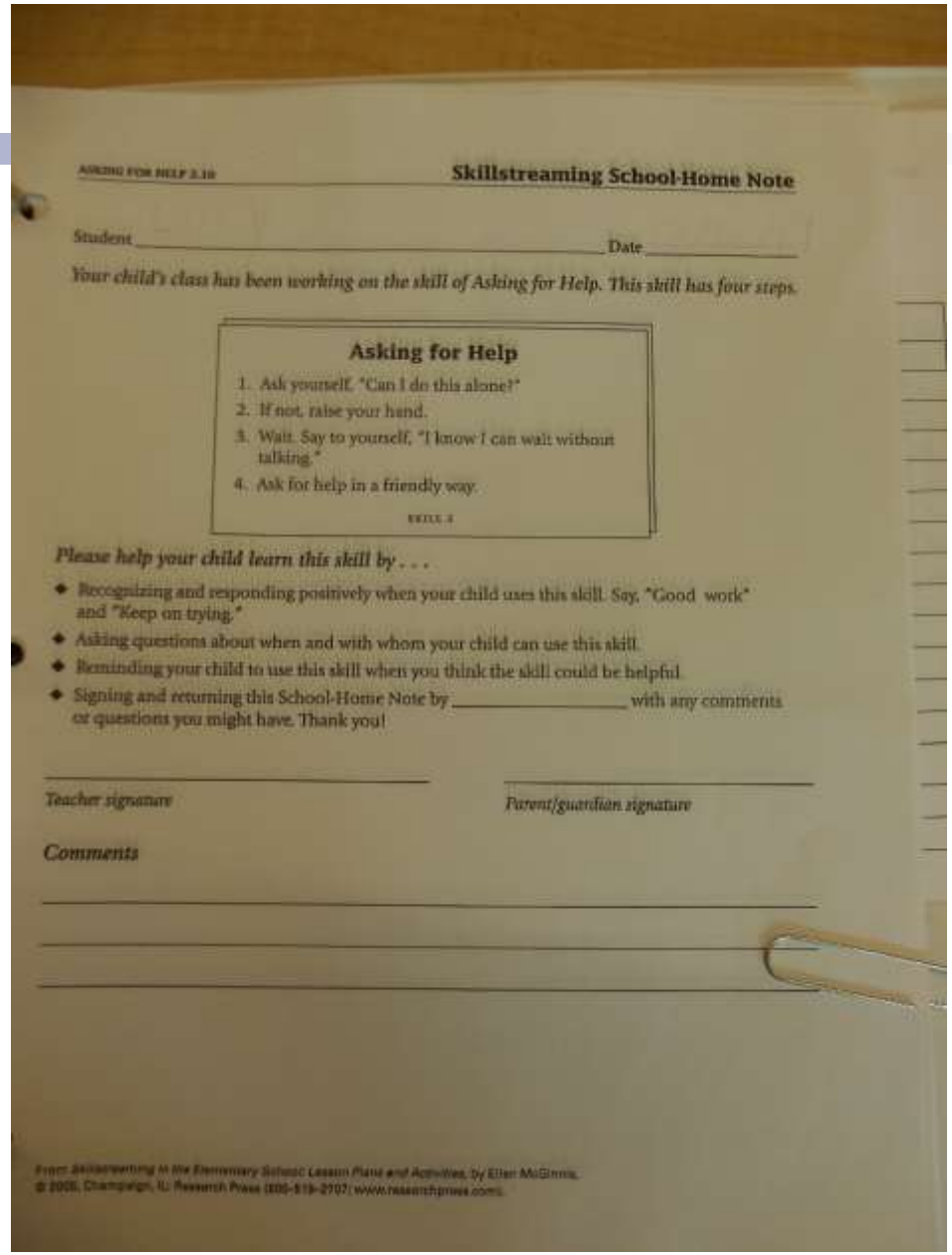
Skills Tracking Sheet

Social Skills-Skillstreaming Curriculum for Elementary Level

	Target	Date Introduce	Date Mastered	Date Generalized	Retention Check(s)
	Group 1: Classroom Survival Skills				
1	Listening	10-31-17	11-30-17		
2	Asking for Help	11-28-17	12-5-17		
3	Saying Thank You 1-9-18	4/11/17	4/12/17		
4	Bringing Materials to Class				
5	Following Instructions		12-8-17		
6	Completing Assignments	2-20-18	3-5-18		
7	Contributing to Discussions				
8	Offering Help to an Adult				
9	Asking a Question				
10	Ignoring Distractions	2-20-18	4-23-18		
11	Making Corrections				
12	Deciding on Something to Do				
13	Setting a Goal				

Middle School

- Skillstreaming School-Home Note



ASKING FOR HELP 2.10

Skillstreaming School-Home Note

Student _____ Date _____

Your child's class has been working on the skill of Asking for Help. This skill has four steps.

Asking for Help

1. Ask yourself, "Can I do this alone?"
2. If not, raise your hand.
3. Wait. Say to yourself, "I know I can wait without talking."
4. Ask for help in a friendly way.

SKILL 2

Please help your child learn this skill by . . .

- Recognizing and responding positively when your child uses this skill. Say, "Good work" and "Keep on trying."
- Asking questions about when and with whom your child can use this skill.
- Reminding your child to use this skill when you think the skill could be helpful.
- Signing and returning this School-Home Note by _____ with any comments or questions you might have. Thank you!

_____ _____

Teacher signature *Parent/guardian signature*

Comments

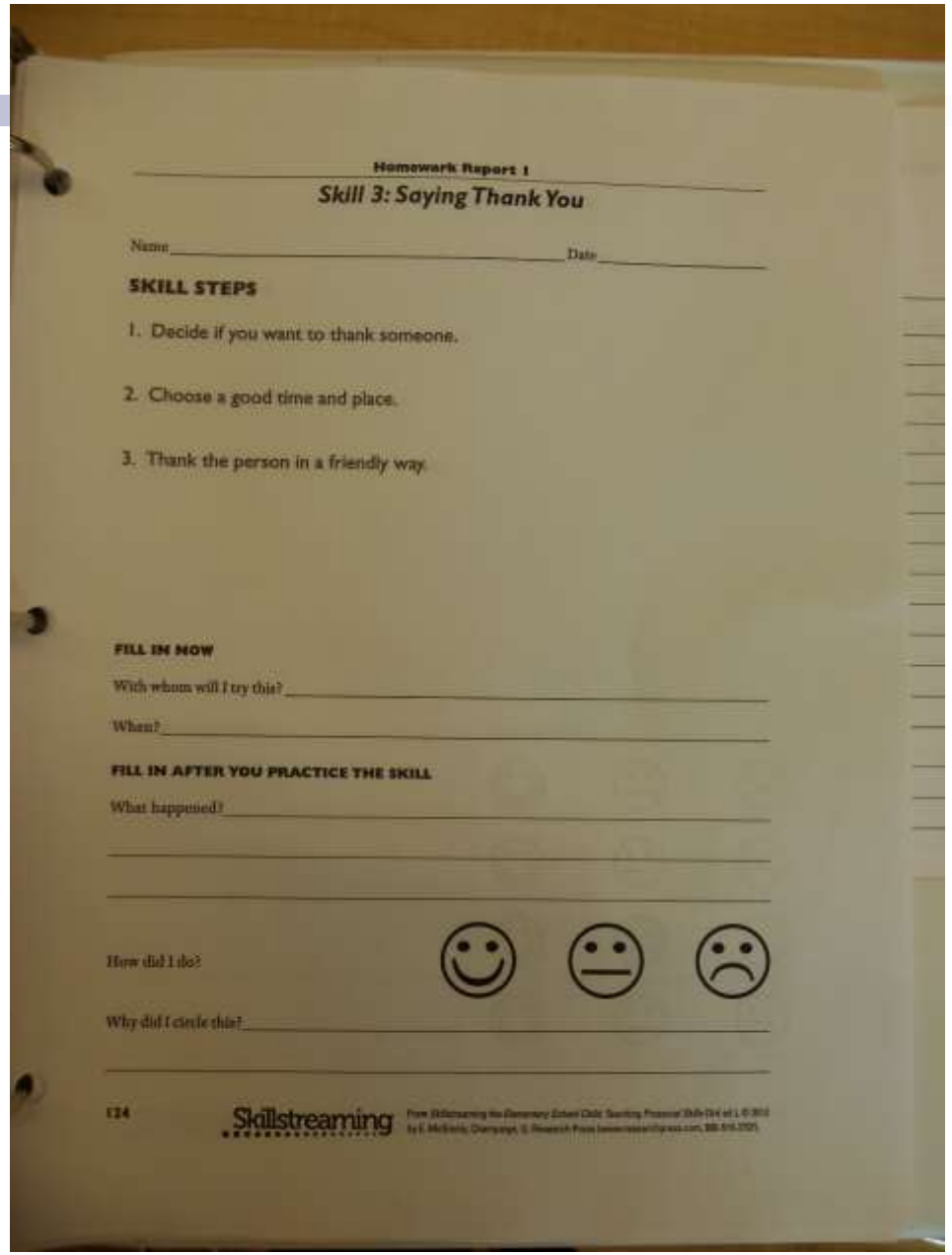
_____

_____

_____

Middle School

- Skillstreaming Homework



Homework Report 1

Skill 3: Saying Thank You

Name _____ Date _____

SKILL STEPS

1. Decide if you want to thank someone.
2. Choose a good time and place.
3. Thank the person in a friendly way.

FILL IN NOW

With whom will I try this? _____

When? _____

FILL IN AFTER YOU PRACTICE THE SKILL

What happened? _____

How did I do?

Why did I circle this? _____

Middle School

- Generalization
  - Home-school
  - Monthly newsletter
  - Daily communication sheet
  - Weekly skills mastered sheet
  - Skillstreaming Parent Log

Middle School

SKILLS MASTERED

These are the target skills that your student mastered this week!
Please let us know if you have any questions about how to apply or practice these skills.

MANDS – Requests	**ECHOIC** – Imitating verbal behavior/Vocal shaping
TACTS – Labels	
INTRAVERBALS – Fill in the blank/WH questions	

Parent Comments:

Middle School

January News

The Training Topic this month is Manding

Manding (requesting): by asking for what one wants and getting that desired item. For example, if a student is motivated by wanting a cookie, he/she asks for a cookie and they receive a cookie. Mand training is more effectively done in the natural environment where there are more opportunities for contact with a variety of reinforcers.

Different types of Mand training:

Basic mand for an item: student requests for desired item (ex: student see a ball, says "ball", and the ball is delivered)

Mand for other forms of direct reinforcement: students can mand to obtain social attention, action, and social comments (ex: while playing a game a student may ask "where is my piece?")

Manding for missing items: student is sitting down to eat dinner, there is no fork on the table, student needs a fork, student mands for a fork.

Manding for information: when the item/person/action is missing and the student is motivated to know where or how it is, he/she will ask "where is ____"

Benefits of Mand training:

1.Mands have been said to be the first type of verbal behavior acquired by children.

2. Mands help the student control their environment.

3. Mand training makes social interaction more valuable.

4. The focus on motivation in manding and developing new reinforcers may serve to reduce the value of repetitive/stereotyped actions.

5. Mand training may assist in developing the value of communication and thus spur the acquisition of the other verbal operants.

6. It is relatively easy to do because you are using the child' own motivation as a tool.

What can I do at home?

- Please continue to check your child's daily communication sheet for any mastered targets. Opportunities for manding should be built into your child's everyday life.
- In order to practice this skill motivation must be present from your child.
- If your child makes an error, be sure to provide him/her with the correct response. Ideally, re-present the question so the child can respond correctly.
- Remember to REINFORCE your child for correct responses!!

Middle School

- Generalization
  - Life Skills classroom to outside Life Skills classroom
  - Transfer to adapted specials, lunch, advisor base
  - Transfer to other general education settings and staff

Middle School

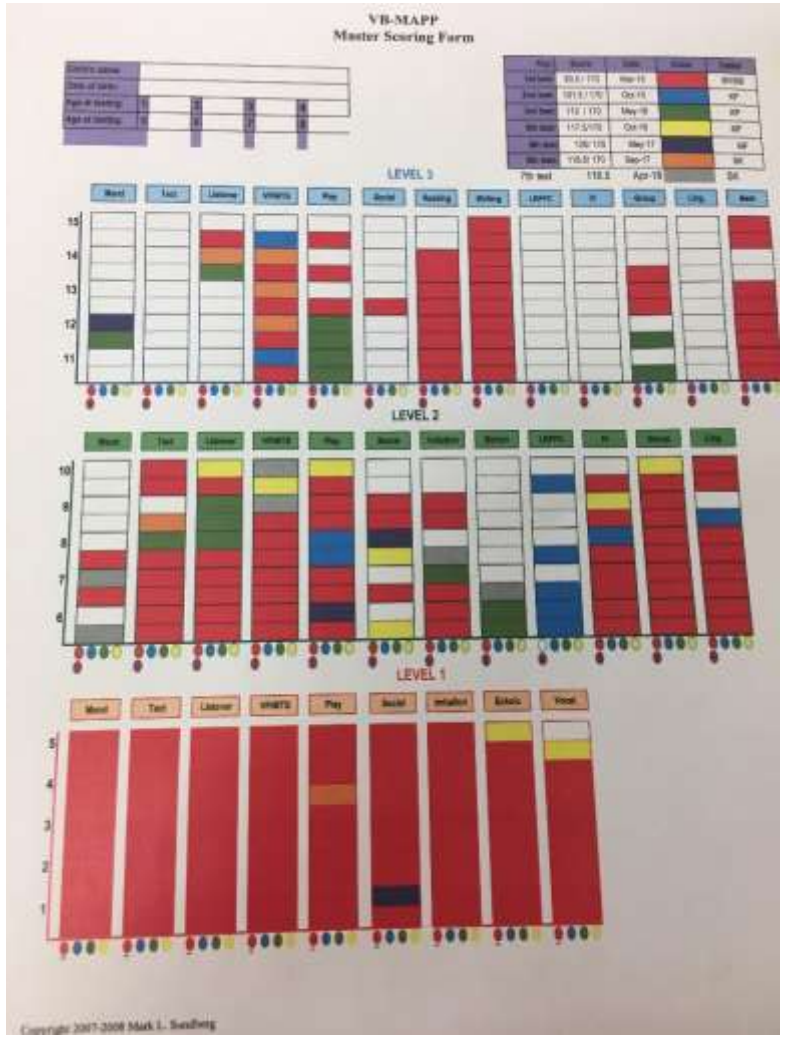
- What's next?
  - Train staff to take data in general education settings
  - District-wide training with general education teachers to assist in facilitating

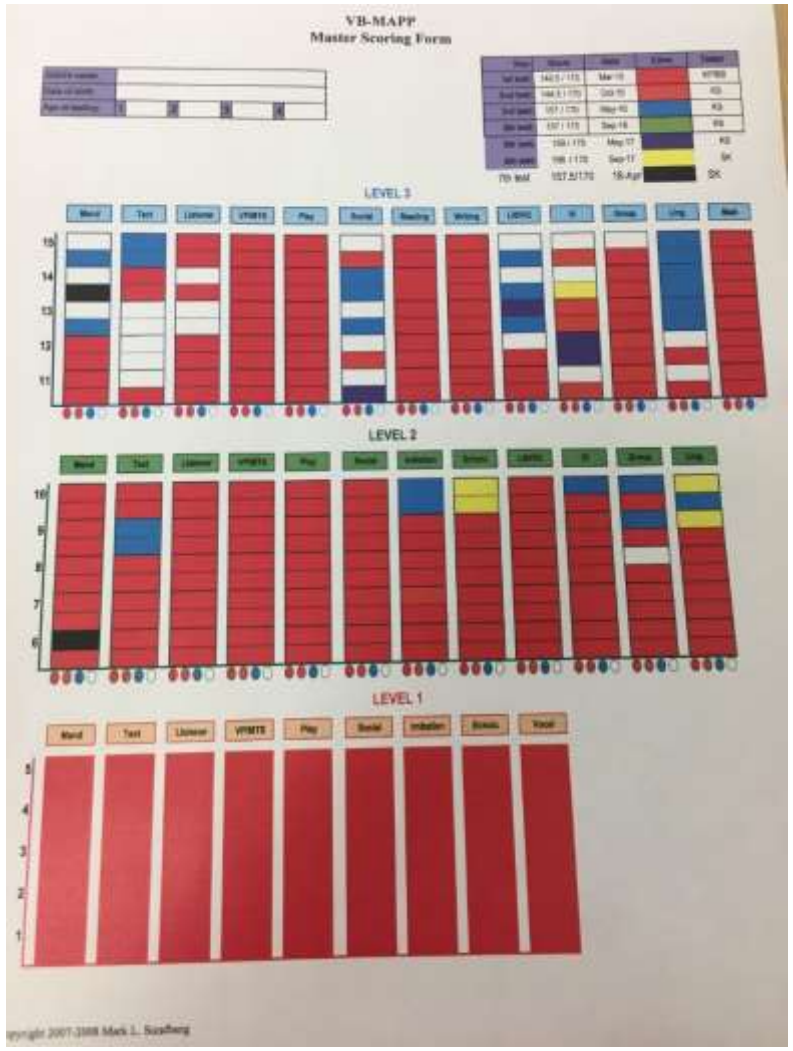
High School Mand Training

High School

- Description of school
- Students
- Grades
- Response Forms

VB-MAPP ranges





High School


Four In A Row
CHECKERS
THE MYSTERY FACE GAME
GUESS WHO ?
TUMBLE
4in1
UNO
4Kidz

HIGH SCHOOL

- Mand for missing items
- Do percentage throughout the day
- Set up situations throughout the day randomly.

Date	Prompted	Unprompted
9/18/18		
9/19/18		
9/20/18		
9/21/18		
9/22/18		

Manding for Information

- Percentage throughout the day

Date	Who			Where		
	Unprompted	Prompted	Spontaneous	Unprompted	Prompted	Spontaneous
8/28						
8/29						
8/30						
8/31						

High School

- Vocational and ADL Mands
  - Community-based instruction, generalized mands

Communication between teachers

- Emails and phone call help with missing items- shampoo.

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