

Teach Your Children Well: Learn to Design and Implement Effective Interventions for Language and Social Interaction Skills

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Major Issues

- ★ Identification & tracking of skills & skill deficits
- * Active engagement by a motivated learner
- ★ Many acquisition trials per day
- **★** Varied learning environments
- ★ Varied types of trials within a session (mixed VB)
- * Parent participation



Critical Points

- ★ Prioritized objectives
- ★ Focus on language & basic learner skills
- ★ Develop learner attending to instructor & tasks
- ★ Develop social interaction
- ★ Teach skills during daily living activities
- ★ Selection of task stimuli that are useful today (word list)



Autism

Qualitative Differences in 3 areas:

- **★** Language
- **★** Social interactions
- ★ Restricted/"highly focused" range of interest/activities

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Main Issue

- ★ Happy children
- ★ Acquisition of as many skills as possible

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The Goal

Teaching should result in the acquisition of generalized skills that allow the learner to learn from his everyday experiences



Research

- ★ Lovaas, O.I., (1987). Behavioral treatment and normal educational and intellectual functioning in young autistic children. Journal of Consulting and Clinical Psychology
- ★ A Comparison of Intensive ABA Treatment & Eclectic... (Howard, et al.) Research in Developmental Disabilities (2005)



Contributions from Behavior Analysis

- ★ How to teach
- ★ How to capture motivation
- ★ What to teach (including language!)

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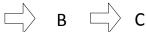


Receptive & Expressive

- ★ Insufficient analysis of variables
- ★ Blends useful distinctions
- ★ "Expressive" describes several different types of language behavior



"Expressive" Responses





Want Book

"book"

Receive Book

See Book

"book"

Praise (tact)

Hear "Book"

"book"

Praise (echoic)

"Can Read"

"book"

Praise (intraverbal)



Verbal Behavior

- ★ Echoics (Vocal Imitation)
- **★** Mands (Requests)
- **★** Tacts (Labeling)
- ★ Intraverbals (conversation -/+)
- ★ Also:
 - ★ Spontaneous Verbal Behavior
 - ★ Syntax & Grammar



"Expressive" Responses





Want Book "book" Receive Book

See Book

"book"

Praise (tact)

Hear "Book"

"book"

Praise (echoic)

"Can Read"

"book"

Praise (intraverbal)



Tracking Skills

- ★ Need to know exactly what the child can do
- ★ Need to identify what the child needs to learn
- ★ There are many skills to learn....what to teach today!
- ★ Need to track the child's progress



The Purpose of Assessment

- **★**Identify existing language skills
- *Determine starting point for language intervention

Skill Discrepancies Typical Delayed Age



The ABLLS®-R

- ★ Criterion Referenced Assessment
- ★ Basis for a Curriculum
- ★ Skills Tracking System



Basic Learner Skills

- ★ Cooperation & Reinforcer Effectiveness
- **★** Visual Performance
- ★ Receptive Skills
- **★** Imitation
- ★ Verbal Behavior
- ★ Play & Leisure Skills
- **★** Social Interaction
- **★** Group Instruction
- **★** Follow Classroom Routines
- ★ Generalized Responding



Academic, Self-Help, & Motor Skills

Reading

Dressing

Gross Motor

Math

Eating

Fine Motor

Writing

Grooming

Spelling

Toileting



Curriculum Issues

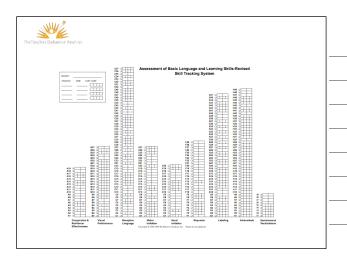
- ★ Must Emphasize the development of skills the student currently needs to learn
- Must allow for changes in instruction as the learner's needs change



Critical Factors

- **★** Language
- **★** Motivation
- ★ Fluency
- **★** Generalization
- **★** Spontaneity
- **★** Joint Attention
- ★ Complex Stimuli
- ★ Skills Tracking (including emerging skills)

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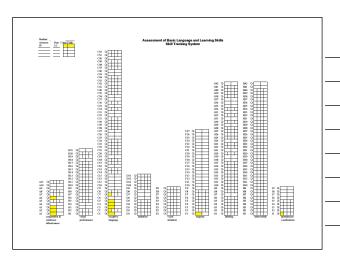


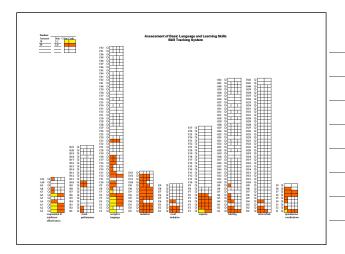
TASK	SCORE	TASK NAME	TASK OBJECTIVE	QUESTION	EXAMPLES	CRITERIA	NOTES
G1	01234 01234 01234 01234	Labels reinforcers	The student will label reinforcing items.	If you ask "What is that?" with one of his reinforcing items present, will the student identify the item?		4= 10 or more labels, 3= 6 labels, 2= 4 labels, 1= 2 labels	
G 2	01234 01234 01234 01234	Labels common objects	least 100 objects which	If you ask "What is that?" with a common item present, will the student identify the item?		4= 100 or more labels of items and can identify several different examples (including novel examples) of most of those items, 3= 50 labels of at least one example of the item, 2= 10 labels, 1= 5 labels	See Appendix 3: Receptive and Label List Note that objects selected should be ones that the student hears the names of and interacts with on a frequent basis.
G3	01234 01234 01234 01234	Labels common people (actual individuals, not professionals)	The student will label people in his environment.	If you ask "Who is this?" with the person present, will the student identify the person?	Mom, Dad, siblings (Rachel), friends (Jason, Emily)	4= 10 or more people, 3= 6 people, 2= 4 people, 1= 2 people	
G 4	01234 01234 01234 01234		The student will label at least 100 pictures of items which are commonly found in his environment.	If you ask "What is that?" when shown a picture of a common item, will the student identify the item?		4= 100 or more labels of pictures of items and can identify several different examples (including novel examples) of most of those items, 3= 50 labels of at least one example of the item, 2= 10 labels, 1= 5 labels	See Appendix 3: Receptive and Label List
G5	01234 01234 01234 01234	Labels body parts	The student will label common body parts on himself or others.	Can the student label body parts on himself or others?	Labels nose, eyes, hair on himself, a doll, another person, or a picture of a person	4= can label 20 or more body parts on himself or others, 3= 10 body parts, 2= 5 body parts, 1= at least 2 body parts on himself or others	See Appendix 4: Body Parts List
G 6	0 1 2 0 1 2 0 1 2	Labels pieces of clothing	The student will be able to label dothing items.	Can the student label pieces of clothing?		2= labels 4 or more clothing items, 1= labels 2 clothing items	New

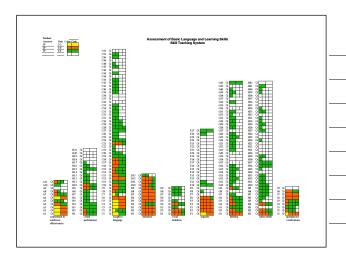
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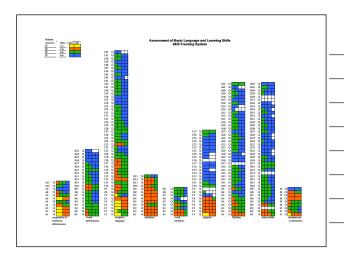
Sample Item

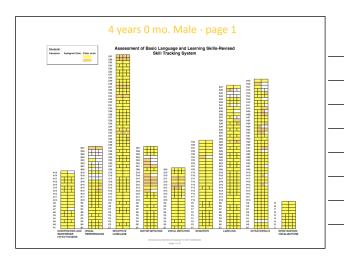
Task	Score	Task Name	Question	Criteria
	01234 01234 01234 01234	common	is that?" with a common item present, will the student identify the item?	4= 100 or more labels of items and can identify several different examples (including novel examples) of most of those items, 3= 50 labels of at least one example of the item, 2= 10 labels, 1= 5 labels

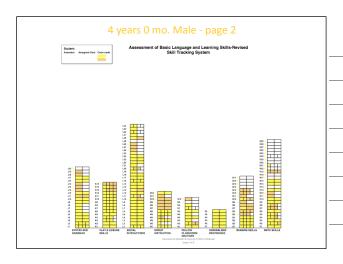


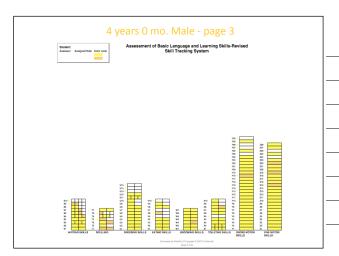














Labeling Sequence



LABELING

TASK	TASK NAME	TASK OBJECTIVE
G 1	Labels reinforcers	The student will label reinforcing items.
G 2	Labels common objects	The student will label at least 100 objects which are commonly found in his environment.
G 3	Labels common people (actual individuals, not professionals)	The student will label people in his environment.
G 4	Labels pictures of common items	The student will label at least 100 pictures of items which are commonly found in his environment.
G5	Labels body parts	The student will label common body parts on himself or others.
G 6	Labels pieces of clothing	The student will be able to label clothing items.
G 7	Labels common ongoing actions	The student will label common actions.



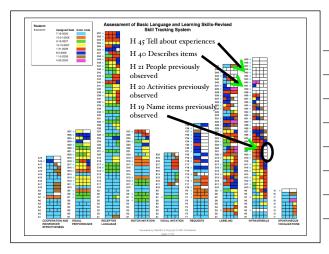
LABELING (Continued)

TASK	TASK NAME	TASK OBJECTIVE
G 42	Labels emotions of others	Student will be able to label ongoing facial and behavioral examples of emotions and pictures of faces depicting various emotions.
G 43	Internal events and emotions	The student will be able to label internal events and emotions which are not directly observable by others.
G 44	Multiple component naming (three component labels)	The student will emit labels containing at least three separate components.
G 45	component +) with carrier phrase	The student will be able to use a variety of carrier phrases when using labels containing at least three separate components and will frequently use those carrier phrases without prompting.
G 46	Labels social interaction behavior	The student will be able to label the nature of ongoing social interactions (e.g., playing, arguing).
G 47	Spontaneous labeling	The student will spontaneously label items and events throughout the day.



Scoring

- **★** Observe the child
- ★ Interview the parent
- ★ Interview the teacher, Speech therapist, etc
- ★ Score all "known can do skills"
- ★ Score all "known can't do"
- ★ Assess the remaining skills





Why Work for Us?

- ★ Easy to be successful
- **★** Get immediate access to reinforcers



Develop Cooperation

- **★** Pairing with reinforcement
- ★ Keep child successful
- ★ Start with easy tasks



Does the child like his/her instructor?

If not.....

MAJOR PROBLEM!!!



Critical Points

- ★ Attention to the task stimuli
- ★ clear availability of reinforcer prior to instruction
- ★ present instructions only when have child's attention
- ★ the child needs to watch what you are showing them
- * Effortful response required before reinforcement



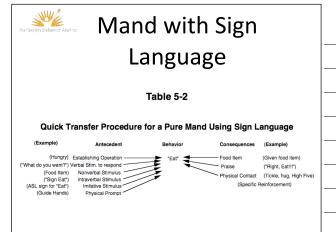
Mands



Multiple Pay-offs

Teach a child to mand for reinforcers & you get:

- **★** Attending
- **★** Cooperation
- **★** Imitation
- **★** Social interaction
- **★** Language





Mand with Speech Table 5-3 Quick Transfer Procedure for a Pure Mand Using Speech (Example) Antecedent Behavior Consequences (Example) (Hungry) Establishing Operation Food Item (Given food Item) (Food Item) Nonverbal Stimulus Echolo Stimulus (Say Fair) (Specific Reinforcement)



Mand with Speech

(Hungry) Establishing Operation

■ "Eat"

Food Item (Given food item)



First Mands to Teach

- ★ Actual reinforcers
- ★ Can control access
- ★ Easy to deliver
- ★ Can deliver multiple times
- **★** Often wanted



Selecting First Mands - Cont.

Select words that are already familiar to the child as demonstrated by an existing receptive, echoic, or imitative skill



Selecting First Mands - Cont.

For signing children, select words that are iconic, that is, the signs look like the objects that they stand for, as in the sign "book" looks like the action of opening a book, or the sign "eat" looks like putting food in the mouth. Also, signs should be selected that match the child's existing imitative repertoire.

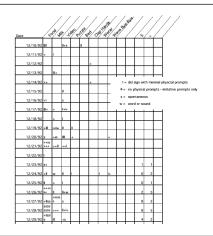




Selecting First Mands - Cont.

Avoid non-specific mands such as "want," "more" and "please"







Tacts

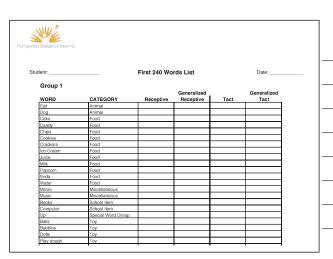
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Session Summary

15 7 Instructions Imitations 15 Discriminations Echoics 23 9 Mands Tacts 88 Total Responses 157 Total session (Min) 32 Rate of response/Min 4.9 85.33% Accuracy rate Worked on /learned 7 new tacts



240 Word List



Stu	ident:	Aiden		Tac	ting	Pict	ures	of O	bjec	ts		AB	LLS®-R	G4
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		i ioia a pi												
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		5/3/11	+	+	+	-	+	+						
		5/4/11	+	+	+	+	+	-						
		5/5/11	Α	Α	+	-	Α	+	-					
		5/6/11			Α	+		+	+	-				
		5/9/11				+		+	-	-				
		5/10/11				+		Α	+	+	-			
		5/11/11				Α			+	+	-	-		
		5/12/11							+	+	+	-		
		5/13/11							Α	Α				
											\vdash			



Receptive by Function, Feature & Class (RFFC)

- $\star \mathsf{Functions}$ the things one can do with an item
- *Features descriptions or common characteristics of items, such as the parts, shape, size, or texture of items
- ★Classes the general categories that many items can be grouped in together



How to Teach RFFC

- ★Student should have at least 200 tacts and receptive discriminations including parts of items
- *Student should be able to receptively identify and tact several actions
- ★Student should have demonstrated generalization of known tacts and receptive responses
- ★Student should be able to respond to a variety of carrier phrases



RFFC - Functions

You eat it You bounce it You drink from it You read it You play with it



RFFC - Features

Touch the one with a tail
Touch the one with wheels
Touch the soft one
Touch the big one
Touch the new one



RFFC - Classes

Show me an animal
Can you find some furniture
Where is the silverware
Do you see some fruits
Give me the toy



Transfer to Intraverbal

- ★RFFC often evokes verbal responses in addition to the pointing response
- **★**This trial contains the basic elements of the intraverbal
- **★**Gradually fade out item (nonverbal stimulus)
- **★Intersperse distracter trials**



Sample Verbal Stimuli

Object	Verbal Stimulus	Rank
Books	Read them	Α
Books	Tells a story	В
Books	Has pages	С
Books	Has pictures	С
Books	Has words	С
Books	Magazine	С
Bubbles	Pop them	Α
Bubbles	Blow them	Α
Bubbles	Toy	С
Bubbles	Use a wand	С
Bubbles	Soapy	С
Car	Something you drive	Α
Car	Go for a ride in it	Α
Car	You go place in	В
Car	It is a vehicle	С
Car	Something that has four wheels	С
Car	Has a horn that honks	С
Car	Has wheels	С
Chips (potato)	You eat them	Α
Chips (potato)	Is food	В



Sample Verbal Stimuli

Object	Verbal Stimulus	Rank
Books	Read them	А
Books	Tells a story	В
Books	Has pages	С
Books	Has pictures	С
Books	Has words	С
Books	Magazine	С



Sample Verbal Stimuli

Object	Verbal Stimulus	Rank
Bubbles	Pop them	Α
Bubbles	Blow them	Α
Bubbles	Toy	С
Bubbles	Use a wand	С
Bubbles	Soapy	С



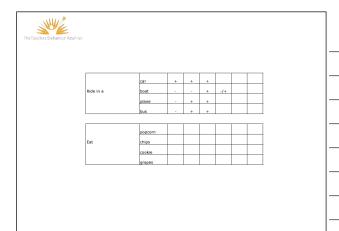
Sample Verbal Stimuli

	Sample verbar Sumun	
Object	Verbal Stimulus	Rank
Car	Something you drive	Α
Car	Go for a ride in it	Α
Car	You go place in	В
Car	It is a vehicle	С
Car	Something that has four wheels	С
Car	Has a horn that honks	С
Car	Has wheels	С



Sample Verbal Stimuli

Object	Verbal Stimulus	Rank
Potato Chips	You eat them	Α
Potato Chips	Is food	В
Potato Chips	Something that is salty	С
Potato Chips	Snack food	С
Potato Chips	Something that you dip	С
Potato Chips	They come in a bag	С
Potato Chips Potato Chips Potato Chips Potato Chips	Is food Something that is salty Snack food Something that you dip	B C C





Intraverbal

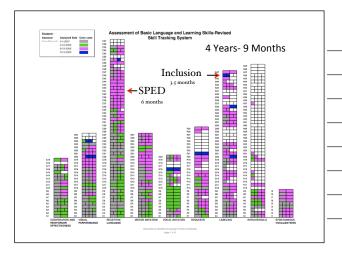


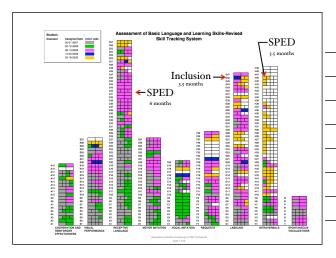
Advanced Mands

- ★ Ask for information
- ★ Ask using pronouns, prepositions & adjectives



Inclusion with Typically Developing Peers









What did you do at school today?

"Played with friends"

Who did you play with?

"Michael"



Tacting/Expressive Labels

Describe items, ongoing activities, people <u>that</u> are present

"Tell me about...

- ...Jim
- ...this room (bedroom)
- ...what's happening (birthday party)

Multiple responses to a single question



Attending to Others

- ★ We teach children to describe items and actions they observe and answer questions about daily activities
- ★ We also need to have them attend to and describe what they observe about others

What does Bobby have for lunch?





Let's talk about lunch

Where did you eat lunch today? Who sat next to you at lunch? What did Michael have for lunch? Tell me about Michael's lunch box

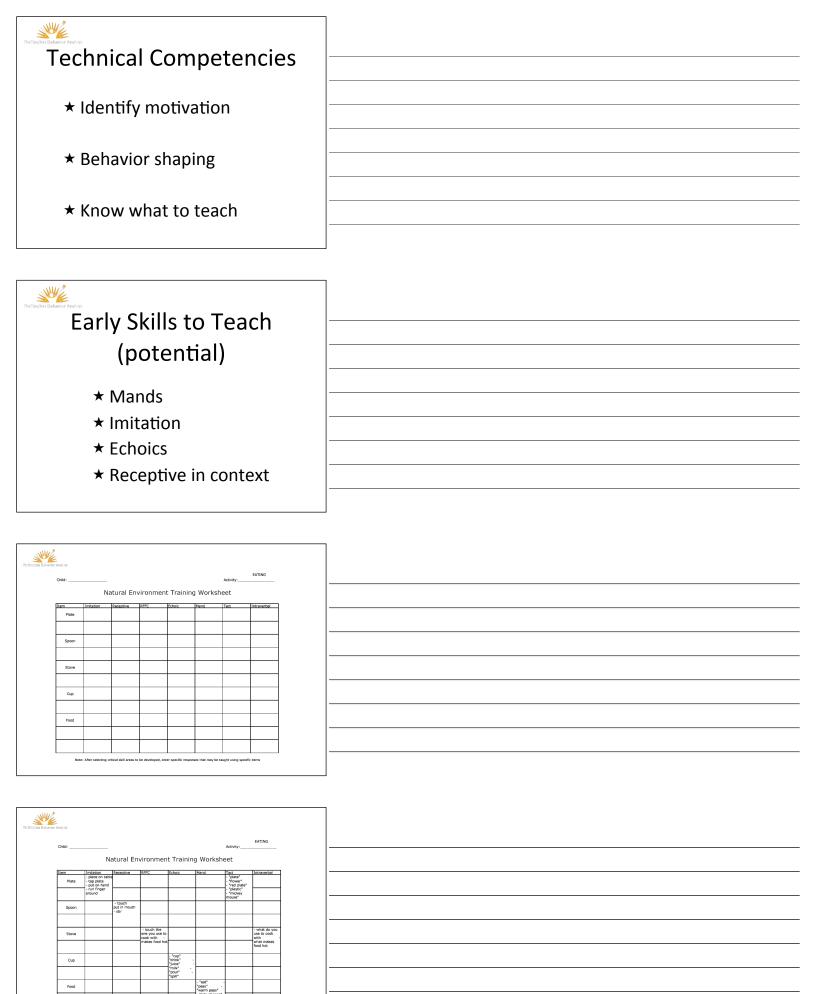


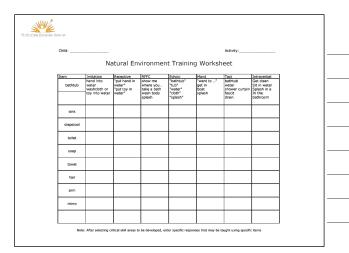
Natural Environment Training



Parents as Teachers

- ★ Strong motivation to see child learn
- ★ Often highly reinforcing to child
- ★ Frequent opportunities to observe their child's behavior
- ★ Trained staff not always present







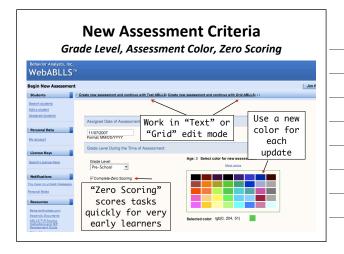
Motor Imitation

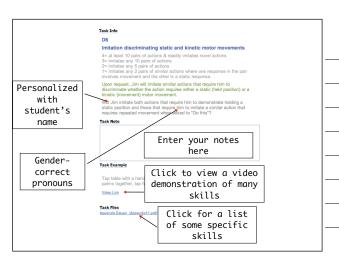
- ★ Includes an objective unless has well-developed& well-generalized skills
 - **★**gross motor
 - **★**fine motor
 - **★**speed, sequence
 - ★head & mouth
- ★ May put imitation of peers in social or play skills section



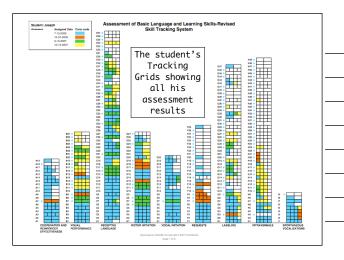
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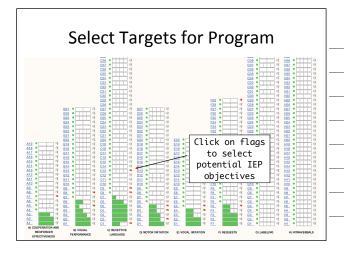
Student Menu Betavyor Analysts, Inc. WebABLLS* Student Menu Jim Paringion 1 Students Menu Menu Assassent Click to start an assessment

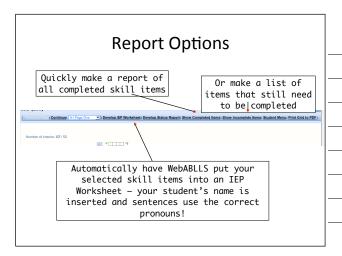


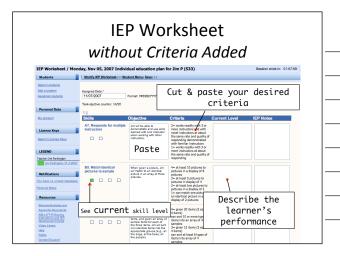


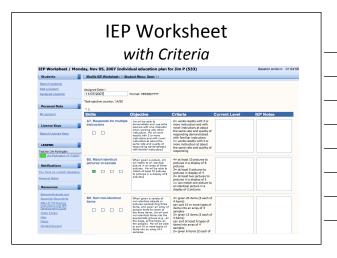










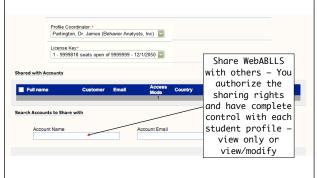


Joey's Student Menu

Saved Assessments, IEP Worksheets, Status and Progress Reports



Account Sharing Options Share information with others



Want to participate in a study of typically-developing children?

6 months - 5 years
3-month intervals
Intellectual assessment?

Contact: Autumn Bailey

Bailey@behavioranalysts.com



Critical Points

- ★ Prioritized objectives
- ★ Focus on language & basic learner skills
- ★ Develop learner attending to instructor & tasks
- ★ Develop social interaction
- ★ Teach skills during daily living activities
- ★ Selection of task stimuli that are useful today (word list)



Where Should Teaching Occur?

EVERYWHERE!

Need a blend of formal (structured) teaching sessions and training in the natural environment

Home, park, stores, car, the yard, the zoo, Discovery Zone, the beach

EVERYWHERE!!!



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