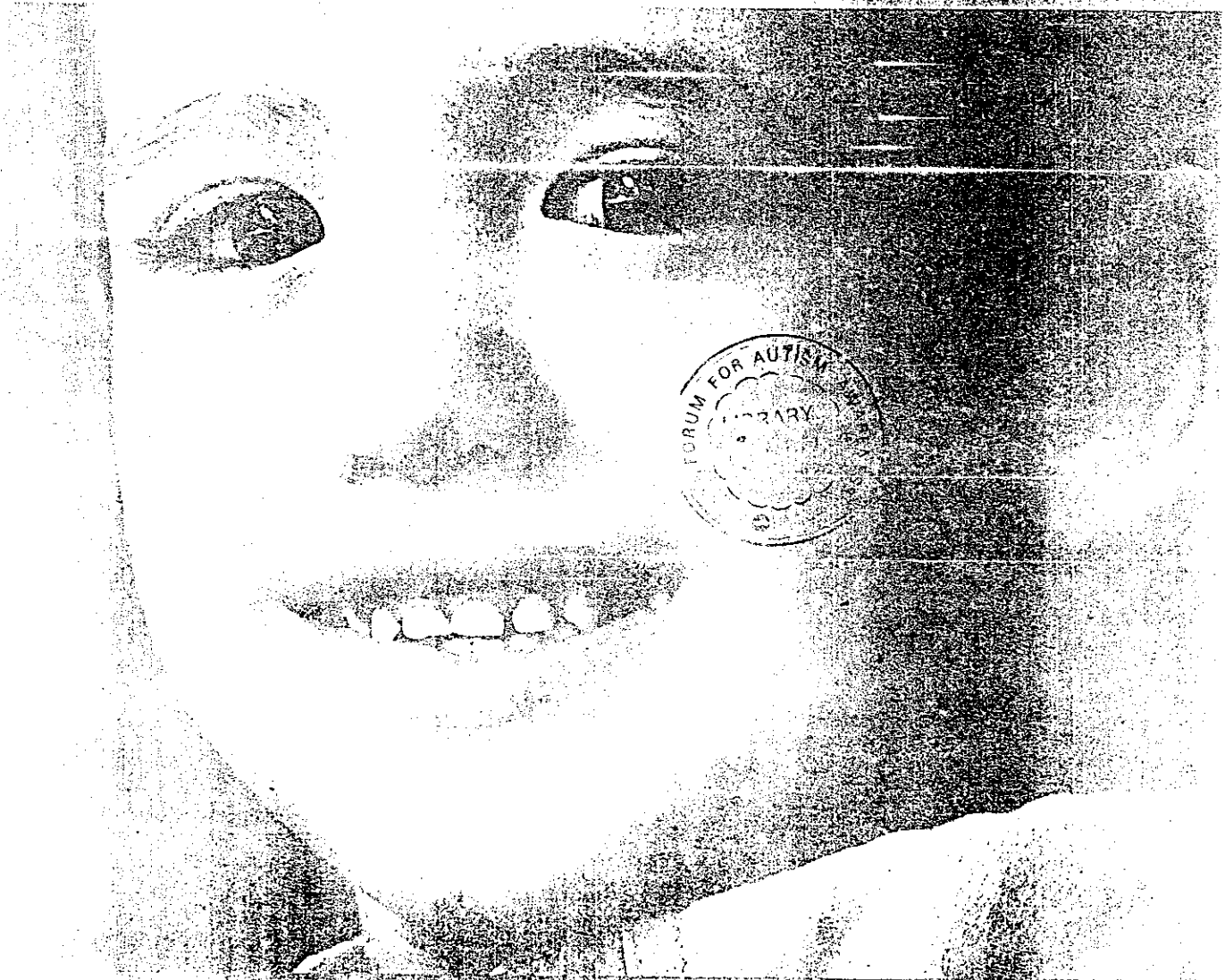
BEHAVIORAL INTERVENTION FOR YOUNG CHILDREN WITH AUTISM

A Manual for Parents and Professionals



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Beginning Curriculum Guide

Attending Skills

1. Sits in a chair independently
2. Makes eye contact in response to name
3. Makes eye contact when given the instruction "Look at me"
4. Responds to the direction "Hands down"

Imitation Skills

1. Imitates gross motor movements
2. Imitates actions with objects
3. Imitates fine motor movements
4. Imitates oral motor movements

Receptive Language Skills

1. Follows one-step instructions
2. Identifies body parts
3. Identifies objects
4. Identifies pictures
5. Identifies familiar people
6. Follows verb instructions
7. Identifies verbs in pictures
8. Identifies objects in the environment
9. Points to pictures in a book
10. Identifies objects by function
11. Identifies possession
12. Identifies environmental sounds

Expressive Language Skills

1. Points to desired items in response to "What do you want?"
2. Points to desired items spontaneously
3. Imitates sounds and words
4. Labels objects
5. Labels pictures
6. Verbally requests desired items
7. States or gestures yes and no for preferred and nonpreferred items
8. Labels familiar people
9. Makes a choice
10. Reciprocates greetings
11. Answers social questions
12. Labels verbs in pictures, others, and self
13. Labels objects by function
14. Labels possession

Pre-academic Skills

1. Matches
   - Identical objects
   - Identical pictures
   - Objects to pictures
   - Pictures to objects
   - Colors, shapes, letters, numbers
   - Nonidentical objects
   - Objects by association
2. Completes simple activities independently
3. Identifies colors
4. Identifies shapes
5. Identifies letters
6. Identifies numbers
7. Counts by rote to 10
8. Counts objects

Self-help Skills

1. Drinks from a cup
2. Uses fork and spoon when eating
3. Removes shoes
4. Removes socks
5. Removes pants
6. Removes shirt
7. Uses napkin/tissue
8. Is toilet-trained for urination

Intermediate Curriculum Guide

Attending Skills

1. Sustains eye contact for 5 seconds in response to name
2. Makes eye contact in response to name while playing
3. Makes eye contact in response to name from a distance
4. Asks "What?" when name is called

Imitation Skills

1. Imitates gross motor movements from a standing position
2. Imitates sequenced gross motor movements
3. Imitates sequenced actions with objects
4. Imitates actions paired with sounds
5. Imitates block patterns
6. Copies simple drawings

Receptive Language Skills

1. Identifies rooms
2. Identifies emotions
3. Identifies places
4. Follows two-step instructions
5. Gives two objects
6. Retrieves objects out of view
7. Identifies attributes
8. Identifies community helpers
9. Pretends
10. Identifies categories
11. Identifies pronouns
12. Follows directions with prepositions
13. Identifies an object in view when it is described
14. Places sequence cards in order
15. Identifies gender
16. Identifies item that is missing
17. Answers *wh*-questions about objects and pictures
18. Answers yes/no in response to questions about objects and actions
19. Names an object by touch

Expressive Language Skills

1. Imitates two- and three-word phrases
2. Requests desired items in a sentence in response to "What do you want?"
3. Requests desired items spontaneously in a sentence
4. Calls parent from a distance
5. Labels object based on function
6. Labels function of objects
7. Labels and points to body part according to function
8. Labels function of body parts
9. Labels places
10. Labels emotions
11. Labels categories
12. Uses simple sentences
    - It's a . . .
    - I see a . . .
    - I have a . . .
13. Reciprocates information
    - I have . . .
    - I see . . .
    - Social information
14. States "I don't know" when asked to label unknown objects
15. Asks *wh*-questions: "What's that?" and "Where is . . ."
16. Labels prepositions
17. Labels pronouns
18. Answers general knowledge questions
19. Labels gender
20. Describes pictures in a sentence
21. Describes objects in view using attributes
22. Recalls immediate past experience
23. Answers "Where . . .?" questions
24. Names what belongs in rooms
25. Labels function of rooms
26. Labels function of community helpers
27. Answers "When . . .?" questions

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Intermediate Curriculum Guide (Cont'd)

28. Describes sequence of pictures
29. Delivers a message
30. Role plays with puppets
31. Offers assistance

Pre-academic Skills

1. Matches items from the same category
2. Gives specified quantity of items
3. Matches number to quantity
4. Matches uppercase to lowercase letters
5. Matches identical words
6. Identifies more and less
7. Sequences numbers/letters
8. Completes simple worksheets
9. Copies letters and numbers
10. Identifies written name
11. Draws simple pictures
12. Writes name
13. Pastes/glues
14. Cuts with scissors
15. Colors within a boundary

Self-help Skills

1. Puts on pants
2. Puts on shirt
3. Puts on coat
4. Puts on shoes
5. Puts on socks
6. Washes hands
7. Is toilet-trained for bowel movements
8. Self-initiates for bathroom

Advanced Curriculum Guide

Attending Skills

1. Makes eye contact during conversation
2. Makes eye contact during group instruction

Imitation Skills

1. Imitates complex sequences
2. Imitates peer play
3. Imitates verbal responses of peers

Receptive Language Skills

1. Follows three-step instructions
2. Follows complex instructions from a distance
3. Names a person, place, or thing when it is described
4. Names an object when only part is visible
5. Identifies items that are the same
6. Identifies items that are different
7. Identifies what does not belong based on attribute or category
8. Identifies plural vs. singular
9. Answers *wh*-questions about a short story
10. Answers *wh*-questions about a topic
11. Follows the instructions "Ask . . ." versus "Tell . . ."
12. Finds hidden object given location clues
13. Discriminates when to ask a question and when to reciprocate information

Expressive Language Skills

1. States "I don't know" to unfamiliar questions
2. Labels a category to which an item belongs
3. Names items in a category
4. Retells a story
5. Describes objects not in view with attributes

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Advanced Curriculum Guide (Cont'd)

6. Recalls past events
7. Describes topics
8. Tells own story
9. Expresses confusion and asks for clarification
10. Labels advanced possessive pronouns
11. Uses correct verb tense
12. Asks a question and retells information
13. Listens to a conversation and answers questions about the conversation
14. Asserts knowledge
15. Answers advanced general knowledge questions
16. Describes how to do something
17. Describes similarities and differences between objects
18. Answers "Which . . .?" questions
19. Asks *wh*-questions when provided with vague information

Abstract Language

1. Answers "Why . . .?" questions
2. Answers "If . . .?" questions
3. Makes logical completions to sentences
4. Describes irregularities in pictures
5. Answers yes/no (factual information)
6. Predicts outcomes
7. Takes another's perspective
8. Provides explanations
9. Excludes an item based on attribute and category
10. Identifies main topic in story and conversation

Academic Skills

1. Defines people, places, and things
2. Completes a pattern
3. Matches written words to objects/objects to written words
4. Reads common words
5. Names letter sounds
6. Names a word beginning with letter sound
7. Names initial, medial, and final consonants
8. Spells simple words
9. States word meaning
10. Identifies simple synonyms
11. Identifies temporal relationships
12. Identifies ordinal numbers
13. Identifies rhyming words
14. Writes simple words from memory
15. Adds single-digit numbers

Social Skills

1. Imitates actions of peer
2. Follows directions from a peer
3. Answers questions from a peer
4. Responds to peer play-initiation statements
5. Plays board game with peer
6. Initiates play statements to peer
7. Reciprocates information to peer
8. Comments to peer during play
9. Asks peer for assistance
10. Offers assistance to peer

School Readiness

1. Waits turn
2. Demonstrates new responses through observation
3. Follows instructions in a group
4. Reciprocates social information in a group
5. Sings nursery rhymes in a group
6. Answers when called on
7. Raises hand to answer question
8. Listens to a story and answers questions about the story
9. Shows and tells

Self-help Skills

1. Brushes teeth
2. Zippers
3. Buttons
4. Snaps

Resources

Noun Cards

1. Photo Cue Cards
   Communication Skill Builders*
2. Photo Nouns (Set One and Set Two)
   Imaginart Communication Products
3. Photo Resource Kit (Nouns)
   PRO-ED

Verb Cards

1. Power Cards: Verb Power (1–3)
   Communication Skill Builders
2. Great Beginnings For Early Language Learning: Beginning Verbs
   Communication Skill Builders
3. Photo Action Cards
   Learning Development Aides (LDA)
   ABC School Supply
4. Verbs, Verbs, Verbs
   PRO-ED

Picture Books

1. *My First Word Book*
   Angela Wilkes
   Dorling Kindersley, Inc., 1991
2. *My First Book of Words: 1,000 Words Every Child Should Know*
   Lena Shiffman
   Cartwell Learning Bookshelf
   Scholastic, Inc., 1992
3. *The First 1,000 Words and Pictures Book*
   Wishing Well Books
   Joshua Morris Publishing, Inc., 1991
4. *The First Thousand Words: A Picture Book*
   Heather Amery & Stephen Cartwright
   Usborne House, EDC Publishing, 1989
5. *300 First Words*
   Betty Root
   Barron's Educational Series, Inc., 1993

Sequencing

1. Childhood Sequence Photos (Sets 1–3)
   Imaginart Communication Products
2. What Follows Next? 3-Scene Sequence Cards
   Kaplan School Supply
3. Frank Schaffer 4- and 6-Scene Sequencing Cards
   Constructive Play Things
4. Classroom Sequencing Card Library
   Lakeshore

Associations

1. Photo Language Cards
   Association Cards
   Imaginart Communication Products
2. Great Beginnings Associations
   Communication Skill Builders
3. Power Cards Association Power
   Communication Skill Builders

Prepositions

1. Color Cards: Language in Living Color
   Prepositions
   Imaginart Communication Products
2. In, On and Under: A Preposition Lotto Game
   Imaginart Communication Products
3. Great Beginning Prepositions
   Communication Skill Builders
4. Where is it? Spatial Relationship Cards
   ABC School Supply

Adjectives

1. Color Cards: Language in Living Color
   Adjectives
   Imaginart Communication Products
2. Power Cards Opposites Power
   Communication Skill Builders
3. Opposites Matching Game
   ABC School Supply

Emotions

1. Feelings and Faces Game
   Lakeshore
2. Moods and Emotions Poster Pack
   Lakeshore
3. Faces and Feelings/Jeux De Visage
   Constructive Play Things

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*See pages 72–73 for telephone numbers of all referenced catalogues.

Resources (Cont'd)

Categories/Classification

1. Category Sort
   Imaginart Communication Products
2. Classroom Sorting Materials
   Lakeshore
3. Classification Picture Card Library
   Lakeshore

Verb Tenses

1. Verb Tenses
   Imaginart Communication Products
2. *Syntax Flip Book*—Revised Edition
   PRO-ED

Irregularities

1. "What's Wrong?" Cards (LDA)
   Imaginart Communication Products
2. "What's Funny?" Blackline Masters
   PRO-ED
3. "What's Different?" Cards
   Imaginart Communication Products
4. "150 What's Wrong with this Picture?" Scenes
   Super Duper School Company

Environmental Sounds

1. Living Learning Soundtracks Lotto
   ABC School Supply
2. Photo Sound Lotto (LDA)
   ABC School Supply
3. Hear the World Sound Lotto Game
   Discovery Toys

Matching

1. Photo Object Beginners Lotto
   Lakeshore
2. Memory Match Game
   ABC School Supply
3. First Memory
   ABC School Supply

Games

1. Eight Spin and See Games:
   Lotto Type Game for Visual and Verbal Skills
   Super Duper School Company
2. No Peeking
   Ravensburger
3. Tell a Story
   Ravensburger
4. What's My Name? The Description Game
   Ravensburger
5. Fast Progress (Advanced Language Game)
   Imaginart Communication Products
6. Silly Expressions Board Game
   Discovery Toys
7. First Four Games
   Ravensburger
8. Mystery Garden
   Ravensburger

Wh-Questions

1. See What You're Asking? Games for *Wh*-Questions
   Colleen Murphy
   Communication Skill Builders
2. *Wh*-Programs Who? What? Where? When? Why?
   Patricia J. Collins, Gary W. Cunningham
   PRO-ED
3. Syntax Two: Materials for Teaching *Wh*-Questions
   ECL Publications

Advanced Language

1. *MEER 1, Manual of Exercises for Expressive Reasoning*
   LinguiSystems
2. *MEER 2, Manual of Exercises for Expressive Reasoning*
   LinguiSystems
3. Why?/Because LDA
   ABC School Supply
4. Safety Cards—In and Around the Home
   Imaginart Communication Products
5. SPARC Picture Scenes
   LinguiSystems
6. Think It—Say It: Improving Reasoning and Organization Skills
   Communication Skill Builders

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Resources (Cont'd)

Academic Curriculums

1. Edmark Reading Curriculum Level 1, 2nd edition
   Edmark Corporation
2. Aims: Pre-Reading Kit
   Continental Press
3. Aims: Mathematics A & B Kits
   Continental Press
4. Special Needs Curriculum: Numbers A–D
   Continental Press
5. Sensible Pencil Handwriting Curriculum
   Ebsco Curriculum Materials

Computer Software

1. First Words
   Laureate
2. First Verbs
   Laureate
3. Micro-LADS
   Laureate
4. First Categories
   Laureate

Miscellaneous

1. Size Sort
   imaginart Communication Products
2. Our Five Senses
   Imaginart Communication Products
3. IZIT Cards
   PRO-ED
4. Power Cards (Same/Different Power 1: House)
   Communication Skill Builders
5. Color Library: Occupations
   Imaginart Communication Products
6. "Say and Do" K—Worksheets
   Super Duper School Company
7. Dot to Dot and Color by Number Artic Worksheets
   Super Duper School Company
8. Deck O' Dough: What's Missing?
   Continental Press
9. Perceptual Activities: Primary
   Academic Therapy
10. ABC Mazes
    Academic Therapy
11. Half-and-Half Design and Color Series
    Academic Therapy
12. Teaching Pictures
    Kaplan
13. Augmentative Communication Products
    Prentke Romich Company
    Mayer-Johnson Company
14. The Best Concept Pictures Ever
    LinguiSystems
15. Brain Quest
    Workman Publishing Company

Catalogs

1. ABC School Supply
   (800) 669-4222
2. Academic Therapy Publications
   (800) 422-7249
3. Communication Skill Builders
   (800) 866-4446
4. Constructive Play Things
   (800) 448-4115
5. Continental Press
   (800) 233-0759
6. Discovery Toys, Inc.
   (800) 426-4777
7. Ebsco Curriculum Materials
   (800) 633-3623
8. ECL Publications
   (602) 246-4163
9. Edmark Corporation
   (800) 362-2890
10. Imaginart Communication Products
    (800) 828-1376
11. Kaplan School Supply
    (800) 334-2014
12. Lakeshore Learning Materials
    (800) 421-5354
13. Laureate Learning Systems, Inc.
    (800) 562-6801
14. LinguiSystems, Inc.
    (800) 776-4332
15. Mayer-Johnson Company
    (619) 550-0084

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Resources (Cont'd)

16. Oriental Trading Company, Inc.
(800) 228-2269
17. Paul Brookes Publishing Company
(410) 337-9580
18. Prentice Hall
(800) 223-1360
19. Prentke Romich Company
(800) 262-1984
20. PRO-ED
(512) 451-3246
21. Research Press
(217) 352-3273
22. Super Duper School Company
(800) 277-8737

Books/Journals

1. *Applied Behavior Analysis*
John O. Cooper, Timothy E. Heron, and William L. Heward
Merrill, 1987
2. *Communication and Language Intervention Series*
Steven F. Warren and Joe Reichle, Eds.
Paul H. Brookes Publishing, 1990
3. *Focus on Autistic Behavior*
PRO-ED Journals
8700 Shoal Creek Blvd.,
Austin, TX 76758-6897
(512) 451-3246
4. *The Good Kid Book: How to Solve the Sixteen Most Common Behavior Problems*
Howard Sloane
Research Press, 1988
5. *The How to Teach Series*
Vance Hall, Nathan Azrin, Victoria A. Besalel, R. Vance Hall, and Marilyn C. Hall
PRO-ED
6. *Journal of Applied Behavior Analysis*
Department of Human Development
University of Kansas
Lawrence, Kansas 66045
(913) 843-0008
7. *Journal of Autism and Developmental Disabilities*
Plenum Press
(212) 620-8000
8. *Let Me Hear Your Voice: A Family's Triumph Over Autism*
Catherine Maurice
Knopf Publishing Company, 1993
9. *Negotiating the Special-Education Maze: A Guide for Parents and Teachers*
Winifred Anderson, Stephen Chitwood and Dierdre Hayden
Woodbine House, 1990
10. *Parents Are Teachers: A Child Management Program*
Wesley C. Becker
Research Press
11. *Personal Care Skills*
Project More: Daily Living Skills
PRO-ED
12. *Steps to Independence: A Skills Training Guide for Parents and Teachers of Children with Special Needs*, 2nd edition
Bruce L. Baker and Allen J. Brightman
Paul Brooks Publishing, 1989
13. *Steps to Independence: Behavior Problems*
Bruce L. Baker, Allen J. Brightman, Louis J. Heifetz, and Diane M. Murphy
Research Press, 1976
14. *Systematic Instruction of Persons with Severe Disabilities*
Martha Snell
Prentice Hall, 1993
15. *Teaching Developmentally Disabled Children: The ME Book*
O. Ivar Lovaas
PRO-ED, 1981
16. *Toilet Training in Less Than a Day*
Nathan Azrin and Richard Foxx
Simon and Schuster, 1974
17. *Toilet Training Persons with Developmental Disabilities*
Richard Foxx and Nathan Azrin
Research Press, 1973

Program Makes Eye Contact

- Program Procedure:
  (1) *In Response to Name*—Sit in a chair across from the child. State the child's name and simultaneously prompt eye contact by bringing an edible reinforcer or a small tangible reinforcer to your eye level. When the child makes eye contact with you for 1 second, immediately give reinforcer to the child. Over the teaching sessions, say the child's name and delay your prompt by several seconds to assess if child looks without the prompt. Differentially reinforce responses demonstrated without prompts. Throughout teaching sessions, provide positive reinforcement if child looks at you spontaneously.
  (2) *For 5 Seconds*—Repeat procedure in #1 but sustain eye contact for 5 seconds prior to giving the reinforcer to the child. Differentially reinforce responses demonstrated without prompts.
  (3) *While Playing*—Give a toy to the child to play with at the table. Sit across from the child and say the child's name. Prompt the child to look at you and reinforce the response. Fade prompts over subsequent teaching trials. Differentially reinforce responses demonstrated with the lowest level of prompting.
  (4) *From a Distance*—Repeat procedure in #3 but sit or stand at a distance of 3 feet. State child's name and prompt the child to look at you. Reinforce the response. Fade prompts over subsequent teaching trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Over the teaching sessions, increase the distance between you and the child.
  (5) *In Response to "Look at Me."*—Sit in a chair across from the child. State the instruction "Look at me." Use the same prompting and reinforcement procedures as in #1.
- Materials: Edible and tangible reinforcers.
- Suggested Prerequisites: Sits in a chair.
- Prompting Suggestions: Bring reinforcer to eye level for child to track or gently guide child's chin upward to prompt eye contact. Use a time-delay procedure: delay the prompt by 2-second increments across trials.

Instruction	Response		
(1–4) The child's name (5) "Look at me."	(1–5) Makes eye contact	Date Introduced	Date Mastered
1. For 1 second			
2. For 5 seconds			
3. While playing			
4. From a distance			
5. In response to "Look at me."			

▸ *Helpful Hint:* Be sure that your child is looking directly at your eyes and not at the reinforcer.

✓ June - Sept. 20

Program: Imitates Gross Motor Movements

- Program Procedure: Sit in a chair facing the child and establish attending. Present the instruction "Do this" while simultaneously modeling a gross motor movement. Prompt the child to perform the action and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Sits in a chair.
- Prompting Suggestions: Physically guide the child to perform the response.

Instruction: "Do this."	Response	Date Introduced	Date Mastered
1. Tap table			
2. Clap hands			
3. Wave			
4. Place arms up			
5. Stomp feet			
6. Tap legs			
7. Shake head			
8. Nod head			
9. Turn around			
10. Cover face with hands			
11. Tap shoulders			
12. Jump			
13. Circle arms			
14. Tap stomach			
15. March			
16. Put arms out			
17. Knock			
18. Put hands on waist			
19. Rub hands together			
20. Tap head			

▸ *Helpful Hint:* Some children may learn object-mediated imitation (e.g., ringing a bell, placing a block in a bucket) faster than gross motor movements. After teaching five imitative responses, probe novel ones; the skill may have generalized!

Program: Imitates Actions with Objects

- Program Procedure: Place two identical objects on the table. Sit across the table facing the child. Establish attending. Present the instruction "Do this" while simultaneously modeling an action with one of the objects. Prompt child to perform the action with the other object and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects for the actions.
- Suggested Prerequisites: Sits in a chair.
- Prompting Suggestions: Physically guide the child to perform the response.

Instruction: "Do this."	Response	Date Introduced	Date Mastered
1. Place block in bucket			
2. Ring bell			
3. Push toy car			
4. Wave flag			
5. Hit drum			
6. Put on hat			
7. Scribble			
8. Wipe mouth			
9. Bang toy hammer			
10. Shake maraca			
11. Feed doll			
12. Hold phone to ear			
13. Drink from cup			
14. Blow horn			
15. Brush hair			
16. Make actions with a doll			
17. Roll Playdoh			
18. Place coin in bank			
19. Kiss doll			
20. Stamp paper			

► *Helpful Hint:* Teach play-related imitations that your child might enjoy.

Program: Imitates Fine Motor Movements

- Program Procedure: Sit in a chair facing the child and establish attending. State the instruction "Do this" while simultaneously modeling a fine motor movement. Prompt child to perform the movement and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Sits in a chair and imitates gross motor movements.
- Prompting Suggestions: Physically guide child to perform the response.

Instruction: "Do this."	Response	Date Introduced	Date Mastered
1. Clasp hands together			
2. Open and close hands			
3. Tap index fingers			
4. Tap thumbs			
5. Wiggle fingers			
6. Rub hands together			
7. Tap index finger to thumb			
8. Point to body parts			
9. Point index finger to palm			
10. Extend index finger			
11. Place thumbs up			
12. Make a peace sign			

▸ *Helpful Hint:* Keep in mind typical motor development when teaching this program. Many children under age 3 will have difficulty imitating fine motor movements.

Program: Imitates Oral Motor Movements

- Program Procedure: Sit in a chair facing the child and establish attending. Present the instruction "Do this" while simultaneously modeling an oral motor movement. Prompt child to perform the movement and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Sits in a chair; makes eye contact; imitates gross and fine motor movements.
- Prompting Suggestions: Physically place the child's mouth in the correct position. Use materials that may facilitate responding (e.g., horn or bubbles for blowing, lollipop for sticking tongue out).

Instruction: "Do this."	Response	Date Introduced	Date Mastered
1. Open mouth			
2. Stick out tongue			
3. Put lips together			
4. Tap teeth together			
5. Blow			
6. Smile			
7. Pucker			
8. Kiss			
9. Place tongue to top teeth			
10. Place top teeth over lower lip			

▶ *Helpful Hint:* Assess the goal of this program. If you are introducing it as a prerequisite for verbal imitation, it may be best to pair a sound with the movement from the start. If you're having trouble prompting a movement, try using a mirror. Have the child look at both of your reflections in the mirror when you present the model and then fade the use of the mirror.

Program: Follows One-Step Instructions

- Program Procedure: Sit in a chair facing the child and establish attending. Present the instruction. Prompt the child to perform the response and reinforce. Fade prompts over subsequent trials. Differentially reinforce responses that are demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.

- Materials: Items needed for the instruction.
- Suggested Prerequisites: For instruction #2, sits in a chair.
- Prompting Suggestions: Physically guide the child to perform the response.

Instruction	Response	Date Introduced	Date Mastered
1. "Sit down."			
2. "Stand up."			
3. "Come here."			
4. "Put hands down."			
5. "Wave bye bye."			
6. "Give me a hug."			
7. "Put arms up."			
8. "Clap your hands."			
9. "Turn around."			
10. "Jump."			
11. "Give me a kiss."			
12. "Throw this away."			
13. "Shut the door."			
14. "Blow a kiss."			
15. "Turn on the light."			
16. "Get a tissue."			
17. "Turn on the music."			
18. "Put on shelf."			
19. "Give me five."			
20. "Stomp your feet."			

➤ *Helpful Hint:* Select instructions that you are likely to ask your child to perform within the context of the day. Choosing instructions that you're likely to use with your child beyond the teaching session will provide natural opportunities for maintenance and generalization.

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Program: Body Parts (Receptive and Expressive)

- Program Procedure:
  (1) *Identifies Body Parts*—Sit in a chair facing the child. Establish attending and state the instruction "Touch ___ (body part)." Prompt the child to touch correct body part on him/herself and reinforce responses. Fade prompts over subsequent trials and differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Body Parts*—Sit in a chair facing the child and establish attending. Point to a body part on yourself and say "What is this?" Prompt the child to name the body part and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites:
  (1) Follows five one-step instructions.
  (2) Identifies the body part and labels familiar objects.
- Prompting Suggestions:
  (1) Model the response or physically guide child to perform response.
  (2) Model the correct response.

Instruction	Response		
(1) "Touch ___." (2) "What is this?"	(1) Touches the correct body part (2) Labels body part	Date Introduced	Date Mastered
1. Head			
2. Feet			
3. Stomach			
4. Nose			
5. Mouth			
6. Legs			
7. Eyes			
8. Ears			
9. Hair			
10. Cheeks			
11. Shoulders			
12. Hand			
13. Face			
14. Arm			
15. Fingers			
16. Elbow			
17. Chin			
18. Toes			
19. Thumb			

► *Helpful Hint:* Initially choose body parts that are not located within close proximity to one another (e.g., initially, teach discrimination of head and feet rather than nose and eyes).

Program: Objects (Receptive and Expressive)

- Program Procedure:
  (1) *Identifies Objects*—Place object(s) on the table in front of the child. Establish attending and state the instruction "Give me ___ (name of object)." Prompt child to hand you the object and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Objects*—Sit in a chair facing the child. Establish attending and present an object. Say "What is this?" Prompt child to label object and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects.
- Suggested Prerequisites:
  (1) Matches identical objects.
  (2) Follows 15 one-step instructions.
  (3) Imitates sounds and simple words.
- Prompting Suggestions:
  (1) Physically guide child to hand the object to you.
  (2) Model the label.

Instruction	Response		
(1) "Give me ___." (2) "What is this?"	(1) Gives correct object (2) Labels object	Date Introduced	Date Mastered
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			

▸ *Helpful Hint:* Choose objects that are relevant to your child. For example, if your child prefers certain toys (e.g., Big Bird or Elmo), use these as the first few objects to teach. The first several objects should sound different (e.g., do not teach "shoe" and "juice" as your first two objects because they sound so similar). If your child has trouble learning receptive labels, try teaching object-related commands (e.g., "Get a tissue" and "Throw the ball"). Gradually move objects closer together and change the instruction to "Give me a tissue" and "Give me the ball."

Program: Pictures (Receptive and Expressive)

- Program Procedure:
  (1) *Identifies Pictures*—Place picture(s) on the table in front of the child. Establish attending and present the instruction "Point to ___ (name of item in picture)." Prompt child to point to the picture and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Pictures*—Sit in a chair facing the child. Establish attending and present a picture for the child to view. Say "What is this?" Prompt child to label the picture and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Photographs of objects, and picture cards (see resource list).
- Suggested Prerequisites:
  (1) Matches identical pictures.
  (2) Follows 10–15 one-step instructions and can identify 10–15 objects.
  (3) Labels objects.
- Prompting Suggestions:
  (1) Physically guide child to point to the picture.
  (2) Model the label.

Instruction	Response		
(1) "Point to ___." (2) "What is this?"	(1) Points to correct picture (2) Labels picture	Date Introduced	Date Mastered
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			

▶ *Helpful Hint:* Begin with photographs of objects that your child has learned to identify. Pictures should be visually distinct (e.g., a picture of an apple should be an apple alone, as opposed to an apple on a tree). Photographs of objects that are relevant to your child (e.g., a picture of his or her bed, or a picture of his or her shoe) will assist in promoting generalization.

Program: Identifies Familiar People

- Program Procedure:
  (1) *Identification in Pictures*—Place picture(s) on the table in front of the child. Establish attending and state the instruction "Point to ___ (name of person in the picture)." Prompt child to point to the correct picture and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Identification in Person*—With a familiar person in the room, sit in a chair facing the child. Establish attending and state the instruction "Go to ___ (name of familiar person)." Prompt child to walk to familiar person. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Photographs of familiar people.
- Suggested Prerequisites: Matches identical pictures. Follows 10 one-step instructions and identifies objects in pictures.
- Prompting Suggestions: Physically guide child to perform the response.

Instruction	Response	Date Introduced	Date Mastered
(1) "Point to ___." (2) "Go to ___."	(1) Points to correct picture (2) Walks to familiar person		
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

▸ *Helpful Hint:* Before teaching discrimination of two pictures of familiar people, use pictures of objects as distractors. Start with one photo of a person and two photos or pictures of objects. Gradually add more photos of different people. If your child has trouble identifying familiar people in person, try using the photographs as a prompt by holding up the photograph when presenting the instruction "Go to ___."

Program — Verbs (Instructions and Picture Identification)

- Program Procedure:
  (1) *Follows Verb Instructions*—Sit in a chair facing the child. Place necessary materials on a table within the child's reach. Establish attending and state the instruction "Show me ___ (verb)." Prompt child to perform the action and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Identifies Verbs in Pictures*—Place picture on the table in front of the child. Establish attending and state the instruction "Point to ___ (verb)." Prompt child to point to the correct picture and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects needed for following the actions and verb card (see resource list).
- Suggested Prerequisites:
  (1) Follows 10 one-step instructions.
  (2) Identifies pictures.
- Prompting Suggestions:
  (1) Model response or physically guide child to perform the action.
  (2) Model the label of the action.

Instruction	Response		
(1) "Show me ___." (2) "Point to ___."	(1) Performs action (2) Points to correct picture	Date Introduced	Date Mastered
1. Standing			
2. Sitting			
3. Clapping			
4. Waving			
5. Eating			
6. Drinking			
7. Turning			
8. Jumping			
9. Hugging			
10. Kissing			
11. Blowing			
12. Sleeping			
13. Knocking			
14. Reading			
15. Drawing			
16. Crying			
17. Brushing			
18. Throwing			
19. Walking			
20. Kicking			

► *Helpful Hint:* Start with actions that your child learned as one-step instructions (e.g., teach "show me standing" if he has learned "stand up").

Program: Environmental Objects (Receptive and Expressive)

- Program Procedure:
  (1) *Identifies Environmental Object*—Sit in a chair facing the child. Establish attending and present the instruction "Touch the ___ (environmental object)." Prompt child to walk to and touch the object. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Environmental Object*—Bring child to the environmental object. Establish attending and point to the object. Say "What's this?" Prompt child to label the object. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites:
  (1) Follows one-step instructions and identifies objects.
  (2) Labels objects.
- Prompting Suggestions:
  (1) Physically guide child to perform the response.
  (2) Model the label of the object.

Instruction	Response		
(1) "Touch the ___." (2) "What's this?"	(1) Walks to and touches object (2) Labels object	Date Introduced	Date Mastered
1. Table			
2. Chair			
3. Window			
4. Floor			
5. Wall			
6. Door			
7. Carpet/Rug			
8. Lamp/Light			
9. Stairs/Steps			
10. Shelf			
11. Curtain			
12. Refrigerator			
13. Stove			
14. Sink			
15. Toilet			
16. Bathtub			
17. Bed			
18. Dresser			

▸ *Helpful Hint:* As a prompting technique, begin with your child close to the object and then fade the distance between child and object.

Program: Points to Pictures in a Book

- Program Procedure: Present a page in a picture book to the child. State the instruction "Point to ___ (name of item)." Prompt child to point to correct picture and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Picture books (see resource list).
- Suggested Prerequisites: Identifies objects and pictures.
- Prompting Suggestions: Physically guide a point response. Begin with picture books that have a limited number of items per page.

Instruction: "Point to the ___."	Response: Points to correct picture	Date Introduced	Date Mastered
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

▶ *Helpful Hint:* Arrange photos of objects that your child knows in a photo album for him or her to point to. Generalize the skill to less structured, more natural context (e.g., while looking at books before bedtime).

Program: Function of Objects (Receptive and Expressive)

- Program Procedure:
  (1) *Identifies Object by Function*—Place object(s) or picture(s) on the table in front of the child. Establish attending and present the instruction "What do you ___ (function) with?" (e.g., "What do you sweep with?"). Prompt child to point to the correct object or picture. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Object by Function*—Sit in a chair facing the child. Establish attending. Say "What do you ___ (function) with?" (e.g., "What do you color with?"). Prompt child to label object (e.g., "crayons" or "I color with crayons"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Labels Function of Object*—Sit in a chair facing the child and establish attending. Say "What do you do with a ___ (name of object)?" (e.g., "What do you do with a pencil?"). Prompt child to name function of object (e.g., "write" or "I write with a pencil"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects.
- Suggested Prerequisites:
  (1) Follows one-step instructions; identifies objects; and follows verb instructions.
  (2 & 3) Identifies object by function and labels objects and verbs.

Question	Response	Date Introduced	Date Mastered
(1 & 2) "What do you ___ with?" (3) "What do you do with a ___?"	(1) Points to object/picture (2) States name of object (3) States function		
1. Write with/Pencil			
2. Drink from/Cup			
3. Eat with/Fork			
4. Cut with/Scissors			
5. Read/Book			
6. Sleep in/Bed			
7. Sit on/Chair			
8. Talk on/Phone			
9. Color with/Crayon			
10. Wash with/Soap			
11. Sweep with/Broom			
12. Blow nose with/Tissue			
13. Throw/Ball			
14. Brush hair/Hair brush			

▸ *Helpful Hint:* Only use objects that your child has mastered in the receptive object/picture identification program (i.e., be sure your child can identify a hammer before you teach its function).

Program: Possession (Receptive and Expressive)

- Program Procedure:
  (1) *Identifies Possession*—With a familiar person in view of the child, present the instruction "Touch ___ (person's) ___ (body part or clothing)" (e.g., "Touch Mary's shirt"). Prompt child to touch the correct body part or clothing item and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Possession*—Point to a familiar person's body part or clothing and say "Whose ___ (body part or clothing)?" Prompt child to name the person and the possession (e.g., "Mary's shirt"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites:
  (1) Identifies body parts or clothing and familiar people (in person).
  (2) Labels body parts or clothing and familiar people.
- Prompting Suggestions:
  (1) Physically guide child to point to correct body part or clothing.
  (2) Model the response.

Instruction	Response	Date Introduced	Date Mastered
(1) "Touch ___ (person's) ___ (body part or clothing)." (2) "Whose ___ (body part or clothing)?"	(1) Touches correct body part or clothing (2) Labels person and body part or clothing		
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

▸ *Helpful Hint:* Start with play figures (e.g., "Touch Bert's nose" vs. "Touch Elmo's nose").

Program: Identifies Environmental Sounds

- Program Procedure:
  (1) *Points to Picture Representing Sound*—Place picture(s) on the table in front of the child. Play sound on cassette player. Ask the question "What do you hear?" Prompt child to point to corresponding picture. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Sound*—Play sound on cassette player. Ask the question "What do you hear?" Prompt child to label the sound. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Environmental sounds material (see resource list) and cassette player.
- Suggested Prerequisites:
  (1) Identifies pictures and actions.
  (2) Labels pictures and actions.
- Prompting Suggestions:
  (1) Model the response or physically guide child to point to correct picture.
  (2) Model the correct response.

Question	Response		
(1 & 2) "What do you hear?"	(1) Points to corresponding picture (2) Labels sound	Date Introduced	Date Mastered
1. Phone ringing			
2. Clock ticking			
3. Frog			
4. Sneezing			
5. Dog barking			
6. Duck quacking			
7. Baby crying			
8. Cat meowing			
9. Piano playing			
10. Fire engine			
11. Bird chirping			
12. Ball bouncing			
13. Car starting			
14. Water splashing			
15. Pig			
16. Cow mooing			
17. Door bell			
18. Horn blowing			
19. Sipping			
20. Hammer banging			

► *Helpful Hint:* Start with sounds that your child may be familiar with. Consider recording sounds heard frequently in your home environment.

Program: Pointing to Desired Items

- Program Procedure:
  (1) *Points to Item in Isolation*—Sit in a chair across from the child. Hold up a preferred item (food or toy). Say "What do you want?" Prompt a point response with child's dominant hand and guide child to touch the item with pointer finger. Immediately give the desired item to the child. Allow child to play with toy or to consume the desired food item. Repeat this procedure and fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Points to Item with Nonpreferred Distracter Present*—Sit in a chair across from the child. Hold up one preferred and one nonpreferred item. Say "What do you want?" Prompt child to point to the preferred item. Immediately give child desired item. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Points to Item on Table*—Place one preferred item and one nonpreferred item on the table just beyond child's reach. Say "What you do you want?" Prompt child to point toward desired item. Immediately give child desired item. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (4) *Points to Item without Verbal Instruction*—Place several preferred items and several nonpreferred items on the table just beyond child's reach. Wait several seconds. If child reaches toward desired item, prompt a point response. Immediately give child desired item. If child does not reach or point spontaneously, entice him or her by sampling an item and then placing the item back on the table or by allowing child access to an item for several seconds and then placing it back on the table. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Preferred items (food and toys) and nonpreferred items.
- Suggested Prerequisites: Sits in a chair.
- Prompting Suggestions: Physically guide or model a point response.

Question	Response	Date Introduced	Date Mastered
(1–3) "What do you want?"	(1–4) Points to preferred item		
1. One prepared item			
2. One preferred item and one nonpreferred item			
3. One preferred item and one nonpreferred item on table			
4. Without verbal instruction			

▷ *Helpful Hint:* Make sure items are truly preferred. Change items during teaching session to avoid satiation. Model the label of the desired item when child points to it. When prompting a point, use a consistent prompt that can be systematically faded. Encourage responding in natural contexts!

(*) choosing from preferred & non-preferred.

Program: Requests Desired Items Verbally

- Program Procedure:
  (1) *One-word Request*—Place a preferred and a nonpreferred item on the table just beyond child's reach. Say "What do you want?" Prompt child to point to preferred item and to label the item (e.g., "cookie"). Immediately give desired item to the child. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Two-word Request*—Place a preferred and a nonpreferred item on the table just beyond child's reach. Say "What do you want?" Prompt child to point to preferred item and to verbally request the item (e.g., "I want cookie"). Immediately give desired item to the child. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Three-word Request*—Place a preferred and a nonpreferred item on the table just beyond child's reach. Say "What do you want?" Prompt child to point to preferred item and to verbally request the item (e.g., "I want cookie"). Immediately give desired item to the child. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (4) *Using Adult's Name*—Place a preferred and a nonpreferred item on the table just beyond child's reach. Say "What do you want?" Prompt child to point to preferred item and to verbally request the item using your name (e.g., "Mommy, I want cookie"). Immediately give desired item to the child. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Preferred and nonpreferred items (toys and food).
- Suggested Prerequisites:
  (1–3) Points to desired items and labels objects.
  (4) Requests in sentences and labels people.
- Prompting Suggestions: Physically guide a point response and model the request phrase.

Question	Response	Date Introduced	Date Mastered
(1–4) "What do you want?"	(1–3) Points and verbally requests (4) Uses adult's name		
1. Point + "(label)"			
2. Point + "Want (label)"			
3. Point + "I want (label)"			
4. Point + "(adult's name) I want (label)"			

▸ *Helpful Hint:* Encourage responding in natural contexts. Arrange desired items on a shelf, in the kitchen on the counter, and out of view. Eventually teach your child to approach you, gain your attention (e.g., tap your shoulder), and request in a full sentence. Encourage eye contact when your child is requesting!

keep chips and Banana

✓ Mamma, I want chips.

Program Yes/No (Preferred and Nonpreferred)

- Program Procedure:
  (1) *For Nonpreferred Items*—Sit in a chair facing the child. Hold up a nonpreferred item (food or toy) and say "Do you want ___ (name of item)?" Prompt child to shake head no or to say "No." Immediately following the response, remove the nonpreferred item from view and present a reinforcer. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *For Preferred Items*—Sit in a chair facing the child. Present a preferred item (food or toy) and say "Do you want ___ (name of item)?" Prompt child to nod head yes or to say "Yes." Immediately following the response, give child the preferred item. Fade prompts over subsequent trials. Differentially reinforce responses that are demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Randomize Yes and No*—Sit in a chair facing the child. Present either a nonpreferred item or a preferred item and say "Do you want ___ (name of item)?" Prompt child to shake head no or to say "No" for the nonpreferred item, or nod head yes or to say "Yes" for preferred items. Following a "No" response, immediately remove the nonpreferred item from view and present a reinforcer. Following a "Yes" response, give child the preferred item. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Preferred and nonpreferred food items and objects.
- Suggested Prerequisites: Imitates head shake and head nod or verbally imitates "No" and "Yes."
- Prompting Suggestions: Model a head shake or model "Yes" and "No."

Question	Response		
(1–3) "Do you want ___?"	(1) "No" (2) "Yes" (3) Either "Yes" or "No"	Date Introduced	Date Mastered
1. For nonpreferred Banana	yes		
2. For preferred Chips	no		
3. Randomize Yes and No			

► *Helpful Hint:* Make sure items are truly preferred and nonpreferred. Use "yucky" food items (relish, mustard) that your child does not like as the nonpreferred items.

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Program: Labels Familiar People

- Program Procedure:
  (1) *Labels in Picture*—Sit in a chair facing the child. Establish attending. Present a photograph of a familiar person and say "Who is this?" Prompt child to name the person in the picture and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels in Person*—With a familiar person in the room, sit in a chair facing the child. Establish attending and point to the familiar person. Say "Who is this?" Prompt child to name the person. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Identifies familiar people in pictures and in person; labels objects.
- Prompting Suggestions: Model the name of the person.

Question	Response		
"Who is this?" (1) In pictures (2) In person	(1) Names person (2) Names person	Date Introduced	Date Mastered
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

▶ *Helpful Hint:* Initially teach familiar people who are distinct looking, such as a parent and a sibling.

Program: Makes a Choice

- Program Procedure: Sit in a chair across from the child. Hold two desired items in view of the child. Say "Do you want a ___ or a ___?" Prompt the child to point to the most desired item object and to name the item. Immediately give the chosen item to the child. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Points to desired items; requests desired items verbally; labels objects.
- Prompting Suggestions: Physically guide the child to point to the desired item and provide a verbal model of the label of the object.

Question: "Do you want a ___ or a ___?"	Response: Points to the desired item and labels item	Date Introduced	Date Mastered
1.			

➢ *Helpful Hint:* To enhance discrimination, start with one highly preferred item and one nonpreferred item. Vary your question (e.g., "Which one do you want?"). If your child is not yet speaking, you can teach the response minus the verbalization (e.g., prompt your child to just point to the desired item). Eventually teach your child to make choices about desired items that are not in view. Be sure to vary the order in which you present your choices to be sure the child is not just choosing the item presented last in the choice (e.g., if you present "Do you want a cookie or an apple?" also present "Do you want an apple or a cookie?").

Program: Social Questions

- Program Procedure: Sit in a chair across from the child. Establish attending and ask a social question. Prompt child to answer the question and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Follows one-step instructions and imitates words.
- Prompting Suggestions: Use a time-delay prompt. Immediately model the correct response and then delay your model by 2-second increments over subsequent trials.

Example Social Question	Response	Date Introduced	Date Mastered
1. "What's your name?"			
2. "How old are you?"			
3. "How are you today?"			
4. "Where do you live?"			
5. "Who is your sister/ brother?"			
6. "What do you like to play with?"			
7. "What's your father's/ mother's name?"			
8. "What do you like to eat?"			
9. "Where do you go to school?"			
10. "Who is your friend?"			
11. "What's your favorite TV show?"			
12. "What's your address?"			
13. "What's your phone number?"			
14. "What do you like to drink?"			
15. "What's your favorite toy?"			
16. "When's your birthday?"			
17. "What's your teacher's name?"			

▸ *Helpful Hint:* Practice the answers to the questions in verbal imitation first to ensure adequate articulation.

Program: Verbs (Labels in Pictures, Others, and Self)

- Program Procedure:
  (1) *Labels Verbs in Pictures*—Sit in a chair facing the child. Establish attending and present a picture of a person performing an action. Say "What (is/are) (he/she/they) doing?" Prompt child to label the action. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Verbs in Others*—Sit in a chair across from the child. Establish attending and perform an action. Say "What am I doing?" Prompt child to label the action. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Labels Verbs in Self*—Prompt child to perform an action (physically guide action or model an action for child to imitate). Say "What are you doing?" Prompt child to label the action. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects needed for the actions and verb cards.
- Suggested Prerequisites: Follows verb instructions and labels pictures.
- Prompting Suggestions: Model the label of the action.

Question	Response		
(1) "What (is/are) (he/she/they) doing?" (2) "What am I doing?" (3) "What are you doing?"	(1–3) Labels action	Date Introduced	Date Mastered
1. Standing			
2. Sitting			
3. Clapping			
4. Waving			
5. Eating			
6. Drinking			
7. Turning			
8. Jumping			
9. Hugging			
10. Kissing			
11. Blowing			
12. Sleeping			
13. Knocking			
14. Reading			
15. Drawing			

► *Helpful Hint:* Take photographs of family members performing actions. Be sure to foster generalization by asking your child to label actions in others and himself or herself in natural contexts.

Program: Matches

- Program Procedure: Place item(s) on the table in front of the child. Present an item that corresponds to one of the items to the child and state the instruction "Match." Prompt the child to place the item on top or in front of the corresponding item and reinforce the correct response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses. Initially, begin with one item present on the table; gradually introduce additional items.
- Materials: Identical objects and pictures, letter cards, colored objects, number cards, and shapes.
- Suggested Prerequisites: Sits in a chair.
- Prompting Suggestions:
  (1) Physically guide the child to perform the response.
  (2) Use a positional prompt by placing the item on the table closer to the child.

Instruction: "Match."	Response: Places item on top or in front of the corresponding item	Date Introduced	Date Mastered
1. Identical objects			
2. Identical pictures			
3. Pictures to objects			
4. Objects to pictures			
5. Colors			
6. Shapes			
7. Letters			
8. Numbers			
9. Nonidentical objects			
10. Associative objects (e.g., pencil to paper)			

▸ *Helpful Hint:* Initially, choose objects that will nest or lie on top of each other (e.g., cup, spoon, or plate). You may want to start with at least three items on the table and vary the positions of the items to enhance discrimination.

Program: Colors (Receptive and Expressive)

- Program Procedure:
  (1) *Identifies Colors*—Place colored material(s) on the table in front of the child. Establish attending and say "Point to ___ (name of color)." Prompt child to point to the correct color and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Colors*—Sit in a chair facing the child. Establish attending and present a colored object. Say "What color is this?" Prompt child to label the color and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Colored paper and colored objects.
- Suggested Prerequisites:
  (1) Identifies pictures.
  (2) Labels objects and pictures.
- Prompting Suggestions:
  (1) Physically guide child to point to correct color. Use positional prompts by placing the colored object that you are asking for closer to the child.
  (2) Model the label of the color.

Instruction	Response		
(1) "Point to ___." (2) "What color is this?"	(1) Points to correct color (2) Labels color	Date Introduced	Date Mastered
1. Blue			
2. Red			
3. Yellow			
4. Green			
5. White			
6. Black			
7. Purple			
8. Orange			
9. Pink			
10. Brown			

▸ *Helpful Hint:* Try incidental teaching techniques to teach expressive colors. Arrange desired items that are different colors in view, but out of reach for your child. When your child requests the item, ask him or her what color the object is before giving it to him or her. For example, place a yellow car, a blue ball, and a green M&M on the table. If your child requests the M&M, hold it up and ask, "What color is it?" Prompt your child to answer and then give him or her the M&M.

Program: Shapes (Receptive and Expressive)

- Program Procedure:
  (1) *Identifies Shapes*—Place shape(s) on the table in front of the child. Establish attending and say "Point to ___ (name of shape)." Prompt child to point to the correct shape and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Shapes*—Sit in a chair facing the child. Establish attending and present a shape. Say "What shape is this?" Prompt child to label the shape and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Shapes.
- Suggested Prerequisites:
  (1) Identifies objects and pictures and matches shapes.
  (2) Identifies shapes, labels objects and pictures.
- Prompting Suggestions:
  (1) Physically guide child to point to correct shape. Use positional prompts by placing the shape that you are asking for closer to the child.
  (2) Model the label of the shape.

Instruction	Response		
(1) "Point to ___." (2) "What shape is this?"	(1) Points to correct shape (2) Labels shape	Date Introduced	Date Mastered
1. Circle			
2. Square			
3. Triangle			
4. Rectangle			
5. Diamond			
6. Oval			
7. Star			
8. Heart			

▶ *Helpful Hint:* Begin with three-dimensional shapes that are of the same color and then introduce two-dimensional shapes (e.g., line drawings of shapes). Eventually teach your child to label the shape of objects (e.g., hold up a box and ask "What shape is this?").

Program: Letters (Receptive and Expressive)

- Program Procedure:
  (1) *Identifies Letters*—Place letter(s) on the table in front of the child. Establish attending and say "Point to ___ (name of letter)." Prompt child to point to the correct letter and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Letters*—Sit in a chair facing the child. Establish attending and present a letter. Say "What letter is this?" Prompt child to label the letter and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Letter cards.
- Suggested Prerequisites:
  (1) Identifies pictures.
  (2) Labels pictures.
- Prompting Suggestions:
  (1) Physically guide child to point to correct letter. Use positional prompts by placing the letter that you are asking for closer to the child.
  (2) Model the label of the letter.

Instruction	Response		
(1) "Point to ___." (2) "What letter is this?"	(1) Points to correct letter (2) Labels letter	Date Introduced	Date Mastered
1. A/a			
2. B/b			
3. C/c			
4. D/d			
5. E/e			
6. F/f			
7. G/g			
8. H/h			
9. I/i			
10. J/j			
11. K/k			
12. L/l			
13. M/m			
14. N/n			
15. O/o			
16. P/p			
17. Q/q			
18. R/r			
19. S/s – Z/z			

▶ *Helpful Hint:* If your child has trouble learning letters, try three-dimensional letters (e.g., plastic letter) to enhance discrimination.

Program **Numbers (Receptive and Expressive)**

- Program Procedure:
  (1) *Identifies Numbers*—Place number(s) on the table in front of the child. Establish attending and say "Point to ___ (number)." Prompt child to point to the correct number and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Numbers*—Sit in a chair facing the child. Establish attending and present a number. Say "What number is this?" Prompt child to label the number and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Number cards.
- Suggested Prerequisites:
  (1) Identifies objects and pictures, and matches numbers.
  (2) Identifies numbers, labels objects and pictures.
- Prompting Suggestions:
  (1) Physically guide child to point to correct number. Use positional prompts by placing the number that you are asking for closer to the child.
  (2) Model the label of the number.

Instruction	Response	Date Introduced	Date Mastered
(1) "Point to ___." (2) "What number is this?"	(1) Points to correct number (2) Labels number		
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19–20.			

► *Helpful Hint:* It may be time for some new and exciting reinforcers!

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Program: Imitating Gross Motor Movements While Standing

- Program Procedure: Stand in front of the child. Establish attending and say "Do this" while simultaneously modeling a gross motor movement. Prompt child to perform the action and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Prerequisites: Imitates gross motor movements while seated in the chair.
- Prompting Suggestions:
  (1) Physically guide child to perform the response.

Instruction: "Do this."	Response	Date Introduced	Date Mastered
1. Jump up and down			
2. Turn around			
3. Put arms out			
4. March			
5. Sit on the floor			
6. Bang hands on floor			
7. Knock on door			
8. Crawl			
9. Walk around the chair			
10. Lay down on floor			
11. Put hands on hips			
12. Twist at waist			
13. Touch toes			
14. Run and stop			
15. Lift one foot up			
16. Hop			
17. Fly like an airplane			
18. Crawl under the table			
19. Lift up the chair			
20. Kick a ball			

▶ *Helpful Hint:* Do this program in a "follow-the-leader" format. Have fun with this program and see if you can get your child to play the leader.

Program: Imitates Sequence (Gross Motor and Actions with Objects)

- Program Procedure:
  (1) *Gross Motor*—Sit in a chair facing the child and establish attending. Say "Do this" and model two gross motor movements (e.g., clap and then tap your head). Prompt child to perform the two movements in the order they were presented. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Actions with Objects*—Place two sets of identical objects on the table (e.g., two bells and two flags). Sit across the table facing the child and establish attending. Say "Do this" and model an action with each object. Prompt child to perform the two movements in the order presented. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects.
- Suggested Prerequisites: Follows one-step instructions; imitates gross motor movements and actions with objects.
- Prompting Suggestions:
  (1) Physically guide child to perform the response.
  (2) Model the second gross motor movement as the child is beginning to perform the first gross motor movement. Gradually model both movements together.
  (3) Say the action as you are demonstrating it. For example, if you model touching your nose and then tapping your head, say "Touch nose," "Touch head" as you model the actions. Gradually begin to fade out the verbal prompts.

Instruction: "Do this."	Response	Date Introduced	Date Mastered
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

▸ *Helpful Hint:* Be sure to vary the components of the sequenced gross motor movements (e.g., if you model "Clap hands and touch nose," teach another gross motor sequence with clap hands, such as "Clap hands and wave"). If your child has trouble with sequenced gross motor, try chaining a motor movement and an action with an object (e.g., place a block in a bucket and tap the table). Model functional sequences that are likely to be called for in real life.

Program: Imitates Actions Paired with Sounds

- Program Procedure: Place an assortment of identical objects on the table. Sit across the table facing the child and establish attending. Present the instruction "Do this" and model an action with an object and a verbalization relevant to the action (e.g., push a car and say "Zoom"). Prompt the child to perform the action and the verbalization. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects.
- Suggested Prerequisites: Follows one-step instructions; imitates actions with objects; imitates sounds.
- Prompting Suggestions:
  (1) Physically guide child to perform action.
  (2) Repeat the verbal model as the child is performing the action with the object.

Instruction: "Do this."	Response	Date Introduced	Date Mastered
1. Push car and say "Zoom."			
2. Put play figure down slide and say "Whee."			
3. Bang hammer and say "Bang, bang, bang."			
4. Drink from cup and slurp.			
5. Put phone receiver to ear and say "Hello."			
6. Pick up toy lion and say "Roar."			
7. Bang keys on a toy piano and say "La, la, la."			
8. Make toy frog hop and say "Ribit, ribit."			
9. Move toy snake across the table and say "Sssss."			
10. Pretend to eat a toy sandwich and say "Yummy."			

▶ *Helpful Hint:* Do this program while playing with your child.

Program: Imitates Block Patterns

- Program Procedure: Place an assortment of identical blocks on the table. Sit across the table facing the child and establish attending. Make a block construction with your set of blocks and present the instruction "Build this." Prompt child to build the same construction with his or her set of blocks. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects.
- Suggested Prerequisites: Follows one-step instructions; imitates actions with objects.
- Prompting Suggestions: Physically guide child to build the construction.

Instruction: "Build this."	Response	Date Introduced	Date Mastered
1. Single-block placements			
2. Two-block constructions			
3. Three-block constructions			
4. Four-block constructions			
5. Five-block constructions			

▸ *Helpful Hint:* Begin with one block placement at a time. For example, place five blocks on the table to the right of your child. Present the instruction "Build this." Move one block from your assortment to the middle of the table and prompt your child to pick the correct block from his or her assortment and to place it in front of your block. Repeat this procedure for each block, placing your block in various positions to construct a building. As your child's accuracy improves, repeat this procedure with two blocks and so on. Eventually, teach your child to match your constructions without seeing you make them (e.g., build your construction behind a piece of paper, remove the paper so your child can see the building, and say "Build this").

Program: Copies Simple Drawings

- Program Procedure: Place writing materials (paper and crayons or markers) on the table in front of the child. Present the instruction "Do this," or "Draw a ___," and simultaneously draw a form on the paper (e.g., a circle) for the child to imitate. Prompt child to pick up a writing utensil and to draw the form. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses made with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Writing utensil and paper.
- Suggested Prerequisites: Imitates fine motor actions and block patterns; completes fine motor activities such as placing small pegs in a peg board.
- Prompting Suggestions: Physically guide child to perform the response; use visual cues on the paper such as dots that serve as prompts to cue the child where to begin the drawing.

Instruction: "Do this."	Response: Draws correct form	Date Introduced	Date Mastered
1. Vertical line			
2. Horizontal line			
3. Plus sign			
4. Circle			
5. Diagonal line			
6. Straight line letters			
7. Curved letters			
8. Numbers			
9. Shapes			
10. Smile face			
11. Flower			
12. Car			
13. House			
14. Person			
15. Rainbow			

► *Helpful Hint:* Have your child practice responses on a child-size easel. If your child does not apply adequate pressure when drawing (e.g., does not push down on the writing utensil, causing the drawing to be too light), try using a different writing utensil such as a colored marker. Make drawing fun!

Program: Rooms (Receptive and Expressive)

- Program Procedure:
  (1) *Locates Rooms*—Sit or stand facing the child. Establish attending. Present the instruction "Go to the ___ (name of room)." Prompt the child to walk into the correct room and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Rooms*—Take child to a room. Establish attending and say "Where are we?" Prompt child to say "In the ___ (name of room)," and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites:
  (1) Follows instructions; identifies pictures and environmental objects.
  (2) Labels objects and environmental objects and locates room.
- Prompting Suggestions:
  (1) Bring child to the room.
  (2) Model the response.

Instruction	Response		
(1) "Go to the ___." (2) "Where are we?"	(1) Walks to correct room (2) States name of room	Date Introduced	Date Mastered
1. Kitchen			
2. Bedroom			
3. Bathroom			
4. Family room			
5. Dining room			
6. Hallway			
7. Garage			
8. (Sibling's) room			
9. Living room			
10. Playroom			

▸ *Helpful Hint:* If your child can repeat words and can label, teach response #2 while you are teaching response #1 (e.g., after you and your child enter the room, present question #2, and then reinforce). Remember to train for generalization by asking your child the question "Where are you?" throughout the day when he or she is in specific rooms. If your child has trouble learning rooms in context, take photographs of the rooms and teach him or her to label them (see the "Places" program).

Program Emotions (Receptive)

- Program Procedure:
  (1) *Identifies Emotions in Pictures*—Place picture of a person displaying an emotion on the table in front of the child. Establish attending and state the instruction "Point to ___ (emotion)." Prompt child to point to the correct picture and reinforce response. Fade prompts over subsequent trials. Differentially reinforce the responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Displays Emotion*—Sit in a chair facing the child. Establish attending and state the instruction "Show me ___ (emotion)." Prompt child to display the emotion and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Photographs of people displaying emotions or emotion photo cards (see resource list).
- Suggested Prerequisites: Identifies objects, actions, and familiar people.
- Prompting Suggestions:
  (1) Physically guide child to point to correct picture.
  (2) Model the emotion.

Instruction	Response		
(1) "Point to ___." (2) "Show me ___."	(1) Points to correct picture (2) Displays emotion	Date Introduced	Date Mastered
1. Happy			
2. Sad			
3. Angry			
4. Surprised			
5. Scared			
6. Sleepy			
7. Sick			
8. Tired			
9. Mad			
10. Afraid			

▶ *Helpful Hint:* Take pictures of family members displaying emotions.

Program: Places (Receptive and Expressive)

- Program Procedure:
  (1) *Identifies Places*—Place picture(s) of place(s) on the table in front of the child. Establish attending and state the instruction "Point to the ___." Prompt child to point to the correct picture and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Places*—Sit in a chair facing the child and establish attending. Present a picture of a place and say "What's this a picture of?" Prompt child to name the place. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: SPARC Picture Scenes (see resource list) or photographs of places.
- Suggested Prerequisites:
  (1) Identifies pictures, environmental objects, and rooms.
  (2) Labels pictures, environmental objects, and rooms.
- Prompting Suggestions:
  (1) Model the response or physically guide child to point to the picture.
  (2) Model the label of the place.

Instruction	Response		
(1) "Point to ___." (2) "What is this a picture of?"	(1) Points to correct picture (2) Labels place	Date Introduced	Date Mastered
1. Park			
2. Zoo			
3. Library			
4. Beach			
5. Farm			
6. School			
7. Circus			
8. Airport			
9. City			
10. Restaurant			
11. Grocery store			
12. Jungle			
13. Ocean			
14. Hospital			
15. Classroom			
16. Playground			
17. Train station			
18. Birthday party			
19. Museum			
20. Dentist office			

▸ *Helpful Hint:* Take photographs of places that your child frequents.

Program: Follows Two-Step Instructions

- Program Procedure: Sit in a chair facing the child and establish attending. Present a two-step instruction. Prompt child to perform the instructions in the order presented. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Items needed for the instruction.
- Suggested Prerequisites: Follows one-step instructions; imitates sequenced gross motor movements.
- Prompting Suggestions:
  (1) Physically guide child to perform response or model the response.
  (2) State the second part of the instruction as the child is finishing the first part of the instruction. Gradually begin to state both parts of the instruction together.
  (3) Limit language when presenting the instruction. For example, state " Touch head, touch nose" for "Touch your head and your nose." Gradually begin to add more language as accuracy improves.

Two-step Instruction	Response	Date Introduced	Date Mastered
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

▷ *Helpful Hint:* Combine one-step commands already mastered to form two-step commands. Be sure to vary the components of the two-step instruction (e.g., if you teach "Clap your hands and touch your nose," teach another two-step instruction with clap hands, such as "Clap your hands and wave bye-bye"). Teach related two-step instructions that will have relevance for your child (e.g., "Get the ball and make a basket").

Program: Gives Two Objects

- Program Procedure: Place several objects on the table in front of the child. Establish attending and present the instruction "Give me the ___ and the ___" (e.g., "Give me the car and the ball"). Prompt the child to hand you both objects. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects.
- Suggested Prerequisites: Follows two-step instructions and identifies objects.
- Prompting Suggestions: Guide the child to hand you both objects. Say the name of the second object as your child is reaching for the first object. Gradually begin to ask for both objects simultaneously.

Instruction: "Give me ___ and ___."	Response: Hands you both objects	Date Introduced	Date Mastered
1.			

- *Helpful Hint:* Prompt your child to retrieve both objects simultaneously using two hands (e.g., one object in one hand, the other in the other hand). If your child has trouble with this program, try limiting the language when you state the instruction (e.g., say "ball, car" rather than "Give me the ball and the car"). Be sure to ask your child to retrieve two objects in natural contexts (e.g., "Get your shoes and your socks").

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Program Attributes (Receptive and Expressive)

- Program Procedure:
  (1) *Identifies Attribute*—Place on table in front of the child two objects that are similar except for one obvious difference of attribute (e.g., two trucks, one big, one little). Establish attending and state the instruction "Point to the ___ (attribute) ___ (object)" (e.g., "Point to the big truck"). Prompt child to point to the correct object and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Attribute*—Place on table in front of the child two objects that are similar except for one obvious difference of attribute (e.g., two trucks, one big, one little). Establish attending and point to one of the objects. Say "What is this?" Prompt child to label the object and the attribute (e.g., "It's a big truck"). Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects that differ by attribute and pictures depicting objects that differ by attribute (see resource list).
- Suggested Prerequisites:
  (1) Identifies objects, pictures, familiar people, environmental objects, colors, and emotions.
  (2) Identifies attributes, labels pictures, familiar people, environmental objects, colors, and emotions.
- Prompting Suggestions:
  (1) Physically guide child to point to the picture.
  (2) Model the attribute and the label.

Instruction	Response		
(1) "Point to the ___ ___." (2) "What is this?"	(1) Points to correct attribute (2) Labels object with attribute	Date Introduced	Date Mastered
1. Big/Little			
2. Wet/Dry			
3. Hot/Cold			
4. Clean/Dirty			
5. Tall/Short			
6. Heavy/Light			
7. Empty/Full			
8. Hard/Soft			
9. Young/Old			
10. Old/New			
11. Long/Short			
12. Thick/Thin			
13. Smooth/Rough			
14. Open/Closed			

► *Helpful Hint:* At first, drop the label of the object when teaching your child to identify the attribute (e.g., say "Point to big" rather than "Point to the big truck").

Program: Community Helpers (Receptive and Expressive)

- Program Procedure:
  (1) *Identifies Community Helper*—Place picture(s) of community helper(s) on the table in front of the child. Establish attending and state the instruction "Point to ___ (name of community helper)." Prompt child to point to the correct picture. Differentially reinforce responses demonstrated with the lowest level of prompting and fade prompts over subsequent trials. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Community Helper*—Sit in a chair facing child and establish attending. Present a picture of a community helper and say "Who is this?" Prompt child to label the community helper. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Community helper pictures (see resource list).
- Suggested Prerequisites:
  (1) Identifies pictures, familiar people, environmental objects, and scenes.
  (2) Labels pictures, familiar people, environmental objects, and scenes.
- Prompting Suggestions:
  (1) Model the response or physically guide child to point to the picture.
  (2) Model the label of the community helper.

Instruction	Response		
(1) "Point to the ___." (2) "Who is this?"	(1) Points to correct picture (2) Labels community helper	Date Introduced	Date Mastered
1. Fireman			
2. Policeman			
3. Mailman			
4. Teacher			
5. Farmer			
6. Garbage man			
7. Barber			
8. Waiter			
9. Bus driver			
10. Pilot			
11. Doctor			
12. Nurse			
13. Truck driver			
14. Dentist			
15. Chef			

▸ *Helpful Hint:* Be sure to point out community helpers to your child when you are out in the community.

Program: Pretends

- Program Procedure: Sit in a chair facing the child and establish attending. Present the instruction "Pretend you're (a) ___ (action, animal, community helper)" (e.g., "Pretend you're drinking"). Prompt child to simulate the action (e.g., for drinking, child brings cupped fist to mouth and makes drinking sound). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Props needed for pretending to be a community helper (e.g., a fire hat, a doctor's kit).
- Suggested Prerequisites: Follows one-step instructions; imitates actions with object; follows verb instructions; and labels objects. For animals and community helpers, child labels animals and community helpers.
- Prompting Suggestions: Physically guide child to perform response or model the response.

Instruction: "Pretend you're ___."	Response: Child simulates action or pretends to be an animal or community helper	Date Introduced	Date Mastered
1. Drinking			
2. Brushing hair			
3. Washing face			
4. Brushing teeth			
5. Licking ice cream			
6. Driving a car			
7. Sweeping			
8. Putting on a hat			
9. A snake			
10. A lion			
11. A dog			
12. A monkey			
13. A frog			
14. A rabbit			
15. A cat			
16. A bird			
17. A fireman			
18. A doctor			
19. A policeman			
20. A barber			

▸ *Helpful Hint:* This is a fun program to do with siblings and peers!

Program 5 Categories (Matches, Identifies, and Labels)

- Program Procedure:
  (1) *Matches*—Place picture(s) of item(s) belonging to specific categories on the table facing the child. Present a picture of an item from one of the categories and state the instruction "Match." Prompt the child to place the picture in the correct category pile. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Identifies*—Place pictures of items belonging to specific categories on the table facing the child. Present the instruction "Point to the ___ (category) (e.g., food)." Prompt the child to point to the correct category. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Labels*—Place piles of categories on the table facing the child. Point to one of the piles and say "What are these?" Prompt the child to label the correct category (e.g., food). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Category/Classification cards (see resource list).
- Suggested Prerequisites: Labels objects, colors, numbers, letters, shapes, and matches nonidentical objects.
- Prompting Suggestions:
  (1–2) Physically guide child to place card in correct pile.
  (3) Provide a verbal model.

Instruction	Response		
(1) "Match" (2) "Point to ___." (3) "What are these?"	(1) Matches card (2) Points to correct category (3) Labels category	Date Introduced	Date Mastered
1. Food			
2. Clothes			
3. Animals			
4. Toys			
5. Fruit			
6. Tools			
7. Vegetables			
8. Transportation			
9. Instruments			
10. Furniture			
11. Shapes			
12. Letters			
13. Numbers			

▸ *Helpful Hint:* If your child has trouble matching pictures of categories, try using three-dimensional items.

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Program: Pronouns (My and Your)

- Program Procedure:
  (1) *Identifies Pronouns*—Sit across from the child. Establish attending and state the instruction "Touch ___ (my/your) ___ (body part or clothing)". (e.g., "Touch my shirt"). Prompt child to touch the correct body part or clothing item and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses. Teach "your" first, then "my," and then randomize the presentation of "my" and "your."
  (2) *Labels Pronoun*—Sit across from the child. Establish attending and point to either a body part (or clothing) on the child or on you. Say "Whose ___ (body part or clothing)?" Prompt child to name the pronoun and the body part or clothing (e.g., "your shirt"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses. Teach "my" first, then "your," and then randomize the presentation of "my" and "your."
- Suggested Prerequisites:
  (1) Identifies body parts or clothing, familiar people (in person), possession, and follows two-step instructions.
  (2) Labels body parts or clothing, familiar people, and possession.
- Prompting Suggestions:
  (1) Physically guide child to point to correct body part or clothing.
  (2) Model the response.

Instruction (1) "Touch ___." (2) "Whose ___?"	Response (1) Touches correct body part or clothing (2) Labels pronoun	Date Introduced	Date Mastered
1. My			
2. Your			
3. Randomize My and Your			

▶ *Helpful Hint:* Once your child learns to identify pronouns, hold off for a few weeks before teaching your child to label the pronouns. This may help to reduce confusion.

Program: Prepositions (Receptive and Expressive)

- Program Procedure:
  (1) *Receptive*—Sit in a chair across from the child. Establish attending and hand an object to the child. State the instruction "Put this ___ (preposition) the ___ (location)" (e.g., "Put this on the table"). Prompt the child to place the object in the correct location. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Expressive*—Place an object in a specific location for the child to view. Say "Where is the ___ (object placed)?" Prompt the child to label the location (e.g., "It's on the table"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects and picture cards depicting prepositions (see resource list).
- Suggested Prerequisites:
  (1) Follows two-step instructions and identifies environmental objects.
  (2) Labels environmental objects and rooms; repeats phrases.
- Prompting Suggestions: Physically guide child to place object in correct location. Provide a verbal model for response #2.

Instruction (1) "Put this ___ the ___." (2) "Where is the ___?"	Response (1) Places object in correct location (2) Names location of object	Date Introduced	Date Mastered
1. On			
2. In			
3. Under			
4. In front of			
5. Behind			
6. Next to			
7. Between			
8. On top			
9. On the bottom			
10. Beside			

- *Helpful Hint:* If your child speaks, teach response #2 while teaching response #1 (e.g., when your child places the object in the location, present the question "Where is the ___?" and then reinforce). Use incidental teaching procedures. For example, place desired items in specific locations. When your child asks for one of the items, ask him or her "Where is the ___ (desired item)?" Prompt your child to label the location and then give the desired item to your child. Teach your child to place himself or herself in specific locations (e.g., "Go under the table"), and ask "Where are you?" Generalize responding to pictures depicting prepositions.

Program: Identifies/Labels Objects When Described (In & Out of View)

- Program Procedure:
  (1) *In View*—Place a group of objects on the table in front of the child. Establish attending and say "I'm thinking of something that's ___ (a description of one of the objects on the table)" (e.g., If an apple is on the table, say "I'm thinking of something that's red, it grows on trees, and you can eat it"). Prompt the child to point to and label the object that you described (e.g., "an apple"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Out of View*—Sit in a chair facing the child. Establish attending and say "I'm thinking of something that's ___ (a description of an object)" (e.g., "I'm thinking of something that is round and you can kick it"). Prompt the child to label the object that you described (e.g., "a ball"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects.
- Suggested Prerequisites:
  (1) In view: labels object, attributes, colors, functions, and categories.
  (2) Out of view: names objects in view when described; describes objects in view using attributes; answers general knowledge questions.
- Prompting Suggestions: Give additional descriptors, point to the object, model the answer, and if not in view, present the object that you are describing.

Instruction	Response		
(1–2) "I'm thinking of something . . ."	(1–2) Labels the object	Date Introduced	Date Mastered
1. Objects in view			
2. Objects not in view			

▸ *Helpful Hint:* Begin with only a few objects in view at a time that are distinct in attributes and functions (e.g., one green item, one yellow item, one that you can eat, one that you can play with). Over time, increase the similarities of the objects (e.g., two red objects, one that you wear and one that you eat). Teach responding to descriptions of places (e.g., "I'm thinking of a place where you can swim and play in the sand." and people: e.g., "I'm thinking of someone who has black hair, she's a girl, she plays with you on Saturdays"). Eventually, teach your child to present you with descriptions, so that you can guess what he or she is thinking about! Vary your instruction (e.g., "Tell me something that's . . ." or "Point to something that . . .").

Program: Sequence Cards (Puts in Order and Describes)

- Program Procedure:
  (1) *Puts in Order*—Hand the child a set of sequence cards and state the instruction "Put these cards in order." Prompt the child to place the cards on the table from left to right in the correct order. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Describes Sequence*—Hand the child a set of sequence cards and ask him or her to place the cards in order. Once cards are placed in the correct order on the table, say "Tell me about the pictures." Prompt the child to point to each picture and to describe the sequence of pictures from left to right (e.g., "The girl is pouring juice, she's drinking the juice, and she's putting the cup in the sink"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Sequence cards (see resource list).
- Suggested Prerequisites: Describes pictures in full sentences.
- Prompting Suggestions: Guide child to place cards in correct order or model the correct response. Model

Instruction	Response	Date Introduced	Date Mastered
(1) "Put the cards in order." (2) "Tell me about the pictures."	(1) Places cards in correct order from left to right (2) Points to and describes each picture from left to right		
1. Two-scene sequence			
2. Three-scene sequence			
3. Four-scene sequence			
4. Five-scene sequence			

▸ *Helpful Hint:* If your child speaks, teach response #2 while you are teaching response #1 (e.g., after you prompt your child to place the cards in order, ask him or her to describe each picture). Begin with two-scene sequences and progress to five. Use pictures of events that your child experiences (e.g., climbing up the slide, sitting on the slide, going down the slide). Take photographs of your child engaged in sequential activities and use these to teach the program.

Program: Gender (Receptive and Expressive)

- Program Procedure:
  (1) *Identifies Gender*—Place picture(s) depicting a gender on the table in front of the child (e.g., a picture of a boy, a picture of a girl). Establish attending and state the instruction "Point to ___ (gender)" (e.g., "girl"). Prompt child to point to the correct picture and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Gender*—Sit in a chair facing the child. Establish attending and present a picture depicting a gender. Say "What is this?" Prompt child to label the gender (e.g., "It's a boy"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Pictures depicting gender.
- Suggested Prerequisites:
  (1) Identifies pictures and familiar people.
  (2) Identifies gender, labels pictures and familiar people.
- Prompting Suggestions:
  (1) Physically guide child to point to correct picture. Use positional prompts by placing the picture that you are asking for closer to the child.
  (2) Model the label of the gender.

Instruction	Response		
(1) "Point to ___." (2) "What is this?"	(1) Points to correct picture (2) Labels gender	Date Introduced	Date Mastered
1. Boy			
2. Girl			
3. Man			
4. Woman			
5. Lady			

► *Helpful Hint:* Use magazines to find gender pictures. Use pictures that depict gender in a clear, unambiguous way. Eventually teach your child to label the gender of familiar people (e.g., "Is Daddy a woman or a man?" "Are you a boy or a girl?").

Program: Answers *Wh*-questions about Objects and Pictures

- Program Procedure:
  (1) *With Objects*—Sit in a chair facing the child. Present an object to the child and ask a *wh*-question about the object (see examples below). Prompt the child to answer the question (see examples below). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *With Pictures*—Sit in a chair facing the child. Present a photograph depicting a familiar person performing an action in a specific location (e.g., a picture of daddy cooking in the kitchen). Ask a *wh*-question about the picture (see examples below). Prompt the child to answer the question (see examples below). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses. Teach the child to discriminate questions about a single object/picture. Initially, teach the child to discriminate two questions about the object/picture first and then introduce each additional question one at a time.
- Materials: Objects and photographs of familiar people performing actions in specific locations.
- Suggested Prerequisites:
  (1) Objects: labels objects, colors, functions, categories, and locations.
  (2) Pictures: labels familiar people, actions, locations (rooms), and emotions.
- Prompting Suggestions: Model the answer.

Example Questions	Example Responses	Date Introduced	Date Mastered
About objects:			
1. "What's this?"	"It's a banana."		
2. "What color is it?"	"It's yellow."		
3. "What do you do with it?"	"I eat it."		
4. "What's a banana?"	"Fruit."		
1. "What's this?"	"It's a lollipop."		
2. "What color is it?"	"It's red."		
3. "What do you do with it?"	"I lick it."		
4. "How does it taste?"	"It tastes sweet."		
5. "Where do you get one?"	"At the store."		
About pictures:			
1. "Who is this?"	"Mommy."		
2. "What's she doing?"	"She's laughing."		
3. "Where is she?"	"In the T.V. room."		
4. "How does he/she feel?"	"She's happy."		

▸ *Helpful Hint:* If your child has trouble with this program, try presenting the questions in a fixed order and then randomizing the questions over time. Your child does not have to meet all of the suggested prerequisites to begin to discriminate several questions about objects/pictures (e.g., if he or she knows labels and colors, teach discrimination of "What's this?" and "What color is this?").

Program Yes/No (Objects)

- Program Procedure:
  (1) *For Object* (Yes)—Sit in a chair facing the child. Present an object and say "Is this a ___ (name of object)?" (e.g., "Is this a car?"). Prompt child to say "Yes." Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *For Objects* (No)—Sit in a chair facing the child. Present an object and say "Is this a ___ (name of object)?" (e.g., "Is this an apple?"). Prompt child to say "No, it's a (name of another object)" (e.g., "No, it's a car"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting.
  (3) *Randomize Yes and No*—Sit in a chair facing the child. Present an object and say "Is this a ___ (name of another object)?" or "Is this a ___ (name of object)?" Prompt child to say "Yes" or "No, it's a ___ (name of object)." Reinforce correct responses. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects.
- Suggested Prerequisites: Answers "Yes"/"No" for preferred and nonpreferred items; labels objects; imitates words; identifies items that are the same and different.
- Prompting Suggestions: Model correct response.

Instruction	Response	Date Introduced	Date Mastered
(1) "Is this a ___ (name of object)?" (2) "Is this a ___ (name of another object)?" (3) Randomize 1 and 2.	(1) "Yes" (2) "No, it's a ___ (name of object)." (3) Either "Yes" or "No, it's a ___."		
1. Yes			
2. No			
3. Randomize Yes and No			

► *Helpful Hint:* Eventually, teach Yes/No responses to questions about actions (e.g., "Is she clapping?") and to general knowledge questions (e.g., "Does it snow in the summer?").

Program: Function of Body Parts

- Program Procedure:
  (1) *Labels Body Part According to Function*—Sit in a chair facing the child and establish attending. Say "What do you ___ (function) with?" Prompt child to point to the correct body part and to name the body part. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Function of Body Parts*—Sit in a chair facing the child. Establish attending. Say "What do you do with your ___ (body part)?" Prompt child to name the function. Differentially reinforce responses demonstrated with the lowest level of prompting.
- Suggested Prerequisites: Identifies and labels body parts; labels objects by function.
- Prompting Suggestions: Model correct response.

Instruction	Response	Date Introduced	Date Mastered
(1) "What do you ___ with?" (2) "What do you do with your ___?"	(1) Points to and names body part (2) States function of body part		
1. See with/Eyes			
2. Smell with/Nose			
3. Hear with/Ears			
4. Taste with/Mouth			
5. Touch with/Hands			
6. Walk with/Legs			
7. Sneeze with/Nose			
8. Blink with/Eyes			
9. Talk with/Mouth			
10. Kiss with/Lips			

▸ *Helpful Hint:* Have you evaluated your child's reinforcement package lately? It may be time for some new and exciting reinforcers!

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Program Labels Emotions

- Program Procedure:
  (1) *Labels Emotions in Pictures*—Sit in a chair facing the child across from you. Establish attending and hold up a picture of a person displaying an emotion. Say "How does ___ (he or she) feel?" Prompt child to label the emotion and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses that are demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Emotions in Others*—Sit child in a chair facing you. Establish attending and display an emotion. Say "How do I feel?" Prompt child to label the emotion and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses that are demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Labels Emotions in Self*—In specific contexts when child is displaying an emotion (e.g., when child is laughing; when child is crying because he or she is hurt), say "How do you feel?" Prompt child to label the emotion and reinforce the response. Fade prompts over subsequent opportunities. Eventually, only reinforce correct, unprompted responses.
- Materials: Photographs of people displaying emotions or emotion cards (see resource list).
- Suggested Prerequisites: Identifies emotions in pictures; labels objects, actions, and familiar people.
- Prompting Suggestions: Model label of emotion.

Question	Response		
(1) "How does ___ feel?" (2) "How do I feel?" (3) "How do you feel?"	(1–3) Labels correct emotion	Date Introduced	Date Mastered
1. Happy			
2. Sad			
3. Angry			
4. Surprised			
5. Scared			
6. Sleepy			
7. Sick			
8. Tired			
9. Mad			
10. Afraid			

► *Helpful Hint:* Use pictures that depict emotions within relevant contexts (e.g., for sad, a picture of a boy crying because he fell off his bike).

Program — Categories (Labels Category & Names Objects in a Category)

- Program Procedure:
  (1) *Labels Category to Which Object Belongs*—Sit in a chair across from the child. Present a picture of an item from a category and ask the child to label the picture (e.g., "What's this?" "A cat"). Say "What's a ___ (label of object)?" (e.g., cat). Prompt child to label the category that the item belongs to (e.g., "an animal"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Names Objects in a Category*
  (a) In view: Place several category cards on the table facing the child. Say "Name a ___ (category)" (e.g., food). Prompt child to name the item belonging to the category (e.g., "hamburger"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (b) Out of view: Sit in a chair across from the child. Establish attending and say "Name a ___ (category)" (e.g., animal). Prompt child to name an item belonging to the category (e.g., "a tiger"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Category/Classification cards (see resource list).
- Suggested Prerequisites: Labels objects, colors, numbers, letters, shapes; matches categories.
- Prompting Suggestions: Provide a verbal model.

Instruction	Response		
(1) "What's a ___?" (2a–2b) "Name a ___."	(1) Labels category (2a–2b) Names item in the category	Date Introduced	Date Mastered
1. Food			
2. Clothes			
3. Animals			
4. Toys			
5. Fruit			
6. Tools			
7. Vegetables			
8. Transportation			
9. Instruments			
10. Furniture			
11. Shapes			
12. Letters			
13. Numbers			

▸ *Helpful Hint:* Consider teaching matching categories, and program #1 simultaneously (e.g., ask "What's this?" ["a cat"]; "What's a cat?" ["an animal"]; "Good! Match animals").

Program: Uses Simple Sentences

- Program Procedure:
  (1) *It's a*—Sit in a chair across from the child. Present an object for the child to view and say "What is this?" Prompt the child to say "It's a ___ (name of object)." Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting.
  (2) *I see a*—Sit in a chair across from the child. Hold up a picture and say "What do you see?" Prompt the child to say "I see a ___ (name of item in the picture)." Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting.
  (3) *I have a*—Sit in a chair across from the child. Hand the child an object or have the child choose an object from a basket. Say "What do you have?" Prompt child to say "I have a ___ (name of object)." Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects and pictures.
- Suggested Prerequisites: Labels objects and pictures; repeats words.
- Prompting Suggestions: Model the correct response.

Question	Response	Date Introduced	Date Mastered
1. "What is this?"	"It's a ___."		
2. "What do you see?"	"I see a ___."		
3. "What do you have?"	"I have a ___."		

► *Helpful Hint:* Question #2, eventually teach your child to label more than one item on a page (e.g., "I see a house, a tree, a car, a ball, and a flower") and generalize responding to picture books.

Program 7: Reciprocates Information (I Have . . . I See . . .)

- Program Procedure:
  (1) *With Objects*—Sit in a chair facing the child. Hand an object to the child and hold a different object in your hand. Hold up your object and say "I have a ___(name of object that you are holding)." Prompt the child to hold up his or her object and prompt the child to say "I have a ___ (name of object child is holding)." Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses. Change objects every few trials. Eventually have the child choose his or her own object from a box when reciprocating. Once the child learns to say what he or she is holding, present additional reciprocation statements about the object (see examples below).
  (2) *With Pictures/Books*—Place two pictures on the table for child to view. Point to one of the pictures and say "I see a ___(name of item in the picture)." Prompt child to point to the other picture and to say "I see a ___ (name of item in the picture)." Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses. Change pictures every few trials. Once child learns to reciprocate one picture, teach responding to pictures in a book (see additional reciprocation statements below).
- Materials: Objects, pictures, and books.
- Suggested Prerequisites: Labels objects; repeats words.
- Prompting Suggestions: Model the reciprocation statement. Use a time-delay procedure by modeling the child's statement immediately after your statement is presented, then fade the presentation of the model by 2-second increments across trials.

Example Statements	Example Responses	Date Introduced	Date Mastered
With objects:			
1. "I have a (duck)."	"I have a (cow)."		
2. "My duck is yellow."	"My cow is white."		
3. "My duck says 'quack.'"	"My cow says 'moo.'"		
4. "My duck lives in a pond."	"My cow lives on a farm."		
With pictures:			
1. "I see a (ball)."	"I see a (flower)."		
2. "I see a (car and a boy)."	"I see a (man and a cake)."		
3. "I see a (red hat)."	"I see a (blue ball)."		
4. "I see a (man walking)."	"I see a (girl swimming)."		
5. "I see a (girl in a car)."	"I see a (boy on the slide)."		

- *Helpful Hint:* Train for generalization in natural contexts (e.g., while playing, "I'm playing with a . . . ;" during meals, "I'm eating a . . .").

Program: Reciprocates Social Information

- Program Procedure: Sit in a chair facing the child and establish attending. Present a social statement to the child (e.g., "My name is ___ [your name]"). Prompt the child to reciprocate relevant information about him/herself (e.g., "My name is ___ [child's name]"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Answers simple social questions; reciprocates with objects/pictures.
- Prompting Suggestions: Model the reciprocation statement. Use a time-delay procedure by modeling the child's statement immediately after you present your statement, then fade the presentation of the model by 2-second increments across trials.

Example: Social statements	Response: Reciprocates relevant information	Date Introduced	Date Mastered
1. "My name is . . ."			
2. "I am ___ years old."			
3. "I live in . . ."			
4. "I like to play with . . ."			
5. "My brother/sister's name is . . ."			
6. "I like to eat . . ."			
7. "My friend's name is . . ."			
8. "My Mommy/Daddy's name is . . ."			
9. "I like to drink . . ."			
10. "My favorite TV show is . . ."			

▶ *Helpful Hint:* Use the social questions that your child has mastered as reciprocation statements. Eventually, teach your child to reciprocate complex information (e.g., "When I go to the park, I like to . . ." or "I had ___ for lunch"). Teach your child to reciprocate information to peers and in a circle-time activity.

Program I Don't Know (Unknown Objects and Questions)

- Program Procedure:
  (1) *To Unknown Objects*—Sit in a chair across from the child and establish attending. Hold up a known object (one that the child can label), and say "What's this?" (child should label object). Following three trials of asking the child to label known objects, hold up an unknown object (one that the child cannot label) and say "What's this?" Immediately prompt the child to say "I don't know." Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses. Randomize trials of asking the child to label known and unknown objects. Change objects across teaching sessions.
  (2) *To Unknown Questions*—Sit in a chair across from the child and establish attending. Ask the child a question whose answer he or she knows (e.g., "What's your name?"). (Child should answer the question.) Following three known questions, present a question whose answer the child does not know (e.g., "Who discovered America?"). Immediately prompt the child to say "I don't know." Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses emitted with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses. Randomize trials of presenting known and unknown questions.
- Materials: Known and unknown objects.
- Suggested Prerequisites:
  (1) Labels objects; repeats phrases.
  (2) States "I don't know" for unknown objects and answers social questions and simple general knowledge questions.
- Prompting Suggestions: Provide a verbal model of the statement. Use a time-delay procedure by modeling the response immediately following the question, and then fading the presentation of the model by 2-second increments across trials.

Questions	Response		
(1) "What's this?" (2) Novel questions	(1–2) "I don't know."	Date Introduced	Date Mastered
1.			
2.			

> *Helpful Hint:* After several successful trials, tell your child the label of the object after each response (e.g., "This is a salt shaker") and the answer to the unknown question.

Program: Asks "What's that?"

- Program Procedure:
  (1) *During an Instructional Task*—Place four pictures that the child can label on the table in front of the child. Establish attending and say "Tell me what you see on the table." Prompt the child (physically guide and provide a verbal model) to point to each picture from left to right and to label each picture (e.g., "cat, ball, tree, apple"). Reinforce the response and fade prompts over subsequent trials. Following several trials of independent responding, remove one of the known pictures and replace it with a picture that the child cannot label. Say "Tell me what you see on the table." Prompt the child (physically guide and provide a verbal model) to point to each picture from left to right and to label each picture (e.g., "cat, ball . . ."). As soon as the child points to the unknown picture, prompt the child to ask "What's that?" Reinforce the response (e.g., "Good asking!") and answer the question (e.g., "It's a vacuum"). Present a new combination of pictures on each trial, each combination consisting of three known pictures and one unknown picture. Change the placement of the unknown picture on each trial. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.

  (2) *Walking Through the House*—Place an assortment of unknown objects throughout the house. Objects should be placed where they would not ordinarily be found (e.g., a plunger in the bedroom). Take the child for a walk through the house. As soon as you and the child approach an unknown object, prompt the child to point to the object and to ask "What's that?" Reinforce the response (e.g., "Good asking!") and answer the question (e.g., "It's a plunger"). Repeat the above procedure for each approach to an unknown object. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.

- Materials: Known and unknown pictures and objects.
- Suggested Prerequisites: Labels objects; imitates the question "What's that?"; states "I don't know" for unknown objects and pictures.
- Prompting Suggestions: Provide a verbal model of the question. Use a time-delay procedure by modeling the question immediately after the child points to the unknown picture/object and by fading the presentation of the model by 2-second increments across trials. Present the model in an exaggerated questioning tone of voice.

Instruction	Response		
(1) "Tell me what you see on the table." (2) Without instruction	(1–2) "What's that?"	Date Introduced	Date Mastered
1.			
2.			

▷ *Helpful Hint:* Determine known and unknown objects ahead of time. Promote question asking in natural contexts (e.g., while looking at a book, while on a walk in the park). Use enticing unknown pictures and objects (e.g., colorful toys).

Program: Asks "What's this?"

- Program Procedure: Place an assortment of known and unknown objects in a bag. Hand the bag to the child and say "Tell me what's in the bag." Prompt the child (physically guide and provide a verbal model) to remove each object from the bag, hold it up, and label the object (e.g., "ball, car, Power Ranger"). As soon as the child holds up an unknown object, prompt the child to ask "What's this?" Reinforce the response (e.g., "Good asking!") and answer the question (e.g., "It's a pinwheel"). Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses. Change objects every few trials.
- Materials: Known and unknown objects.
- Suggested Prerequisites: Labels objects; imitates the question "What's this?"; states "I don't know" for unknown objects and pictures.
- Prompting Suggestions: Provide a verbal model of the question. Use a time-delay procedure; that is, model the question as soon as the child holds up the unknown object, then fade the presentation of the model by 2-second increments across trials.

Instruction: "Tell me what's in the bag."	Response: Asks "What's this?" when holding up known object	Date Introduced	Date Mastered
1.			

▸ *Helpful Hint:* Determine known and unknown objects ahead of time. Generalize responding to natural contexts (e.g., at dinnertime hand your child an unknown food item and prompt him or her to ask "What's this?"). Use enticing, novel objects (e.g., new, colorful toys). Fade distance between you and child so that he or she walks up to you, displays object, and asks the question.

Program: Asks "Where is . . . ?"

- Program Procedure:
  (1) *When Asked to Retrieve Missing Objects*—Place five objects that the child can identify behind his or her chair (out of view). Show child where the objects are (e.g., turn child toward the group of objects and say "Look, there is a ball, car, book, pencil, and a hat"). Turn child toward you so items are no longer in view of the child. Establish attending and state the instruction "Get the ___ (name of an object present)." Prompt child to retrieve the object and reinforce the response. After three trials of asking the child to retrieve objects that are present, remove one of the items (do not let child see you remove the object). Present the instruction "Get the (name of removed object)." As soon as the child goes behind the chair and begins to look for the object (e.g., looks on floor), prompt the child to ask "Where's the ___ (name of removed object)?" Following the question, say "Here's the ___ (name of removed object)!" Show the object to the child and reinforce the response. Following several trials of asking for objects that are not present, ask for objects that are present. Randomize trials of asking for objects present and objects not present. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses. Change objects across teaching sessions.
  (2) *During Activities*—Arrange a context where child is expected to complete an activity (e.g., a puzzle or an art project). Prior to engaging the child in the activity, remove one of the objects needed to complete the activity (e.g., remove a puzzle piece, remove the crayons). Prompt child to begin the activity. When child looks for the removed object, prompt him or her to say "Where's the ___ (name of removed object)?" Following the question, say "Here's the ___ (name of removed object)!" Show the object to the child and reinforce the response. Fade prompts over subsequent opportunities. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually only reinforce correct, unprompted responses.
- Materials: Objects.
- Suggested Prerequisites: Labels objects; retrieves objects out of view; repeats phrases.
- Prompting Suggestions: Provide a verbal model of the question. Use a time-delay procedure by modeling the question immediately when the child is looking for the object and then fading the presentation of the model by 2-second increments across trials.

Instruction	Response		
(1) "Get the ___?" (2) Without verbal instruction	(1–2) "Where's the ___?"	Date Introduced	Date Mastered
1.			
2.			

▶ *Helpful Hint:* Set up opportunities in natural contexts to generalize responding (e.g., hide child's shoes or coat before it's time to go outside).

Program: Pronouns (I and You)

- Program Procedure:
  (1) *I*—Prompt the child to perform an action (e.g., physically guide the child to clap his or her hands) and say "What are you doing?" Prompt the child to say what he or she is doing with correct pronoun (e.g., "I am clapping my hands"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *You*—Sit across from the child. Establish attending and demonstrate an action (e.g., clap your hands). Say "What am I doing?" Prompt child to say what you are doing with the correct pronoun (e.g., "You are clapping your hands"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Randomize I and You*—Prompt the child to perform an action (e.g., give the child some juice to drink) and demonstrate an action (e.g., eat a cookie). Say either "What are you doing?" or "What am I doing?" Prompt the child to say what you are doing (e.g., "You are eating a cookie") or to say what he or she is doing (e.g., "I am drinking juice"). Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Labels actions, possession, and pronouns (my and your).
- Prompting Suggestions: Model the correct response and use a time-delay procedure.

Question	Response		
(1) "What are you doing?" (2) "What am I doing?" (3) Either 1 or 2	(1) Describes what he or she is doing with correct pronoun "I am . . ." (2) Describes what you are doing with correct pronoun "You are . . ." (3) Either 1 or 2	Date Introduced	Date Mastered
1. I am			
2. You are			
3. Randomize I and You			

▸ *Helpful Hint:* Be sure to ask your child to label pronouns in natural contexts.

Program: Pronouns (He or She)

- Program Procedure:
  (1) *He or His*—Have a familiar male perform an action in front of the child. Say "What is ___ doing?" (e.g., "What is Billy doing?"). Prompt the child to say what the person is doing with correct pronoun (e.g., "He is clapping his hands"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *She or Her*—Have a familiar female perform an action in front of the child. Say "What is ___ doing?" (e.g., "What is Mary doing?"). Prompt child to say what the person is doing with the correct pronoun (e.g., "She is clapping her hands"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Randomize He and She*—Present either #1 or #2. Prompt the correct response. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Labels familiar people, actions, possession, gender, and pronouns (my, your, I, you).
- Prompting Suggestions: Model the correct response and use a time-delay procedure.

Question	Response		
(1) "What is ___ doing?" (2) "What is ___ doing?" (3) Either 1 or 2	(1) Describes what the person is doing with correct pronoun: "He is . . ." (2) Describes what person is doing with correct pronoun: "She is . . ." (3) Either 1 or 2	Date Introduced	Date Mastered
1.			
2.			
3.			

▶ *Helpful Hint:* You can also use pictures of boys, girls, men, and women to teach the responses (e.g., hold up a picture of a man and ask "What is the man doing?").

Program: Answers General Knowledge Questions

- Program Procedure: Sit in a chair across from the child and establish attending. Present a question related to a general knowledge topic. Prompt the correct response. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Materials related to specific topics; Brain Quest (see resource list).
- Suggested Prerequisites: Child has mastered receptive and expressive programs relevant to the topic (e.g., for colors, child labels colors and for community helpers, child labels community helpers).

Suggested General Knowledge Topics and Sample Questions	Sample Responses
Topic: Animals 1. "What does a ___ say?" 2. "What says ___?" 3. "What does a ___ do?" 4. "Where does a ___ live?"	1. Dog/"Woof Woof" 2. Woof Woof/"Dog" 3. Dog/"Bark" 4. Cow/"On a farm"
Topic: Colors 1. "What color is the ___?" 2. "Tell me something that's ___."	1. Sun/"Yellow" 2. Yellow/"Sun"
Topic: Community Helpers 1. "What does a ___ do?" 2. "Who ___?"	1. Fireman/"Puts out fires" 2. Puts out fires/"Fireman"
Topic: Holidays 1. "What holiday comes in ___?" 2. "When is ___?" 3. "What happens on ___?"	1. December/"Christmas" 2. Christmas/"December" 3. Thanksgiving/"We eat turkey."
Topic: Attributes 1. "How does ___ taste?" 2. "Tell me something that tastes ___." 3. "How does ___ feel?" 4. "Tell me something that feels ___." 5. "Tell me something that's ___."	1. Candy/"Sweet" 2. Sour/"Lemon" 3. Snow/"Cold" 4. Soft/"Cotton" 5. Big/"Elephant"
Topic: Seasons 1. "What are the four seasons?" 2. "What season does it ___ in?" 3. "What happens in the ___?" 4. "Tell me something you do in the ___."	1. "Winter, Spring, Summer, Fall" 2. Snow/"Winter" 3. Fall/"Leaves fall off the tree." 4. Summer/"Swim"
Topic: General Preschool 1. "What shines in the sky at night?" 2. "What do chickens lay?" 3. "How many days are in a week?"	1. "The moon" 2. "Eggs" 3. "Seven"

Helpful Hint: Initially, use concrete visual materials. For example, use pictures representing holidays when teaching general knowledge questions about holidays.

Program: Describes Pictures in Full Sentences

- Program Procedure: Sit in a chair facing the child. Establish attending and present a picture to the child. State the instruction "Tell me about the picture." Prompt the child to describe the picture in a complete sentence (e.g., "The girl is reading a book"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Verb cards.
- Suggested Prerequisites: Labels objects, familiar people, actions, gender; repeats phrases.
- Prompting Suggestions: Model the description of the picture.

Instruction: "Tell me about the picture."	Response: Describes picture in full sentence	Date Introduced	Date Mastered
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			

▶ *Helpful Hint:* Take pictures of family members performing actions and teach your child to describe these pictures in full sentences (e.g., "Daddy is cooking a hamburger").

Program: Describes Objects with Attributes (in View and Out of View)

- Program Procedure:
  (1) *In View*—Sit in a chair facing the child. Establish attending and present an object to the child. State the instruction "Tell me about this." Prompt the child to label the object and to tell you three things about the object (e.g., "It's a fire truck, it's red and white, it has a ladder, and there's a fireman inside it"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses
  (2) *Out of View*—Sit in a chair facing the child. Establish attending and state the instruction "Tell me about a ___ (name of an object)" (e.g., apple). Prompt the child to describe the object according to attribute, function, and/or category (e.g., "It's red, you can eat it, and it's a fruit"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects.
- Suggested Prerequisites:
  (1) In view: labels objects, attributes, functions, and categories; repeats phrases.
  (2) Out of view: describes objects in view; labels categories, attributes, and functions; repeats phrases.
- Prompting Suggestions: Model a description of the objects.

Instruction	Response	Date Introduced	Date Mastered
(1) "Tell me about this." (2) "Tell me about a ___."	(1) Labels object and tells three things about the object (2) Describes object based on attribute, function, or category		
1. Objects in view			
2. Objects not in view			

Helpful Hint: Shape responses over the teaching sessions (e.g., first teach one descriptor, "It's a red car"; then two, "It's a red car and it has four wheels"; then three, "It's a red car, it has four wheels, and there's a man driving it"). Objects out of view should be those that your child can already describe in view.

Program: Recalls Events (Immediate Past/with a Delay)

- Program Procedure:
  (1) *Immediate Past*—Prompt the child to go to a specific location and to perform an action in the location (e.g., "Go to the bathroom and wash your hands"). Accompany the child to the location. Following the action, return to the teaching room and ask the child several questions about the event (e.g., "Where did you go?" "What did you do there?" "Whom did you see?"). Prompt the child to answer each question (e.g., "To the bathroom," "I washed my hands," "I saw Daddy"). Reinforce each response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *With a Delay*—Prompt the child to go to a specific location and to perform an action in the location (e.g., "Let's go to the kitchen and have some cookies and milk"). Return to the teaching room and engage in a play activity (e.g., do a puzzle with the child). After the activity, ask the child questions about the previous activity (e.g., "Where did we go before we did the puzzle?" "What did we do in the kitchen?" "Who was in the kitchen?"). Prompt the child to answer each question (e.g., "We went to the kitchen," "We had cookies and milk," "Sam was in the kitchen"). Reinforce each response. Fade prompts over subsequent trials. Differentially reinforce responses made with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.

- Suggested Prerequisites:
  (1) Labels rooms, actions, and uses correct tense.
  (2) Recalls events without a delay, retells a story, and describes objects not in view.

- Prompting Suggestions: Model the correct responses.

(1–2) A question about the event	Response: (1–2) Answers the question	Date Introduced	Date Mastered
1. No delay			
2. Delay			

▶ *Helpful Hint:* Eventually, drop the verbal prompt of telling your child where he or she is going to go and just physically guide your child to engage in the activity (e.g., lead him or her into the bathroom, guide him or her to wash his or her hands, return to the teaching room and ask a question about the activity). Do fun activities for your child to recall (e.g., run into the bedroom and jump on the bed). Remember to ask your child to recall information in natural contexts throughout the day (e.g., when you get home from the park, ask "Where did we go?" "What did you do at the park?" and "Whom did you see at the park?"). If your child has difficulty with this program, try teaching one recall question at a time (e.g, first teach " Where did you go?" across different events, then "What did you do?" across different events, and then ask both questions, "Where did you go? " and "What did you do?"). Add additional questions as your child's performance improves.

Program **Answers "Where . . .?" Questions**

- Program Procedure: Sit in a chair across from the child. Establish attending and ask a "Where . . .?" question (e.g., "Where do you find a refrigerator?"). Prompt child to answer the question (e.g., "in the kitchen"), and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: MEER 2 (see resource list).
- Suggested Prerequisites: Labels prepositions, rooms, scenes, and functions of objects.
- Prompting Suggestions: Model the correct response.

Examples: "Where . . . ?"	Response	Date Introduced	Date Mastered
1. . . . do you go to sleep?			
2. . . . do you take a bath?			
3. . . . do you cook dinner?			
4. . . . do you live?			
5. . . . do you buy groceries?			
6. . . . do you find a stove?			
7. . . . does Mommy work?			
8. . . . do you play on a slide and swings?			
9. . . . do you go to school?			
10. . . . do you see a lion?			
11. . . . do you go swimming?			
12. . . . do you go when you're sick?			
13. . . . do you get books from?			
14. . . . can you buy hamburgers and french fries?			
15. . . . do you get your hair cut?			

Helpful Hint: Use pictures of the locations as prompts.

Kamal Rajesh Verma

Program: Function of Rooms

- Program Procedure:
  (1) *Labels Room According to Function*—Sit in a chair across from the child. Establish attending and say "What room do you ___ (e.g., sleep) in?" Prompt the child to label the room (e.g., "my bedroom"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Labels Function of Rooms*—Sit in a chair across from the child. Establish attending and say "What do you do in the ___ (room)?" (e.g., "What do you do in the kitchen?"). Prompt child to say what he or she does in the room. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Labels rooms, function of objects, and actions.
- Prompting Suggestions: Model the correct response.

Question	Response		
(1) "What room do you ___ in?" (2) "What do you do in the ___ ?"	(1) Labels room (2) Labels function	Date Introduced	Date Mastered
1. Kitchen/Cook			
2. Bedroom/Sleep			
3. Bathroom/Take a bath			
4. Family room/Watch TV			
5. Dining room/Eat dinner			
6. Living room/Watch TV			
7. Playroom/Play with toys			

▷ *Helpful Hint:* Use pictures of rooms as a prompt for response #1.

Program: Answers "When . . .?" Questions

- Program Procedure: Sit in a chair across from the child. Establish attending and ask a "When . . .?" question (e.g., "When do you go to sleep?"). Prompt child to answer the question (e.g., "at night"), and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Answers who, where, and why questions.
- Prompting Suggestions: Model the correct response.

Examples: "When . . .?"	Response	Date Introduced	Date Mastered
1. . . . do you go to sleep?			
2. . . . do you take a bath?			
3. . . . do you eat dinner?			
4. . . . do you go to school?			
5. . . . do you wake up?			
6. . . . does it get dark?			
7. . . . does the sun come up?			
8. . . . is Grandma coming?			
9. . . . do you go to the doctor?			
10. . . . is your birthday?			

Helpful Hint: Use the MEER 2 book for additional "When. . .?" questions (see resource list).

Program: Delivers a Message

- Program Procedure: Sit in a chair across from the child and establish attending. Present the instruction "Go tell ___ (a person) ___ (a message)" (e.g., "Go tell Mommy that it's time for lunch"). Prompt the child to approach the person, gain his/her attention, and deliver the message (e.g., "Mommy, it's time for lunch"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Repeats phrases; makes requests in sentences; follows two-step instructions; recalls events.
- Prompting Suggestions: Physically guide child to approach the person and model the message for the child to repeat.

Instruction: "Go tell ___ ___."	Response: Child approaches correct person, gains his/her attention, and delivers the message	Date Introduced	Date Mastered
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

▶ *Helpful Hint:* Begin with simple request messages (e.g., "Go tell Daddy that you want a cookie"). Gradually increase complexity of messages (e.g., "Go tell Daddy whom you saw at the park"). Make the messages relevant to the context. Encourage eye contact when your child is delivering the message.

Program: Role Plays with Puppets

- Program Procedure: Sit across from the child on the floor in a play area. Place several puppets of specific characters or animals in front of the child (e.g., a Bert puppet, a frog puppet). Prompt the child to choose a puppet. Place a puppet on your hand and ask the child a question directed at his or her puppet (e.g., "What's your name?"). Prompt the child to answer the question related to his or her puppet (e.g., "Ernie"). Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Puppets (e.g., Bert, Ernie, animal puppets).
- Suggested Prerequisites: Reciprocates social information and information about object; answers social questions and general knowledge questions.
- Prompting Suggestions: Repeat the question, or provide a verbal model of the correct answer.

	A question directed at the puppet	Response: Correctly answers question related to the puppet	Date Introduced	Date Mastered
1.				
2.				
3.				

Helpful Hint: This program should be taught in a play context with peers. Eventually teach your child to ask your puppet questions! If you do not have puppets, you can do the same program with a play figure (e.g., if you have a Bert doll and an Ernie doll, substitute these for the puppets). Eventually teach reciprocation statements as well as questions.

Laemate Rajesh Verma

Program: Same and Different (Receptive)

- Program Procedure:
  (1) *Same*—Place three objects (two that are the same, one different, e.g., two spoons and a ball) on the table in front of the child. Establish attending and say "Which ones are the same?" Prompt the child to hand you the two identical objects. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Different*—Place three objects (two that are the same, one different, e.g., two spoons and a ball) on the table in front of the child. Establish attending and say "Which one is different?" Prompt the child to hand you the object that is different. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Randomize Same/Different*—Place three objects (two that are the same, one different, e.g., two spoons and a ball) on the table in front of the child. Establish attending and say either "Which one is different?" or "Which ones are the same?" Prompt the the correct response. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting.
- Materials: Objects.
- Suggested Prerequisites: Matches objects; identifies objects, attributes, colors, and categories.
- Prompting Suggestions: Physically guide child to hand you the correct object(s).

Question	Response		
(1) "Which ones are the same?" (2) "Which one is different?" (3) Either 1 or 2	(1–3) Gives correct object(s)	Date Introduced	Date Mastered
Identical Objects			
1. Same			
2. Different			
3. Randomize Same and Different			
Based on Color			
1. Same			
2. Different			
3. Randomize Same and Different			
Based on Category			
1. Same			
2. Different			
3. Randomize Same and Different			

▶ *Helpful Hint:* Begin with identical objects (e.g., two spoons and a hat), then use ones that are similar based on color (e.g., red ball, red cup, and blue shoe), then use ones based on category (e.g., one apple, one banana, and a cup).

Program: Identifies What Does Not Belong (Attribute and Category)

- Program Procedure:
  (1) *Attribute*—Place four objects on the table in front of the child (three that are similar based on attribute and one that is different; e.g., three blue cars and one red car). Say "Which one does not belong?" Prompt the child to point to the correct object and to name the object (e.g., "the red car"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Category*—Place four objects on the table in front of the child (three that are similar based on the category they belong to and one that is different; e.g., three fruits and one animal). Say "Which one does not belong?" Prompt the child to point to the correct object and to name the object (e.g., "the dog"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects in categories and objects similar based on attribute.
- Suggested Prerequisites: Identifies objects that are described; answers "Yes"/"No" in response to questions about objects; identifies objects that are the same and different; labels categories and attributes.
- Prompting Suggestions: Physically guide the child to hand you the correct object and provide a verbal model of the object.

Instruction	Response		
(1–2) "Which one doesn't belong?"	(1–2) Child points to the correct object and names the object	Date Introduced	Date Mastered
1. Attribute			
2. Category			

Helpful Hint: Start simply: Place four objects, three identical, one different (e.g., three balls and one cup) on the table. Say "Which one does not belong?" Prompt your child to hand you the cup. Teach your child to express why the object does not belong (e.g., after the child hands you the correct object, say "Good, why doesn't it belong?" Prompt your child to say "Because it's not [a] ___ [e.g., ball]").

Program: Answers *Wh*-questions About a Story

- Program Procedure:
  (1) *With Pictures*—Sit in a chair facing the child. Present a picture of someone performing an action in a specific location (e.g., a picture of a sibling swimming at the beach). Tell a simple story about the picture (e.g., "Once upon a time Billy went to the beach and he went swimming"). Ask the child a *wh*-question about the story (e.g., "Who went swimming?", "Where did Billy go?", "What did Billy do at the beach?"). Prompt the child to answer each question (e.g., "Billy," "To the beach," "He went swimming"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses made with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Simple Verbal*—Sit in a chair facing the child. Tell a simple story (e.g., "One day, Mommy went to the store and bought some ice cream"). Ask a *wh*-question about the story (e.g., "Who went to the store?", "Where did Mommy go?", "What did Mommy buy at the store?"). Prompt the child to answer each question (e.g., "Mommy," "To the store," "Ice cream"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses made with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Simple Story Book*—Sit in a chair facing the child. Read a page from a simple story book and ask a *wh*-question about what was read. Prompt the child to answer the question. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses made with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (4) *Advanced Verbal*—Sit in a chair facing the child. Tell a four-sentence story to the child (e.g., "One day a little boy named Sam went to the park. At the park he found a red ball. He brought the ball home to show his mommy. He played with the ball after dinner and then he went to bed"). Ask a *wh*-question about the story. Prompt the child to answer each question. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses made with the lowest level of prompting.
- Materials: Photographs of familiar people performing actions in specific locations, and story books.
- Suggested Prerequisites: Discriminates *wh*-questions about objects and pictures; recalls events.
- Prompting Suggestions: Model the answer.

(1–4) A *wh*-question about the story	Response: (1–4) Correctly answers the question	Date Introduced	Date Mastered
1. With pictures			
2. Simple verbal			
3. Simple story book			
4. Advanced verbal			

▶ *Helpful Hint:* If your child has trouble with this program, try teaching each question separately, then randomizing the questions or reducing the complexity of the story (e.g., "Mommy went to the store." "Who went to the store?").

Program

Answers *Wh*-questions About Topics

- Program Procedure: Sit in a chair across from the child. Establish attending and ask a *wh*-question about a topic (see examples below). Prompt the child to answer the question (see examples below). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Discriminates *wh*-questions about objects and pictures; answers why/because questions, where questions, and when questions.
- Prompting Suggestions: Model the correct response.

Example Topics and Questions	Example Responses	Date Introduced	Date Mastered
1. *Breakfast* "What do you eat for breakfast?"	"Pancakes."		
"When do you eat breakfast?"	"In the morning."		
"Why do you eat breakfast?"	"Because I'm hungry."		
"Where do you eat breakfast?"	"In the kitchen."		
"Who makes you breakfast?"	"Daddy does."		
2. *Taking a bath* "When do you take a bath?"	"Before I go to bed."		
"Who gives you a bath?"	"Mommy does."		
"Why do you have to take a bath?"	"To get clean."		
"Where do you take a bath?"	"In the bathtub."		
3. *School* "Where do you go to school?"	"ABC school."		
"When do you go to school?"	"On Mondays."		
"Who do you see at school?"	"I see Tommy and Mary."		
"What do you do at school?"	"I play and write letters."		
"Why do you go to school?"	"To see my friends and to learn."		

▸ *Helpful Hint:* If your child has trouble with this program, try presenting the questions in a fixed order and randomizing the questions over time.

Program: Follows "Ask . . ." Versus "Tell . . ." Instructions

- Program Procedure:
  (1) *Asks*—With another person in view of the child, present the instruction "Ask ___ (person) ___ (a question)" (e.g., "Ask Billy how old he is"). Prompt the child to approach the person and ask the question (e.g., "Billy, how old are you?"; person should then answer the question). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Tells*—With another person in view of the child, present the instruction "Tell ___ (person) ___ (information)" (e.g., "Tell Billy how old you are"). Prompt the child to approach the person and tell the information (e.g., "I'm 6 years old"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Randomize Ask and Tell*—Present either instruction #1 or instruction #2. Prompt for the correct response. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Delivers messages; labels advanced pronouns; answers social questions in full sentences; follows complex instructions from a distance.
- Prompting Suggestions: Physically guide child to approach the person, and model the question or the information for the child to repeat. Use a time-delay procedure.

Instruction	Response		
(1) "Ask ___ ___." (2) "Tell ___ ___." (3) Either 1 or 2	(1) Approaches person and asks the correct question (2) Approaches person and tells the correct information (3) Either 1 or 2	Date Introduced	Date Mastered
1. Ask			
2. Tell			
3. Randomize Ask/Tell			

► *Helpful Hint:* Use peers for this program and teach responding related to play activities (e.g., "Ask Billy what he is making," and "Tell Billy what you're making"). Begin with the other person seated next to your child, so you can model the correct response immediately.

Program: Finds a Hidden Object Given Location Clues

- Program Procedure: Place a variety of objects in specific locations around the house (e.g., place a ball in the closet in the bedroom, place child's shoes under the table in the kitchen). Sit in a chair across from the child and establish attending. Present the instruction "Go get the ___ (object). It's ___ (location clues)" (e.g., "It's in the kitchen, under the table"). Prompt the child to retrieve the object. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Retrieves objects out of view; identifies rooms; follows directions with prepositions; follows three-step instructions.
- Prompting Suggestions: State one location clue first (e.g., "It's in the kitchen"), then once in the kitchen provide the second clue (e.g., "Under the table"). Gradually provide all the clues simultaneously.

Instruction	Response		
(1–3) "Go get the ___, it's ___."	(1–3) Child finds the object	Date Introduced	Date Mastered
1. One clue (e.g., in the closet)			
2. Two clues (e.g., in the closet, in a brown box)			
3. Three clues (e.g., in the kitchen, under the table, in the red cup)			

▸ *Helpful Hint:* Begin with simple clues in the teaching room (e.g., "Get me the ball. It's under the table"). Gradually increase the complexity of the clues (e.g., "Get me the ball. It's in your room, under your bed, in a red box").

Program: Discriminates When to Ask/When to Reciprocate

- Program Procedure: Sit in a chair facing the child. Establish attending and present *either* a vague statement to the child (e.g., "I went somewhere to eat last night") *or* a statement for reciprocation (e.g., "I love eating french fries"). Prompt child either to ask a question related to the statement (e.g., "Where did you go?") or to reciprocate information (e.g., "I love eating cookies"). Reinforce the response (if the child asked a question, answer the question [e.g., "I went to the movies"]). Fade prompts over subsequent trials. Differentially reinforce responses made with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Reciprocates social information and asks *wh*-questions when provided with vague information.
- Prompting Suggestions: Model the question or the statement. Use a time-delay procedure by modeling the response immediately after the vague statement is presented or after the reciprocation statement is presented, and then fading the presentation of the model by 2-second increments across trials.

Examples of Vague Statements and Reciprocation Statements	Examples of Questions and Reciprocal Responses	Date Introduced	Date Mastered
1. Guess what.	"What?"		
2. I went somewhere last night.	"Where did you go?"		
3. I went to the movies. My favorite movie is *The Little Mermaid.*	"My favorite movie is *Pinocchio.*"		
4. I ate something at the movies.	"What did you eat?"		
5. I ate popcorn. I love popcorn!	"I love it too!"		
6. I love it with salt.	"I love it with butter."		
7. I saw someone at the movies.	"Whom did you see?"		
8. I saw Mary. Mary is my best friend.	"Tommy is my best friend."		
9. I'm going to be something really scary for Halloween.	"What are you going to be?"		
10. I'm going to be a ghost.	"I'm going to be a lion."		

► *Helpful Hint:* The above are examples. Prompt for responses that are relevant to your child. Present your statements in a natural conversational tone.

Program: Retells a Story

- Program Procedure:
  (1) *With Props*—Sit on the floor across from the child and establish attending. Using props (e.g., play figures, toy car, toy slide, and doll house furniture) tell the child a simple story (e.g., "Once upon a time, the girl went to the park. She went down the slide, then she went in the car and drove home"). Present the instruction "Tell me what happened in the story." Prompt the child to retell the story using the props. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Without Props*—Sit in a chair across from the child. Establish attending and tell the child a simple story (e.g., "Once upon a time there were three bears . . ."). Present the instruction "Tell me what happened in the story." Prompt the child to retell the story. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Play figures, doll house furniture, toy cars, toy playground equipment (e.g., Little Tykes jungle gym, slide, and swing set).
- Suggested Prerequisites: Imitates complex sequences; describes sequence of pictures; repeats sentences.
- Prompting Suggestions:
  (1) Physically guide child to manipulate the props.
  (2) Model the story for the child to repeat.

Instruction	Response		
(1–2) "Tell me what happened in the story."	(1) Child retells story using props (2) Child retells story	Date Introduced	Date Mastered
1. With props			
2. Without props			

▸ *Helpful Hint:* Begin with simple one-sentence stories and increase the complexity as your child's proficiency improves.

Program: Describes Topics

- Program Procedure: Sit in a chair across from the child and establish attending. Present the instruction "Tell me about ___ (a topic, see examples below)." Prompt the child to describe the topic with three descriptors. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Describes objects in view and out of view with attributes; answers general knowledge questions related to the topic; recalls events; repeats phrases.
- Prompting Suggestions: Model the description.

Instruction "Tell me about ___." Suggested topics and examples	Example Responses	Date Introduced	Date Mastered
1. *Holidays* Example: "Tell me about Christmas."	"It's a holiday. It comes in December. Santa comes and brings presents."		
2. *Places* Example: "Tell me about school."	"I go to Elwood school, my teacher's name is Mr. Jones, and I play with Sarah."		
3. *Family* Example: "Tell me about your brother."	"My brother's name is Mark. He is five years old, and he plays Nintendo."		
4. *Special Events* Example: "Tell me about going ice skating."	"I go ice skating with Mommy. We go to the Willow rink. We skate fast."		

▶ *Helpful Hint:* Shape responses over the teaching sessions (e.g., first teach one descriptor, "It's a holiday"; then two, "It's a holiday. It comes in December"; then three, "It's a holiday. It comes in December, and Santa brings me presents").

Program: Tells a Story (with Props)

- Program Procedure:
  (1) *About a Specific Topic*—Sit on the floor across from the child. Place props (e.g., play figures, toy car, toy slide, and doll house furniture) on the floor in front of the child. Present the instruction "Tell me a story about ___ (topic)" (e.g., "Ernie going to the park"). Prompt the child to tell the story using the props (e.g., guide child to manipulate Ernie while modeling "Once upon a time, Ernie got in his car. He drove to the park and he went down the slide. He got in his car and he drove home"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *No Specific Topic*—Sit on the floor across from the child. Place props (e.g., play figures, toy car, toy slide, and doll house furniture) on the floor in front of the child. Using the props, tell a simple story to the child. Present the instruction "Now it's your turn. Tell me a story." Prompt the child to tell a story using the props (e.g., guide child to manipulate Bert while modeling "Once upon a time, Bert was hungry so he got in his car and drove to McDonald's. He got a hamburger and fries, and then he went home"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Play figures, doll house furniture, toy cars, toy playground equipment (e.g., Little Tykes jungle gym, slide, and swing set).
- Suggested Prerequisites: Retells stories; imitates complex sequences; describes sequence of pictures; describes objects in view; repeats sentences.
- Prompting Suggestions:
  (1) Physically guide child to manipulate the props, and model the story for the child to repeat.
  (2) If the child has difficulty creating his or her own story, suggest vague topics (e.g., "You can tell me a story about Ernie"), or start the story by modeling the first sentence and pausing to assess if the child will continue with the story.

Instruction	Response	Date Introduced	Date Mastered
(1) "Tell me a story about ___." (2) "Now it's your turn. Tell me a story."	(1) Child tells story about the topic using the props (2) Child tells story using props		
1. About a topic			
2. No topic			

Helpful Hint: This is a good program to do with peers. Sit in a circle and take turns telling stories. For response #2 discourage exact repetitions of your story (e.g., say "Tell a different story" if your child repeats the story you told). Try videotaping simple stories with props and teaching your child to imitate the model presented on the video.

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Program Tells a Story (without Props)

- Program Procedure:
  (1) *About a Specific Topic*—Sit in a chair across from the child. Establish attending and present the instruction "Tell me a story about ___ (topic)" (e.g., "a scary monster"). Prompt the child to tell a story (e.g., model "Once upon a time, there was a big scary monster. He had red eyes and green teeth"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *No Specific Topic*—Sit in a chair across from the child. Establish attending and tell the child a simple story. Present the instruction "Now it's your turn, tell me a story." Prompt the child to tell a story. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Retells stories; imitates complex sequences; describes sequence of pictures; tells stories with props; describes objects out of view, describes topics; repeats sentences.
- Prompting Suggestions:
  (1) Model the story for the child to repeat.
  (2) If the child has difficulty creating his or her own story, suggest vague topics (e.g., "You can tell me a story about Ernie"), or start the story by modeling the first sentence and pausing to assess if the child will continue with the story.

Instruction	Response	Date Introduced	Date Mastered
(1) "Tell me a story about ___." (2) "Now it's your turn, tell me a story."	(1) Child tells story about topic. (2) Child tells own story.		
1. Specific topic			
2. Without topic			

► *Helpful Hint:* Shape storytelling over the teaching sessions (e.g., first reinforce one-sentence stories, then two, and so on). This is a good program to do with siblings and peers.

Program: Expresses Confusion and Asks for Clarification

- Program Procedure: Sit in a chair across from the child. Establish attending and present a complicated instruction (e.g., ask the child to perform something that you know he or she can't perform, such as "Touch your shin," or state a three-step instruction in a fast manner, or present an instruction with low volume). Prompt the child to express confusion and to ask for clarification (e.g., "I don't understand. Show me how to do that," or "I didn't understand you. Say it again," or "I can't hear you. Say it louder"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: States "I don't know" to unfamiliar questions; identifies irregularities in pictures; repeats sentences.
- Prompting Suggestions: Model the correct response.

A Complicated Instruction	Response: Child states that he/she does not understand and asks for clarification	Date Introduced	Date Mastered
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			

▸ *Helpful Hint:* Be sure to randomize simple instructions that your child can perform with complicated ones. This will teach your child to discriminate when to ask for clarification and when not to.

Program: Advanced Possessive Pronouns (I/You)

- Program Procedure:
  (1) *I/Your/His/Her*—Prompt (physically guide) the child to touch a body part or clothing item on you or on another person. Say "What are you doing?" Prompt the child to say what he or she is doing with the correct pronouns (e.g., "I am touching your head" or "I am touching her shoulder"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *You/My/His/Her*—Touch a body part or a clothing item on the child or on someone else. Say "What am I doing?" Prompt the child to say what you are doing with the correct pronouns (e.g., "You are touching my shirt" or "You are touching his hat"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Randomize 1 and 2*—Prompt (physically guide) the child to touch a body part or a clothing item on you or on another person while you are touching a body part or a clothing item on the child or on someone else. Say either question #1 or #2. Prompt the correct response. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Labels familiar people, actions, possession, gender, and pronouns (my, your, I, you).
- Prompting Suggestions: Model the correct response and use a time-delay procedure.

Question	Response	Date Introduced	Date Mastered
(1) "What are you doing?" (2) "What am I doing?" (3) Either 1 or 2	(1) Describes what he/she is doing with the correct pronouns (2) Describes what you are doing with the correct pronouns (3) Either 1 or 2		
1. I/Your/His/Her			
2. You/My/His/Her			
3. Randomize 1 and 2			

► *Helpful Hint:* Do this program with peers during circle-time activities.

Program: Advanced Possessive Pronouns (He/She)

- Program Procedure:
  (1) *He/My/Your/His/Her*—Have the child observe a male person touching a clothing item or a body part on himself, the child, you, or another person. Say "What is ___ (person's name) doing?" Prompt the child to say what the person is doing with the correct pronouns (e.g., "He is touching my nose"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *She/My/Your/His/Her*—Have the child observe a female person touching a body part or a clothing item on herself, the child, you, or another person. Say "What is ___ (person's name) doing?" Prompt the child to say what the person is doing with the correct pronouns (e.g., "She is touching his nose"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Randomize 1 and 2*—Have the child observe 1 and 2 simultaneously. Present either question #1 or question #2. Prompt the correct response. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Labels familiar people, action, possession, gender, pronouns (my, your, I, you, he, she); repeats sentences.
- Prompting Suggestions: Model the correct response and use a time-delay procedure.

Question	Response		
(1–3) "What is ___ doing?"	(1–3) Describes what the person is doing with the correct pronouns	Date Introduced	Date Mastered
1. He/My/Your/His/Her			
2. She/My/Your/His/Her			
3. Randomize 1 and 2			

▸ *Helpful Hint:* Do this program with peers during circle-time activities.

Program: Uses Correct Tense

- Program Procedure:
  (1) *Future*—Sit in a chair across from the child. Establish attending and ask the child to perform an action (e.g., "Clap your hands"). Before the child performs the action, say "What are you going to do?" Prompt the child to say what he or she is going to do with the correct tense (e.g., "I'm going to clap my hands"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Present*—Sit in a chair facing the child. Establish attending and ask the child to perform an action (e.g., "Clap your hands"). While the child is performing the action, say "What are you doing?" Prompt the child to say what he or she is doing with the correct tense (e.g., "I'm clapping my hands"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Past*—Sit in a chair facing the child. Establish attending and ask the child to perform an action (e.g., "Clap your hands"). After the child performs the action, say "What did you do?" Prompt the child to say what he or she did with the correct tense (e.g., "I clapped my hands"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Labels actions in self; uses pronouns; repeats sentences.
- Prompting Suggestions: Model the correct response.

Question	Response	Date Introduced	Date Mastered
(1) "What are you going to do?" (2) "What are you doing?" using present tense (3) "What did you do?"	(1) Provides description using future tense (2) Provides description (3) Provides description using past tense		
1. Future			
2. Present			
3. Past			

▷ *Helpful Hint:* Eventually teach more complex descriptions with correct tense (e.g., "I'm going to go to the kitchen to get a cup," "I'm getting a cup from the kitchen," and "I went to the kitchen and got a cup"). Teach responding to pictures (e.g., use the Verb Tensing Cards; see resource list).

Program: Answers Questions About a Conversation

- Program Procedure: Sit in a circle with the child and another person. Have the child observe a simple conversation about a specific topic between you and the other person (e.g., "Mike, what's your favorite thing to eat?" "Pizza. What's your favorite thing to eat?" "I like to eat hamburgers"). After the conversation, ask the child specific questions about the conversation (one at a time) (e.g., "What are we talking about?" "What's Mike's favorite thing to eat?" "What do I like to eat?"). Prompt the child to answer each question (e.g., "You're talking about your favorite thing to eat," "Pizza," "Hamburgers"). Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Retells a story; listens to a story and answers questions about the story; asks questions and retells information; recalls events.
- Prompting Suggestions: Repeat portions of the conversation. Model the response.

A question about a conversation	Response: Child correctly answers question	Date Introduced	Date Mastered
1.			
2.			
3.			

Helpful Hint: During the conversation, prompt the child to look at each person as he or she is speaking. Begin with simple conversations and progress to more complex conversations. If your child has trouble answering many questions about a conversation, begin with one question (e.g., teach responding to "What are we talking about?" across a number of conversations before adding additional questions). Videotape conversations.

Program: Describes How

- Program Procedure: Sit in a chair across from the child and establish attending. Ask a "How" question (e.g., "How do you brush your teeth?"). Prompt the child to provide a description (e.g., "First I get my toothbrush and toothpaste. I put the toothpaste on the toothbrush, . . . and then I put the toothbrush away"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Describes sequence of pictures; recalls events; tells stories.
- Prompting Suggestions: Model the response. If your child reads, use written prompts (write out the description for the child to read) and fade the prompts over the teaching sessions.

Examples of a "How" question	Response: Describes how	Date Introduced	Date Mastered
1. . . . do you brush your teeth?			
2. . . . do you make a peanut butter and jelly sandwich?			
3. . . . do you play ___?			
4. . . . do you wash your hands?			
5. . . . do you make a snowman?			
6. . . . do you get dressed?			
7. . . . does this work?			
8. . . . do you make a sand castle?			
9. . . . do you take a bath?			

▶ *Helpful Hint:* When your child is engaging in the activities that he or she will later describe, verbalize the sequence as your child is going through each step (e.g., as your child is brushing his or her teeth, say "First you get your toothbrush and the toothpaste . . ."). Generalize responding about events in which your child participates (e.g., Make waffles with your child. When you're finished, ask your child "How did we make the waffles?").

Program: Same and Different (Expressive, in View)

- Program Procedure:
  (1) *Same*—Sit in a chair across from the child. Present two objects that are the same and say "What is the same about these?" or "Why are these the same?" Prompt child to describe the similarities between the objects (e.g., "They're both apples"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Different*—Sit in a chair across from the child. Present two objects that are different and say "What is different about these?" Prompt the child to describe what is different about the objects (e.g., "One is an apple and the other is a ball"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Randomize Same and Different*—Sit in a chair across from the child. Present two objects that are similar but have different attributes (e.g., two balls, one red and one blue). Say either "What is different about these?" or "What is the same about these?" Prompt the correct response (e.g., "One is blue and the other is red" or "They're both balls"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Objects.
- Suggested Prerequisites. Labels objects, attributes, colors, and categories; discriminates *wh*-questions about an object; and identifies objects that are the same/different.
- Prompting Suggestions: Model the correct response.

Question	Response	Date introduced	Date Mastered
(1) "What is the same about these?" (2) "What is different about these?" (3) Either 1 or 2	(1) Describes similarities between the objects (2) Describes differences between the objects (3) Either 1 or 2		
1. Same			
2. Different			
3. Randomize Same and Different			

▸ *Helpful Hint:* You can teach expressive responding while you are teaching receptive responding (e.g., after your child hands you the objects that are the same, ask "Why are these the same?"). Eventually, teach your child to describe several things that are similar and/or different about the objects (e.g., "One is red and you eat it, and the other is blue and you color with it"). Be sure to point out similarities and differences in natural contexts (e.g., "Look at those two boys. They both have hats. What's different about their hats?" Response: "One is red and the other is blue").

Program: Same and Different (Expressive, out of View)

- Program Procedure:
  (1) *Same*—Sit in a chair across from the child. Establish attending and say "What is the same about a ___ and a ___?" (e.g., "What is the same about an apple and a banana?"). Prompt the child to describe the similarities between the items (e.g., "They're both fruit"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Different*—Sit in a chair across from the child. Establish attending and say "What is different about a ___ and a ___?" (e.g., "What is different about an apple and a banana?"). Prompt the child to describe what is different about the items (e.g., "One is red and the other is yellow"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Randomize Same and Different*—Randomize the presentation of question #1 and question #2. Prompt for the correct response. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Describes objects out of view; describes similarities and differences between objects in view.
- Prompting Suggestions: Model the correct response.

Question	Response	Date Introduced	Date Mastered
(1) "What is the same about a ___ and a ___?" (2) "What is different about a ___ and a ___?" (3) Either 1 or 2	(1) Describes similarities between objects (2) Describes differences between objects (3) Either 1 or 2		
1. Same			
2. Different			
3. Randomize Same and Different			

► *Helpful Hint:* If your child has difficulty with this program, hold the objects in view for the first trial and then repeat the question with the objects out of view on the following trial.

Program Answers "Which . . .?" Questions

- Program Procedure: Sit in a chair across from the child. Establish attending and ask a "Which . . ." question (e.g., "Which one is big, an elephant or a mouse?"). Prompt child to answer the question (e.g., "an elephant") and reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses made with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Answers yes/no for objects, answers who, where, and why questions and general knowledge questions.
- Prompting Suggestions: Model the correct response.

Examples of a "Which . . .?" question	Response	Date Introduced	Date Mastered
1. . . . one can swim: a fish or a bird?			
2. . . . toy can you throw: a puzzle or a ball?			
3. . . . food tastes sweet: candy or lemons?			
4. . . . animal says roar: a tiger or a cat?			
5. . . . season does it snow: winter or summer?			
6. . . . one do you wear on your head: a sneaker or a hat?			
7. . . . do you ride in: a car or a chair?			
8. . . . animal is soft and furry: a snake or a cat?			
9. . . . one is little: a mouse or an elephant?			
10. . . . one flies in the sky: a bird or a dog?			

- *Helpful Hint:* Begin with objects in view (e.g., place an apple and a banana on the table and ask "Which one is yellow: the apple or the banana?"). Use the MEER 2 book for additional "Which. . ." questions (see resource list).

Program: Asks a *Wh*-question When Provided with Vague Information

- Program Procedure: Sit in a chair facing the child. Establish attending and present a vague statement to the child (e.g., "I went somewhere last night"). Prompt child to ask you a question related to the statement (e.g., "Where did you go?"). Reinforce the response and answer the question (e.g., "I went to the movies"). Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Reciprocates information, answers *wh*-questions about topics, answers when and why questions, asks "Where is . . .", "What is . . .", uses advanced possessive pronoun, and uses correct tense.
- Prompting Suggestions: Model the question. Use a time-delay procedure by modeling the question immediately after the vague statement is presented, and then fade the presentation of the model by 2-second increments across trials.

Sample Vague Statements	Response: Asks *wh*-question related to the statement	Date Introduced	Date Mastered
1. "I got a new toy."	"What did you get?"		
2. "I bought something at the store."	"What did you buy?"		
3. "My friend did something funny."	"What did he do?"		
4. "I had something good for lunch."	"What did you have?"		
5. "I went somewhere last night."	"Where did you go?"		
6. "My dad went on a trip."	"Where did he go?"		
7. "I'm going somewhere tomorrow."	"Where are you going?"		
8. "I saw someone today."	"Whom did you see?"		
9. "There's someone here."	"Who is here?"		
10. "Someone bought this for me."	"Who bought it for you?"		
11. "I had to go to the doctor."	"Why?"		
12. "I can't go to the park today."	"Why not?"		
13. "I'm going to Disney World."	"When are you going?"		

➢ *Helpful Hint:* Start with questions related to play activities (e.g. "I'm making something," "I'm drawing something," or "I have something"). Your statements should be ones that would naturally evoke a question (e.g., saying "I went to McDonald's" does not naturally evoke a question, but saying "I found something at the park" may evoke the question "What did you find?"). Present evocative statements in natural contexts (e.g., before going out, say "We're going somewhere." Pause and prompt for "Where are we going?").

Program: Answers "Why . . .?" and "If . . .?" Questions

- Program Procedure:
  (1) *"Why . . .?"*—Sit in a chair facing the child. Establish attending and ask a "Why" question (e.g., "Why do you eat?"). Prompt child to answer the question (e.g., "Because I'm hungry"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting.
  (2) *"If . . .?"*—Sit in a chair facing the child. Establish attending and ask an "If" question (e.g., "What do you do if you're hungry?"). Prompt child to answer the question (e.g., "I eat something"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Suggested Prerequisites: Answers who, what, where, questions; labels actions, emotions, and functions.
- Prompting Suggestions: Model the correct answer.

Question	Response		
(1) "Why do you ___?" (2) "What do you do if (you're) ___?"	(1) "Because I'm . . ." (2) "I . . ."	Date Introduced	Date Mastered
1. Eat/Hungry			
2. Drink/Thirsty			
3. Sleep/Tired			
4. Cry/Sad			
5. Smile/Happy			
6. Go to the doctor/Sick			
7. Take a bath/Dirty			
8. Put on coat/Cold			
9. Laugh/Something's funny			
10. Use an umbrella/It's raining			

▸ *Helpful Hint:* Use incidental teaching procedures (e.g., when your child asks for a drink, present the question "Why do you want a drink?" Prompt the answer, "Because I'm thirsty," and then give your child a drink). Teach responding about pictures (e.g., show your child a picture of a boy who has fallen off his bike and is crying. Present the question "Why is the boy crying?" Prompt the answer, "Because he fell off his bike").

Program: Completes Sentences Logically

- *Program Procedure: Sit in a chair across from the child.* Establish attending and present a picture relevant to the examples below. State part of a sentence (e.g., "His hands are dirty. He has to . . ."). Prompt the child to complete the sentence (e.g., "Wash them"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level *of prompting. Eventually, only reinforce correct, unprompted responses.*
- Materials: Pictures.
- Suggested Prerequisites: Describes irregularities; answers "Why . . .?" and "If . . .?" questions.
- Prompting Suggestions: Model the response.

Examples of an unfinished sentence	Response: Completes the sentence	Date Introduced	Date Mastered
1. "He's hungry. He needs to . . ."			
2. "It's raining. She needs a . . ."			
3. "He's thirsty. He needs a . . ."			
4. "The door is locked. She needs a . . ."			
5. "He cut his finger. He needs a . . ."			

► *Helpful Hint:* Use the MEER Book I for additional examples (see resource list).

Program: Describes Irregularities in Pictures

- Program Procedure: Sit in a chair across from the child and establish attending. Present a picture that depicts something wrong (e.g., a picture of a car with square tires) and ask "What's wrong in this picture?" Prompt the child to describe what is wrong in the picture (e.g., "The tires are square"). Fade prompts over subsequent trials. Differentially reinforce responses made with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Picture cards that depict something wrong (see resource list).
- Suggested Prerequisites: Describes pictures; states similarities and differences between objects; answers "Why?" questions.
- Prompting Suggestions: Model the description for the child to imitate.

Question: "What is wrong in this picture?"	Response: Describes the irregularity in the picture	Date Introduced	Date Mastered
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
13.			
14.			
15.			
16.			
17.			
18.			
19.			
20.			

Helpful Hint: Vary your question (e.g., "What's silly about this picture?"). Eventually, teach your child to say what should be happening in the picture (e.g., "Cars should have round wheels"). Perform irregular events for your child to observe (e.g., look at a book upside down, write with a fork) and teach your child to describe what's wrong.

Program: Predicts Outcome

- Program Procedure:
  (1) *To Pictures*—Present a picture to the child depicting an event where an outcome can be predicted (e.g., a boy pouring juice). Present one of the following questions "What do you think the ___ (person, e.g., boy) is going to do next?" "What do you think will happen next?" Prompt the child to say what will happen next (e.g., "The boy's going to drink the juice"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting.
  (2) *To Story*—Tell the child a short story about an event where an outcome can be predicted (e.g., "One day Bill was hungry. He decided to make a sandwich. When he went to get some bread, it was all gone"). Present one of the following questions: "What do you think ___ (person, e.g., Bill) is going to do next?" "What do you think will happen next?" Prompt the child to say what will happen next (e.g., "Bill is going to go to the store to buy more bread," or "Bill is going to make something else to eat"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Pictures of events where an outcome can be predicted (see resource list, e.g., Verb Tensing Cards).
- Suggested Prerequisites: Describes irregularities; answers "Why?" questions; tells story; recalls events; makes logical completions to sentences.
- Prompting Suggestions: Model the response.

Question	Response	Date Introduced	Date Mastered
(1–2) "What do you think will happen next?" or "What do you think ___ will do next?"	(1–2) Child predicts an appropriate outcome		
1. To pictures			
2. To stories			

► *Helpful Hint:* Use pictures that suggest an obvious outcome to predict.

Program: Provides Explanations

- Program Procedure: Sit in a chair across from the child and establish attending. Present a picture that depicts a scene or an event (e.g., a beach, a picture of a kitchen, a picture of children making a snowman). Ask the child a question about the picture (e.g., "What season is this?"). After the child answers the question (e.g., "winter"), say "How do you know ___?" (e.g., "How do you know it's winter?"). Prompt the child to provide an explanation (e.g., "Because there is snow on the ground"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
- Materials: Pictures of scenes and events (see resource list).
- Suggested Prerequisites: Describes pictures; states similarities and differences between objects; answers why/because questions.
- Prompting Suggestions: Model the explanation for the child to imitate.

Question: "How do you know ___?"	Response: Provides an explanation	Date Introduced	Date Mastered
Examples:			
1. A picture of a birthday party. Ask: "What are they doing?"	"Having a birthday party."		
"How do you know they are having a birthday party?"	"Because she's blowing out candles and they have party hats."		
2. A picture of a park. Ask: "What is this place called?"	"It's a park."		
"How do you know it's a park?"	"Because there's a slide and jungle gym."		
3. A picture of a girl smiling. Ask: "How does she feel?"	"She's happy."		
"How do you know she's happy?"	"Because she's smiling."		
4. A picture of a girl wearing a swimsuit. Ask: "Where is she going?"	"Swimming."		
"How do you know she's going swimming?"	"Because she has her bathing suit on."		

Helpful Hint: Generalize responding to events observed in natural contexts (e.g., Child observes a boy carrying a bat. Ask "What is that boy going to play?" "Baseball." "How do you know he's going to play baseball?" "Because he has a bat.").

Program — Excludes an Item Based on Attribute and Category

- Program Procedure:
  (1) *Attribute*—Place a group of objects varying according to attribute on the table in front of the child. Present the instruction "Give me something that's not ___ (attribute)" (e.g., "Give me something that's not yellow," "Give me something that is not little," or "Give me something that does not feel soft"). Prompt the child to hand you the correct object. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Randomize instruction #1 with the instruction "Give me something that is ___ (attribute)" (e.g., "Give me something that is yellow"). Eventually, only reinforce correct, unprompted responses.
  (2) *Category*—Place a group of objects varying according to the category they belong to on the table in front of the child. Present the instruction "Give me something that's not ___ (a category)" (e.g., "Give me something that's not a food," "Give me something that's not an animal," or "Give me something that's not a fruit"). Prompt the child to hand you the correct object. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Randomize instruction #2 with the instruction "Give me something that is ___ (a category)" (e.g., "Give me something that is a food"). Eventually, only reinforce correct, unprompted responses.
- Materials: Objects in categories and objects similar in attribute.
- Suggested Prerequisites: Identifies objects that are described; answers "Yes" and "No" in response to questions about objects; identifies objects that are the same and different; answers "Which . . . ?" questions; identifies objects that do not belong based on attribute and category.
- Prompting Suggestions: Physically guide the child to hand you the correct object.

Instruction	Response		
(1–2) "Give me something that's not ___."	(1–2) Child gives the correct object	Date Introduced	Date Mastered
1. Attribute			
2. Category			

▶ *Helpful Hint:* Begin with simple exclusion. For example, place four objects, three identical, one different (e.g., three balls and one cup) on the table and present the instruction "Give me something that's not a ball." Eventually vary the instruction (e.g., "Which one isn't ___?").

Program: Defines People, Places, and Things

- Program Procedure:
  (1) *People*—Sit in a chair facing the child. Establish attending, and say "What's a ___(community helper, e.g., librarian)?" Prompt the child to define the function of the community helper (e.g., "*Someone* who works at the library"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Places*—Sit in a chair facing the child. Establish attending, and say "What's a ___ (place, e.g., library)?" Prompt the child to define the place (e.g., "It's *a place* where I get books"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (3) *Things*—Sit in a chair facing the child. Establish attending, and say "What's a ___ (something, e.g., book)?" Prompt the child to define the item (e.g., "It's *something* you read"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting.
  (4) Randomize the presentation of 1, 2, and 3.
- Suggested Prerequisites: Labels community helpers, functions of objects, and scenes; describes objects out of view; answers *wh*-questions about objects; repeats phrases.
- Prompting Suggestions: Model the definition.

Question	Response		
(1–4) "What's a ___?"	(1) Defines community helper (2) Defines the place (3) Defines the item (4) Either 1, 2, or 3	Date Introduced	Date Mastered
Examples			
1. Fireman	"*Someone* who puts out fires."		
Fire house	"A *place* where firemen live."		
Fire truck	"It's *something* a fireman drives."		
2. Doctor	"*Someone* who gives me medicine when I'm sick."		
Hospital	"It's *a place* where people go when they are sick."		
Medicine	"It's *something* I take when I am sick."		
3. Teacher	"*Someone* who teaches me."		
School	"It's *a place* I go to learn."		
Blackboard	"It's *something* I write on at school."		

▸ *Helpful Hint:* Use pictures of the community helpers, places, and things.

Program Imitates Peer

- Program Procedure:
  (1) *Gross Motor Movements*—Sit the child in a chair facing a peer. Prompt the peer to demonstrate a gross motor movement (e.g., whisper in the peer's ear so that the child does not hear the instruction "Clap your hands" or provide pictures as prompts of the actions to model). While the peer is demonstrating the action, present the instruction "Do what ___ (peer's name) is doing" (e.g., "Do what Michael's doing"). Prompt the child to imitate the gross motor movement. Reinforce the response. Fade prompts over subsequent trials. Differentialiy reinforce responses demonstrated with the lowest level of prompting.
  (2) *Actions*—Sit the child and a peer in chairs next to one another. Prompt the peer to perform an action out of the chair and to return to the chair (e.g., "Go shoot a basket"). Peer should perform the instruction (e.g., peer should get the ball and make a basket). When the peer returns to his or her seat, present the instruction "It's your turn. Do what ___ (peer's name) did" (e.g., "It's your turn. Do what Billy did"). Prompt the child to imitate the action. Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting.
  (3) *Verbal Responses*—Sit in a chair across from the child and a peer. The peer and the child should be seated next to one another. Present a picture to the peer (child should not see the picture) and ask the peer "What is this?" After the peer labels the picture, say "What did ___ (name of peer) see?" Prompt the child to name what the peer saw (e.g., "apple"). Reinforce the response. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting.
- Suggested Prerequisites: Imitates behavior of adult; repeats phrases; follows one-step instructions.
- Prompting Suggestions:
  (1–2) Physically guide child to demonstrate the response.
  (3) Provide a verbal model or allow the child to see the picture while you are presenting the question.

Instruction	Response	Date Introduced	Date Mastered
(1) "Do what ___ is doing." (2) "It's your turn. Do what __ did." (3) "What did __ see?"	(1–2) Imitates peer's demonstration (3) Names what peer saw		
1. Gross motor movements			
2. Actions			
3. Verbal responses			

▶ *Helpful Hint:* If your child has trouble with instruction #1, have the peer present the instruction "Do this" while he or she is demonstrating the action. Prompt the peer to perform play-related activities for your child to imitate. Eventually, change instruction #2 to "It's your turn" without saying "Do what ___ did," and do not allow your child to hear the instruction that is presented to the peer. If your child has trouble with #3, have the peer present single words directly to the child for him or her to imitate (e.g., have the peer sit across from the child and say "Say 'book'" etc.), until the child can imitate verbal responses of peer.

Program: Initiates Play Statements to a Peer

- Program Procedure:
  (1) *Verbal Instruction*—During playtime activities with peer, approach the child and state the instruction "Go ask ___ (peer's name) to play ___ (a preferred activity for peer and child)" (e.g., "Go ask Billy if he wants to play with the trains"). Prompt the child to approach the person, gain his or her attention, and initiate the play statement (e.g., "Billy, do you want to play with the trains?"). Reinforce the response. Allow the child and peer to play with the activity. Fade prompts over subsequent trials. Differentially reinforce responses demonstrated with the lowest level of prompting. Eventually, only reinforce correct, unprompted responses.
  (2) *Without Verbal Instruction*—Place a number of highly preferred play activities in the play area. When the peer and the child enter the play area, wait to see which play activity the child goes to. As soon as the child approaches a play activity (e.g., child walks over to the trains), immediately guide the child to approach the peer and prompt the child to initiate a play statement about the activity to the peer (e.g., model the initiation statement or say "Billy, let's play with the trains"). Reinforce the response. Allow the child and peer to play with the activity. Fade prompts over subsequent opportunities. Differentially reinforce responses demonstrated with the lowest level of prompting. Each time the child demonstrates interest in another play activity, repeat the procedure.
- Suggested Prerequisites: Repeats sentences; delivers verbal messages; requests in sentences; follows two-step instructions; plays with toys.
- Prompting Suggestions: Physically guide child from behind to approach the child, and model the initiation for the child to repeat.

Instruction: "Go ask ___ to play ___."	Response: Approaches peer and initiates a play statement to peer	Date Introduced	Date Mastered
1. With verbal instruction			
2. Without verbal instruction			

▸ *Helpful Hint:* Make sure you use compliant peers who will respond positively to your child's initiation. Once your child is reliably initiating, teach your child what to do when the peer declines his or her initiation (e.g., offers another alternative). Use photographs of play activities and written cues to prompt initiations.

Laxmi Rajesh Verma

Program: Demonstrate New Responses Through Observation

- Program Procedure:
  (1) *To Unknown Pictures*—Sit in a chair across from the child and a peer. The peer and the child should be seated next to one another. Present a picture of an unknown object to the child. Ask the child "What is this?"; child should answer "I don't know" (see prerequisites below). Present the same picture to the peer (picture should be one that the peer can successfully label) and ask the peer "What is this?" Peer should correctly label the picture. Reinforce the response of the peer (e.g., "You're right!"). Re-present the same picture to the child and say "What is this?" Child should correctly label the picture (e.g., repeats peer's response). Reinforce the response.
  (2) *To Unknown Questions*—Sit in a chair across from the child and peer. The peer and the child should be seated next to one another. Ask the child a novel question. Child should respond "I don't know" (see prerequisites below). Present the same question to the peer (question should be one that the peer can successfully answer). Peer should correctly answer the question. Reinforce the response of the peer (e.g., "You're right!"). Represent the same question to the child. Child should correctly answer the question (e.g., repeats peer's response). Reinforce the response.
- Materials: Pictures that child cannot identify but peer can identify.
- Suggested Prerequisites: States "I don't know" to unfamiliar question and objects; imitates verbal responses of peer.
- Prompting Suggestions: Have child observe the response again, model the response following the peer's model (e.g., "You're right it's a ___ [label]").

Question	Response		
(1) "What's this?" (2) A novel question	(1) Correctly labels picture following peer's model (2) Correctly answers the question following peer's model	Date Introduced	Date Mastered
1. To pictures			
2. To novel questions			

▷ *Helpful Hint:* Make sure the child is attending to the peer when the peer models the response. Generalize responding to other labels (e.g., pictures of novel actions). Increase the latency between the time the peer models the response and when you re-present the picture or the question (e.g., have the peer model the response, ask the child some known questions, and then re-present the novel question).

Program

- Program Procedure:

- Materials:

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

- Comments:

Meeting Summary Form

Date

Present

1. _____ 6. _____
2. _____ 7. _____
3. _____ 8. _____
4. _____ 9. _____
5. _____ 10. _____

Programs Reviewed

1. _____ 6. _____
2. _____ 7. _____
3. _____ 8. _____
4. _____ 9. _____
5. _____ 10. _____

Program Changes

1. _____
2. _____
3. _____
4. _____
5. _____

Program Additions

1. _____ 6. _____
2. _____ 7. _____
3. _____ 8. _____
4. _____ 9. _____
5. _____ 10. _____

▶ Date of next meeting:

Data Sheet

- Score (+) if child responds correctly without prompts.
- Score (+wp) if child responds correctly with specified prompting level.
- Score (−) if child does not respond correctly or fails to respond to specified prompting level. Note changes in prompting procedure.

Date:_____ Program:_____ Therapist:_____ 1._____ 6._____ 2._____ 7._____ 3._____ 8._____ 4._____ 9._____ 5._____ 10._____ _____% Correct Comments:	Date:_____ Program:_____ Therapist:_____ 1._____ 6._____ 2._____ 7._____ 3._____ 8._____ 4._____ 9._____ 5._____ 10._____ _____% Correct Comments:	Date:_____ Program:_____ Therapist:_____ 1._____ 6._____ 2._____ 7._____ 3._____ 8._____ 4._____ 9._____ 5._____ 10._____ _____% Correct Comments:
Date:_____ Program:_____ Therapist:_____ 1._____ 6._____ 2._____ 7._____ 3._____ 8._____ 4._____ 9._____ 5._____ 10._____ _____% Correct Comments:	Date:_____ Program:_____ Therapist:_____ 1._____ 6._____ 2._____ 7._____ 3._____ 8._____ 4._____ 9._____ 5._____ 10._____ _____% Correct Comments:	Date:_____ Program:_____ Therapist:_____ 1._____ 6._____ 2._____ 7._____ 3._____ 8._____ 4._____ 9._____ 5._____ 10._____ _____% Correct Comments:

PART FOUR

How to Teach

CHAPTER SIX

Teaching New Skills to Young Children with Autism

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This chapter recommends educational practices for teaching young children with autism in a home-based training program. It is intended to serve as a practical guide for parents and professionals who have little experience or formal training in the area.

The recommended practices are based largely upon the principles of Applied Behavior Analysis (ABA). Applied Behavior Analysis emphasizes employing instructional technology designed to change behavior in systematic and measurable ways. The key words of this definition are *technology, systematic,* and *measurement.* Any specific strategy can fall under the rubric of ABA as long as it is conceptually consistent with the basic principles of child development, it can be described in detail for others to use, and it can be introduced in a systematic manner that allows for accurate measurement of effectiveness. We are taking the time to make this point because there continues to be considerable misunderstanding of the ABA approach. In this chapter, we have recommended practices that have been demonstrated scientifically to work or that are at least described in sufficient detail to allow evaluation of effectiveness.

It is important to state that home-based training may not be appropriate for every child and every family. The effects on the family system, as well as the lives of its individual members, can be significant. First, it involves considerable sacrifice and commitment from everyone, with no guarantee of significantly favorable outcomes for the child with autism. Second, it may not be easy for some parents to accept the basic philosophical and practical tenets of the ABA approach. According to some, the emphasis on instructional technology, systematic intervention, and ongoing evaluation departs too much from their understanding of typical child development and normal parenting practices. In short, the decision to develop an intensive home-based program is a very personal one. Parents should begin only if they are completely committed to giving the approach an *opportunity* to succeed. You cannot implement part of an ABA approach, then conclude that the entire approach failed. This would be tantamount to providing only half of a prescribed antibiotic to treat a child's ear infection, and then concluding that the medicine did not work when the child's infection did not improve.

Another word of caution: Although professionals and programs who espouse ABA methods may agree on the basic principles and general practices, the specific applications may vary within and across consultants (e.g., curricular items, number of hours, age of the child, amount of teacher-led vs. child-directed instruction). We will present in this chapter what we believe are the best applications of the ABA approach. We also have limited our suggestions to children who are more than 24 months of age and less than 6 years. Important variations in the ABA approach might occur for younger and older children (e.g., selecting more functional goals for an older child). The parents need to work with the home-based consultant to develop the most clinically sound approach for their child and their specific situation.

Finally, home-based training is largely about hope—hope that the child will acquire social and language skills similar to those of her peers, attend kindergarten, participate in normal school activities, and in the final analysis, live a normal and productive life. We can safely say that some children may achieve these goals. We also know that not all will do so, although most children will benefit, to a greater or lesser degree, from intensive home-based intervention. At this time, there is no way to predict accurately which children will achieve the most significant outcome.

Jeffrey

Jeffrey was $2\frac{1}{2}$ years old when his parents first heard the word *autism* used to explain his peculiar behavior. His life appeared to start out so normally. They remembered him to be an affectionate baby who reached each developmental milestone (e.g., smiling, reaching for objects, crawling, and walking) like any other young child. And, like any other family, they had significant hopes and aspirations for their firstborn. Their troubles began when Jeffrey's day-care director commented that he seemed passive and isolated in his play. Instead of joining in with the art and play activities, he spent his time lining objects, opening and closing cabinet doors, repeatedly flushing the toilet, or simply sitting passively in a corner. By the time he was 3 years old, he spoke fewer than 50 words and rarely placed words together to form a sentence. On the other hand, his parents expressed that he seemed exceptionally smart in some areas. He could identify most colors when asked, complete complex puzzles, and count to 20. Although they did not fully understand the inconsistencies in his development, they were convinced that they needed to do something extraordinary to help him.

THE ROLE OF PARENTS

The normal process of development seems to unfold almost magically for children without a developmental disability. For their parents, it is reasonably clear that their job is to foster and support their child's development by providing a safe and caring environment, providing appropriate models, and taking advantage of the thousands of natural opportunities for imparting information. This is a job that most parents are reasonably prepared to do. In contrast, a child with autism presents a more daunting task. In the case of Jeffrey (the example provided above), his parents had few experiences to draw upon in their lives that adequately prepared them to face the significant challenges of raising a child with autism.

Most parents assume the role of either educator or advocate for their child with autism. Some are able to accomplish both. In either role, the parents typically provide the best perspective on their child's developmental history, current needs, and learning style. Furthermore, while many professionals will come and go across the child's lifetime, parents remain constant. Parents also form the foundation for learning at home, including the carryover of school programs and the teaching of relevant community skills.

We recommend that parents be empowered by learning to apply the most effective instructional methods for teaching their young child with autism, as well as by acquiring the skills to manage behavior problems (Anderson, 1989). This requires that parents participate in the initial assessment of the child, assist in establishing specific training objectives, and provide direct instruction. Parents must understand that simply reading and intellectually understanding the recommendations in this chapter may not adequately prepare them for their application (the same can be said about untrained professionals). However, with practice, modeling, and feedback provided by a trained professional (or another trained parent), parents typically become excellent teachers. As the home-based training program develops, the parents assume an increasingly larger role in designing the child's program and monitoring his progress.

Evelyn

Evelyn was nearly $3\frac{1}{2}$ years old when her parents sought home-based services. They were concerned that she had not developed functional speech, nor did she appear to show any interest in playing with other children, including her 6-year-old sister. They were encouraged when she occasionally repeated a word or phrase from a song, but then they would never hear it again. Evelyn communicated most effectively by leading someone by the hand to the desired object or activity. She did not appear to understand what was said to her, although it was sometimes difficult to sort out understanding from her willingness to comply. If given a toy, she would often hold the object to her lips or rub it against her skin rather than play with it appropriately. If someone tried to engage her in an instructional activity, she would become very upset, crying and struggling to leave the area. She was interested in eating only a small variety of foods and refused to remain at the table while the rest of the family ate. She slept only a few hours each night but insisted on taking long naps during the day.

DECIDING WHAT TO TEACH

This topic is addressed in the preceding chapter, so we will make only a few points needed to set the stage for our discussion of how to teach. This is necessary because what you decide to teach may affect how and where the teaching occurs. Let us again refer to Evelyn and Jeffrey to illustrate our point. In the case of Evelyn, the first several months were spent teaching readiness skills (e.g., following simple instructions, imitating motor movements, sitting in a chair). Nearly all training occurred in short sessions under highly structured conditions (e.g., sitting across from each other in chairs). The teacher led all instructional exercises, us-

ing direct physical guidance as needed. He systematically faded his guidance across many sessions as Evelyn became more responsive.

Jeffrey, on the other hand, could already sit in a chair, could imitate (although inconsistently), and had labels for common objects; therefore, his educational curriculum was comparably broader, addressing all of the major skill areas from the beginning. His trainer provided some highly structured situations similar to those provided to Evelyn, but she also used natural opportunities to teach throughout the day. For instance, Jeffrey was required to ask for objects that previously were provided to him without the need to use his language. Physical guidance was rarely needed. However, other subtle instructional techniques (e.g., delayed modeling) were used to encourage greater spontaneity. As these different cases show, accurately understanding the child's current level of ability can significantly affect the instructional approach.

The first step in deciding what to teach is to gather information about the child. A variety of formal and informal assessment tools are available to guide you, including (a) an interview or survey of the individuals who know the child best (typically the parents), (b) a direct observation of the child at home, (c) the administration of formal assessment instruments, and (d) the use of commercially available curricula. Some tests and scales are more suited than others for helping to develop specific instructional targets. For example, we have found the Early Learning Accomplishment Profile (ELAP) (Glover, Preminger, & Sanford, 1988) or the Learning Accomplishment Profile (LAP) (Sanford & Zelman, 1981) to be useful. These instruments assess the child's existing skills across a variety of developmental domains and help parents and professionals to identify specific learning objectives. The Individualized Goal Selection Curriculum (IGS) (Romanczyk, Lockshin, & Matey, 1994) and the Carolina Curriculum for Children with Special Needs (Johnson-Martin, Attermeier, & Hacker, 1990) can also be used to assess current functioning, set instructional priorities, and identify specific objectives for learning. We also refer you to Chapter 5 in this book. Once the child has been assessed, identify 15–20 objectives to be targeted over the next 3–6 months. The total number is limited so that significant repetition or instructional trials occur for each objective. Start by addressing 3–5 objectives from this set, then gradually add the others as the child is able to tolerate longer and more frequent sessions.

The training curriculum should be developmentally organized (like the IGS), although common sense should always be used in establishing specific objectives. Avoid teaching skills that have no apparent relevance for enhancing current or future learning. Include the major skill areas of learning readiness, language and cognitive development, fine and gross motor skills, play, socialization, maladaptive behavior, and self-help. The curricular content should move in a linear direction from learning readiness (e.g., orients to teacher, follows instructions, remains seated in a chair, imitates motor movements) to early developing language and cognitive skills. The curriculum typically addresses those areas that immediately impede the child's ability to learn. Eventually, training addresses all skill areas, and trials on related concepts are interspersed (e.g., vocabulary items may be embedded within a play curriculum).

DEVELOPING A PLAN FOR INSTRUCTION

Figure 6.1 provides a lesson plan to teach Evelyn to imitate simple motor movements. To complete the plan, consider the answers to several important questions:

1. When will you know that the child has achieved the skill (the behavioral objective)?
2. How is the target behavior defined?
3. Where and when will training occur?
4. What materials will be needed?
5. What reinforcers will motivate the child to learn?
6. How will you measure the child's progress?
7. What are the steps for teaching the program? How will you know when to move to a new step?
8. How will instructions and materials be presented?
9. What will you do when the child responds incorrectly? How about correctly?
10. How will you encourage generalization and maintenance?

The first step in developing a plan is to specify an objective for each of the skills to be taught. For example: "When instructed ('Do this'), Evelyn will imitate 10 randomly presented motor movements with 80% accuracy across three consecutive sessions." This degree of specificity allows the trainer to objectively determine when a skill has been achieved. Behaviorally stated objectives include three major parts: (a) a statement of the condition in which the behavior will occur (e.g., "When instructed" and "randomly presented"); (b) a statement of the expected behavior (e.g., "imitate 10 motor movements"); and (c) a statement of the criteria for attainment (e.g., "with 80% accuracy across three consecutive sessions").

Child's Name: Evelyn

Target Behavior: Motor Imitation

Behavioral Objective: When instructed "Do this," Evelyn will imitate 10 randomly presented motor movements with 80% accuracy across three consecutive sessions.

Definition of Target Behavior: A correct imitation is defined as a response that closely matches the model provided by the trainer and occurs within 5 seconds.

Setting, Time & Activity for Teaching: During direct teaching sessions at a table.

Materials Needed: None

Reinforcer(s) Identified: Reinforcer assessments will be conducted on a daily basis. Praise, potato chips, candy, tickles, and hugs have been identified as potential reinforcers.

Measurement System: The percentage of trials correct.

Task Analysis or Step Analysis

Step	Teacher Presentation	Student Response	Consequence
1	Teacher says, "Do this" while clapping and then physically helps student to clap	Student claps hands with physical guidance	Teacher delivers reinforcer if response is correct
2	Teacher says, "Do this" while clapping and provides a partial prompt for student to clap	Student claps hands with partial prompt	Teacher delivers reinforcer if response is correct If no response, provide full physical guidance, no reinforcement
3	Teacher says, "Do this" while clapping	Student claps hands	Teacher delivers reinforcer for correct responses If no response or incorrect response, teacher provides full physical guidance with no reinforcement
4	Repeat steps 1–3 for the response arms up, while randomizing presentation with clap hands	Student imitates movements	Teacher delivers reinforcer for correct responses If no response or incorrect response, teacher provides full physical guidance with no reinforcement
5	Repeat steps 1–4 for the following motor movements: pat legs, touch head, stomp feet, touch nose, arms out, pat belly, shake head, touch ears	Student imitates movements	Teacher delivers reinforcer for correct responses If no response or incorrect response, teacher provides full physical guidance, no reinforcement

Assessing Generalization

	Cues	Materials	Setting	Persons
1	"You do"	N.A.	Music	Mom
2	"Do the same"		Bedroom	Dad
3	Song w/words & actions		School	Neighbor

Postchecks (Dates):

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6
1/12/95	1/19/95	1/26/95			

Start Date	End Date	Date Closed
9/15/94	1/12/95	1/26/95

Figure 6.1. Sample lesson plan for teaching Evelyn motor imitation.

A lesson plan also provides a definition of the target behavior. Normally this is needed most when the skill is very complex (e.g., positive social interactions) or when targeting the reduction of problem behaviors (e.g., defining tantrums). A clear description of the behavior helps to ensure consistency in the implementation of treatment programs and identifies what responses should result in positive reinforcement. Consistent administration of consequences helps the child learn correct vs. incorrect responses and acceptable vs. unacceptable behavior.

For the next part of the plan, specify where the training will occur and under what conditions. In the case of Jeffrey, the trainer chose naturally occurring opportunities to teach him to request common items using words already in his vocabulary. On the other hand, if the number of natural opportunities had been low, she would have decided to use a combination of natural and contrived activity-based situations for the instructional context (e.g., engaging in a cooking activity and placing many of the needed ingredients out of reach). Again, clearly specifying in writing the instructional context fosters consistency across multiple trainers.

When describing the instructional context, visualize three points along a continuum. We refer to the three points as follows: (a) direct teaching, (b) activity-based instruction, and (c) incidental teaching. We must admit in advance that the distinction gets somewhat blurred at times. In direct teaching, the teacher maintains unusually tight control over the instructional activities. The teacher and student often sit face-to-face, and trials are presented in rapid succession. In activity-based instruction, the instructional trials are embedded within a specific activity. For example, language trials might be embedded within an art activity. The teacher may intentionally fail to provide all the materials and teach the child to ask for them. Both direct teaching and activity-based instruction are typically teacher led (i.e., the teacher controls the materials, asks questions, and so on). In contrast, incidental teaching typically involves child-selected activities. The trainer observes and interacts with the child and uses any naturally occurring opportunities to provide relevant instruction (e.g., the child indicates that he wants a drink by pointing to the refrigerator, and the trainer models the correct language). As you might surmise, direct teaching sessions are more highly structured and allow for more repetitions or trials than either activity-based instruction or incidental teaching. On the other hand, activity-based instruction and incidental teaching often result in greater generalization of skills taught. All three strategies are important and should be used at different times depending upon what specific skill is being taught and the child's ability. For example, it may be necessary to teach vocabulary to a highly distractible child using direct teaching methods. Then, once a small vocabulary has been acquired, activity-based instruction and incidental teaching methods should be used to make the skill functional.

The remaining areas of the lesson plan (selecting reinforcers, measuring progress, completing a list of training steps, and assessing generalization and maintenance) will be discussed later in this chapter. We will conclude this section by simply saying that thoughtful planning will result in greater consistency across trainers and will lead to a more successful outcome for the child.

STRUCTURING THE LEARNING ENVIRONMENT

The physical environment must be properly designed to maximize any intervention efforts. In short, be prepared. For children like Evelyn, the first day of home-based training may be the first time they have been required to sit and attend for more than a minute or two. You can expect that most children will resist your efforts by trying to leave the area, crying, and throwing a tantrum, and they may even exhibit aggression and self-injury. You can minimize or avoid this by following a few simple guidelines.

First, make the sessions fun. Remain highly animated, provide nearly constant praise for staying in the chair, and blend work demands and play activities. Start by making sessions very short (5–10 minutes), with breaks of similar length. Initially, we allow children to do whatever they want during the breaks, but eventually this time also should become a context for instruction. In spite of your best plans, many children will still protest the initial intervention efforts (we will deal with this in a later section).

Choose a quiet room for instruction that is free of distractions. Provide two child-size chairs (one for the trainer and one for the child) and a table for instructional materials and reinforcers. Leave the materials out of the child's reach. Also, remember to bring the lesson plans relevant to the tasks to be taught, as well as data sheets for monitoring progress. We typically put these into a notebook with labeled dividers for each program area (e.g., language, self-help, learning readiness) and tabs for each program.

The initial instructional activities should involve a task the child is already capable of performing. Emphasize skills such as remaining in the chair and following simple instructions. Avoid tasks involving materials that can be easily broken, thrown, or inappropriately used.

In Jeffrey's case, we started with the imitation of simple motor movements (e.g., "Do this": trainer touches her nose), because this was an emerging skill and was easy to prompt.

Avoid using materials or reinforcers that are difficult for you to give and take away. On the one hand, items the child plays with frequently probably are reinforcing to him or her. On the other hand, the child may respond very dramatically if the item is removed and controlled by you. Striking a balance here can sometimes be a little tricky. For instance, Evelyn often carried small Disney characters that she would place in neat rows. When we attempted to withhold them and provide them for appropriate sitting, she became extremely upset and was unable to remain quiet, even for a few seconds. After trying for several days, we decided to put the toys out of sight, and we identified other reinforcers. Fortunately, we were able to reintroduce the toys several weeks later. In the long run, if the reinforcers you have chosen seem to be interfering with the child's attention more than motivating the child to respond, then put the objects away and out of sight (at least during sessions) until a later point in the program.

Begin each direct teaching session by placing the two chairs directly in front of each other with the trainer and child sitting face-to-face. Sit very close to the child with his legs resting between your legs. You may find it necessary to wrap your legs and feet around the legs of the child's chair to prevent him from pushing away. The child should be praised frequently for simply staying in the chair, making eye contact, and following instructions. If the child attempts to leave the chair, physically prompt him back.

As the child becomes more compliant, move the table closer to the chairs. Eventually, you and the child should sit at the table on adjacent sides. Now begin to introduce additional materials and expand the content of the training curriculum. Then begin sometimes to introduce training trials at more natural times, using activity-based instruction and incidental teaching techniques. For example, once Evelyn is imitating motor actions, integrate her new skill into a musical activity or game. In short, all activities of the day become a stage for instruction and learning.

MOTIVATING YOUR CHILD TO LEARN

Learning does not come easily for a child with autism. The things that motivate most children (e.g., receiving praise from their parents, imitating peers, successfully completing a task) do not appear to motivate many children like Jeffrey and Evelyn; therefore, it is necessary to identify and use more extrinsic rewards (we will use the word *reinforcers*) to motivate the child to attend and respond to instruction. The use of a planned reinforcement system may be the most important thing that you do to help your child to learn. It may at times seem unnatural and extraordinary, but it must be done to foster and maintain new skills.

Almost any behavior has an obvious or not-so-obvious payoff for adults and children. For instance, we ask questions to get answers, we work to receive a paycheck, and we complete homework assignments to improve our grades. All of these outcomes represent the use of reinforcement. This principle of ABA states that behavior that is followed by a reinforcing consequence is more likely to happen again. In short, a trainer who wants to increase the future occurrence of desirable behavior should reinforce it.

There are many different kinds of reinforcers. The most important thing to remember is that they must be individualized. What may be a reinforcer for one child may not be for another. Reinforcers are typically perceived as positive objects or activities, such as food, hugs, kisses, praise, or stickers. What defines a reinforcer, however, is not what others perceive as its positive qualities, but whether it increases the occurrence of the behavior it follows. Therefore, a variety of objects and activities, however unusual, may be reinforcing to a particular individual (e.g., access to a fan, a flashlight, a favorite article of clothing).

When teaching a child a new skill, reinforce every correct or desired response. For example, each time that Evelyn correctly imitated the trainer's model, she received tickles, hugs, and a small piece of candy. As her performance improved, the frequency and the amount of reinforcers were reduced or faded to an intermittent schedule (i.e., every second or third response resulted in praise). It has been demonstrated that an intermittent schedule of reinforcement results in more lasting change.

Identify reinforcers by observing the child to see what she chooses to do during free time, asking directly, presenting several choices and asking the child to choose one, and conducting a reinforcer assessment (Dyer, 1987). In a reinforcer assessment, a variety of potentially reinforcing items (e.g., toys, crayons, food) are presented one at a time. The reinforcing value of the object is evaluated by noting whether the child reaches for it, manipulates it, resists when it is taken away, and so on. You should conduct a reinforcer assessment at least daily, but you may need to do so even more frequently if the child is difficult to motivate. Once several reinforcers have been identified, they are held by the trainer and delivered one at a time contingent upon correct responses to specific instructional activities.

Praise is the most natural, convenient, and universal reinforcer that you can use. Unfortunately, praise is not naturally reinforcing to many children with autism. Nevertheless, by providing it simultaneously with the delivery of small portions of food or other reinforcing consequences, it also may gain reinforcement value to the child. Make your praise statement very specific and descriptive of the target behavior (e.g., "Good sitting" vs. "Good boy").

USING GOOD INSTRUCTIONAL METHODS

During the last 20 years we have learned a great deal about how best to instruct children with developmental disabilities, including autism. (See Appendix A for a list of references that discuss teaching techniques in greater detail.) These instructional methods are guided by the core principles of ABA and have been validated by many well-controlled research studies. We will discuss here several methods that increase the likelihood that a child will give the desired response, so that it can be reinforced and ultimately result in learning.

Discrete-Trial Methods

Throughout intervention, employ good, discrete-trial methodology. Although discrete-trial methods are generally associated with direct teaching, they also are important for activity-based instruction and incidental teaching. A good discrete trial consists of four parts: (a) the trainer's presentation, (b) the child's response, (c) the consequence, and (d) a short pause between the consequence and the next instruction (between-trials interval).

Instructions

How you state the instruction may influence whether it is followed. If the child is paying attention, hears the instruction, and it is within his abilities, he is more likely to follow it. Prior to giving the instruction, get the child's attention (e.g., say the child's name, make eye contact, touch the child). The instruction should be clear, concise, phrased as a statement, and given only once. If the instruction contains too many words, the child may not attend to the key words. Here is an example of a poor instruction: "Evelyn, can you stop running around and sit down over here so mommy can put your shoes on?" In contrast, a good instruction would be, "Evelyn, sit down."

When the child is first learning to respond to an instruction, keep the wording the same each time it is given; otherwise, each variation might be perceived by the child as a different instruction. After the child demonstrates initial understanding of the instruction, vary it systematically to enhance generalization (this is discussed further under "Programming Generalization").

Child's Response

In response to the adult's instruction, the child may respond in one of three ways: correctly, incorrectly, or not at all. In general, allow approximately 3–5 seconds for the child to initiate his response. If the child begins to respond incorrectly or engages in inappropriate or competing behaviors (e.g., attempts to leave the seat), immediately provide a consequence.

Consequences

The consequence, or the adult's response, will vary depending upon the child's response. If the child responds correctly, immediately reinforce the response with enthusiastic praise in combination with any other identified reinforcers (e.g., food, hugs, tickles).

If the child responds incorrectly or does not respond at all, provide an effective prompt or guidance. For example, provide mild verbal feedback ("No," or "Wrong," or repeat the instruction) while physically guiding the child to respond (this is called a *correction trial*). Physical guidance may be a touch on the arm or hand, or it can mean hand-over-hand assistance. The most important point is that whatever you choose, it should work the first time. Repeating the direction or repeating the prompt several times may teach the child that he does not need to respond the first time you ask. The physical prompt helps the child learn what your words mean. If he understands but chooses not to respond, the physical guidance teaches that you expect him to comply. Either way the child benefits. Initially, less enthusiastic praise can be given following the correction trial. When it becomes evident that he is beginning to understand what you are asking him to do, reserve reinforcement only for correct responses that occur following the first request (i.e., before the correction trial).

Between-Trials Interval

The period between the consequence (reinforcement or correction) and the next instruction is called the between-trials interval. Include a very discrete pause of 3–5 seconds between the consequence and the next trial. This helps you define for the child that you have ended one request and are now delivering a new one. Begin each new request with a clear and concise

instruction and the child's attention. During the between-trial interval, praise the child for appropriate sitting and allow her a few moments to consume or play with the reinforcer. At the same time, record the child's response to the last trial on the data sheet and organize the instructions and materials needed for the next presentation.

Teaching Methods

Sometimes the behavior that you want to teach does not occur or does not occur often enough to be reinforced. For example, we could not increase Evelyn's verbalizations using reinforcement alone, because we could not reinforce a behavior that never or rarely occurred. Fortunately, there are a variety of accepted teaching methods to encourage new behaviors. In this section we discuss the techniques of shaping, prompting, and prompt fading. The method chosen must be appropriate for the child's current level of functioning, her learning style, and the skill to be taught.

Shaping

Shaping is a technique that is used when the child initially does not have the desired skill in her repertoire. This method takes advantage of related responses the child already has, reinforces those, and then only reinforces closer and closer approximations to the desired response. For example, to shape Evelyn's imitation of words, the trainer first reinforced imitating the trainer's mouth movements (e.g., opening her mouth, pursing her lips to blow, and so on). Once she was able to consistently imitate mouth movements Evelyn received reinforcers for producing any sound, whether it matched the trainer's verbalization or not. Gradually, the trainer required closer and closer approximations of the modeled word. As this example demonstrates, shaping and reinforcement strategies were used in combination to achieve the desired goal. Keep in mind that shaping techniques require a great deal of patience. It often takes weeks or months to achieve the desired results.

Prompting

Some children need extra help to perform the desired skill or behavior so that you can reinforce it. Prompting is an instructional technique that helps the child to make the correct response. You can give prompts at the same time as the instruction (e.g., modeling the desired response), during the child's response to help minimize errors, or after the child's incorrect response to show him the expected answer. One risk of using prompts is that the child may become dependent on them for correct responding. You can foster independence by using a technique called *prompt fading*, which is discussed in the next section.

There are several types of prompts: verbal, modeling, physical, and gestural and position cues. Verbal prompts provide the child with a verbal instruction, cue, or model for the desired response. For example, the trainer initially taught Jeffrey to label new objects by holding up an object and saying "Cup. What is this?" The label was gradually faded leaving only the question "What is this?" The trainer also used verbal prompting to teach Jeffrey to take turns. After he completed his turn in a game, she paused briefly and then said "It's my turn," as a prompt for Jeffrey to pass the dice. Again, this verbal prompt was eventually faded.

Modeling consists of actually demonstrating the correct response for the child. For example, when teaching an appropriate greeting skill, the trainer may show the child how to shake another person's hand following an introduction. We must note, however, that a child can only benefit from modeling if he is able to imitate.

Physical prompts consist of physically guiding the child through all or part of the desired response. The degree of physical assistance varies from complete hand-over-hand to a light touch at the shoulder to initiate the response (i.e., partial prompt). Many children with autism need a great deal of physical prompting. For example, the trainer used full physical assistance to teach Evelyn to follow a few simple instructions. She first gave the instruction (e.g., "Stand up"), paused briefly, provided a full physical prompt, and reinforced responding without resistance. Physical prompts were faded gradually until Evelyn was standing up in response to a gesture.

Gestural cues are actions such as pointing to, looking at, moving, or touching an item to indicate the correct response (e.g., the trainer may point to the circle while simultaneously giving the instruction "Point to the circle"). Position cues also occur prior to or simultaneously with the trainer's instruction. When using position cues, you should place the correct item in an advantageous position in relation to the child (e.g., when asking the child to point to the item that is red, place the red item closer to the child than those of other colors).

Prompt Fading

As we have mentioned, the child may become dependent on prompts for correct responding. Therefore, use prompts in the initial stages of learning and gradually fade them as progress occurs. There are four methods of fading prompts: graduated guidance, most-to-least prompting, least-to-most prompting, and time delay.

The technique of *graduated guidance* is used to progressively fade physical guidance. One way to accomplish this is gradually to reduce the amount of physical effort that you exert to help the child to respond. For example, Evelyn was taught to point to one of two objects to indicate preference. Initially, a full physical prompt (hand-over-hand) was used to obtain the desired response. Next, the trainer progressively changed from a hand-over-hand prompt to a light touch on top of the hand by applying less and less effort. This occurred very slowly over many sessions. The trainer also could have chosen a slightly different approach. Instead of applying progressively less effort directly to the hand, he could have gradually moved the placement of his physical prompt away from the hand by moving from a prompt given hand-over-hand to a prompt to her wrist, then to her forearm, and so on until the prompt was no longer needed.

The *most-to-least prompting* strategy begins with a full physical prompt for the desired response, then fades to a gesture or model, and ends with the verbal instruction. Let us refer again to our program to teach Evelyn to follow simple instructions. First, the trainer provided the instruction (e.g., "Stand up") followed by a full physical prompt. Next, he provided the instruction with a gesture (e.g., a sweep of his hand and arm upward) as a cue to stand. Finally, the gesture was faded (e.g., a smaller sweep of the hand alone) until the response was controlled by the instruction only.

Least-to-most prompting starts off by giving the child the opportunity to respond independently, then the trainer progressively increases the amount of assistance provided until the child responds. This is a good technique when the goal is to encourage greater spontaneity (e.g., teaching Jeffrey to ask for desired objects during natural times). It is not a good technique for teaching brand-new response, however, because it can allow the child to make too many errors, and it can encourage dependence on prompts. The hierarchy typically begins with a brief delay and progresses to a verbal prompt or model. If that level of prompting is unsuccessful, a physical prompt may be used when it is appropriate. For example, when Jeffrey indicated that he wanted a drink (by pointing to the pitcher of juice), the trainer first used a simple time delay. He looked at Jeffrey and paused to determine if Jeffrey would use his words to ask. *Time delay* fades the use of verbal and physical prompts by inserting gradually longer intervals of time between the instruction and the delivery of the prompt. If he did not respond during the time delay, the trainer next said "What do you want?" If there was still no response, the trainer modeled "Say 'want juice.'" In this particular example, a physical prompt did not apply.

DEVELOPING THE SPECIFIC STEPS FOR INSTRUCTION

In order to teach a complex skill, you need to break it into a series of smaller, more manageable steps. We will refer to the delineation of steps as either a *step analysis* or a *task analysis.* Learning is enhanced because these smaller steps lead to greater success for the child. When writing the steps for your lesson plan, try to view the task from the child's point of view. How would she learn a new task? That is, how can you break the task down into steps that reduce the number of response errors, promote more rapid learning, minimize frustration, and create a more positive atmosphere for the child? The ABA techniques of shaping, prompting, and prompt fading can be used individually and collectively to break the task into a series of steps. Later we will discuss a different technique, called *chaining,* that you can use to enhance the child's learning.

Delineating Steps Using the Technique of Shaping

The steps of a program may be delineated by gradually increasing or decreasing what the child must do before reinforcement is delivered. For example, you could require that the child work or play for progressively longer periods of time, or with fewer prompts from an adult, or with greater productivity. We refer to this kind of program as a *step analysis.* For example, we developed an objective to teach Jeffrey to play more independently (i.e., when presented with three sets of toys and asked to play, Jeffrey will play appropriately for 15 minutes with two or fewer prompts across three consecutive sessions). From our assessment, we concluded that prior to the start of instruction, Jeffrey was able to play only about 4 or 5 minutes, and several prompts were needed to achieve even this level of performance. Thus, if we simply waited for Jeffrey to demonstrate the target response of 15 minutes, few if any responses could be reinforced. We knew that the task would have to be broken down into a step analysis so that some correct responding would occur and could be reinforced. We decided to progressively increase the amount of time Jeffrey needed to play before a reinforcer was delivered. We taught one step at a time until he achieved the predetermined criterion. The steps were as follows:

Step 1: Jeffrey will play for 3 minutes with two or fewer prompts.

Step 2: Jeffrey will play for 5 minutes with two or fewer prompts.

Step 3: Jeffrey will play for 10 minutes with two or fewer prompts.

Step 4: Jeffrey will play for 13 minutes with two or fewer prompts.

Step 5: Jeffrey will play for 15 minutes with two or fewer prompts.

We used a similar step analysis to teach Evelyn to color, with the following objective: When presented with crayons, a picture to color, and the instruction "Color," Evelyn will color the picture with one or fewer prompts across three consecutive sessions. The step analysis for Evelyn was as follows:

Step 1: Evelyn will color ¼ of the picture with one or no prompts.

Step 2: Evelyn will color ½ of the picture with one or no prompts.

Step 3: Evelyn will color ¾ of the picture with one or no prompts.

Step 4: Evelyn will color the entire picture with one or no prompts.

As we mentioned earlier, the exact sequence and number of steps in the step analysis must be individualized. Some children may need many steps to learn a new skill, while others may require far fewer steps to accomplish the same goal. You may need to revise your step analysis if the child does not progress on a particular step or series of steps.

Delineating Steps Using the Techniques of Prompting and Prompt Fading

Let us again refer to our program to teach Evelyn to follow simple instructions to illustrate how the techniques of prompting and prompt fading would be used to develop a step analysis. The objective was as follows: Evelyn will follow four simple instructions given by an adult at least 80% of the time across three consecutive sessions of ten trials each. The results of our assessment showed that Evelyn was unable to follow any of the targeted instructions (i.e., "Come here," "Stand up," "Sit down," and "Give me"). Therefore, we decided to begin with a full physical prompt and to fade our prompts systematically as Evelyn became more independent. We also decided to introduce one instruction at a time to minimize confusion and errors. Within each instruction we used the following step analysis: (a) full physical prompt, (b) touch prompt behind the arm, (c) touch prompt at the shoulder, (d) gesture near the shoulder, and (e) independent. Here are examples of each of the steps to illustrate the process.

In Step 1, the trainer gave the instruction "Stand up" and immediately provided a full physical prompt by placing his hands on the child's upper arms bringing her to a standing position. Initially Evelyn was reinforced for responding even if she resisted the prompt. Eventually, only cooperative responses were reinforced. The step was considered mastered (i.e., she was ready to move on to the next step) when she met the program criterion of "at least 80% of the time across three consecutive sessions of ten trials each."

In Step 2, the trainer provided a partial prompt by placing his fingers at the back of Evelyn's upper arm and nudging her gently. A correct response was scored if Evelyn stood up within 3–5 seconds. An error was scored if a greater degree of prompting was needed (e.g., full physical prompt). The criterion for movement to the next step was the same as that given for Step 1.

In Step 3, the trainer provided a partial prompt by placing his fingers at the back of Evelyn's shoulder and nudging her gently. The criterion for movement to the next step was consistent with Steps 1 and 2. The trainer continued in this manner until all of the steps were completed.

Delineating Steps Using the Technique of Chaining

Chaining is the linking together of component skills to comprise an entire, more complex skill. A description of the specific steps in the chain is referred to as a *task analysis*. Like the step analyses that we have been discussing, a task analysis is a description of the sequence of behaviors needed to perform a task. It is most often associated with teaching self-help skills, although it is relevant to any task in which steps are performed in a specific order (this is what distinguishes it from a step analysis). To develop the list of steps in a task analysis, look at the skill and write down all the separate steps it takes to complete the entire task. A sample task analysis for washing hands is presented in Table 6.1.

There are two types of chaining methods: forward and backward. *Forward chaining* begins by teaching the first step of the task analysis, while physically guiding the child through the remaining steps. After the child masters the first step, training begins with the second step, while prompting continues for the remaining steps of the chain. This procedure is repeated

Table 6.1.
Task Analysis of Hand Washing

Step 1:	Turns on cold water
Step 2:	Turns on hot water
Step 3:	Places hands under water
Step 4:	Gets soap
Step 5:	Rubs soap between hands
Step 6:	Puts soap down
Step 7:	Rubs front of hands together
Step 8:	Rubs back of right hand
Step 9:	Rubs back of left hand
Step 10:	Places hands under water
Step 11:	Rubs front of hands together
Step 12:	Rubs back of right hand
Step 13:	Rubs back of left hand
Step 14:	Turns off warm water
Step 15:	Turns off cold water

for each step until the child can independently perform all steps of the task analysis. For example, when Evelyn was taught to use a spoon to eat, grasping the spoon was taught first (Step 1 of the task analysis). The trainer gave the instruction "Use your spoon" and then used prompting, prompt fading, and reinforcement techniques to teach the step. The remaining steps of the chain were completed with hand-over-hand guidance. This eliminated any potential errors. When Evelyn had mastered grasping the spoon, then Step 2 (i.e., bringing the spoon to her mouth) was trained in combination with Step 1. Again, the rest of the steps in the task analysis were physically prompted to prevent errors. We continued in this manner until all steps were completed independently and linked together in a single chain.

Backward chaining uses the same principle as forward chaining, but the steps are taught in reverse sequence; that is, training begins with the last step of the task analysis and works toward the first. Using the task analysis provided in Table 6.1, the trainer physically guided Jeffrey through Steps 1–14, preventing any errors. Prior to the last step (turns off cold water), she paused to give Jeffrey an opportunity to complete the step independently. If guidance was needed, the trainer provided a least-to-most prompting sequence to teach the step. When Jeffrey was consistently performing the last step independently, the trainer introduced Step 14 (turns off warm water). The trainer continued in this manner until all steps were trained and the complex skill of hand washing was learned.

PROGRAMMING GENERALIZATION

A common characteristic of children with autism is their inability to generalize newly learned skills to circumstances different than those that were present during training. Although generalization to other times, places, and with new people may occur naturally, it is not always predictable. For example, children may learn to label common objects, but rarely use the words to request the items; they may be toilet trained at home but not at school; they may follow instructions given by their teachers but not their parents; and they may respond to the greeting "Hi" but not "Hello."

During initial teaching situations, the trainer often maintains unusually tight control over the instructions provided, the materials presented, the seating arrangement, and other setting conditions. This level of control is often needed to help children attend to the task and to minimize distractions. On the other hand, training in this restrictive manner may lead to less generalization. Thus, before a skill is considered learned, the trainer must determine whether the skill has generalized across cues, settings, and people. In the lesson plan shown in Figure 6.1, we suggest that you indicate how you plan to assess generalization.

If your assessment indicates that generalization has not occurred, the best way to encourage it is to expand the conditions (e.g., the range of materials, settings, and cues) that were initially a part of training. For example, if Jeffrey is able to label only when working with his trainer, then we should incorporate trials at other times of the day, in different rooms of the house, with different people, and so on. Once you have taught across several different conditions, the target skill is more likely to occur in new situations as well. We often assess and program for generalization after the target skill has been achieved. However, for more capable children (like Jeffrey) it is possible to begin programming for generalization as the skill is emerging. For example, we taught Jeffrey to label common objects under direct teaching conditions but simultaneously used naturally occurring times throughout the day as additional opportunities for instruction (incidental teaching). The reader should refer to Stokes and Osnes (1988) for a complete discussion of this issue.

PROMOTING LASTING CHANGE

Until now, we have recommended that each time the child demonstrates the desired skill, a reinforcer is given. Once a skill has been acquired, maintenance and generalization can be enhanced by gradually fading the frequency and type of reinforcement. This can

be accomplished by following some, but not all, correct or appropriate responses with a reinforcer (e.g., every third correct imitation), and by changing to more natural reinforcers (e.g., praise instead of food).

After reinforcers have been faded and the child has generalized the skill, a postcheck (or maintenance phase) is introduced. During this phase, the frequency of training trials is reduced. We typically assess maintenance once a week across a 3- to 6-week period (see Figure 6.1). If data indicate that the child has not maintained the skill, then we repeat the last phase of training and the generalization conditions. If data indicate that the skill has been maintained for at least 3 weeks, we consider it mastered. Ongoing data-collection systems are then eliminated or drastically reduced. Nevertheless, we continue to practice and encourage the use of this skill whenever it is appropriate.

ASSESSING PROGRESS AND REVISING INSTRUCTION

Applied Behavior Analysis stresses direct measurement of the child's performance. Direct evaluation is important because it allows the trainer to determine the child's progress, and it guides objective, clinical decision making. Trainers and parents who do not collect data may continue ineffective intervention programs or discontinue programs prematurely. In addition, it is important to show that the programs actually are producing the skill developments as claimed. We could be stealing valuable time from the child if in fact the gains reported are not occurring.

A variety of recording strategies are available, and only a few will be described here; see Cooper, Heron, and Heward (1987) for additional consideration of recording strategies. The most commonly used measurement method is a frequency count (e.g., number of prompts) and its variations (e.g., percentage correct). A frequency recording simply involves tallying or counting each occurrence of the target behavior. For example, the trainer might record the number of times the child makes eye contact, the number of bites of food eaten, or the number of prompts required to get the child to brush his teeth. Typically, for skill-development programs, the frequency of a response is measured either by recording the number of prompts required to complete the task or the percentage of correct trials (i.e., number of correct responses divided by the number of opportunities, multiplied by 100%). For example, if the child correctly imitates seven times out of ten trials, convert this to a percentage (e.g., $\frac{7}{10}$ = .70 × 100% = 70%). It is not necessary to score the child's response to every trial. You can obtain a sample of trials for each instructional program (e.g., the first 10–20 trials each day) to evaluate progress.

After data are collected, graph it for visual inspection. The reader again is referred to Cooper, Heron, and Heward (1987) for a complete discussion of graphing methods. Graphing provides a meaningful way of monitoring changes in behaviors and skills. It also is an efficient way to organize, store, summarize, interpret, and communicate the results of intervention to other parties.

Use the collected data for treatment planning, decision making, and evaluating the effectiveness of each intervention. Actually, data collection should begin prior to your first day of intervention. We typically obtain a preintervention, or *baseline*, measure of the child's performance. Baseline data provide the "before" picture with which to compare the treatment results (the "after" picture). In addition, a baseline can provide information on the child's current level of functioning. In turn this information can assist you in developing realistic objectives, establishing performance criteria, and developing task and step analyses. Collect baseline data for a minimum of three data points (i.e., sessions) and continue until a stable baseline is achieved.

Once you begin instructional sessions, the data will help you to determine when the child is ready to move to the next step within the step or task analysis that has been developed. We often use a step criterion of 80% accuracy for three consecutive sessions. If you notice that after many sessions the child is not making progress, then you will need to develop smaller intermediate teaching steps. In short, your step or task analysis should be revised. Finally, use the data to determine when the objective has been achieved and when generalization and maintenance have been demonstrated.

DEALING WITH THE RESISTANT CHILD

Initial sessions for a child with autism can be extremely difficult. One of the defining characteristics of many of the children with autism is their resistance to instruction. This becomes most evident during the first minutes of intervention. As soon as you begin to set limits (e.g., containing the child in the chair), the child may verbally and physically resist.

Evelyn was described by her parents as a child on the move. Her typical day was spent moving quickly from one activity to another. She rarely remained seated for more than a few minutes until she fell asleep at night. As soon as the trainer tried to contain her in

a chair for instruction, she began to cry, tried to stand up, and physically resisted the trainer's physical prompts to keep her seated. This resistance was a behavior her parents had indicated occurred often throughout the day (e.g., she would not remain seated for meals). They admitted that Evelyn usually would win those battles and was allowed to move, stand, and walk as she wanted; that is, she was allowed to escape from tasks or activities to situations she found more comfortable and possibly less demanding. Because she lacked speech, her only way to communicate her desire to escape was her physical resistance and tantrums.

Her trainer decided to approach this problem in a multidimensional way. First, he tried to select objects as reinforcers that he was reasonably sure Evelyn wanted. Second, he decided to keep the sessions very short and to expand them as Evelyn become more tolerant of the instructional demands. Third, he provided reinforcers contingent upon her remaining in the chair without crying and trying to get up. Initially this meant that he physically guided Evelyn to the chair, sat her down, reinforced following directions, then immediately let her get up. Gradually, the amount of time that Evelyn needed to remain seated before getting up was expanded. If she began to throw a tantrum while in the chair, it was ignored until she was quiet. Simple tasks were gradually introduced into the sessions. At first the tantrums were long and very difficult, in spite of the trainer's preventive measures. However, within and across sessions Evelyn began to throw tantrums less and for shorter periods of time.

This approach to dealing with extreme resistance to instruction has been very successful for many young children with autism. It enables them to learn that crying and other problem behaviors will no longer function to get them out of the session demands. Sometimes, positive results can be enhanced by teaching the child an appropriate alternative skill that replaces the problem behavior (e.g., we taught Evelyn to use a manual sign to indicate that she wanted a break). In other situations, the behavior problems persist, and more complicated intervention strategies may be necessary. Appendix A contains a list of relevant publications.

SUMMARY

In conclusion, we have herein provided a brief summary of educational practices that have been demonstrated to work with children having autism. It is not a comprehensive discussion. Each child with autism brings to the situation unique biology, learning experiences, and skills. The child's disability may affect the course of training as much as training affects the child's course of development. Most instructional programs include many subtleties that were developed and shaped to meet individual needs. We have tried to address potential variations by providing a couple of examples of children with autism, each at a different point along the continuum of abilities. Our aim has been to provide a set of best practices that will enable the reader to begin a successful program for any child. However, along the way most parents and professionals will need the advice of a good ABA-trained consultant in order to maintain an effective program.

USEFUL BOOKS ON APPLIED BEHAVIOR ANALYSIS

Baker, B. L., & Brightman, A. J. (1989). *Steps to independence: A skills training guide for parents and teachers of children with special needs.* Baltimore: Paul H. Brookes.

Cooper, J. O., Heron, T. E., & Heward, W. L. (1987). *Applied behavior analysis.* Columbus, OH: Merrill.

Foxx, R. M. (1982). *Increasing behaviors of severely retarded and autistic persons.* Champaign, IL: Research Press.

Foxx, R. M. (1982). *Decreasing behaviors of persons with severe retardation and autism.* Champaign, IL: Research Press.

Horner, R. H., Dunlap, G., & Koegel, R. L. (1988). *Generalization and maintenance: Life-style changes in applied settings.* Baltimore: Paul H. Brookes.

Koegel, R. L., Rincover, A., & Egel, A. L. (1982). *Educating and understanding autistic children.* Boston: College-Hill Press.

Lovaas, O. I. (1983). *Teaching developmentally disabled children: The ME book.* Austin, TX: PRO-ED.

Snell, M. E., (Ed.). (1993). *Instruction of students with severe disabilities* (4th ed.). New York: Merrill.

Sulzer-Azaroff, B., & Mayer, G. (1991). *Behavior analysis for lasting change.* Orlando, FL: Holt, Rinehart and Winston.

REFERENCES

Anderson, S. R. (1989). Training parents of autistic children. In B. L. Baker (Ed.), *Parent training and developmental disabilities* (Monograph of the American Association on Mental Deficiency, No. 13).

Cooper, J. O., Heron, T. E., & Heward, W. L. (1987). *Applied behavior analysis.* Columbus, OH: Merrill.

Dyer, K. (1987). The competition of autistic stereotyped behavior with usual and specially assessed reinforcers. *Research in Developmental Disabilities, 8,* 606–626.

Glover, M. E., Priminger, J. L., & Sanford, A. R. (1988). *The early learning accomplishment profile.* Winston-Salem, NC: Kaplan Press.

Johnson-Martin, N. M., Attermeier, S. M., & Hacker, B. (1990). *The Carolina curriculum for preschoolers with special needs.* Baltimore: Paul H. Brookes.

Romanczyk, R. G., Lockshin, S., & Matey, L. (1994). *The individualized goal selection curriculum (IGS).* Appalachian, NY: Clinical Behavior Therapy Associates.

Sanford, A. R., & Zelman, J. G. (1981). *The learning accomplishment profile.* (Rev. ed.). Lewisville, NC: Kaplan Press.

Stokes, T. F., & Osnes, P. G. (1988). The developing applied technology of generalization and maintenance. In R. H. Horner, G. Dunlap, & R. L. Koegel (Eds.), *Generalization and maintenance: Life-style changes in applied settings* (pp. 5–19). Baltimore: Paul H. Brookes.

CHAPTER SEVEN

Behavioral Analysis and Assessment

The Cornerstone to Effectiveness

Raymond G. Romanczyk

The field of autism is strongly associated with a great number of fads and movements that over the last several decades have promised much but consistently failed to deliver in the light of objective evaluation (Delmolino & Romanczyk, 1995; Romanczyk, 1994). In contrast, however, the behavioral approach, (also known as behavior modification, behavior therapy, or Applied Behavior Analysis), with its roots strongly within a research/academic framework, has often been grossly misunderstood, yet is an effective approach that has only recently received the positive attention it deserves (see Maurice, 1993).

Over the past three decades, consistent and systematic research projects have demonstrated the utility of the behavioral approach, and many recent, larger-scale outcome studies have consistently demonstrated that this approach yields significant benefits for children with autism (Harris & Handleman, 1994). The most important of these outcome studies, which has sparked the enthusiasm that has resulted in the demand for a book such as this one, is the outcome study by Ivar Lovaas (1987). His long-term outcome study clearly demonstrated the magnitude of positive change that is possible and has set a new standard against which to compare existing treatment approaches (McEachin, Smith, & Lovaas, 1993).

THE IMPORTANCE OF INDIVIDUALIZATION

Intervention programs must be tailored for the individual child using the specific information, principles, and strategies of behavioral research. The specifics of programs will be different for different children. Assessment and evaluation of your child as an individual, not simply in a comparison to the "typical" child thus becomes a central task. The rigid adoption of a technique-oriented approach can have severe detrimental effects. Children with autism are often characterized by idiosyncratic learning styles and overly rigid learning styles. Thus one must be very careful in identifying and defining the problem behaviors and behavior deficits, and what measures are to be used to evaluate positive outcome. For example, it is not necessarily true that a child who performs every task item correctly in a teaching lesson is doing better than another child who makes some errors but continues to participate in the lesson; that is, often we are attempting to teach problem solving to children. Some level of trial-and-error learning, particularly persistence in the face of error, is a critical skill that must be learned. A child who is experiencing only success may have great difficulty when faced with novel situations in which the rote response no longer applies. However, this must be balanced by the fact that many children with autism find simple learning experiences very difficult, and rote responding is often a necessary first step.

Thus two issues that we must constantly consider are the balance of teaching items and goals, and how to interpret the data we collect. It is not an easy perspective to acquire as a parent, because you are working only with your child, so that each step is a novel experience both for you and the child. All procedures, all approaches, must be individualized for the child, and this can only take place if you are very sensitive to the child's needs and reactions, and scrupulously *objective* in the measurement and analysis of those reactions. This is perhaps one of the most difficult things for a parent to do: to step back and be truly objective. Thus procedures for quantifying the child's behavior that can be used to create and evaluate intervention strategies are essential.

THE BEHAVIORAL APPROACH

The behavioral approach is a conceptual model of behavior that takes into account at a precise and moment-to-moment level how individuals learn, in the context of their unique physical and social environment, biology, and learning history. Factors include the way in which stimuli are perceived, (that is, their salience, or value), the way in which an individual reacts to those stimuli, the consequences that occur as a function of those specific reactions, and how those consequences influence the future occurrence of behavior. Thus we speak about the characteristics of lesson materials presented, the timing of the task presentation, the distribution over time of the teaching sessions, the behaviors the child is expected to perform at different steps in the presentation of stimuli, and what the consequences for the child will be depending on the response to the stimuli. One must be sensitive to issues of perception, motivation, memory, fatigue, response repertoire, sequences, and a myriad of other variables.

To fully describe behavioral assessment is not possible in a single book chapter. There are many good sources available, however. Two books, one by Gelfand and Hartman (1984), and the other by Powers and Handleman (1984), are highly recommended.

IMPORTANCE OF ANCHOR POINTS

We measure and assess for two basic purposes: to establish absolute points of development and to assess relative change from one point in time to the next. To assist in developing a good teaching program and to place assessments into context, a good curriculum can serve as a map, indicating position, direction, and routes. Thus a curriculum addresses the most frequently raised question: "What should I teach next?" The answer requires assessment of the child and the framework to provide perspective.

More than 20 years ago, starting with long evening meetings with staff and colleagues on the floor of my living room, with papers and charts scattered all about, I began constructing and continually revising a curriculum. In particular, Dr. Stephanie Lockshin and Linda Matey have had a central role in the continuing refinement and expansion of this curriculum, the Individualized Goal Selection Curriculum (Romanczyk, Lockshin, & Matey, 1982, 1995; IGS, current version 8.0). The IGS curriculum is designed to enhance decision making and child evaluation and is structured both by learning and development domains, and in a hierarchical format of area, level, stage, and task. It contains 18 specific areas of development, with approximately 2,000 specific goals that serve as a road map through these various areas, levels, and stages of development. It cannot be overemphasized that with any curriculum, one cannot focus on all areas of development simultaneously. It is critical to adopt a focused prioritized approach (Romanczyk & Lockshin, 1984; Romanczyk, Lockshin, & Matey, 1994). One of the reasons that children with autism have traditionally made little progress in educational and therapeutic settings is that a balanced curriculum approach is typically utilized, whereby many different service providers provide a little of many different procedures and approaches addressing a multitude of need areas simultaneously. For many children with autism this is a formula for confusion and lack of progress.

BEHAVIORAL ASSESSMENT

It is important to note that individual behaviors can have multiple causes and maintaining factors. Human behavior is very complex, and the behavior of a child with autism can be complex along multiple dimensions (Romanczyk, 1986b; Romanczyk, Lockshin, & O'Connor, 1992; Taylor & Romanczyk, 1994; Taylor, Ekdahl, Romanczyk, & Miller, 1994).

The essential element of behavioral assessment is quantification. For most of us the processes of social, language, and cognitive development proceeded relatively easily throughout our childhood years, and little attention was given either by ourselves or parents and teachers to the specifics of those processes. We learned it "naturally." A great deal of our learning is done through observation, and we are also highly motivated by the social aspects of our environment to continue to participate in various learning and social activities. When this process does not take place easily, as it does not for a child with autism, we need to analyze the situation to understand where the difficulties lie. Behavioral assessment gives us powerful tools to conduct such analysis.

Figure 7.1 presents the basic elements of behavior analysis in pictorial form. The essence of behavior analysis (functional analysis) is that you serve as a detective to closely observe and figure out motivation and sequences of events. There are seven basic steps: (a) define and quantify, (b) observe, (c) record, (d) analyze, (e) evaluate, (f) hypothesize and challenge, and (g) conceptualize.

The figure illustrates the sequence and interrelationship of these components. First, definition and quantification are important, because humans are not

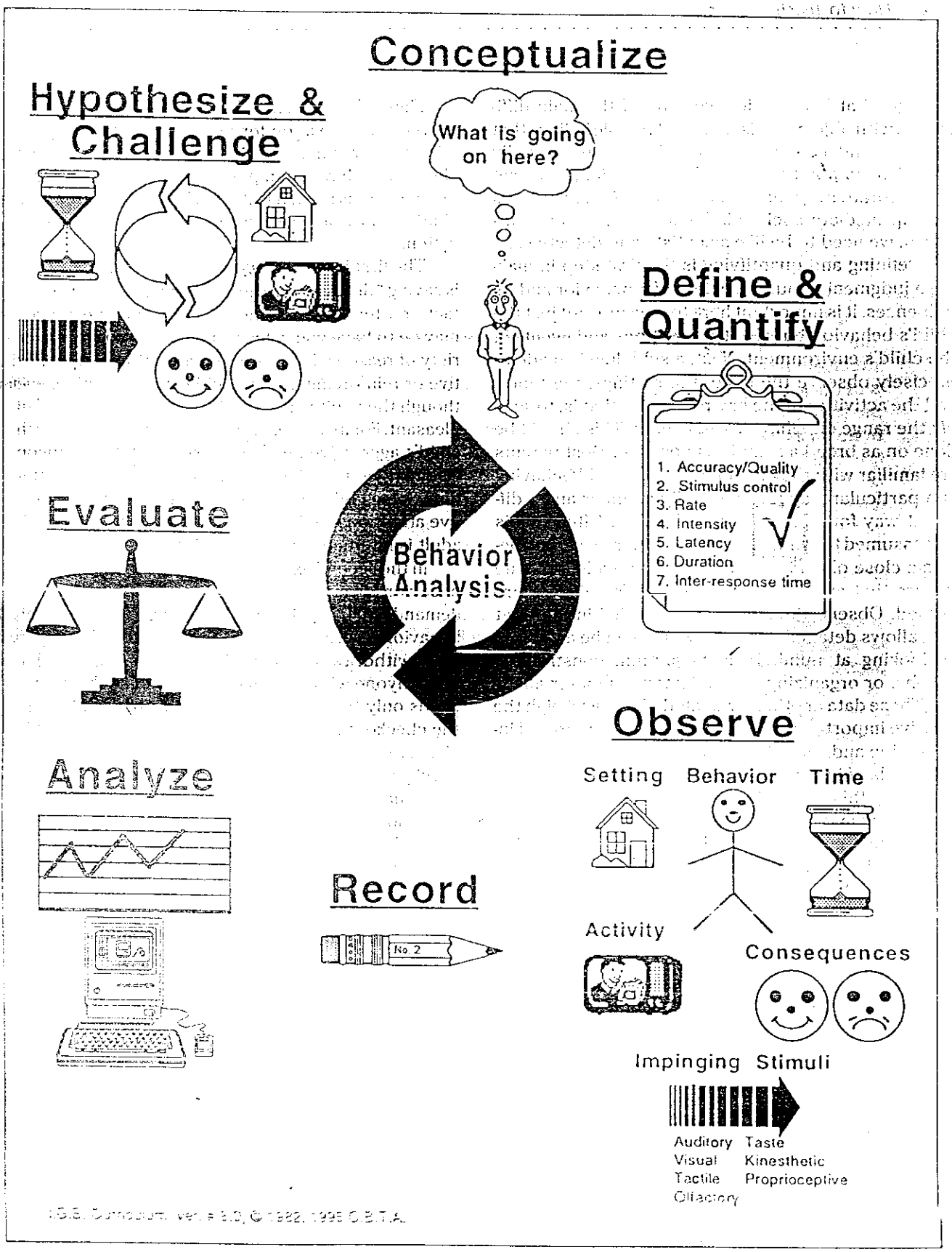

Figure 7.1. Behavior analysis diagram. Reprinted with permission.

very good at being objective. One of the main difficulties with objectivity is that most people believe that they can indeed be objective. But we are actually flawed in our ability to process information, so we set up elaborate systems of rules, regulations, and laws to help mediate social disputes. Thus, for our purposes, we need to be like scientists and detectives.

Defining and quantifying is the first step in making a judgment about the extent of a behavior and its influences. It is important here to measure not just the child's behavior, but also the reactions and events in the child's environment. Next, a schedule is made to precisely observe the child, the settings, the times, and the activities in the environment—that is, to *sample* the range of behavior and events. This should be done on as broad a sample as possible. Most parents are familiar with the phenomenon of a child behaving in a particular way for one family member and a different way for another family member. Often this is just assumed to reflect the child's preferences, and because close observation is not being made, the true factors that are influencing the child's behavior are missed. Observations must be recorded in a format that allows detailed analyses, which can be as simple as looking at numbers in a column, constructing graphs, or organizing sophisticated computer analysis. These data are then evaluated. We must weigh the relative importance and meaning of each source of information and also determine if appropriate amounts and kinds of information have been collected.

Using this evaluation, we begin to form hypotheses as to what might be causing or influencing the behavior and then construct "challenge" situations, that is, we begin to systematically alter the elements in the environment that were observed to produce a pattern. By changing these elements, we are "challenging" the individual with these particular elements. In many ways this is similar to testing the child for an allergy. A physician does an interview to ask questions about the child's reaction, talks about seasonal changes and specific reactions, and then applies small quantities of the hypothesized allergens to the skin to observe possible reactions.

The next step in our assessment is to conceptualize and understand what is going on. It is important to distinguish the very broad type of understanding, such as "What is the meaning of life," from the very specific and focused task that we have: to understand those aspects of the environment and social interactions that are influencing your child's behavior. Thus, this diagram illustrates an ongoing process that can have very different results for different behaviors displayed by the same child; as with most adults, all of a child's behavior is not affected and maintained by only one small set of influences and events.

Figure 7.2 presents diagrams showing possible sources of motivation for behavior, particularly maladaptive (dysfunctional) behavior. In these examples, children are having temper tantrums, but for very different reasons in each instance. In these diagrams, the child's behavior serves as a metaphor for communication.

The first is termed *approach*. In essence, the child is saying "Get over here now." That is, she desires contact or attention for some reason; it may be social, it may be to have you get a glass of juice, or any of a variety of reasons. Be aware that attention can be positive or reinforcing from the child's perspective, even though the adult may intend the interaction to be unpleasant. For instance, a reprimand explaining why the child's aggressive behavior is so hurtful to someone else may be perceived by the child simply as attention. Some children will seek both positive *and* negative attention; the form doesn't matter as long as the adult is interacting with the child.

In the second example, escape, the purpose of the behavior is very different. Here an adult has made a demand, such as "Give me the glass," and the child's behavior serves to remove the demand by having the adult withdraw or stop asking. The message is "Back off." Anyone who doubts the power of such behavior needs only to observe adults with young children in the checkout line in grocery stores, when a child begins a temper tantrum because the parent would not purchase a particular cereal item or candy bar. One can usually observe such confrontations escalate on the child's part until finally the adult gives in and gives the child what he or she wishes. The tantrum then "miraculously" ceases, and the blood pressure of the adult typically falls. In this example, the escape behavior was engaged in by the adult; in order to escape the temper tantrum, she gave in to the child's request and thus made the unpleasant social scene go away. Such interactions can have an extremely powerful influence on behavior, but in this example it is clear that, although the adult may find immediate relief from an embarrassing situation, such escape behavior is neither in the adult's nor child's long-term best interests.

The next mechanism is termed *avoidance* behavior. This is much more complex. It is similar to escape, but the individual is responding to something associated with an unpleasant situation. In this example, the child notices that it is 9:00, and this is when the teacher usually comes to say "It's time to get started," which leads to working on specific tasks. While working on the tasks is actually the unpleasant aspect for the child, having learned the sequence of events, the child responds immediately to those cues in the environment that lead to unpleasant events. Using our metaphor of language, the child is saying "I'm not going to put

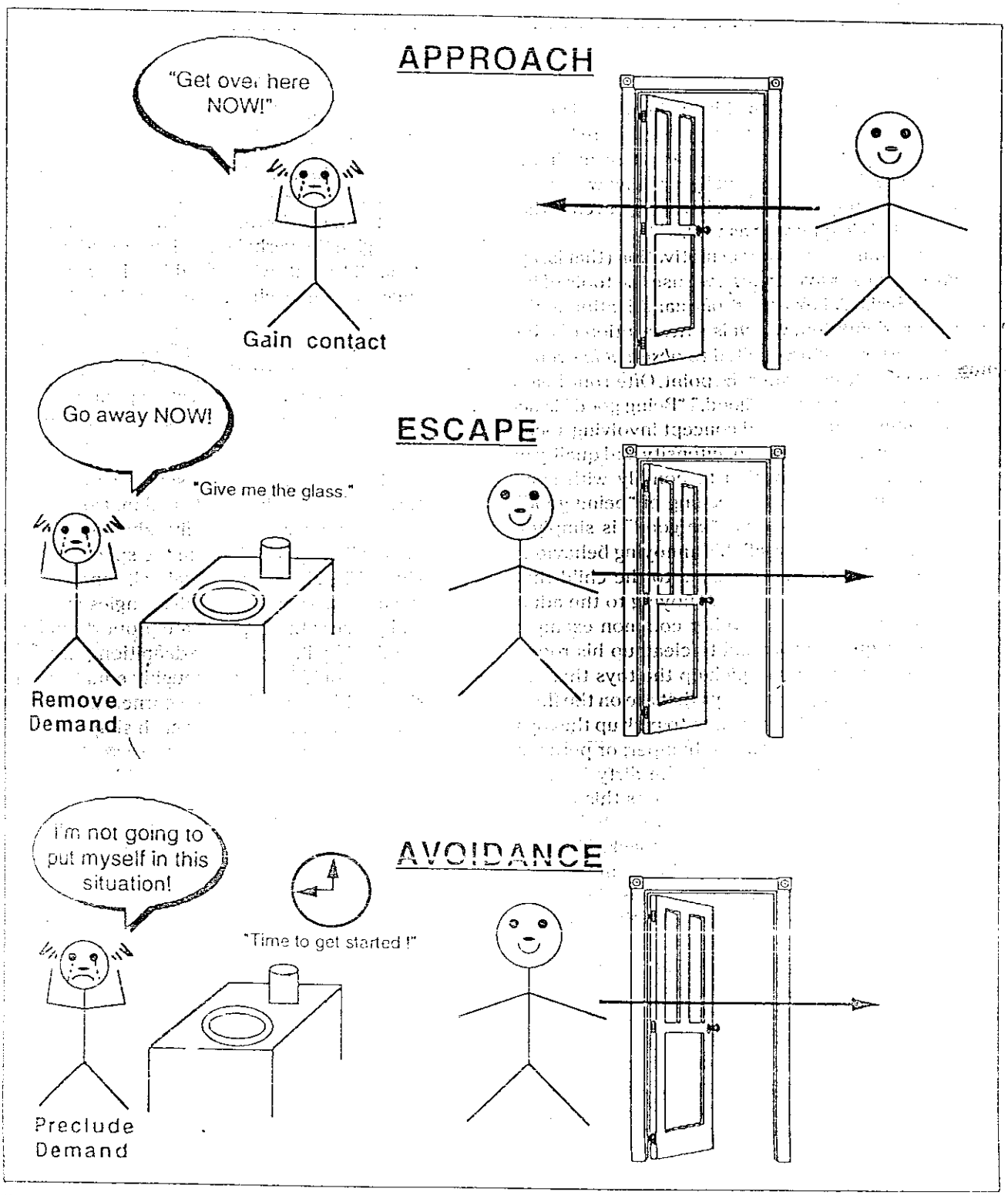

Figure 7.2. Motivation of behavior schematic. Reprinted with permission.

myself in this situation." Avoidance behavior is often very difficult to analyze because, while we are looking for immediate distressing or unpleasant events in the environment, the child is actually reacting well in advance of such unpleasant or distressing events that may be quite idiosyncratic as well.

To ascertain these types of motivation (that is, approach, escape, or avoidance), we use the tools of behavior analysis. A key aspect of quantification is the operational definition, which is a description of a behavior in terms that are limited to *observable* events. A simple example illustrates the point. Often one hears a parent say to a child, "Be good." "Being good" is actually a highly sophisticated concept involving social norms, context, modulation of intensity and quality of behavior, and the motivation to comply with such norms and guidelines. The meaning of "being good" can change. Often the phrase "be good" is simply a translation of "stop doing all this annoying behavior." It thus serves as an unclear signal to the child that something not very specific is annoying to the adult and that it should cease. Another common example would be a request for a child to clean up his room. This could mean simply to pick up the toys that are on the floor, or to pick up the toys that are on the floor and place them in the toy chest, or to pick up the toys and also put dirty laundry in the hamper; or perhaps the command really refers just to the dirty laundry and making the bed. In typical situations this lack of specificity often works itself out by repeated examples, trial and error, and parental feedback. This is a very imprecise way of teaching and transmitting expectations; therefore, for a child who has significant communication difficulty, it is clearly not the preferred method of interaction.

The purpose of precisely defining behavior is to help not only the person taught but also the instructor by maintaining precision and consistency, which are critical components of an effective teaching program. Creating good operational definitions takes practice, feedback, and getting into a particular "mind set." The following are some simple examples of operational definitions:

- Good sitting. When placed in a chair in preparation for conducting an individual activity or lesson, the student will remain seated with buttocks on the chair, feet on the floor, and body oriented toward the instructor. Response must be present for a minimum of 15 seconds. The instructor will record the number of times the 15-second criteria is met in each of six 15-minute instruction periods scheduled per day for this goal. Reinforcement is delivered at the end of each correct 15-second period and consists of physical affection, clapping, and stating "Good sitting!"
- **Imitates single action.** Instructor will extend her hand in a random position (e.g., to the right/left, up, down, etc.). The instructor will then give the verbal direction, "(Student), do this." (Student) will extend hand in a mirror image of the teacher's arm position within 5 seconds of the instruction to do so. Record each trial as + or −, and present 10 trials for each of four instruction periods according to schedule. Reinforce correct responding with verbal praise and one cheddar cheese goldfish cracker.
- Copies shapes. When presented with one picture of a shape chosen at random from the materials box containing five shapes, the student will copy the shape in the space provided. The shape will contain all aspects of the original (number of sides, angles and arcs) and possess the appropriate proportionality required by its geometric definition (e.g., a square would have four roughly equal-length sides, with four right-angle corners). The student has 1 minute to copy each shape. Provide verbal feedback as to correct and incorrect responses. Put shape aside and draw another from box and repeat until all shapes are used. Record responses as +, A+ (approximately correct), and −. Reinforce both A+ and + with verbal praise, but for + also give a colored sticker on the work sheet.
- Decrease throwing objects at others. Throwing is defined as projection of any object in the direction of another person, regardless of accuracy of aim. This does not include playing catch with a willing recipient of the thrown object, indicated either verbally or by having outstretched hands. To be recorded as frequency on a continuous basis by each person supervising/teaching/observing the child. Record the person toward whom object was directed. Do not intervene at this time except if possible to block object's path or grab object before child releases it for projection.

MEASUREMENT

Once behaviors have been operationally defined, we can observe them with greater precision. Observation and measurement are crucial components of our efforts to intervene effectively. These are complex

processes involving how often a behavior is observed, under what circumstances, with what units of quantification, and whether the child reacts to being observed. Objective markers provide us with feedback as to when things are going well and, even more important, when programs are not going well.

Adequately monitoring your child's behavior and performance is difficult, but an essential aspect of the behavioral approach is the objective, quantitative analysis of behavior and performance. It is tempting to simply "get a feel for" the child's behavior or performance, but most errors in program development come from inadequate objective analysis and overreliance on memory and impression. Thus, appropriate tools and procedures must be used.

One important concept in measurement is *interobserver agreement*, a technical term that simply means that two people observe the child at exactly the same time, without conferring, and then compare how well their observations agree. This is a good procedure to do at the start of programs and intermittently thereafter. It is often surprising to people to see just how differently they observe behavior even when they think they have clear definitions. These reliability checks on observation should foster discussion in order to resolve the inconsistencies between observers. Never assume that everyone is observing accurately; it is a skill, and individuals require practice and feedback.

There are several basic measurement types: frequency, episode, proportion, duration, latency, intensity, quality, and interresponse time. The choice of which to use depends upon the specific task or behavior being taught. Measurement need not be continuous; we often sample behavior simply because it's not possible to observe every behavior and task of concern every moment. Sampling means setting up an unbiased schedule for observation. For instance, sampling by having mother record aggression and father record self-stimulation (mother usually does most of the speech tasks and father does most of the self-help tasks) would be a biased sample: the observations of specific behaviors would also be specific to people and activities. Good sampling is designed to eliminate such bias. A better approach would be for both mother and father to record aggression and self-stimulation, to conduct speech and self-help programs, and to agree to record for every third teaching session. This would then be an unbiased sample.

In my own work the use of computer technology is invaluable in producing highly detailed analyses of child behavior and performance as well as producing detailed individualized teaching programs (Delmolino, Romanczyk, & Matey, 1994; Romanczyk, 1984, 1986a, 1991, 1993; Romanczyk & Delmolino, 1994). However, as part of the development of the IGS curriculum, which can be used with or without computer resources, a number of data-collection and analysis forms were created as examples of a good, basic paper-and-pencil procedure, a few of which will be presented here. All of them are based on the principle that recording data must be an inherent part of the intervention process. Data collection in the context of interacting with your child is a skill, and like any skill it takes practice and organization on your part. With a little perseverance you will find after a time that it becomes almost second nature.

Performance Measurement

The minimum requirements for measurement are that we look at the accuracy of performance, the rate of performance (responses per unit of time), nonresponding versus incorrect responding, and the pattern of responding. This basic system provides us with the minimal information necessary to evaluate progress. It is not sufficient to evaluate learning anomalies or assessment of learning deficits, but for the purpose of conducting a home program and providing feedback to modify the child's learning program, it will serve as a good basic foundation.

Figure 7.3 presents the IGS Performance Record Form, a simple data-recording sheet for discrete-trial, performance-oriented programs. It is very useful when teaching basic skills and assisting a child to reach particularly difficult goals that require concentration, repetition, and mastery. Of course, this format should not be used for all learning tasks, but it is an important component of the child's overall program.

A form such as this permits you to look for a pattern such as increasing or decreasing performance both within a session of 10 trials and across sessions within a day and across days of the week. The task is to understand and promote your child's learning. By looking at patterns you can begin to make hypotheses as to what may be influencing the behavior beyond the task materials themselves. You may also use "permanent product" measures for some tasks, such as number of drawings completed, or worksheet problems correctly completed, or the dinner table set correctly. In these instances a correct response leaves a "product" that you can observe after the child has completed the task or activity.

The information from each session should be summarized and graphed in order to provide an ongoing perspective on your child's performance. It is not sufficient to have simply a "good idea" of where your child is heading or a "feel" for her performance.

I.G.S. PERFORMANCE RECORD FORM

I.G.S. Curriculum (ver. # 8.0) © 1982, 1995 C.B.T.A.

Child__________

Title________________________________ Start Date___/___/___ St. Week #____ Stage # ___

IGS Goal # _______

TRIALS week of __/__/__ Week #___

Data collection
+/-/NR
+/A+/-/NR
+/P+/-/NR

	Date	Time	Init	1	2	3	4	5	6	7	8	9	10	# tr	Corr	% +	DAILY DATA SUMMARY No data
MON																	
TUES																	
WED																	
THURS																	
FRI																	
SAT																	
SUN																	
Week's Summary																	

Comments:

A=absent
B=behavior interfered
C=conflicting schedule
D=disrupted by another
E=error, taken incorrectly
F=all other - EXPLAIN

Figure 7.3. IGS Performance Record Form. Reprinted with permission.

Be aware that the parent's or teacher's perception of the child's progress is influenced by many factors other than the child's actual performance, such as fatigue, distraction, stress, expectations, depression, selective memory, systematic and nonsystematic performance variations, the number and type of other goals being simultaneously evaluated, and so on. Your task is to analyze and understand patterns of performance and behavior as objectively as possible.

Figure 7.4 presents the IGS Standard Multiple Data Plotting Form, a simple summary format for evaluating and graphing each performance program (as well as behavior as we'll discuss later). You can use some simple processes to make the evaluation easier. For instance, if you are consistent in placing calendar dates on the *x* (horizontal) axis of the graphs so that they are always synchronized, then it is easy to lay the graphs out on the living room floor, stacking them vertically, and to look at patterns over time for both behavior and performance. That is, if you start your first graph with the first data point on the *x* axis being May 1, and then start your second graph of a different program that started on May 10, do not put May 10 at the first point on the *x* axis of your second graph, but rather at the tenth point. Thus, a vertical line through related graphs will always indicate the same point in time. It is a little wasteful of paper, but the benefits far outweigh this aspect. Interpreting graphs of behavior and performance and analyzing patterns is a difficult task and often takes great expertise. However, the more you can systematize and arrange your information in a logical fashion, the greater the chance that you will be able to put it to good use.

This next important aspect is to note on your graphs any important teaching changes or situational changes. For instance, if you begin to utilize a food reward for certain behavior, and playing with a favorite toy for certain performance goals, you should note the date on which you start these procedures on your graph by drawing a vertical line on the graph and labeling it. This allows you to see patterns in the teaching methods and procedures that are most effective for your child. It also will quickly show you if you are attempting to change too many things too rapidly. Remember that one of the most important tasks you have is to find what methods are more or less effective for your child. If you are trying many things simultaneously, then often you will not be able to discover how they are interacting, whether they are additive in their positive value, or subtractive in their positive value, and you will simply be employing busywork and relying on your gut feeling rather than utilizing the precision that skilled professionals use in order to make their decisions.

Behavior Measurement

The IGS Behavior Analysis Form shown in Figure 7.5 is used for the initial attempt to quantify your observations. It is very important always to be precise and timely in this endeavor, as memory is faulty and we are all influenced by particular biases and influences. One parent might find a particular behavior more or less troublesome than the other, and their recollection of the frequency and events surrounding the behavior can often bear little resemblance to what is actually going on. One must adopt the view of an objective observer who is collecting detailed diagnostic information. This form thus becomes a diary. Each time you observe the problematic behavior, indicate the start and end time, intensity of the behavior, and any important characteristics such as setting, activity, antecedent, the specific form of the behavior, the consequence, and the comments. The following are just a few examples of possible specific items.

Setting

bedroom	kitchen	transition
bathroom	work area	
living room	outdoors	

Activity

waiting	play	transition
specific task	unstructured	
break	bathroom	
meal/snack		

Antecedent

demand	physical contact	loss of privilege
request	instigated	attention to other
feedback	no contact	removal of attention
denial	play	vicious circle
reprimand	task difficulty	
reinforce		

Consequence

attention	remove demand	restraint
physical contact	ignored	response cost
distraction	reprimand	overcorrection
verbal interaction	time out	relaxation
	redirected	
	soothing	
	P.C.I.	

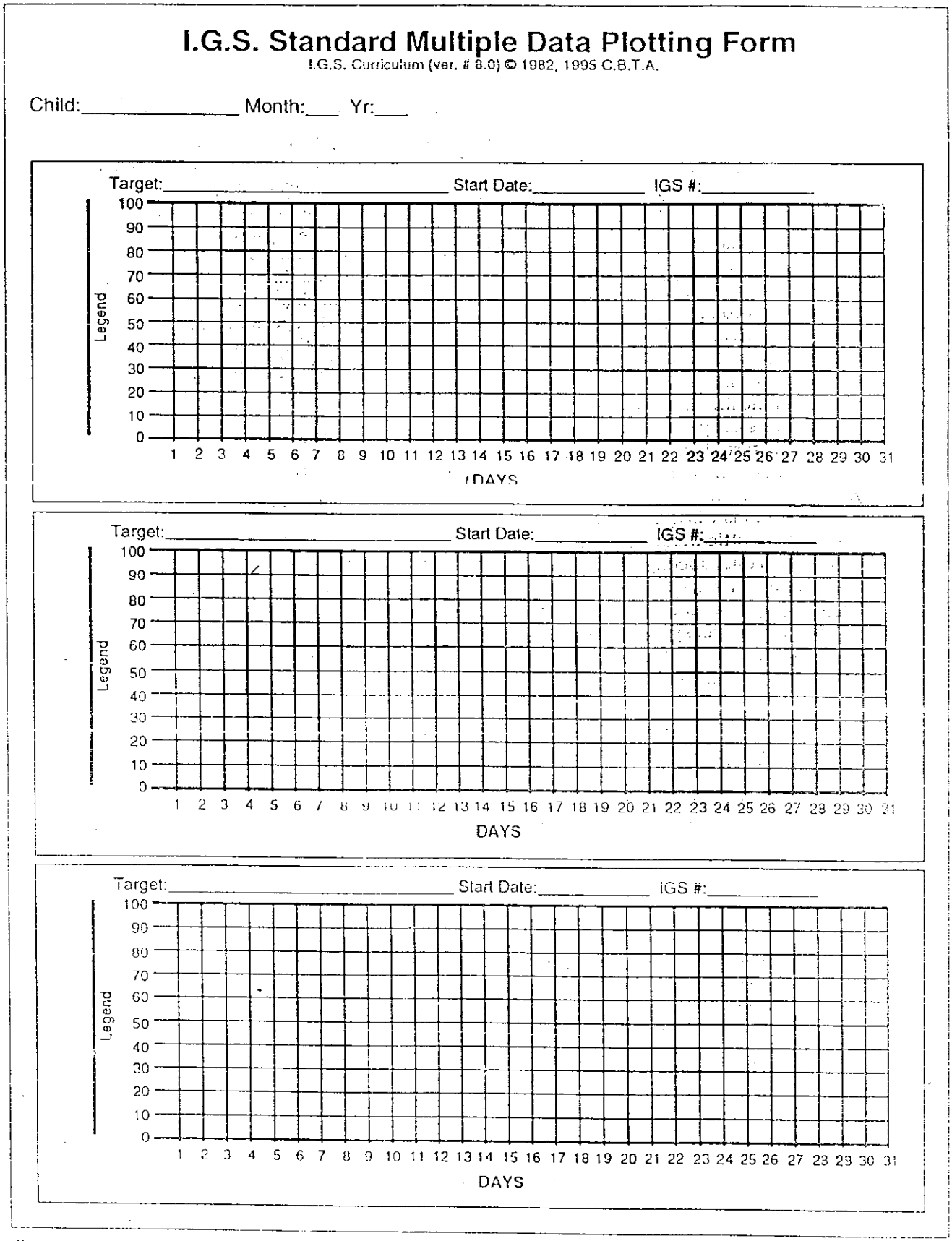

Figure 7.4. IGS Standard Multiple Data Plotting Form. Reprinted with permission.

I.G.S. BEHAVIOR ANALYSIS FORM

Child:______________

Date:________

Page __ of __

	SETTING	ACTIVITY	ANTECEDENT	BEHAVIOR	CONSEQUENCE	COMMENTS
Time start:______ Time end:______ Intensity: ______ Initials: ______						

	SETTING	ACTIVITY	ANTECEDENT	BEHAVIOR	CONSEQUENCE	COMMENTS
Time start:______ Time end:______ Intensity: ______ Initials: ______						

	SETTING	ACTIVITY	ANTECEDENT	BEHAVIOR	CONSEQUENCE	COMMENTS
Time start:______ Time end:______ Intensity: ______ Initials: ______						

	SETTING	ACTIVITY	ANTECEDENT	BEHAVIOR	CONSEQUENCE	COMMENTS
Time start:______ Time end:______ Intensity: ______ Initials: ______						

	SETTING	ACTIVITY	ANTECEDENT	BEHAVIOR	CONSEQUENCE	COMMENTS
Time start:______ Time end:______ Intensity: ______ Initials: ______						

	SETTING	ACTIVITY	ANTECEDENT	BEHAVIOR	CONSEQUENCE	COMMENTS
Time start:______ Time end:______ Intensity: ______ Initials: ______						

	SETTING	ACTIVITY	ANTECEDENT	BEHAVIOR	CONSEQUENCE	COMMENTS
Time start:______ Time end:______ Intensity: ______ Initials: ______						

	SETTING	ACTIVITY	ANTECEDENT	BEHAVIOR	CONSEQUENCE	COMMENTS
Time start:______ Time end:______ Intensity: ______ Initials: ______						

	SETTING	ACTIVITY	ANTECEDENT	BEHAVIOR	CONSEQUENCE	COMMENTS
Time start:______ Time end:______ Intensity: ______ Initials: ______						

Figure 7.5. IGS Behavior Analysis Form. Reprinted with permission.

It is very important in using this form to be objective about what you observe. For example, when observing a common form of misbehavior, one might make a notation of a child being reprimanded by his father for jumping on the furniture while the family is watching TV. The specific behaviors are important, not the supposed intent. For instance, it provides no clinically useful information to say that a child was frustrated, began jumping on the furniture, and then was punished. In contrast, an observation that "Father picked up Sammy, carried him to the kitchen, sat him on a chair next to the table, and stated 'I don't want you jumping on the couch'" is much more useful because it is behaviorally descriptive. Next, a description of the child's reaction to this, such as "Sammy smiled and struggled to get away" is necessary. Last, one needs a description of the antecedent events, such as "Sammy was watching TV and Martha (sibling) would not let him change the channel." This series of observations is much more useful and lends itself to useful interpretation of possible causes of Sammy's behavior.

Much of behavior analysis is the process of determining what the reaction of the individual is to antecedents and consequences rather than the intent of those trying to influence the child or the intent of the child to influence the environment. Intent is an elusive and slippery concept, and usually an oversimplification for purposes of behavior analysis. Thus, when a parent says that she "rewards" her child for saying please and thank you but is disappointed because the child rarely says please and thank you without constant reminders, then in fact the behavior is not being appropriately reinforced. What is really occurring is that the parents are describing their *efforts* and their good *intent*, rather than objectively observing the effect of their behavior on the child. The reward being used was assumed by the parents to be effective, but it was not a reinforcer; that is, it was not serving to increase the behavior. In order to be effective in conducting good behavior therapy programs, one must constantly evaluate the gap between intent and effect. Good intent is a prerequisite, but not a substitute for precision of analysis.

The IGS Behavior Record Form shown in Figure 7.6 is designed for recording behavior for 6-hour blocks of 15-minute intervals across the days of the week. (This is just one of many different IGS forms that we use.) This form is used for long-term monitoring after clues have been found using the IGS Behavior Analysis Form, and for detecting patterns over longer time periods that may lead to clues as to further possible influences. Certainly for most families the routine on Saturdays and Sundays is quite different from that of weekdays. The influence or lack thereof of this change in schedule and activities can be seen quite readily.

By monitoring several behaviors on one form, we can look for possible important patterns across behavior. This is where the true detective work comes in, not only with respect to analyzing what you have recorded, but also in the choice of what you record. For instance, the basic form provides four choices for the units of measurement: frequency (how many times did the behavior occur?), occurrence (did the behavior occur or not occur in the observation interval?), duration (for how long did the behavior occur during the interval?), and proportion (of the opportunities for the behavior to occur, what percent of the time did it occur? For example, if the child was asked three times to come when called, and did it twice, then 66% would be recorded). This last example is also appropriate for latency measurement; that is, how long does it take the child to respond when the request or situation arises? Sometimes the difficulty is not in the actual responding, but in the speed of responding. The choice of how to record a behavior is as important as which behavior to record. There is no simple answer: it will always depend upon the purpose and context of the behavior or performance goal.

For instance, one might record the times of naps as well as play activities along with frequency of aggression, occurrence of self-stimulation, and proportion of appropriate play that occurs in response to another child trying to initiate play with your child. By looking at the patterns across such behaviors and taking into account normal scheduled activities, you can make deductions about possible influences. You can use the form in a number of ways: for frequency, use little slash marks to indicate when the behavior has occurred; for duration, write in the number of minutes; for proportion, use percentage; and for occurrence, use a + or a −. If you can't observe for a particular interval, be sure to cross it out so you know when you summarize what the correct denominator will be (you don't want to mix or count nonobservation periods in with times when you are actually observing).

For frequency, if you find that there is not enough room in each box because the behavior is occurring too often, simply change the resolution of the matrix. Instead of 15-minute periods, you might use 10-, or 5-, or even 1-minute intervals. The resolution is completely dependent upon the individual characteristics of your child and the behavior being monitored. There is no one correct answer other than to say it is reasonable to start with 15-minute periods and if the patterns remain elusive, then one adopts other time resolutions in an effort to systematically evaluate the behavior. Summary data, such as rate per day, can be plotted on the IGS Standard Multiple Data Plotting Form, as for performance data.

I.G.S. BEHAVIOR RECORD FORM

Child__________________

Week #___ week of __/__/__

Behavior:__________________ Units: freq occ dur prop IGS Goal # ________ Step # ___

	9	:15	:30	:45	10	:15	:30	:45	11	:15	:30	:45	12	:15	:30	:45	1	:15	:30	:45	2	:15	:30	:45	RATE
M																									
T																									
W																									
T																									
F																									
S																									
S																									

Behavior:__________________ Units: freq occ dur prop IGS Goal # ________ Step # ___

	9	:15	:30	:45	10	:15	:30	:45	11	:15	:30	:45	12	:15	:30	:45	1	:15	:30	:45	2	:15	:30	:45	RATE
M																									
T																									
W																									
T																									
F																									
S																									
S																									

Behavior:__________________ Units: freq occ dur prop IGS Goal # ________ Step # ___

	9	:15	:30	:45	10	:15	:30	:45	11	:15	:30	:45	12	:15	:30	:45	1	:15	:30	:45	2	:15	:30	:45	RATE
M																									
T																									
W																									
T																									
F																									
S																									
S																									

Behavior:__________________ Units: freq occ dur prop IGS Goal # ________ Step # ___

	9	:15	:30	:45	10	:15	:30	:45	11	:15	:30	:45	12	:15	:30	:45	1	:15	:30	:45	2	:15	:30	:45	RATE
M																									
T																									
W																									
T																									
F																									
S																									
S																									

Figure 7.6. IGS Behavior Record Form. Reprinted with permission.

The IGS Temporal Behavior Analysis Form shown in Figure 7.7 is an example of one of several of this type that is used for very precise analysis of a particular behavior problem. Each sheet records only a single behavior and indicates the precise time at which the behavior occurs for each day the samples are taken. It is very important therefore to indicate within any particular day times when the behavior was not recorded by crossing out the box. Not doing so can generate false patterns that reflect more the parental schedule of being able to monitor the behavior rather than any temporal characteristics of the behavior itself. This form has many permutations, including a 24-hour analysis, analysis for short periods of time, such as an hour, where specific task variables and social variables are manipulated, and also plotting and analysis of long-term trends over many months. However, the basic format is one of recording by time of day when a specific behavior occurs, which allows you to look for patterns across days that are occurring at the same time of day. These patterns are the basis for speculation as to issues concerning fatigue, interaction with specific activities and people, or the sequence of demands and stimulation in the child's day. It is common to see patterns based upon physical distress, meal times, parents leaving or arriving from work, planned family activities, the times of favorite TV shows, and so on.

What is most important in this section is that the purpose is not simply to count behaviors to indicate how "bad" a day it was (what I have referred to in various conference presentations as "the pain index"), but rather to analyze and understand behavior patterns. Doing so enables you to intervene more effectively by altering the specific conditions that lead to, or elicit, the behavior problem. This is a much more useful and effective approach than arbitrarily punishing undesired behavior and hoping that the punishment will decrease the behavior (Romanczyk, 1986b, 1990). The more information and understanding you have about the purpose and function of a behavior and the conditions that tend to elicit and maintain it, the better your chance of developing an effective intervention program that will maximize the child's short-term and long-term success.

Figure 7.8 shows the IGS Language Development Form, which is similar in concept to the IGS Behavior Analysis Form. Language training involves not only the production of specific sounds and words, but also the appropriate use of those words in context. This is often referred to as *spontaneous* speech. In fact, very little speech is truly spontaneous; that is, in a technical sense, the individual who is speaking spontaneously is in fact reacting to subtle social and environmental cues that are appropriate for this speech. Thus, when a child walks into the kitchen in the morning and sees a parent working at preparing breakfast, it is very appropriate to spontaneously ask "What's for breakfast?" In like manner, when a parent arrives home from work, it is quite appropriate for the child to say "Hi, I missed you all day." These are spontaneous statements in the sense that they are not directly prompted by another individual, but as you can see, they are prompted by the particular stimulus conditions that are present.

One of the tasks in helping to develop appropriate language repertoires is to remain aware of the subtle but ever-present cues for appropriate communication. We are so used to them and find them so easy to respond to that we rarely pay direct attention to them. However, the essence of being a good teacher is to analyze these common situations and help the child to develop the skills necessary to respond spontaneously. The IGS Language Development Form permits various family members to share and monitor language use and then to promote its sustained use. This form is particularly useful in the initial stages of language development, when sounds and words may be used only intermittently and involve poor stimulus control. The data may be plotted on the IGS Standard Multiple Data Plotting Form to look at long-term trends.

The IGS Scale Rating Form shown in Figure 7.9 is used in a similar way to record behaviors that occur intermittently for which it is not as important to count the number of times they occur as to note the quality or some other dimension of the behaviors when they do occur. Such behaviors could include showing affection, cleaning up toys after playing with them, cooperating in a joint task, or assessing the degree of independence in self-dressing. A scale rank of 0–10 is perhaps the easiest to use, as it translates most readily to our general concept of 0–100% of accuracy. However, it is important to note that a scale of 0–10 can also be used to rank the intensity or quality of behavior. For instance, in rating temper tantrums, one would use 10 to indicate the most severe temper tantrum that you have ever observed, 5 being the midpoint and 1 being extremely mild. One uses such a scale to look at issues other than frequency. As an example, for most young preschool children, temper tantrums are part of normal development. Thus, the goal of having a young child never display temper tantrums would be both an unreasonable and uninformed expectation as well as an example of a poorly chosen criterion. However, reducing the intensity and duration of temper tantrums to half of what is currently observed may be a quite reasonable and appropriate goal.

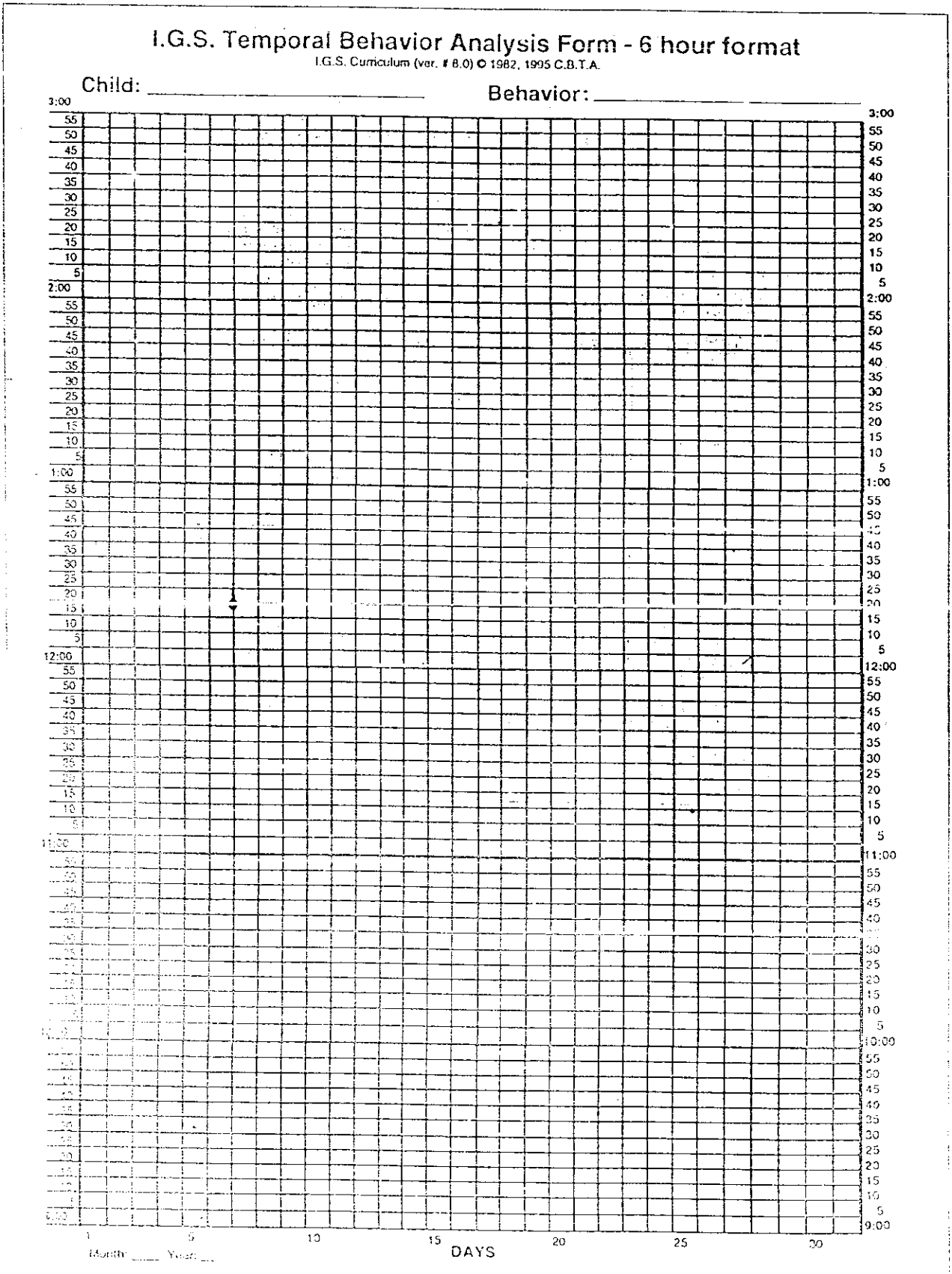

Figure 7.7. IGS Temporal Behavior Analysis Form. Reprinted with permission.

I.G.S. Language Development Form

Child:_____ WEEK of : __/__/__

Record any new word used. Rate the level of articulation - poor, adequate, good. Indicate time, situation, who child was speaking to, as well as what was being said. Also record if a word child has used, was NOT used when the situation required it. Record any other unusual language event in the same manner. Look for patterns in terms of the development of new words, use of words child has learned, and very importantly, words that disappear or fall into disuse. Note changes, either positive or negative, in articulation and if child begins to substitute gestures or signs for spoken words. Make some entries each day, even if there are no unusual or striking events. At the end of each day, indicate the amount of language used that day - LOW, AVG, HIGH.

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							
Amount of Language	low avg high	low avg high	low avg high	low avg high	low avg high	low avg high	low avg high

Figure 7.8. IGS Language Development Form. Reprinted with permission.

Child ____________

Week of __/__/__ Week #___

I.G.S. SCALE RATING FORM

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APPropriate responses
INDependence level
QUAlity of response
CONsistency of response
COOperation level
FREquency of response
INTensity of response

All scales are rated 1>10

IGS# ____ Scale ____
Behavior

	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	#	AVG
Monday														
Tuesday														
Wednesday														
Thursday														
Friday														
Saturday														
Sunday														

IGS# ____ Scale ____
Behavior

	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	#	AVG
Monday														
Tuesday														
Wednesday														
Thursday														
Friday														
Saturday														
Sunday														

IGS# ____ Scale ____
Behavior

	9:00	9:30	10:00	10:30	11:00	11:30	12:00	12:30	1:00	1:30	2:00	2:30	#	AVG
Monday														
Tuesday														
Wednesday														
Thursday														
Friday														
Saturday														
Sunday														

Figure 7.9. IGS Scale Rating Form. Reprinted with permission.

WHEN THINGS GO WRONG

There are many components to a good teaching program. (In my own work, teaching programs for each goal address more than three dozen specific variables.) We cannot expect that all goals will be taught in the same manner nor that the child will respond in exactly the same way to the same teaching technique in different situations. Thus, in order to create good programs, it is important to recognize that many children with autism share a common set of learning difficulties. Our teaching needs to compensate for these difficulties, which tend to be (a) poor attention, (b) poor motivation, (c) poor stimulus control, (d) poor generalization, (e) poor cause-effect learning, (f) poor observational learning, (g) poor communication, (h) poor perspective taking (walking in another's shoes), (i) poor understanding of social and behavioral expectations.

Sequencing of goals is a very complex issue and concerns the child's overall development, the strength of the child's existing behavioral repertoire, responsivity to the environment, and your skill in constructing the program. We are always confronted with the need for fine balance and careful judgment as to whether a child is not succeeding because insufficient time has been devoted to teaching the particular goal or whether the goal is poorly chosen and poorly taught. Such evaluation and judgment is greatly enhanced by specific training, supervision, and experience. It is not possible to give a magic formula for the answers to these complex questions. Thus, it is important that you be sensitive to the issues and continuously evaluate your child's treatment plan. As with any important decision, this is best done with someone who can serve as a sounding board to challenge and critique what you are doing and to take an objective look at the data you are collecting and the conclusions you are drawing. You do not want someone who is simply being supportive and trying to tell you that everything is okay and that you are doing your best. Such interpersonal support is crucial and very important, but should not be confused with the hard-nosed analytical evaluation that you need in order to optimize your child's treatment plan.

Figure 7.10 presents the goal problem flowchart for the process of evaluating program adequacy. Once again there is not enough space to detail each step and the multitude of possible options. However, the logic of the flow of decision making should assist you in how to problem solve. The chart has two basic emphases: Is the problem specific to (a) one goal or (b) do many goals involve problems? If specific to one or a few goals, then you must inspect the teaching program itself to see if it may be contributing to lack of progress. One must review the materials and their appropriateness, the instructions given to the child (are they perhaps too complex or insufficient to produce clear understanding?). Is the particular response required too complex for the child at this point in time, and should a simpler response be accepted? Is the complexity of the task beyond the child's current abilities? Finally, are the task and goal appropriate for the child's current skill and development level? These are all complex considerations. For instance, we often see in teaching interactions instructions that go far beyond what is required for the task and actually involve points of confusion. Thus, if one wants a child to match a sock to a sock and a cup to a cup in a simple match-to-sample teaching process, it is much better to use verbal instructions such as "Match sock" rather than "OK Johnny, now I'd like you to take the sock and match it to the other sock so you can show me how well you can do it." It is always critical to remember that language can be very difficult for individuals with autism and that your language should be as functional and simple as possible: that is, each word should be used because it contains relevant and important information. The "filler" that we all use in normal conversation can be a source of confusion and frustration. As the child's skills progress, certainly you can expand the verbal interchanges that occur, but in the beginning it is wise to be direct and simple.

When problems are present for many goals, there can be many discrete impediments to progress, often in combination. A good start is with a three-part investigation. First, is there a problem with the child's attention? If so, there could be many possible causes. Certainly factors like physical discomfort, fatigue, too-stimulating a learning environment, and poor reinforcers are some of the possibilities. What is important here, as always, is that these are factors to which the child may be sensitive, but which may not be significant to you or to other children. For instance, the issue of whether the environment is too stimulating is not a question that can be answered on a normative basis, such as whether most people would find it overly stimulating. The answer must be ascertained for your particular child. It could be that the noise level is too high, or there are too many interesting things in the room, such as favorite toys, or perhaps the child's clothing is not comfortable, or the chair the child is sitting on is too high and the feet cannot touch the floor. In like manner you must question whether the reward being utilized is in fact a reinforcer. A child may like a particular food item, or a hug, or a toy to play with, but that does not necessarily mean that it will be an effective reinforcer (that is, act to increase the behavior desired).

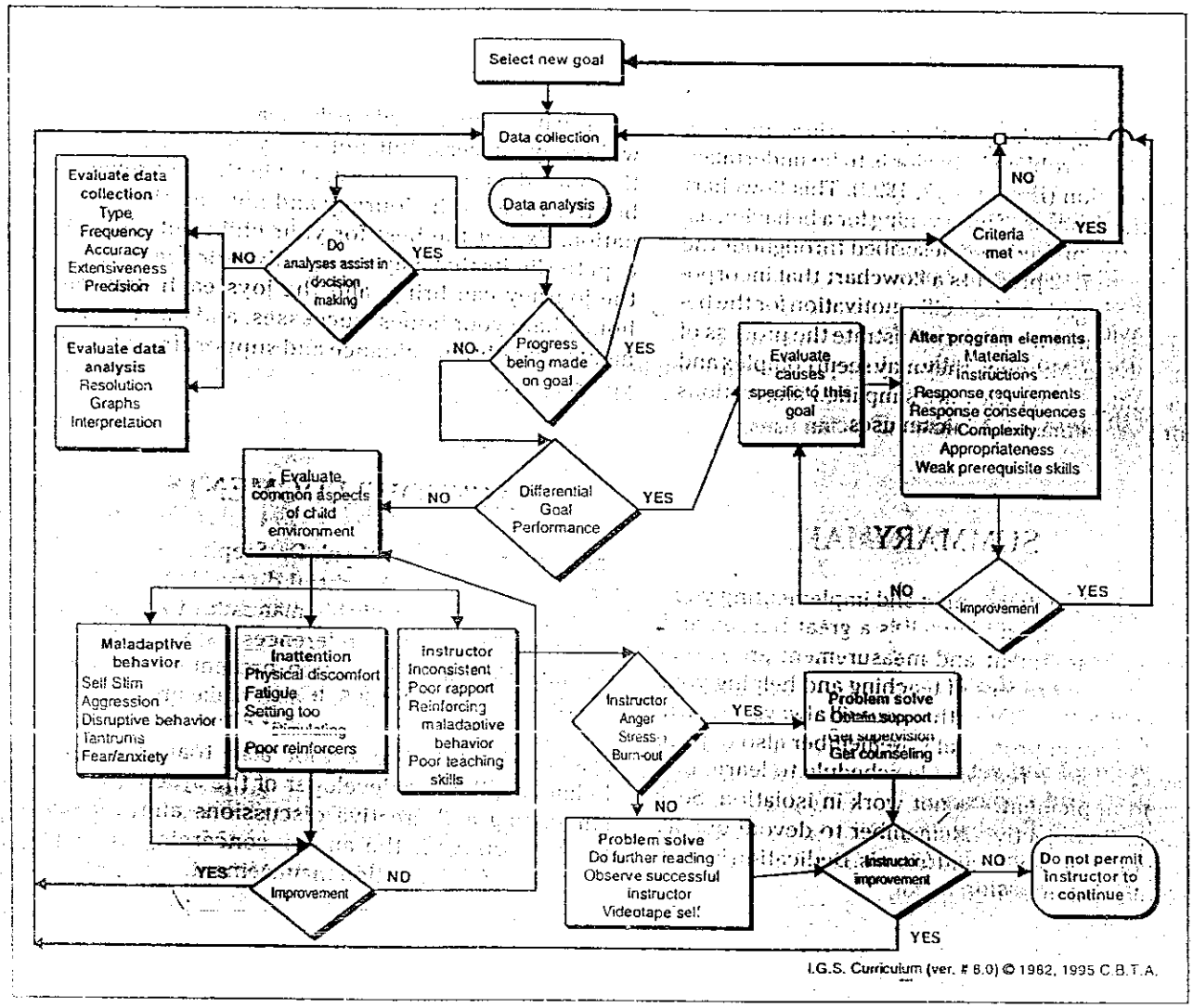

Figure 7.10. Goal problem flowchart. Reprinted with permission.

A second area of possible difficulty would be the presence of problem behaviors. If the child is engaging in a great deal of self-stimulatory behavior or interfering behavior such as aggression or disruption (throwing materials, yelling and screaming, falling to the floor, etc.) then all of these prevent the teaching program from being appropriately implemented. If this is the case, these behaviors need to be dealt with directly. The presence of such behaviors, however, often indicates that there are problems elsewhere. For instance, as just mentioned, if the child is inattentive due to physical discomfort, fatigue, and so on, and therefore is not receiving the reinforcer desired, then becoming aggressive or disruptive may be her response to that situation. It is also important to first analyze the teaching environment before attempting to directly suppress a behavior. Most often the answer lies in the teaching program and interactions rather than in the behavior problem itself.

Third, we must examine the characteristics of the teacher. This is an emotionally difficult task if the teacher is the parent, or one spouse is examining the efforts of the other. Clearly, the teacher is critical to achieving success, and thus the cold light of evaluation must constantly be applied. As stated before, intent to help is not sufficient; skill and proficiency are mandatory. Some characteristics can be easily improved, for example, by videotaping your teaching sessions and reviewing them with someone in a calm setting, where the emphasis is on critiquing skills, not criticizing the person. It does happen at times that a particular person does not have the skill, temperament, or personality at a given point in time to be an effective teacher. Such a person can still assist in all of the logistics of conducting a home program, and perhaps the most valuable contribution may be to help with activities to allow more free time for the more proficient teacher to teach.

Figure 7.11 expands upon the process in Figure 7.10. Intervention for problem behavior is to be undertaken with great caution (Romanczyk, 1990). This flowchart illustrates the process of intervening for a behavior, using many of the procedures described throughout the chapter. Figure 7.12 presents a flowchart that incorporates the investigation of specific motivation for the behavior. These three flowcharts illustrate the process of problem solving. Although they may seem complex and overwhelming, in fact they are simplified illustrations of the process a master clinician uses.

SUMMARY

Taking the task of developing and implementing your child's program upon yourself is a great burden and challenge. Assessment and measurement are essential tools to the process of teaching and helping your child develop. Remember that you will always be learning and improving your skills. Remember also to pace yourself and set a reasonable schedule to learn, prepare, and implement. Do not work in isolation. Seek feedback. Be objective. Remember to devote quality time to yourself, family, and friends. Dedication is wonderful; obsession is not.

You have much hard work ahead of you, and you will enjoy success. But not everyone will achieve the same degree of success, and in the end remember the value of the journey and not just the destination. Expect the best for your child but also accept the limits that may emerge. Experience the joys the journey can bring, and the joys each day can hold. Share your hopes, successes, and disappointments, and obtain guidance and support from those you respect.

ACKNOWLEDGMENTS

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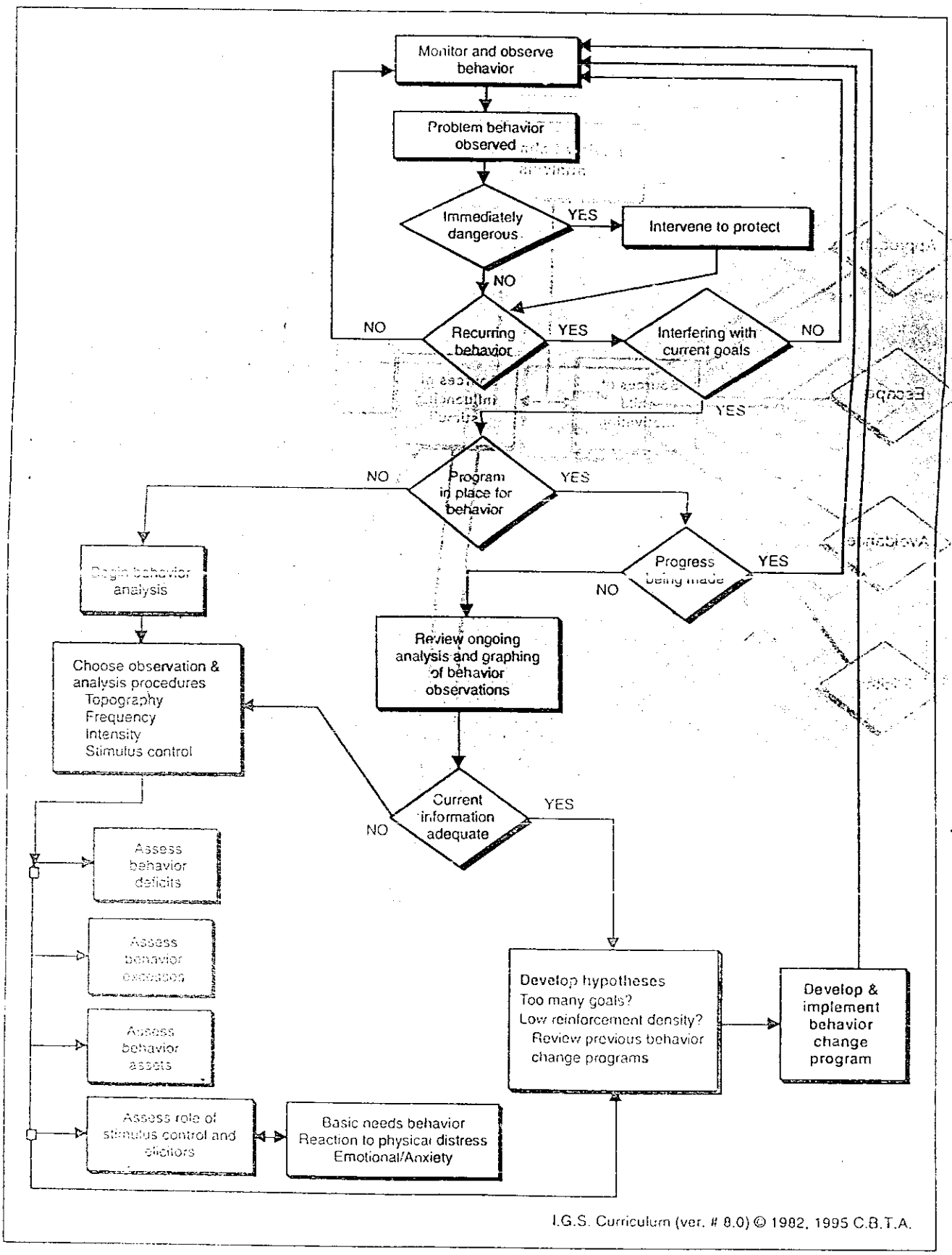

Figure 7.11. Problem behavior flowchart. Reprinted with permission.

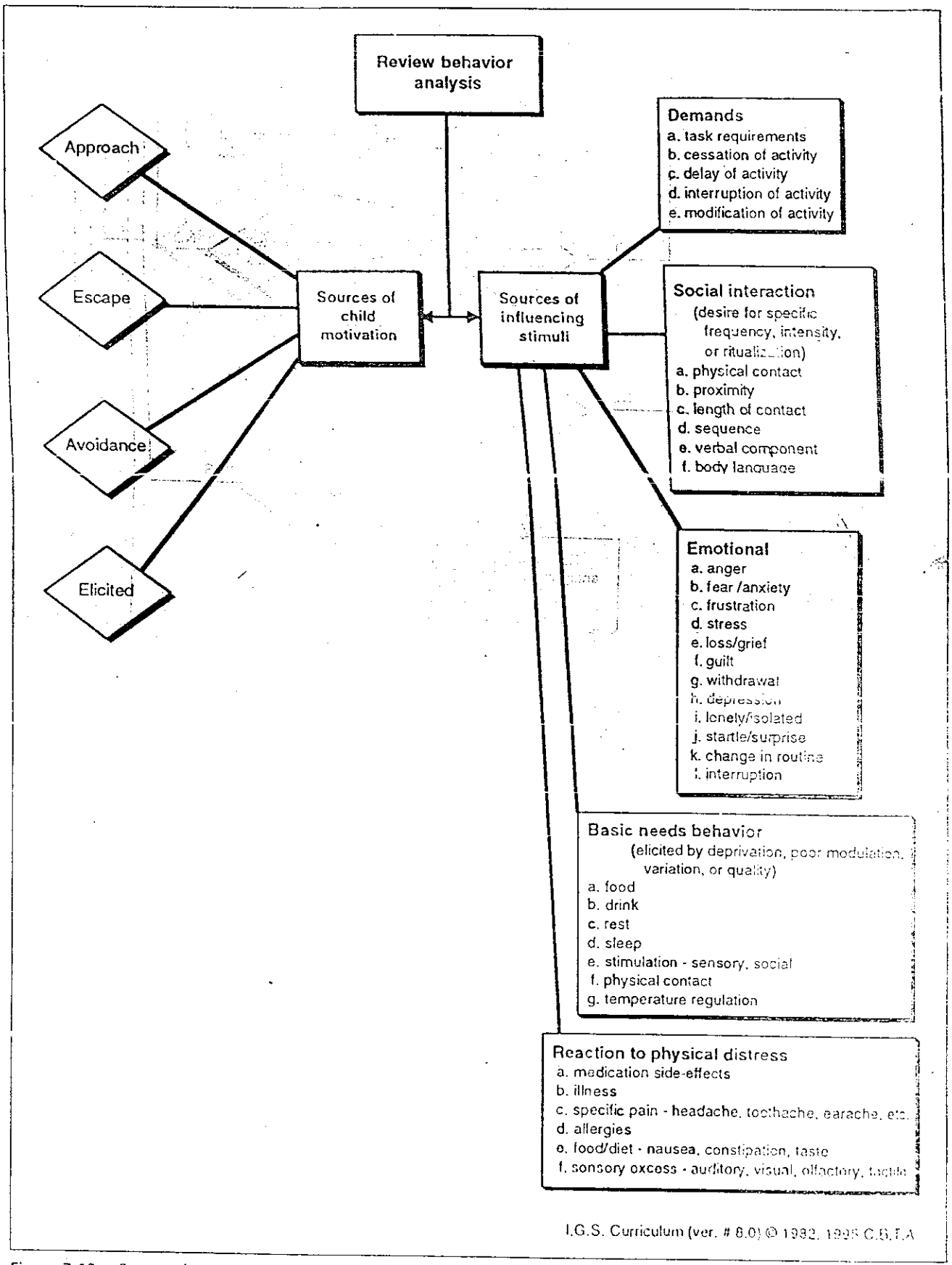

Figure 7.12. Sources of problem behavior flowchart. Reprinted with permission.

REFERENCES

Delmolino, L. M., & Romanczyk, R. G. (1995). Facilitated communication: A critical review. *The Behavior Therapist, 18*(2), 27–30.

Delmolino, L., Romanczyk, R. G., & Matey, L. (1994, May). *Impact and cost-benefit of "off-the-shelf" computer-assisted behavior analysis.* Presented at the 20th Annual Convention of the Association for Behavior Analysis, Atlanta, GA.

Gelfand, D., & Hartman, D. (Eds.). (1984). *Child behaviar analysis and therapy.* New York: Pergamon.

Harris, S., & Handleman, J. (Eds.). (1994). *Preschool education programs for children with autism.* Austin, TX: PRO-ED.

Lovaas, O. I. (1987). Behavioral treatment and normal educational and intellectual functioning in young autistic children. *Journal of Consulting and Clinical Psychology, 55*, 3–9.

Maurice, C. (1993). *Let me hear your voice.* New York: Knopf.

McEachin, J. J., Smith, T., & Lovaas, O. I. (1993). Long term outcome for children with autism who received early intensive behavioral treatment. *American Journal on Mental Retardation, 4*, 359–372.

Powers, M., & Handleman, J. (Eds.). (1984). *Behavioral assessment of severe developmental disabilities.* Austin, TX: PRO-ED.

Romanczyk, R. G. (1984). A case study of micro-computer utilization and staff efficiency: A 5-year analysis. *Journal of Organizational Behavior Management, 6*, 141–154.

Romanczyk, R. G. (1986a). *Clinical utilization of microcomputer technology.* New York: Pergamon Press.

Romanczyk, R. G. (1986b). Self-injurious behavior: Conceptualization, assessment and treatment. In K. D. Gadow (Ed.), *Advances in learning and behavioral disabilities,* (Vol. 5, pp. 29–56). Greenwich, CT: JAI Press.

Romanczyk, R. G. (1990). Aversive conditioning as a component of comprehensive treatment: The impact of etiological factors on clinical decision making. In S. L. Harris & J. Handleman (Eds.), *Aversive and non-aversive intervention: Controlling life-threatening behavior of the developmentally disabled.* New York: Springer.

Romanczyk, R. G. (1991). Monitoring and evaluating clinical service delivery: Issues of effectiveness of computer data base management. In A. Ager, (Ed.), *Micracomputers in clinical psychology.* New York: Wiley Press.

Romanczyk, R. G. (1993, May). *The appropriate utilization of computer applications for early intervention.* Presented at the 14th Annual Division TEACCH Conference, Chapel Hill, NC.

Romanczyk, R. G. (1994). Autism. In V. S. Ramachandran (Ed.), *The encyclopedia of human behavior* (Vol. 1, pp. 327–336). San Diego, CA: Academic Press.

Romanczyk, R. G., & Delmolino, L. M. (1994). *IGS Computer Information Management System.* Apalachin, NY: CBTA.

Romanczyk, R. G., & Lockshin, S. L. (1984). Short-term, intensive services: The deficit-oriented, focused model. In W. Christian, J. Hannah, & T. Glahn (Eds.), *Programming effective human services.* New York: Plenum.

Romanczyk, R. G., Lockshin, S., & Matey, L. (1982; 1995). *The Individualized Goal Selection Curriculum.* Apalachin, NY: CBTA.

Romanczyk, R. G., Lockshin, S., & O'Connor, J. (1992). Psychophysiology and issues of anxiety and arousal. In J. Luiselli, J. Matson, & N. Singh (Eds.), *Self-injurious behavior: Analysis, assessment, and treatment.* New York: Springer-Verlag.

Romanczyk, R. G., Lockshin, S., & Matey, L. (1994). Intensive early intervention. In S. Harris & J. Handleman (Eds.), *Preschool education programs for children with autism.* Austin, TX: PRO-ED.

Taylor, J., Ekdahl, M., Romanczyk, R. G., & Miller, M. (1994). Escape behavior in task situations: Task versus social antecedents. *Journal of Autism and Developmental Disorders, 24*(3), 331–344.

Taylor, J., & Romanczyk, R. G. (1994). Generating hypotheses about the function of student problem behavior by observing teacher behavior. *Journal of Applied Behavior Analysis, 27*(2), 351–265.