

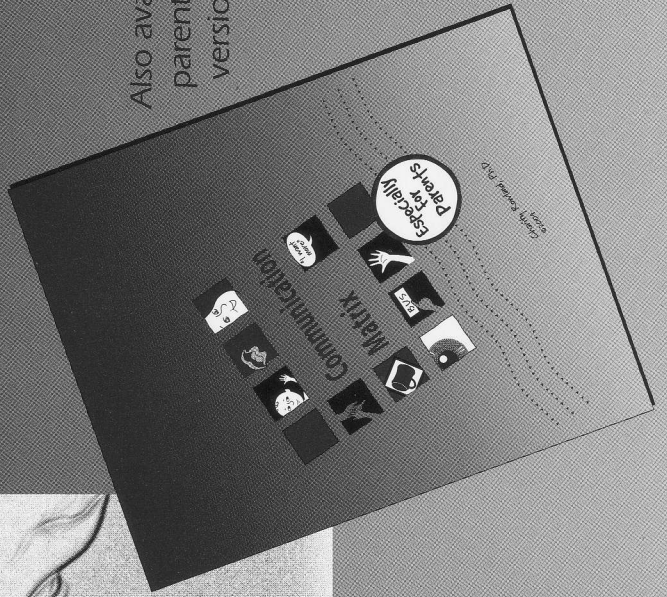
Communication Matrix



A communication skill assessment

- for individuals at the earliest stages of communication development
- for individuals who use any form of communication, including presymbolic or alternative and augmentative forms

Also available in a parent-friendly version



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Rationale and Introduction

The **Communication Matrix** is actually a series of four matrices representing four basic reasons for communicating and seven levels of competence. The levels of competence are distinguished by the behaviors used to communicate, ranging from pre-intentional behavior to the use of two- and three-symbol utterances. The organization of the Matrix is based on a sample of nine typically developing infants who were assessed three times between 6 and 20 months of age. The Matrix is an assessment tool designed to pinpoint exactly how a child is currently communicating and to provide a framework for determining logical communication goals in terms of specific behaviors and communicative functions or intents to be targeted. The Matrix was designed for use with children who have severe communication impairments, including severe sensory, motor and cognitive impairments. Throughout the Matrix materials, the person being assessed is referred to as "your child". Please note that the Matrix is equally applicable to adults who are functioning at the earliest levels of communication. It may also be useful for assessing young children without severe disabilities who are in the early stages of communicative development.

The Matrix has two major parts – this booklet and the Profile, which is provided separately. After you read this introduction on pages 1 and 2, you will find instructions on page 3. Then you will find four matrices, one for each of the four major reasons for communicating. Each matrix includes a series of questions which you answer on the matrix. Completing these matrices will give you specific information about exactly how your child expresses himself or herself.

After you have answered the questions on pages 3-6, you will be able to complete the Profile. The Profile summarizes the information gathered on pages 3-6, showing you at a glance how the child's communication is developing.

Four Basic Reasons for Communicating

In the earliest stages of communication, we can easily see four very basic reasons for communicating to other people. As we grow older and become more sophisticated communicators, we also develop more complex reasons for communicating and we need to express completely new messages that can't be expressed using the early communicative behaviors. The Matrix is organized into the four basic reasons for communicating, which are described below.

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1. To REFUSE things that you don't want ...

Even new born infants can usually make it clear when they don't like what's going on—either they're hungry or hurt or for some other reason they're uncomfortable. As we grow older, we find more conventional ways to refuse unwanted things, and to avoid things we don't want even before they are offered.

2. To OBTAIN things that you want ...

When we encounter something we like, we want to be able to have more of it or to make it happen again. Initially, infants can only show that they like something that's already going on. Later they figure out how to make people give them what they want, even if it hasn't been offered yet.

3. To engage in SOCIAL interactions ...

For most people, social interaction is an extremely important aspect of life. A great deal of communication is designed purely to keep an interaction going with another person. Infants thrive on attention from others and quickly learn how to attract it. Eventually they learn more polite and less selfish ways to keep another person engaged.

4. To provide or seek INFORMATION ...

As children grow, they are increasingly interested in things outside of themselves, and they learn to seek information, to formulate and respond to questions, and to provide information. Initially these messages take the form of answering "Yes" "No" questions, asking simple questions, labelling things and making comments. For the most part, these messages require the internal representation of experience and the use of symbols to manipulate information.

Communicative Behaviors

As we develop, we gradually become able to express messages in more subtle, conventional and socially acceptable ways. Early communicative behaviors will be nonspeech vocalizations, motor behaviors, gestures, facial expressions and eye gaze. Occasionally a simple mechanical device may be used by the child with severe orthopedic impairments. Later we learn to use symbols to communicate, including spoken words, manual signs, written or Brailled words, tangible symbols (such as picture symbols or three-dimensional symbols) or electronic communication devices that incorporate one of these symbol systems.

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Seven Levels of Communicative Competence

The seven levels of communicative competence represented in the Matrix are described below.

LEVEL I: PRE-INTENTIONAL BEHAVIORS ... and the states that they reflect
These behaviors are reflexive or reactive rather than purposeful, but they seem to be associated with specific states of well-being. Parents interpret the behaviors as expressing certain internal states such as hunger, comfort or pain.

LEVEL II: INTENTIONAL BEHAVIORS ... that function as communication
These behaviors are intentional, but they are not intentionally communicative. That is, children do not realize that they can use these behaviors to control another person's behavior. Nevertheless, some of these behaviors serve a communicative function, since parents interpret them as communicating something. At this level, children do not establish eye contact prior to exhibiting a potentially communicative behavior, nor do they wait for a response from the adult. Instead, children operate directly on objects and people, rather than using an object to attract a person's attention or using a person to obtain a desired object.

LEVEL III: UNCONVENTIONAL COMMUNICATION ... using pre-symbolic behaviors

This is a critical stage. Now children communicate **intentionally**, but they use unconventional ways of communicating, such as body movement, actions on people and objects, vocalizations (or switch activation for the severely orthopedically impaired). Behaviors are called unconventional because they do not constitute a socially acceptable means of communication in the adult world. Although these behaviors are extremely effective, they are usually replaced eventually by more conventional gestures.

LEVEL IV: CONVENTIONAL COMMUNICATION ... using pre-symbolic behaviors

At this level children communicate intentionally using conventional (or socially acceptable) gestures and vocalizations. The conventional gestures will continue to be used throughout childhood and adulthood to effectively augment symbolic behavior. The child now has "dual orientation": she or he acts on or orients toward **both** a person and the topic of communication at the same time. Dual orientation is frequently achieved through the combination of gestures (e.g., gazing at someone while pointing to something). Children without sight may not develop many of these behaviors.

LEVEL V: CONCRETE SYMBOLS ... that represent specific referents
At this level children are able to represent an environmental entity (a referent) through the use of concrete symbols such as "natural" or "depictive" gestures (gestures for mine, sit, come), pantomiming actions or objects, or the use of tangible symbols (pictures or objects used as symbols). These concrete symbols are related to environmental entities in two ways. First, they bear a 1:1 relationship to a specific referent. Second, they bear a clear perceptual relationship to the referent: that is, they physically resemble the referent in appearance, sound, touch or motion. Children with severe orthopedic impairments may access tangible symbols through the use of a switch or other mechanical device or by pointing, touching, eye gaze, etc. In most children, Level V does not appear as a separate stage of communicative development. Instead, Level V behaviors tend to be interspersed with Level IV and Level VI behaviors. However, Level V may become a separate and critical stage of development for children with severe disabilities for whom concrete symbols may be the only meaningful symbols. Or, it may serve as a transitional stage for children with milder disabilities who are having difficulty acquiring abstract symbols.

LEVEL VI: ABSTRACT SYMBOLS ... that represent specific referents
At this level children are able to represent environmental entities through the use of abstract symbols such as speech, manual signs, Brailled or written words, abstract graphic symbols, or three-dimensional abstract symbols (a certain shape or texture that has been arbitrarily designated as a symbol for something). These symbols bear a purely arbitrary relationship to their referents - that is, they are not perceptually similar to them. At this stage, the child uses abstract symbols one at a time, rather than in combinations. Children with severe orthopedic impairments may access the symbols through the use of a switch or other mechanical device or by pointing, touching, eye gaze, etc.

LEVEL VII: LANGUAGE ... combining symbols

At this level children use symbols in two- or three-symbol combinations, according to grammatical rules, or syntax. The meaning of an utterance may change if the order of the symbols is changed. Children with severe orthopedic impairments may access the symbols through the use of a switch or other mechanical device or through pointing, touch, eye gaze, etc.

Instructions

Data Sources

Use any combination of observations, interviews with parents or teachers, and direct attempts to elicit communication to determine which behaviors the child is capable of producing to express which states (at Level I), functions (at Level II) or intents (at Levels III-VII).

Scoring

On each matrix ask yourself or an informant each question under the "Ask These Questions" columns. If the answer is YES, then circle the letter next to any behaviors the child uses to express that state, function or intent in the appropriate column under "Answer Here". Be sure to use the answer column with the same number as the question you are answering. The letters in the "Answer Here" columns correspond to the behaviors listed under the "Communicative Behaviors" column. Only check off behaviors that the child produces **independently** (that is, without assistance) and **consistently** (occurring most times that an appropriate opportunity is provided). Most of the Questions refer to intents that may be expressed at a number of different levels. Since most children straddle two or more levels of communicative competence at any given time, you will probably find yourself checking off behaviors at two or more levels to answer each question. For instance, a child might use a variety of behaviors to Request a New Object, including the spoken word "cookie" (Level VI), handing you a picture of a cookie (Level V), and pointing to a cookie and gazing at you (Level IV).

Where to Start

Start with REFUSE and work your way through the other three major reasons for communicating (OBTAIN, SOCIAL, INFORMATION). On each page, you should work from the first question to the last. If the child has very little or no behavior that appears to be intentionally communicative, then start with the first question on each page and work your way through succeeding questions until you're sure you're beyond the child's capabilities. If the child uses any sort of symbols (speech, signs, picture symbols, etc.) or if the child has a fairly extensive repertoire of intentional communicative gestures, then questions that can be answered at Levels I, II or even III may be too low for the child: that is, the child may have already moved beyond those levels of communication. In this case, you may just mark through the answer columns for these questions to indicate that they have been subsumed (or replaced) by higher skill levels.

Ways to REFUSE things that you don't want ...

Ask these questions	Answer here	Communicative Behaviors	Level
<p>1. Expresses Discomfort Can you tell when your child is uncomfortable (in pain, wet, hungry, startled)? <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, what does your child do to make you think he's uncomfortable?</p>	1 a b c d e f	<p>a) Changes in posture (stiffen body, twist, turn away) b) Limb movements (kick legs, bat arms) c) Head movements (turn head away) d) Facial expressions (grimace) e) Vocalizations (cry, grunt, scream) f) Other behavior _____</p>	<p>I. Pre-Intentional Behavior Pre-intentional or reflexive behavior that expresses state of subject. State (e.g., hungry, wet) is interpreted by caregiver.</p>
<p>2. Protests Can you tell when your child doesn't want something specific such as a certain food or a toy or a game you're playing like tickling? <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, what does your child do to make you think that she doesn't want something?</p>	2 a b c d e f g	<p>a) Head movements (turn away, pull back head) b) Arm movements (bat arms, push, throw away) c) Leg movements (stamp, kick) d) Facial expressions (frown, grimace) e) Vocalizations (whine, fuss, scream) f) Moves away from person or object g) Other behavior _____</p>	<p>II. Intentional Behavior Behavior is intentional, but is not intentionally communicative. Behavior functions to affect caregiver's behavior, since caregiver infers intent.</p>
<p>3. Refuses or Rejects Does your child intentionally show you that he or she doesn't want a certain thing or a certain activity? <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, what does your child do to refuse or reject something?</p>	3 a b c d e f g h	<p>a) Whole body movements (twist, turn away) b) Turns head away or to side c) Arm or hand movements d) Leg movements (kick, stamp feet) e) Vocalizations (scream, whine) f) Facial expressions (frown, grimace) g) Pushes away object or person h) Other unconventional gesture _____</p>	<p>III. Unconventional Communication Unconventional gestures are used with intent of affecting caregiver's behavior.</p>
	a b c d	<p>a) Gives unwanted item to you b) Shakes head "no" c) Specific intonated vocalizations ("uh-uh") d) Other conventional gesture _____</p>	<p>IV. Conventional Communication Conventional gestures are used with intent of affecting caregiver's behavior. Child shows "dual orientation."</p>
	a b c	<p>a) Rejects photo or drawing of unwanted item b) Rejects object symbol representing unwanted item c) Rejects other concrete symbol _____</p>	<p>V. Concrete Symbols Limited use of concrete symbols to represent specific entities. 1:1 correspondence between symbol and referent.</p>
	a b c d e f g	<p>a) Spoken word ["no", "finished"] b) Manual sign ["no", "stop"] c) Written word ["no", "finished"] d) Brailled word ["no", "stop"] e) Abstract 3-dimensional symbol (for "no", "stop") f) Abstract 2-dimensional symbol (for "no", "stop") g) Other abstract symbol _____</p>	<p>VI. Abstract Symbols Limited use of abstract symbols to represent entities. Symbols used one at a time.</p>
	a b	<p>a) Two symbols ["stop it", "no want"] b) Three symbols ["no go out"] Type of symbols _____</p>	<p>VII. Language Rule-bound use of symbol system. Ordered combinations of 2 or 3 symbols according to syntactic conventions.</p>

Ways to OBTAIN things that you want ...

Ask these questions

1. Expresses Comfort
Can you tell when your child is contented, comfortable or pleasantly excited?
 No **Yes**
If yes, what does your child do to make you think he's comfortable?

2. Continues Action
Can you sometimes tell that your child would like to continue an action or activity that you have just stopped doing with her (such as bouncing, patting, playing a musical toy)?
 No **Yes**
If yes, what does your child do to make you think she would like to continue an activity?

4. Requests More Action
Does your child intentionally show you that she wants more of an action that you have just stopped doing (such as playing peek-a-boo or making a musical toy go)?
 No **Yes**
If yes, how does your child request more action?

5. Requests New Action
Does your child intentionally indicate that he wants you to perform a new action (one that you have not just been engaged in)?
 No **Yes**
If yes, how does your child request (or command) a new action?

6. Requests More Object
Does your child intentionally show you that she wants more of something (such as a toy or some food), after already having some of it?
 No **Yes**
If yes, how does your child request more of an object?

7. Makes Choices
Does your child intentionally make a choice between two or more items that you offer him at the same time? (Make sure that your child is aware of all the choices presented and doesn't just indicate the first item he notices.)
 No **Yes**
If yes, how does your child make a choice?

8. Requests New Object
Does your child intentionally show you that she wants something new (such as a toy or food) that is within her sight or hearing or touch, but that you have not offered?
 No **Yes**
If yes, how does your child request new objects?

9. Requests Absent Object
Does your child intentionally request things (toys, food, people) that are not present in the immediate environment (things that are out of sight, hearing, touch, in another room, etc.)?
 No **Yes**
If yes, how does your child request absent objects?

3. Obtains More of Something
Can you sometimes tell that your child wants more of something specific (such as food or a toy)?
 No **Yes**
If yes, what does your child do to make you think he would like to have more of something?

- 1**
- a) Changes in posture (stiffen, relax)
 - b) Limb movements (kick legs, bat arms)
 - c) Head movements (bob head)
 - d) Facial expressions (smile)
 - e) Vocalizations (coo, squeal)
 - f) Other behavior _____

- 2**
- a) Approaches desired object
 - b) Head movements (moves head forward, bobs head)
 - c) Arm movements (bat arms)
 - d) Leg movements (kick)
 - e) Facial expressions (smile)
 - f) Vocalizations (coo, squeal, fuss)
 - g) Looks at desired item or person
 - h) Takes desired item
 - i) _____
 - j) Other behavior _____

- 3**
- a) Whole body movements (lunge, bounce)
 - b) Moves head towards desired item
 - c) Arm/hand movements
 - d) Leg movements
 - e) Vocalizations (coo, squeal, laugh)
 - f) Facial expressions (smile)
 - g) Looks at you or desired object
 - h) Guides your hand to or pulls you over to desired item
 - i) Touches desired object or person (without taking it)
 - j) Reaches towards or taps object or person
 - k) Takes your hand
 - l) Other unconventional gesture _____

- 4**
- a) Gazes back/forth between you and desired object
 - b) Gives or shows you something
 - c) Beckons to you to come
 - d) Holds out hand with open palm
 - e) Holds hands up or out to you (for "up")
 - f) Points at desired object
 - g) Nods head
 - h) Raises or waves hand (for attention)
 - i) Specific intoned vocalizations
 - j) Other unconventional gesture _____

- 5**
- a) Indicates photo or drawing of desired item/person/action
 - b) Indicates object symbol representing desired item/person/action
 - c) Pantomimes action or object
 - d) Mimics sound of desired object/action
 - e) Other concrete symbol _____

- 6**
- a) Spoken word ("more", "ball")
 - b) Manual sign ("more", "ball")
 - c) Written word ("more", "ball")
 - d) Brailled word ("more", "ball")
 - e) Abstract 3-dimensional symbol ("more", "ball")
 - f) Abstract 2-dimensional symbol ("more", "ball")
 - g) Other abstract symbol _____

- 7**
- a) Two symbols ("more juice", "want ball")
 - b) Three symbols ("do it again", "give me ball")
 - c) _____
 - d) _____
 - e) _____
 - f) _____
 - g) _____
 - h) _____
 - i) _____
 - j) _____

Answer here

Communicative Behaviors

Level

I. Pre-Intentional Behavior
Pre-intentional or reflexive behavior that expresses state of subject. State (e.g., hungry, wet) is interpreted by caregiver.

II. Intentional Behavior
Behavior is intentional, but is not intentionally communicative. Behavior functions to affect caregiver's behavior, since caregiver infers intent.

III. Unconventional Communication
Communicational gestures are used with intent of affecting caregiver's behavior.

IV. Conventional Communication
Conventional gestures are used with intent of affecting caregiver's behavior. Child shows "dual orientation."

V. Concrete Symbols
Limited use of concrete symbols to represent specific entities. 1:1 correspondence between symbol and referent.

VI. Abstract Symbols
Limited use of abstract symbols to represent entities. Symbols used one at a time.

VII. Language
Rule-bound use of symbol system. Ordered combinations of 2 or 3 symbols according to syntactic conventions.

Ways to engage in SOCIAL interactions

Ask these questions

1. Expresses Interest in Other People

Can you tell that your child is interested in other people?

No Yes

If yes, what does your child do to make you think she's interested in you or in other people?



2. Attracts Attention

Does your child do certain things that attract your attention to him, even though he isn't purposefully trying to get your attention?

No Yes

If yes, what behaviors does your child produce that attract your attention?



3. Requests Attention

Does your child intentionally try to attract your attention?
 No Yes
 If yes, how does your child request your attention?

4. Shows Affection

Does your child intentionally demonstrate affection toward you or anyone else?
 No Yes
 If yes, what does your child do to show affection?



5. Greets People

Does your child intentionally indicate hello or goodbye when someone arrives or leaves?
 No Yes
 If yes, how does your child greet you or other people?

6. Offers, Shares

Does your child intentionally offer things or share with you, not expecting anything in return?
 No Yes
 If yes, how does your child offer or share something with you?

7. Direct Another's Attention

Does your child intentionally direct your attention to something that she is interested in (as if saying "look at that")?
 No Yes
 If yes, how does your child direct your attention to something?

8. Polite Social Forms

Does your child sometimes intentionally use polite forms of social interaction such as asking you for permission before doing something, indicating "please", "thank you", or "excuse me"?
 No Yes
 If yes, what polite social forms does your child use?



Answer here

- 1
 a) Changes in posture (stiffen body, relax)
 b) Limb movements (kick legs, bat arms)
 c) Facial expressions (smile)
 d) Vocalization (coo, fuss)
 e) Other behavior _____

- 2
 a) Approaches person
 b) Head movements (moves head forward, bobs head)
 c) Arm movements (bat arms)
 d) Leg movements (kick)
 e) Facial expressions (smile)
 f) Vocalizations (coo, squeal, fuss)
 g) Looks at person
 h) Other behavior _____

- 3
 a) Arm/hand movements (bat arms)
 b) Vocalizations (coo, squeal)
 c) Facial expressions (smile)
 d) Touches person
 e) Looks at person
 f) Activates mechanical "calling device"
 g) Other unconventional gesture: _____

- 4
 a) Looks back and forth between you and object, person or place
 b) Gives or shows something to you
 c) Beckons person to come
 d) Waves "hi" or "bye"
 e) Nods or shakes head
 f) Hugs, kisses, pats someone
 g) Raises hand
 h) Specific intonated vocalizations (questioning sound for "may I?", "want this?")
 i) Points to something or someone
 j) Other conventional gesture: _____

- 5
 a) Photo/drawing of social concept (photo of someone waving)
 b) Other concrete symbol (for social concept) _____

- 6
 a) Spoken word ("please", "look", "hi", "yours")
 b) Manual sign ("please", "look", "hi", "yours")
 c) Written word ("please", "look", "hi", "yours")
 d) Brailled word ("please", "look", "hi", "yours")
 e) Abstract 3-dimensional symbol ("please", "look", "hi", "yours")
 f) Abstract 2-dimensional symbol ("please", "look", "hi", "yours")
 g) Other abstract symbol _____

- 7
 a) Two symbols ("love you", "out please", "over there", "bye, Mommy")
 b) Three symbols ("that for you", "I love you", "see you later")
 Type of symbol _____

Communicative Behaviors

I. Pre-Intentional Behavior

Pre-intentional or reflexive behavior that expresses state of subject. State (e.g., hungry, wet) is interpreted by caregiver.

II. Intentional Behavior

Behavior is intentional, but is not intentionally communicative. Behavior functions to affect caregiver's behavior, since caregiver infers intent.

III. Unconventional Communication

Unconventional gestures are used with intent of affecting caregiver's behavior.

IV. Conventional Communication

Conventional gestures are used with intent of affecting caregiver's behavior. Child shows "dual orientation."

V. Concrete Symbols

Limited use of concrete symbols to represent specific entities. 1:1 correspondence between symbol and referent.

VI. Abstract Symbols

Limited use of abstract symbols to represent environmental entities. Symbols used one at a time.

VII. Language

Rules-bound use of symbol system. Ordered combinations of 2 or 3 symbols according to syntactic conventions.

Level

Ways to provide or seek INFORMATION ...

Ask these questions

Answer here

Communicative Behaviors

Level

I. Pre-Intentional Behavior
Preintentional or reflexive behavior that expresses **state** of subject. State (e.g., hungry, wet) is interpreted by caregiver.

II. Intentional Behavior
Behavior is intentional, but is not intentionally communicative. Behavior functions to affect caregiver's behavior, since caregiver infers intent.

III. Unconventional Communication
Unconventional gestures are used **with intent** of affecting caregiver's behavior.

1. Answers Yes/No Questions

Does your child **intentionally** indicate "yes" or "no" or "I don't know" in answer to a question?

No **Yes**
If yes, how does your child answer "yes" or "no" questions?

2. Asks Questions

Does your child ask you questions (not necessarily using words), clearly wanting an answer from you?

No **Yes**
If yes, how does your child ask questions?

3. Names Things/ People

Does your child name or label objects, people or actions, either spontaneously or in response to a question from you (such as "What's that?")?

No **Yes**
If so, how does your child label something?

4. Makes Comments

Does your child spontaneously (without being asked) provide information to you about things in the form of comments ("that's pretty", "hot", etc.?).

No **Yes**
If so, how does your child make a comment?

a) Looks back and forth between you and object or place
b) Nods head "yes"
c) Shakes head "no"
d) Strugs shoulders
e) Facial expressions (smile, stick out tongue)
f) Specific intonated vocalizations (questioning sound, "uh-uh", "nu-uh")
g) Other _____

1
a
b
c
d
e
f
g

2
a
b
c
d
e
f
g

3
a
b
c
d
e

4
a
b
c
d
e

V. Concrete Symbols
Limited use of concrete symbols to represent specific entities. 1:1 correspondence between symbol and referent.

a) Indicates photo/drawing of item/person/place/activity/quality/yes-no
b) Indicates object symbol representing item/person/place/activity/yes-no
c) Pantomimes action or object or quality
d) Mimics sound of object
e) Other concrete symbol _____

a
b
c
d
e

a
b
c
d
e

VI. Abstract Symbols
Limited use of abstract symbols to represent entities. Symbols used one at a time.

a) Spoken word ["yes", "no", "why?", name of item, quality]
b) Manual sign ["yes", "no", "why?", name of item, quality]
c) Written word ["yes", "no", "why?", name of item, quality]
d) Brailled word ["yes", "no", "why?", name of item, quality]
e) Abstract 3-dimensional symbol ["yes", "no", "why?", name of item, quality]
f) Abstract 2-dimensional symbol ["yes", "no", "why?", name of item, quality]
g) Other abstract symbol _____

a
b
c
d
e
f
g

a
b
c
d
e
f
g

VII. Language
Rule-bound use of symbol system. Ordered combinations of 2 or 3 symbols according to syntactic conventions.

a) Two symbols ("no thanks", "that car", "why go?")
b) Three symbols ("who go home?", "that too cold", "I don't know")
Type of symbol _____

a
b

a
b

Name _____

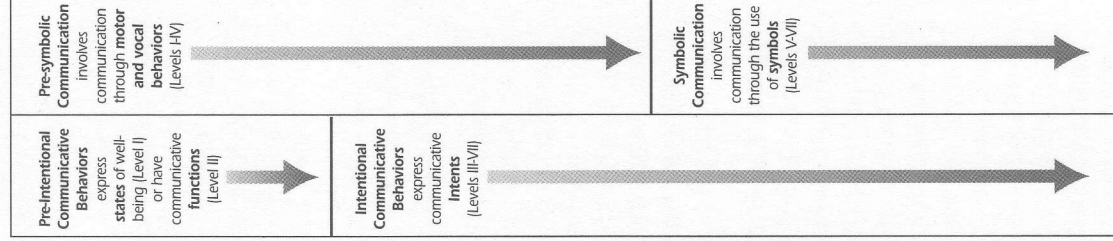
Dates _____ / _____ / _____

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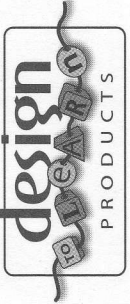
Type of Symbol
 For Levels V, VI or VII, specify types of symbols used (e.g., picture symbols, 3-dimensional symbols, manual signs, speech)

	OBTAIN				SOCIAL				INFORMATION			
I Pre-Intentional Behavior 0-3 mo.	(1) Expresses Discomfort	(2) Continues Action	(3) Obtains More of Something	(1) Expresses Interest in Other People	(2) Attracts Attention	(3) Requests Attention	(4) Shows Affection	(1) (1) Answers Yes/No Questions	(2) (2) Asks Questions	(3) (3) Names Things/People	(4) (4) Makes Comments	
II Intentional Behavior 3-8 mo.	(1) Refuses, Rejects	(2) Requests More Action	(3) Requests New Action	(5) Greets People	(6) Offers, Shares	(7) Directs Another's Attention	(8) Polite Social Forms	(1) (1) Answers Yes/No Questions	(2) (2) Asks Questions	(3) (3) Names Things/People	(4) (4) Makes Comments	
III Unconventional Communication 6-12 mo.	(1) Refuses, Rejects	(2) Requests More Action	(3) Requests New Action	(5) Greets People	(6) Offers, Shares	(7) Directs Another's Attention	(8) Polite Social Forms	(1) (1) Answers Yes/No Questions	(2) (2) Asks Questions	(3) (3) Names Things/People	(4) (4) Makes Comments	
IV Conventional Communication 12-18 mo.	(1) Refuses, Rejects	(2) Requests More Action	(3) Requests New Action	(5) Greets People	(6) Offers, Shares	(7) Directs Another's Attention	(8) Polite Social Forms	(1) (1) Answers Yes/No Questions	(2) (2) Asks Questions	(3) (3) Names Things/People	(4) (4) Makes Comments	
V Concrete Symbols 18-24 mo.	(1) Refuses, Rejects	(2) Requests More Action	(3) Requests New Action	(5) Greets People	(6) Offers, Shares	(7) Directs Another's Attention	(8) Polite Social Forms	(1) (1) Answers Yes/No Questions	(2) (2) Asks Questions	(3) (3) Names Things/People	(4) (4) Makes Comments	
VI Abstract Symbols 18-24 mo.	(1) Refuses, Rejects	(2) Requests More Action	(3) Requests New Action	(5) Greets People	(6) Offers, Shares	(7) Directs Another's Attention	(8) Polite Social Forms	(1) (1) Answers Yes/No Questions	(2) (2) Asks Questions	(3) (3) Names Things/People	(4) (4) Makes Comments	
VII Language 24 mo. +	(1) Refuses, Rejects	(2) Requests More Action	(3) Requests New Action	(5) Greets People	(6) Offers, Shares	(7) Directs Another's Attention	(8) Polite Social Forms	(1) (1) Answers Yes/No Questions	(2) (2) Asks Questions	(3) (3) Names Things/People	(4) (4) Makes Comments	

FEATURES



COMMUNICATION MATRIX PROFILE



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Completing the Profile

The Profile is designed to summarize the Matrix information that you have entered on pages 3-6. It shows you at a glance how the child is developing in terms of communication skills.

Use a highlighter to shade in cells on the Profile for which the child shows competence. Competence is indicated if the child uses at least one behavior (independently and consistently) at a given Level to express a given message (state, function or intent). You may also use different colors to indicate whether you consider each message to be emerging or mastered. You do not need to shade in cells for Levels I and II if you consider those levels completely subsumed (or replaced) by higher skills that the child has acquired.

If you administer the Communication Matrix a second time, you may use a different color to highlight newly acquired abilities so that you can easily see how much growth has occurred since the last administration.

Interpreting the Profile

The Profile covers approximately the first two years of communicative development in the typical child without disabilities. Looking at the shaded areas of the Profile will give you an idea as to how your child is developing compared to typical children without disabilities. More importantly, it shows you where the child's communicative repertoire needs to be strengthened, and where there may be gaps in the child's ability to express a useful range of messages.

Using Matrix Results to Plan Intervention

This rather fine-grained analysis of communication development is intended to assist intervention efforts for children who are progressing slowly. The Matrix results may help educators to determine immediate communication goals and also to engage in long-range planning. For each child, you should determine a generic intervention goal (what level of communicative competence to target), as well as specific intervention goals (what communicative behaviors and functions - or intents - to target). In general, a child should be allowed to perform at his/her current level of communicative competence while being steadily pushed toward the next level of competence. The table opposite provides generic intervention goals for children who are showing competence at each Level. The first decision to make is whether to focus primarily on increasing the child's competence at the current Level (which you would do if the child has a very small repertoire at the current level) or whether to start targeting the next higher Level. The next decision is which specific communicative behaviors to target. Should you target only existing ones or strive for new behaviors? This decision must take into account the child's motor, fine motor and vocal abilities as well as any sensory limitations that may make it difficult or impossible for the child to produce certain behaviors.

In addition, consider any cognitive limitations that might prevent a child from understanding certain types of symbols. Finally, you must decide exactly which messages (states, functions or intents) to target. Refer to the Profile to determine where there are gaps in the child's expressive ability and consider targeting new messages that the child really needs to be able to express.

Seven Levels of Communicative Competence and Generic Intervention Goals

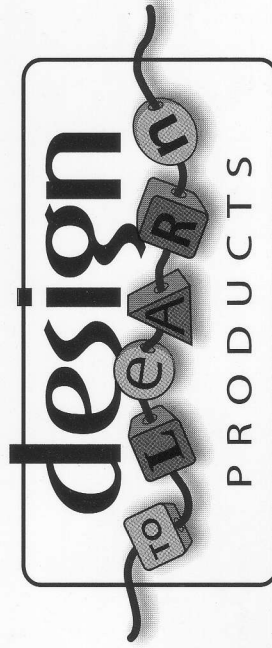
Level	Salient Behavior	Intervention Goals
I. Pre-Intentional Behavior	Pre-intentional or reflexive behavior that expresses state of subject. State (e.g., hungry, wet) is interpreted by caregiver.	Establish purposeful behavior by creating highly responsive environments.
II. Intentional Behavior	Behavior is intentional, but is not intentionally communicative. Behavior functions to affect caregiver's behavior, since caregiver infers intent.	Respond to potentially communicative behaviors so that child becomes aware of their communicative purpose.
III. Unconventional Communication	Unconventional gestures are used with intent of affecting caregiver's behavior.	Shape unconventional gestures into conventional gestures and/or target symbol use.
IV. Conventional Communication	Conventional gestures are used with intent of affecting caregiver's behavior. Child shows "dual orientation."	Teach 1:1 correspondence between symbols (concrete or abstract) & referents.
V. Concrete Symbols	Limited use of concrete symbols to represent specific entities. 1:1 correspondence between symbol & referent.	Teach 1:1 correspondence between abstract symbols & referents.
VI. Abstract Symbols	Limited use of abstract symbols to represent entities. Symbols are used one at a time.	Teach the combination of symbols into two- and three-symbol utterances.
VII. Language	Rule-bound use of symbol system. Ordered combinations of two or three symbols according to syntactic conventions.	Expand semantic & syntactic abilities.

The Communication Matrix ...for professionals

is an assessment of communication skills designed for individuals operating at the earliest stages of communication development. It accommodates all forms of expression and is helpful for individuals without conventional means of communication. A parent-friendly version of this instrument is also available in print and online at

www.designtolearn.com

Visit our web site for additional practical information and materials.



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