Using the Communication Matrix to Develop Communication Goals for the Whole Team

IDEAS Conference: June 2, 2015
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The University of Georgia
Why do we need to communicate?

“Without communication we become isolated from our fellow human beings and cannot form meaningful relationships.”

B. Miles & M. Riggio, 1999

Through communication, children can make changes in their world. They can express their wants and needs. They can make choices.

Kathleen Stremel, 2004

“...communication is the basis of all other skills and for interaction between student... and all others”

Hand In Hand, AFB Press, 1995
COMMUNICATION IS EVERYONE’S BUSINESS

Communication is crucial to development in all areas—academic and social—it is everyone’s business—not just the SLP and must be incorporated in all educational programming.
HOW IS THE CHILD COMMUNICATING?

#1: He’s not communicating at all!

#2: We’ve asked the speech teacher to find a device for him, but she hasn’t found one yet.

#3: He has a Big Mack switch
WHAT COMMUNICATION GOALS DO YOU HAVE FOR THE CHILD?

#1: To recognize his name

#2: To indicate yes and no
Determining Goals Requires Assessment of What the Child Can Do

“…accurate assessment of communication will lead to realistic educational goals and appropriate learning experiences, not only for communication, but across developmental domains.”

“While state and local regulations may require that standardized measures be administered, they are unlikely to provide information useful in program planning or in predicting outcomes for children who are deafblind or who have multiple disabilities.”

From: Assessing Communication and Learning in Young Children Who are Deafblind or Who Have Multiple Disabilities  Project Investigators: Deborah Chen, Ph.D., Harvey Mar, Ph.D., Charity Rowland, Ph.D. Robert Stillman, Ph.D.
Why Do Children Communicate?

• Protest, refuse, reject object, stop disliked activity
• Request objects
• Request action
• Greeting “bye” “hi” “mama”
• Attention seeking
• Request for social routine, familiar game
• Request for comfort
• Comment on object (points to ball and says ball)
• Comment on action (“uh-oh” or “down” when knocks something off)
• Request for information about an object or event
Communication Assessments

Most assessments don’t capture the communication skills of children who have only pre-symbolic communication

- Callier Azusa
- Insite
- Oregon
The Communication Matrix

By : Charity Rowland, Philip Schweigert
Design to Learn Products
Oregon Institute on Disability & Development

www.designtolearn.com
1-888-909-4030

www.communicationmatrix.org
CM COMMUNITY OF PRACTICE

Community.communicationmatrix.org
Dr. Rowland talks about the Communication Matrix
The Communication Matrix

- For children with severe communication impairments
- Assesses expressive communication skills that typically develop in the first 2 years of life
- Looks at 4 reasons to communicate and 7 levels of competence.
- 3 versions: the original, a version especially for parents, and a free on-line version available at www.communicationmatrix.org.
Things I like about the Matrix

• Complete by questioning parent/teacher and observing the child

• Gives family and professionals broader definition of communication

• Gives family and professionals way to visualize progression of skills
Reasons to Communicate

• To refuse things that you don’t want
• To obtain things that you want
• To engage in social interactions
• To provide or seek information
7 Levels of Communication Skills

Pre-symbolic levels

• **Level 1** Pre-intentional behaviors (reflexes, crying that is interpreted by adults)

• **Level 2** Intentional, but not purposefully communicative behaviors – kicking, turning head away – interpreted by adult, but not directed toward adult

• **Level 3** Pre-symbolic, non-conventional behaviors (like tugging on adult, pushing things away) that are directed to a communication partner. This is a critical stage because now the child understands that he can impact someone else’s behavior. He is communicating because he acknowledges a communication partner

• **Level 4** Pre-symbolic, conventional behaviors like pointing, nodding head.
7 Levels of Communication Skills

Symbolic Levels

• **Level 5**  Uses concrete symbols that physically resemble what they represent in a way that is obvious to the child – they look like, feel like, move like or sound like what they represent.

• **Level 6**  Abstract symbols such as speech, manual signs, or Brailled or printed words. These symbols do not look, feel, or sound like what they represent. They are used one at a time.

• **Level 7**  Combines symbols (any sort of symbols) into ordered two or three-symbol combinations ("want juice", "me want juice"), according to grammatical rules.
Messages
To refuse what you don’t want

Level I: Express discomfort: He’s mad, He’s unhappy, He’s upset

Level 2: Protest: She doesn’t like that, She doesn’t want that

Level 3-7: Refuse or reject: Stop doing that to me, Take that away, NO!
To get what you do want

Level I: Express comfort: “He’s content, He’s happy, He’s pleased”

Level 2: Continues action: “She likes to do that”
- Wants more of something: “She wants more of that”

Level 3: Requests more action: “Do that again!”
- Requests new action: “I want to play the bouncy game”
- Requests more of object: “Give me more of that”
- Makes choices: “Give me that one”
- Requests new object (within sight): “I want my blocks”

Level 4-7: Requests absent object: “I want you to get my Elmo tape”
To engage in social interactions

Level 1: Expresses interest in other people: “He knows someone’s here”

Level 2: Attracts attention: “Look at what she’s doing”

Level 3: Requests attention: “come over here!” “Pay attention to me”

Shows affection: “I know you, I like you”

Level 4-7: Greets people: “hello,” “goodbye”

Offers, shares: “this is cool, check it out”

Directs another’s attention: “look at that!”

Polite social forms: “please,” “thank you”
To provide or seek information

Level 4: Answers yes/no: yes, no or I don’t know

Asks questions: expects a response from you

Level 5 - 7: Names things/people: labels either spontaneously or in response to “what’s that?”

Makes comments: “that’s big,” “this” is hot”
Communication Assessment for Parents & Professionals

An easy to use assessment instrument designed for individuals of all ages who function at the earliest stages of communication and who use any form of communication.

Try It Now
Create Your Account

Download the entire handbook. Need Adobe Reader?, get it here.
Welcome to the Communication Matrix

On this page you will see information about any Matrix data you have already entered. The ID numbers for all children for whom you have entered data are listed below. You may click on an ID number to see what data you have entered for that child. From there you may:

- View or Delete a previously completed Matrix
- Resume an unfinished Matrix
- Update a child’s communication skills starting with a previously completed Matrix
- Start a new Matrix from scratch for a child

Note: Matrices are editable for 30 days from the date of completion.

Help Videos

The Communication Matrix | Filling Out the Communication Matrix | Understanding Your Results

Add a New Child

Download The Matrix Questions

Matrix ID | Entered | Administered | Actions
---|---|---|---
90491 | 12/23/2013 | 12/13/2013 | View Profile | Skills List | Delete
127907 | 12/9/2014 | 12/4/2014 | View Profile | Skills List | Delete

Start a New Matrix Administration For This Child

Reports
Getting Started … Please indicate the statement below that best describes the communications skills of your child

- **Statement A**  My child doesn't seem to have real control over his body yet. The only way I know that he wants something is because he fusses or whines when he's unhappy or uncomfortable, and he smiles, makes noises or calms down when he's happy and comfortable.

- **Statement B**  My child has control over her own behaviors, but she doesn't use them to try to communicate to me. She doesn't come to me to let me know what she wants, but it's easy for me to figure out, because she tries to do things for herself. She knows what she wants, and her behavior shows me what she wants. If she runs out of something to eat, she will just try to get more, rather than trying to get me to give her more.

- **Statement C**  My child clearly tries to communicate his needs to me. He knows how to get me to do something for him. He uses various gestures and sounds (like pointing, shaking his head, tugging at my arm or looking back and forth between me and what he wants) to communicate to me. For instance, when he wants more milk, he might hand his cup to me or point to the refrigerator. He doesn't use any sort of language to communicate. ..

    OR..

My child lets me know what she wants by using some form of language or symbolic communication (such as speech, printed words, Braille, picture symbols, three-dimensional symbols, or sign language). When he uses his symbols it's clear that he understands what they mean.
Scoring the Matrix

**Mastered**
- Does this independently most of the time when the opportunity arises.
- Does this in a number of different contexts, and with different people.

**Emerging**
- Does this inconsistently.
- Only does this when prompted or encouraged to do so. Only does this in one or two contexts or with one person.

**Symbols**
- If the child uses symbols either on cards or in devices, score based on what kind of symbol:
Completing the Matrix

Section A

At this stage, your child doesn’t seem to have control over her own behaviors, but seems mostly to react to sensations. Her reactions show you how she feels.

A.1 Expresses Discomfort

Can you tell when your child is uncomfortable (in pain, wet, hungry, startled)?

- Yes
- No
Section C

At this stage, your child knows that if he does certain things, you will react in certain ways, and he uses his behaviors to communicate very intentionally. There are many different ways that a child may communicate intentionally. Some involve symbols (speech, sign language, picture symbols, 3-dimensional symbols); others involve specific gestures or body movements; some involve early sounds that aren’t yet speech. Some children with severe physical impairments may use electronic devices to communicate. Whatever the behavior the child uses to communicate, what’s important here is that he uses those behaviors on purpose, obviously trying to communicate something specific to you. Remember that some children may access symbols through a communication device.

**C.1 Refuses or Rejects Something**

Does your child intentionally show you that he doesn’t want a certain thing or a certain activity?

- Yes
- No

What does your child do to refuse or reject something?

**LEVEL 3**

- Not Used
- Emerging
- Mastered

- Whole body movements (twist, turn away)
- Head movements (turn head away or to side)
- Arm or hand movements
- Leg movements (kick, stamp feet)

**LEVEL 4**

- Not Used
- Emerging
- Mastered

- Gives unwanted item to you
- Shakes head “no”
- Specific vocalizations (“uh-uh”)

**LEVEL 5**

- Not Used
- Emerging
- Mastered

- Rejects photo or drawing of unwanted item
- Rejects object symbol representing unwanted item

**LEVEL 6**

- Not Used
- Emerging
- Mastered

- Spoken word (“no”, “finished”)
- Manual sign (“no”, “stop”)
- Written word (“no”, “finished”)
- Brailed word (“no”, “stop”)
- Abstract 3-D symbol (For “no”, “stop”)
- Abstract 2-D symbol (For “no”, “stop”)
### C1. Refuses or Rejects Something

<table>
<thead>
<tr>
<th>Level 3</th>
<th>Skill</th>
<th>Behavior</th>
<th>Mastery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Facial Expressions</td>
<td>frown, grimace</td>
<td>Mastered</td>
</tr>
</tbody>
</table>

*Notes: She will fall to the floor and 'throw a fit'*

<table>
<thead>
<tr>
<th>Level 4</th>
<th>Skill</th>
<th>Behavior</th>
<th>Mastery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Conventional Gestures &amp; Vocalizations</td>
<td>shakes head &quot;no&quot;</td>
<td>Mastered</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 6</th>
<th>Skill</th>
<th>Behavior</th>
<th>Mastery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Abstract Symbols</td>
<td>manual sign (&quot;no&quot;, &quot;stop&quot;)</td>
<td>Emerging</td>
</tr>
<tr>
<td></td>
<td>Abstract Symbols</td>
<td>spoken word (&quot;no&quot;, &quot;finished&quot;)</td>
<td>Mastered</td>
</tr>
</tbody>
</table>

*Notes: Says 'no' and may say 'all done' may sign 'finished'*

### C2. Requests More of an Action

<table>
<thead>
<tr>
<th>Level 3</th>
<th>Skill</th>
<th>Behavior</th>
<th>Mastery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Simple Gestures</td>
<td>takes your hand</td>
<td>Mastered</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Level 4</th>
<th>Skill</th>
<th>Behavior</th>
<th>Mastery</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Conventional Gestures &amp; Vocalizations</td>
<td>beckons you to come</td>
<td>Mastered</td>
</tr>
</tbody>
</table>
Completed Profile

Jack’s Profile is a handout
Using the Matrix to Create Goals

- General intervention strategies dictated by the child’s level
- Adding messages
- Adding forms of communication
- Adding level of symbolism
- Increasing rate of communicative attempts
## General Strategies for Each Level

<table>
<thead>
<tr>
<th>Level</th>
<th>Salient Behavior</th>
<th>Intervention Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Pre-Intentional Behavior</td>
<td>Reflexive behavior expressing state: hungry, wet</td>
<td>Establish purposeful behavior by creating highly responsive environments.</td>
</tr>
<tr>
<td>2. Intentional Behavior</td>
<td>Behavior intentional but not intentionally communicative. Caregiver infers intent</td>
<td>Respond to potentially communicative behaviors so that child becomes aware of communicative purpose.</td>
</tr>
<tr>
<td>3. Unconventional communication</td>
<td>Unconventional gestures are used with intent of affecting caregiver’s behavior.</td>
<td>Shape unconventional gestures into conventional gestures and/or target symbol use.</td>
</tr>
</tbody>
</table>

From *The Communication Matrix*, Rowland & Schweigert, 2004
# General Strategies for Each Level

<table>
<thead>
<tr>
<th>Level</th>
<th>Salient Behavior</th>
<th>Intervention Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Conventional</td>
<td>Communication using socially acceptable gestures, vocalizations</td>
<td>Target symbol use to expand range of what child can talk about. Respond to communication and encourage another exchange</td>
</tr>
<tr>
<td>5. Concrete Symbols</td>
<td>Can represent an object/action with concrete symbols</td>
<td>Provide many opportunities to use symbols for meaningful, motivating activities</td>
</tr>
<tr>
<td>6. Abstract Symbols</td>
<td>Speech, sign, braille or written words, symbols/textures (can be accessed with eye gaze, switch)</td>
<td>Increase vocabulary, expand topics, and functions to include comments, information</td>
</tr>
<tr>
<td>7. Language</td>
<td>2-3 symbol combinations with syntax</td>
<td>Respond to comments and model correct sentence structure</td>
</tr>
</tbody>
</table>
General Strategies for Jack

Respond to potentially communicative behaviors so that child becomes aware of communicative purpose.

Move things he gets himself so he has to ask

Give him a gesture- pointing, or symbol

Offer a choice when he indicates he is tired of activity, or wants something
Choosing Goals

- Adding messages
  - Messages that may make him less frustrated
  - Messages that are important to the family
  - Messages that occur naturally in his day

- For Jack:
  - Getting Attention – to solidify move to level 3
  - Request More of an Object
  - Making Choices
Choosing Goals

• Adding forms or communication behaviors
  • Find a more appropriate way to express a message at the same level
  • Move to a new level on the Matrix
  • Move toward a more abstract symbol

• For Jack:
  • Move quickly to appropriate way to get attention
  • Introduce conventional gestures for requesting, greeting
Jack’s Goals

1. Jack will request teacher’s attention by touching her arm to get his turn.

2. Jack will request more of an activity (push on swing) or object (food or drink) by touching a tactile symbol, or get adult’s attention and point.

3. Jack will choose an activity from 2 choices, by touching an object related to the activity held by an adult.

4. Jack will greet a classmate, teacher, or other familiar adult
## Embedding Goals into Routines

### LOOK AT DAILY SCHEDULE

### Jack’s Day

<table>
<thead>
<tr>
<th>Activity</th>
<th>Goals to embed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arrival</td>
<td>Attract attention, Greet others</td>
</tr>
<tr>
<td>Potty</td>
<td>Attract attention</td>
</tr>
<tr>
<td>Morning circle</td>
<td>Attract attention, Greet others, Make choices</td>
</tr>
<tr>
<td>Centers</td>
<td>Attract attention, make choices</td>
</tr>
<tr>
<td>Snack</td>
<td>Attract attention, Greet others, Make choices, Request more</td>
</tr>
<tr>
<td>Specials</td>
<td>Attract attention, greet others</td>
</tr>
<tr>
<td>Lunch</td>
<td>Attract attention, Greet others, Make choices, Request more</td>
</tr>
</tbody>
</table>
New Snack Routine

How can we change the way we do snack to embed these goals into our routine each day?

1. Introduce a symbol that represents snack to signal the start of the routine
2. Have students pass napkins to the person sitting beside them- build in a greeting when it is your turn to pass to your neighbor
3. Don’t give Jack his turn to choose snack until he touches teacher’s hand after it taps table in front of him
4. Offer 2 snack choices using symbol cards with a piece of snack food on the card
5. Give a small amount of food and drink and have him request more by getting adult’s attention, then either touching plate/cup, or touching symbol
Activity

Develop a routine that embeds the communication goals into another activity.