

Language Development

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Communication

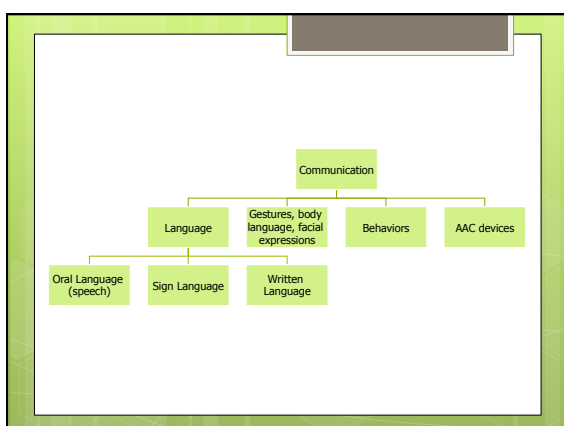
- The process of exchanging information and ideas between participants
- Involves the following (goal: shared meaning/understanding)
 - 1) Sender has a concept
 - 2) Sender encodes
 - 3) Sender transmits
 - 4) Receiver receives
 - 5) Receiver decodes
 - 6) Receiver formulates a concept

Communication

- Expressive →
 - Communicating to others
 - Receptive ←
 - understanding the communication from others
 - Pragmatic (social skills)
 - Conversational skills, interpreting social cues
- *Assessments

Communication

- Occurs through a variety of modalities
- Intentional or unintentional
- Symbolic or non-symbolic



Intentional vs. Non-Intentional Communication

Degrees of Intentionality

Not an "all-or-nothing" phenomenon

1. Absence of awareness of goal
2. Awareness of goal
3. Simple plan to achieve the goal
4. Coordinated plan to achieve the goal
5. Alternative plan to achieve the goal
6. Metapragmatic awareness of the plan to achieve the goal

Wetherby and Prizant, 1989, pg. 79 as cited in Dr. Cosbey's SPCD 582 Lecture

Seven Indicators of Intentionality

1. Alternating eye gaze
2. Persistent signaling until goal is accomplished or failure is indicated
3. Waiting for a response from listener
4. Changing the signal quality until the goal has been met
5. Ritualizing or conventionalizing communicative forms
6. Ceasing signal production when goal is met
7. Displaying satisfaction when goal is met & dissatisfaction when it is not met

Wetherby & Prizant (1989), as cited by Reichle, Halle, & Drasgow (1998). From Dr. Cosbey's SPCD 582 Lecture

Intentional vs. Non-Intentional Communication

- GO TO INTENTIONAL FOLDER

Symbolic vs. Non-symbolic Communication

- Symbolic communication involves the use of symbols to communicate.
- Non-symbolic communication does not include the use of symbols.

What is a symbol?

- "Something that stands for or represents something else" Vanderheiden & Yoder, as cited in Beukelman & Mirenda, 2005, p. 36

- Not context bound

Symbolic Communication

- Oral Language - speaking
- Written Language - writing
- Symbolic gestures: one gesture means the same thing irrespective of the context (i.e., waving "hi")

Non-Symbolic Communication

- Reaching / Pointing
- Hand-Leading
- Facial Expressions / Body Language
- Vocalizations
- Body Language
- Non-symbolic Gestures (Context bound)
 - meaning changes depending on context (point dog, point cat, same gesture referencing different things)

Types of Symbols

- Conventional vs. Unconventional
 - ASL vs. idiosyncratic signs
- Aided vs. Unaided
 - Aided: AAC device, writing, PECS
 - Unaided: speech, sign language

Hierarchy of Symbol Levels

Most symbolic - harder

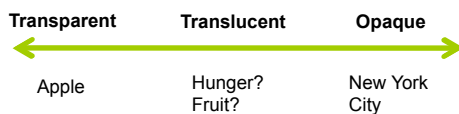
- Written Text / Speech
- Line Drawings
- Pictures (ex. PECS)
- Photographs (color, black and white)
- Miniature Objects / Partial object / created association
- Objects

Least Symbolic - easier

What do you think of?



Continuum










Set 1











Set 1 - Transparent

		
milk	cookie	cat










Set 2










Set 2 - Translucent

			
eat	I want	milk	cookie
			
play	bored	drink	happy

Set 3

Set 3 - Opaque

				
hot	cold	come	cookie	music
				
make	sick	girl	frightened	

Important to remember!

- Just because a symbol is transparent to you, it doesn't mean it is to your student.

Using Objects to Communicate- is it a symbol?

You can use an object to communicate, but it doesn't necessarily make it a symbol

- Ex. 1 object → cereal box
 - Presented with two choices of cereal, he points to the one he wants and you hand him the box
 - Presented with an empty cereal box and an empty egg carton. Chooses cereal box, you go and get the cereal from the pantry

Using Objects to Communicate- is it a symbol?

- Ex. 2 object → glass
 - Picks up a glass and hands it to you, you fill it with milk
 - Picks up a glass and hands it to you. You get him another glass and pour milk into it.

AREN'T OBJECT SYMBOLS JUST A HASSLE, WHY BOTHER?

Reasoning?

- Want him to progress and begin to use symbols, hope he will move up the hierarchy (even if he doesn't it's still worthwhile)
- Things he wants may not always be visible, but if he has his own set object symbols, always accessible to him

Determining the Individual's Symbolic Level

- Observe what they attend to in their environment
- Present them with things that contain photographs, pictures, objects and see how they respond
 - During snack ask them to hand you a spoon and see if they respond
 - Give them a magazine with photographs and see if they attend to the photograph
 - Hand them a story book and see if they look at the pictures.

Determining the Individual's Symbolic Level

- Start at a level lower than you think they are (i.e., if you think they are at the picture level, start at the photograph level)
- Have them discriminate between symbols at the same level (e.g., have them discriminate between a photo of an apple and a pear).
- If they demonstrate competency at one level, move up one more to see if they understand the next level

Communication/Language / Speech

- Communication
 - The process of exchanging information and ideas between participants
- Language
 - A creative, generative, rule-governed symbol system for communicating meaning through a shared code of arbitrary symbols
- Speech
 - The neuromuscular act of producing the sounds that can be used in language

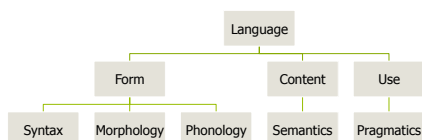
Language

- A **creative, generative**, rule-governed symbol system for communicating meaning through a **shared code** of **arbitrary symbols**
- **Creative**
 - New words enter the language, old words drop out
- **Generative**
 - From a finite set of words and a finite set of rules, you can generate an infinite number of messages

Language (continued)

- **Rule-governed**
 - Words have to be in a particular order to convey the intended meaning
 - Sentences are organized in a particular way (e.g., in English, the noun phrase precedes the verb phrase)
 - Example: He hit the dog vs. The dog hit him
- **Shared code**
 - People who know the language can communicate with each other
- **Arbitrary symbols**
 - Words have meaning simply because we say they do

Components of Language



Components of Language

- **Form**
 - Syntax – form or structure of a sentence / grammar
 - Morphology – internal organization of words
 - Morphemes: smallest unit of meaning (dog, -s)
 - Phonology – how we put speech sounds together
 - Phonemes – smallest unit of sound (/d/ /o/ /g/)
- **Content**
 - Semantics – meaning of words or word combinations
- **Use**
 - Pragmatics – how we use language / social skills

LANGUAGE DEVELOPMENT



Unintentional Communication

- **0-1 MONTH**
 - Cry
 - Crying helps the child to get used to air flowing across the vocal folds and this early stimulation of the vocal folds is important in acquiring speech
 - As a child cries, exhalation phase of breathing increases. This is important because the exhalation phase of breathing needs to be longer than inhalation phase because you talk during exhalation
 - Vegetative sounds: burbs
 - Pleasure sounds (Vowel like sounds)

Unintentional Communication

1-4 MONTHS

- Cooing:
 - back of the throat sounds (k,g)
 - Rounded vowels (ku, goo)
- Turn-taking interactions
 - Rhythmic exchanges, mutual gaze
 - Repeated vocalizations/actions
 - Building tempo/excitement
 - Disengagement

Unintentional Communication

4-8 MONTHS

- Vocal play
 - Single syllable sounds (ba, da), Raspberries
- Reduplicated babbling (ba-ba, da-da)
- Baby & Adult interaction become more refined
 - More conventionalized actions and sequences (Ex. Peek-a-boo, Pat-a-cake)
 - Child anticipates specific actions (If change the order the baby will get mad or will just do it in the right order)

Intentional Communication - Communicative Intents -

Behavioral Regulation:

- Get you to start or stop doing something
- Request object, action, and to protest

Joint Attention:

- Wanting to show you or draw your attention to something
- Label/comment on an object (look at object then at you)

Social Interaction:

- Want to interact/play with you
- Greeting
- Request social routine (peek-a-boo)

Intentional Communication

8-10 MONTHS

- Non-symbolic Gestures
 - Pointing, giving, showing
- Variegated Babbling
 - Different syllables in a row (babigabad)
- Echolalia
 - Imitate what you say

Intentional Communication

8-10 MONTHS

- Jargon
 - Babbling that mirrors the stress patterns of adult speech
 - Sounds like their saying a sentence, but it doesn't mean anything- no "real" words
- Phonetically Consistent Forms (PCF)
 - Sounds that are consistent relative to a specific context
 - "uh" to request food, "ah" to request being held

Intentional Comm. with Language

12 months

- One word utterances (no, wawa, dodi)

18-24 months

- Have 50 words, mostly concrete nouns
- Start combining words

*Multiword utterances correlated with gestural combinations

- Agent + action (mommy go)
- Action + object (want cookie)

*Vocabulary Spurt

*vocabulary production is correlated with functional gestures (will pretend to eat with a spoon and then say "spoon")

Intentional Comm. with Language

- 2-2½ YEARS
 - Appearance of grammatical morphemes
 - -ing, in, on, plural -s, -ed, a, etc.
 - Mastery of morphemes occurs around 4 yrs
 - Expand utterances to include morphemes
 - Jimmy eat → Jimmy eating

Intentional Comm. w/ Language

- 2½ - 3 years
 - Continue to expand utterances
 - Develop a variety of sentence types
 - Negative: The boy is not eating
 - Imperative: the subject "you" is implied
Push the Truck
 - Interrogative: What's the man doing?

Intentional Comm. w/ Language

- 3 – 4 YEARS
 - Emergence of complex constructions
 - Coordination
 - Using 'and'
 - Ex. Jen went to the doctor and her sister stayed home.
 - Complementation
 - Using verbs that express feeling/intention/state
 - Ex. I want to spend the night at Susie's house.
 - Relativization
 - Adding relative clauses
 - Ex. The girl who lives next door is my cousin.