Ch. 9 – "A Functional Intervention Model

Owens, Robert E. (2010). Language disorders: A functional approach to assessment and intervention, 5th Edition. Boston, MA: Pearson.

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- "Traditional language intervention does not consider either the integrated nature of language or the context of language use (Duchan, 1997). Language is viewed as a hierarchically organized set of rules, rather than as a holistic set of variable context-sensitive rules (Rice, 1986). Although the focus may include form, content, and use, the overall design is usually additive, rather than integrative. Often, the stated goal is to learn specific language units, not enhance communication." (p. 242)

- "Clinical intervention should be a well-integrated whole in which the various aspects of language combine to enhance communication. The purposes of intervention should be
  - (a) to teach a genera-tive repertoire of linguistic features that can be used to communicate in socially appropriate ways in various contexts and
  - (b) to stimulate overall language development (Duchan, 1997; Russell, 1993; War-ren & Kaiser, 1986a)." (p. 242)

- "A functional language intervention model attempts to target language features that a child uses in the everyday context, such as the home or the classroom, and to adapt that context so that it facilitates the learning of language." (p. 242)
  - p. 243 – Table 9.1 "Comparison of Traditional and Functional Intervention Models

Key Principles of a Functional Intervention Model

- 1. The Language Facilitator as "Reinforcer"
    - ...provide feedback and reinforcement
    - ...indi who
        - ......genuinely care, respect, and enjoy interacting with the child
        - ......are willing to attend to the children, to listen (watch), and to accept their topics
        - ......reduce the authority figure persona
        - ......create a setting where stu are eager to interact and communicate

Key (cont.)

- 2. Close Approximation of Natural Learning
  - ...approximate as closely as possible the natural language learning environment
  - ...do not teach language devoid of its communicative functions, to do so would make language learning even more difficulty + a LOT less interesting/motivating
  - ...remember that language functions precedes language form
  - ...be aware of, but do not be bound by the "normal" progression of language skills / Language Development
  - ...keep in mind the following principles:
    - a. nonverbal language lays the foundation for verbal language
    - b. learning how to interact comes before learning how to communicate, learning how to communicate comes before learning language, learning language comes before learning how to read and write
    - c. simple rules are acquired before complex rules
    - d. lang dev is not uniform
    - e. children act differently at different levels of development
  - ...children need to know when, as well as how to communicate

Key (cont.)

- 3. Following Developmental Guidelines
  - ...if the facilitator expects the child to communicate, s/he will
  - ...respond to the content and intent of the child's utterance
  - ...children learn vocabulary the best in relation to their topical experiences and interest

Key (cont.)

- 4. Following the Child's Lead
  - ..."A more child-centered approach guarantees joint or shared reference (i.e., attending to the same topical focus), enhances semantic contingency, and reduces noncompliance by the child." (p. 246)
  - ..."Children appear to attend most to and be best able to comprehend speech during joint-attention activities." (p. 246)
  - ...if you expect the child to communicate, they will

Key (cont.)

- 5. Active Involvement of the Child
  - ...the more active the involvement, the more learning will occur

- 6. Heavy Influence of Context on Language
  - ...language intervention should occur within the contexts of everyday events and within the contexts of conversational give-and-take events
  - ...manipulate the environment to increase the likelihood of the desired language to occur/be developed

Key (cont.)

- 7. Familiar Events Provide Scripts
  - ...a script is a social routine
  - ...scripts provide the structure and contexts to learn and use language
  - ...as children mature, their scripts become longer, more sophisticated and have more options
- 8. Designing a Generalization Plan First
  - ...establish prior to intervention

Generalization Variables

- Training Targets
  - "Language is usually acquired more rapidly and used more effectively if
    - " communicative interaction" is established first (Rieke & Lewis, 1984).
    - Language targets need to be those that increase the effectiveness of a child as a communicative partner.
    - The first goal of intervention should be successful communication by a child at the present level of functioning." (p. 250)
  - = students should learn those communicative behaviors that are used most frequently in the context

Training Targets (cont.)

- "The best way to determine need is through environmental observation. If, for example, a child frequently requests items in the environment but is generally ineffective, then requesting might be chosen as a target." (p. 250)
  - = our observational study

Training Targets (cont.)

- "Infrequent opportunity for possible training targets to occur may be the result of low environmental expectations or requirements for a child to produce these forms or functions. For example, there may be few opportunities for children to ask questions when there is little expectation that they will do so. In such cases, low expectations can become self- fulfilling. The communication environment may need to be restructured to facilitate use of newly acquired communication skills." (p. 250)

- Training Items
  - "An SLP should plan to train enough examples of the feature being targeted to enable a child to generalize to untrained members (Stremel-Campbell & Campbell, 1985)." (p. 250)
  - "…a sufficient number of items must be trained so that a child can determine both the relevant and irrelevant aspects of the communication context." (p. 250)

Training Items (cont.)

- "When a particular syntactic form or function is being targeted, it is especially important to select content words or utterances already in the child's repertoire. With the targeting and introduction of new topic words, an SLP selects familiar structural frames. This principle is called " new forms– old content/ old forms– new content" (J. MacDonald, 1985)." (p. 251)

Training Items (cont.)

- "Processing constraints found in all human beings reflect the limited capacity of the brain to process information." (p. 251)

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- ***Muma Model, i.e., Muma, J. (1974). Language intervention. Ten techniques. LSHSS, 5, 7-17**
  - 1. <u>Correction Model</u>, e.g.,
    - stu: "I go"
    - tea: "No, that is not right, say 'I am going now'"
      - = impact: least effective, least used within normal lang. dev. Process
  - 2. <u>Expansion Model</u>, e.g.,
    - stu: "Daddy"
    - tea: "Yes, Daddy is gone."
      - = impact: used frequently during the lang. dev. process provides child with a more complete syntactic model to match the child's utterance

***Note**: there are really just 8, not 10

Muma (cont.)

- ## 3. Simple Expatiation, e.g.,
  - stu: "Hurt!"
  - tea: "Yes, the fire will hurt you."
    - = impact: expand on child's utterance - add new information - keep sentence simple + respond to and build upon child's utterance

- ## 4. Complex Expatiation, e.g.,
  - stu: "Truck fast!"
  - tea: "Yes, that was a fire truck. It must go fast to help people who may be hurt."
    - = impact: similar to "Simple Expatiation," simply more info. added + more complex sentence format used

Muma (cont.)

- 5. Alternative Model, e.g.,
    - stu: "Tom Cry"
    - tea: "Yes, Tom is crying. Why do you think he is crying?"
        - = impact: cont. stu. topic - models a more complete syntactic form - ask a question that will encourage a student response + an inference (why Tom is crying) = abstract thinking
- 6. Completion Model (...used in a game), e.g.,
    - tea: "Yesterday I ate a _____?"
    - stu: "egg?"
        - = Impact: frequently used in 2nd language acquisition - good way to test/develop stu, knowledge/vocab. - targeted completion can be a word or a phrase - provides student with an almost complete linguistic model...all they have to do is complete it

Muma (cont.)

- ## 7. Replacement Model (used in a game), e.g.,
  - tea: "The plane is red."
  - stu: "The plane is big."
    - = impact: can be used to test/rehearse specific ling. forms - should be used with peers judging if the replaced element is acceptable or not

- ## 8. Combination & Revision Model, e.g.,
  - tea: "Today is Monday. Today it is clear. Today it is cold."
  - stu: "Today is Monday and it is cold and clear."
    - = impact: focus upon stu. seeing/using syntactical structures to increase efficiency - has proven to be very successful in dev. advanced lang. skills

Training Items (cont.)

- "Often a language feature fails to generalize because a child has not learned the conditions that govern its use. For example, if a child learns by imitation, he or she internalizes the variables that affect imitation, not the variables found in conversation." (p. 251)

- **Training Items (cont.)**
  - "Because a young child lacks metalinguistic awareness, rule explanation is not a viable clinical tool. An SLP must structure the environment so that linguistic regularities are obvious." (p. 251)

- Training Items (cont.)
  - "Contrast training is one method of overcoming generalization problems (Connell, 1982). In contrast training, a child learns those structures and situations that obligate use from those that do not." (p. 251)
  - "Conversational use requires recognition of the linguistic contexts within which the training tar-get does or does not appear." (p. 251)

Method of Training

- Key information to keep in mind

  a. function precedes form

  b. establish, then build on stu. existing com. system

  c. students must have the concepts before they can use the language

  d. old form/new function or old function/new form...just do one new thing at a time

  e. children follow semantic rules before they follow syntactic rules

  g. "scaffolding" is a key "facilitator" lang. behavior

Method of Training

- Key information to keep in mind (cont.)

    h. you should always follow child's topical lead...then use "topic shading" if necessary

    i. "joint attention" is critical for lang. dev.

    j. learning will occur most readily if it is the child's topical focus/interest you are building upon

    k. lang. learning is not a passive process

    l. stu. must use it to learn it & stu must have reasons to learn/use language, i.e., communicative function dictates language forms

    m. the more use, the better the learning, assuming that the use is based on the student's topical interests and tasks

- **Method of Training**
  - ❑ Key information to keep in mind (cont.)

    n. routines or scripts provide the "known" context within which "unknown" information can be effectively learned.

    p. focus upon those lang. elements that fill the greatest com. need of the stu. ,i.e., where he wants the most and his existing language skills are insufficient to meet those wants

    q. "Natural language models---parents, teachers, peers, other adults, etc....",

Method of Training

Language Facilitators

- "If the goal is language use within a child's everyday context, then a lone SLP working only in a clinical setting is limited as to what he or she can accomplish. The brevity of child– SLP contact necessitates the use of a wider variety of social contexts, including various communication partners." (p. 255)

  - "Successful use of the language taught in intervention programs depends, in part, on the expectations of these significant others in the child's environment." (p. 255)

Method of Training

Language Facilitators (cont.)

- "A child must have the opportunity to communicate; thus, a facilitator must be attentive and responsive. A facilitator must consistently recognize a child's attempts to communicate and provide appropriate responses (Wilcox, Kouri, & Caswell, 1990)." (p. 255)

- "A facilitator must be trained in both
  - (a) the how, or the best teaching techniques, and
  - (b) the what, or the goals and materials for intervention.
  - Training of facilitators can be accomplished in a combination of ways, including direct training and modeling, in-service training, and the use of telephoned and written/ illustrated instructions.." (p. 255)
    - + careful use of video recordings

Training Cues

- "If one accepts the premise that pragmatics is the governing aspect of language, then an SLP must be concerned with the context within which training occurs. Certain linguistic and nonlinguistic contexts require or provide an expectation of certain linguistic units." (p. 262)

    - "In part, the problem of lack of success in generalization is due to response programs" in which children are taught specific responses to specific, often carefully worded, directions or questions" (Rieke & Lewis, 1984, p. 49)." (p. 262)

        - = i.e., kids are trained to respond 'x' when 'y' occurs + they look for our "cues" if their response is correct

            - = lack of real learning

Training Cues (cont.)

- "Too often, the traditional approaches rely on very narrow and somewhat stilted cues unlike those found in conversation.

  - The use of these traditional cues, such as " Tell me the whole thing," may result in training characterized as " a pragmatic pseudoconversational drills" (Cochrane, 1983).

  - Pragmatically, the cues do not make sense— for example, asking a question to which the speaker already knows the answer.

  - As a result, the conversations within which training occurs are little more than drill with a conversational veneer." (p. 262)

- Contingencies
  - "…the child's utterance is the stimulus to which the facilitator responds. These responses or contingencies help form the context for the child's utterance." (p. 263)
  - "Natural maintaining consequences should be identified prior to beginning training.
    - As much as possible, these consequences should be related directly to the response.
    - Such consequences as " Very good" and " Good talking" should be avoided (Stremel-Campbell & Campbell, 1985). When a child mes-sage (" I saw monkeys") child message ("I saw monkeys") and the consequence (" Good talking") are unrelated, the child's language fails to retain its communicative value." (p. 263)

Contingencies (cont.)

- "Communication behaviors can be maintained by conversational responses (" Oh, I think monkeys are funny. What did they do?"). Often, simply attending to a child is sufficient to maintain the child's participation." (p. 263)

- "As much as possible, conversational consequences should be semantically and pragmatically contingent and should serve to acknowledge a child's utterance.

  - Semantic contingency, the relatedness of a parent's or facilitator's response to the content or topic of a child's previous utterance…" (p. 263)

Contingencies (cont.)

- "Adult speech that is semantically contingent decreases the amount of processing a child has to do to understand and analyze the structure and meaning of an adult's utterances.
  - The sharing of a conversational topic and common vocabulary decreases a child's memory load for processing and increases the ease of immediate language production.
  - The facilitator's utterance provides a prop or scaffolding for the child's own analysis and production." (p. 263)
- "In contrast, frequent topic changing or refocusing of a child's attention by an adult impedes the child's language acquisition." (p. 263)

- **Contingencies (cont.)**
  - ❑ "The facilitator's response should make sense within the conversational framework." (p. 263)
  - ❑ "…behaviors that attempt to increase a child's participation in the interaction, that is, a child-centered interactional style, enhance a child's language skills.
    - By relinquishing some control and adopting the child's topics, language facilitators can ensure more child participation and interest." (p. 263)

- **Conclusion**
  - "Facilitators should adhere to the following guidelines:
    - 1. Expect the child to communicate.
    - 2. Respond to the child's topics and initiations.
    - 3. Respond conversationally and build the child's utterances into longer, more acceptable ones.
    - 4. Facilitate communication within the everyday activities of the child.
    - 5. Cue the child in a conversational manner to elicit the language desired." (p. 265)