

Evidence-Based Practice (EBP)

- Applying current research results to decision making in our professions
- ASHA recognizes a three-legged approach to EBP:
 - External evidence: i.e., the scientific evidence of effectiveness
 - 2 sources of Internal evidence: clinical experience and the client's/family's needs/preferences

Evaluating External Evidence

- Three principles (Dollaghan):
 1. Expert opinions do not equal scientific evidence
 2. Published studies are not equivalent
 3. Clinicians need skills for critiquing studies
- Levels of Evidence (Fig. 3-2, p. 69 & Table 3-1, p. 70)
 - Ia – systematic meta-analysis
 - Ib – well-designed randomized, controlled study
 - IIa – systematic review of high quality studies
 - IIb – one high quality study
 - III – observational studies with controls
 - IV – observational studies, no controls
 - V – expert opinions

Using EBP in Clinical Decision-Making

1. Formulate a clinical question, use PICO
 - P = Patient or problem
 - I = Intervention under consideration
 - C = Comparison intervention
 - O = Outcome desired for patient given intervention
2. Evaluate the internal evidence
3. Find the external evidence
4. Evaluate the external evidence
5. Integrate the internal and external evidence
6. Document treatment outcomes to evaluate the clinical decision

Developing Intervention Goals (Nelson)

- Gathering baseline data
 - quantitative and qualitative description
 - some naturalistic observation is needed
 - test-retest might help to measure progress
- Identifying the “developing edge of competence”
 - point of focus for the clinician
 - middle point - not too easy, not out-of-reach
 - may demonstrate behavior but inconsistently or only in certain contexts
 - zone of proximal development (Vygotsky) - point where child can perform given mediation

Goal Selection

- Goals and Objectives
 - Long-term versus short-term
- Factors in Goal Selection:
- Developmental sequence of behaviors
 - Teachability of goal
 - Stimulability of child
 - Communicative effectiveness or functional outcome
 - Priorities identified by family, teacher, or child

Developmental Logic in Goal Selection (Fey)

Rationale for Using Developmental Logic:

- learning something new depends on child's prior knowledge
- strong patterns in groups of children
- parallels between linguistic and cognitive developments
- earlier developing aspects are easier
- earlier developing aspects are more functional

Developmental Logic cont'd

Potential Problems with Developmental Logic:

- the theory used affects the goal selection
- assumes that linguistic behaviors are interdependent, but this is not true for all forms
- developmental stages are not discrete
- children with SLI have normal or near-normal IQ
- children with LI often have rec>exp skills

Writing Behavioral Objectives

- The do statement
 - tells the observable behavior expected of the child
 - does not tell what the clinician does or the procedures
 - ___will imitatively produce modifier-noun phrases...
- The conditions statement
 - tells the context of the behavior
 - may be linguistic and/or social
 - ...to describe pictures during a story-reading activity...
- The criterion statement
 - tells how well the child will perform
 - ...in four of five opportunities.

Goal Attack Strategies (Fey)

- Vertical
 - goals introduced one at a time til mastery or criterion is achieved
 - advantage for children with cognitive limitations
- Horizontal
 - more than one goal is addressed at a time
 - helps with attention
- Cyclical
 - goal addressed for predetermined amount of time, then next goal begun despite lack of mastery
 - allows for gradual nature of learning

Clinician or Adult-directed Approach

- Traditional behaviorist approach
- Linguistic stimuli are made highly salient
- Clear responses expected
- Clear reinforcement and feedback
- Less natural contexts
- Advantages: high number of responses, "unnaturalness" promotes child's skills
- Disadvantages: generalization
- Examples: drill and drill play

Child-Centered Approach

- Effective with children who are shy, unassertive, or obstinate
- Uses natural contexts and events to facilitate language development
- Advantages: generalization, fits with what is known about typical language acquisition
- Disadvantages: no increased saliency, not ideal for teaching reading/writing
- Examples: facilitative play

Techniques used in Facilitative Play

- Self-talk - we describe our own actions
- Parallel-talk - we describe the child's actions
- Imitations - we imitate what the child says
- Expansions - we repeat child's utterance expanding it with grammatical markers to make it like the adult utterance
- Build-ups/Break-downs - repeat sentence, highlighting phrases, key words, other possible sentences
- Recast Sentences

Hybrid Approach

- Combination of the best of clinician-directed and child-centered
- Uses specific goals, clinician controls activities, but focus on tempting the client to communicate, and maintaining natural language and contexts
- Examples: focused stimulation, milieu teaching

Intervention Activities (Paul, 2007, pp. 86-93)

- Select Input modality
 - Comprehension versus production
- Modify the linguistic signal
 - Reduce rate
 - Increase repetition
 - Increase perceptual saliency
 - Decrease complexity
 - Obligate pragmatic responses
- Planning consequences for client language
 - Reinforcement
 - Feedback

Monitoring Progress Measuring Outcomes

- Monitor at 2 levels:
 - broadly for changes that are relevant, functional
 - narrowly to chart progress in treatment activities
- Functional Outcomes (Broad Level)
 - Activities of Daily Living (ADLs) are one aspect
 - Communicative skills for particular needs
 - Reports from family and friends re: changes
 - Academic grades

Monitoring Progress cont'd

- Log notes or daily progress notes (Narrow level)
 - after each contact with a client, the SLP documents the session
 - SOAP notes
 - charting progress
 - running language samples

Discharge Decisions

- Recommendation for ongoing treatment
 - documented ongoing problem
 - evidence of progress or improvement
 - evidence that progress is result of treatment
 - Nelson identifies 3 questions to be answered:
 - "Is more change needed?"
 - "Is more change possible?"
 - "Are services justified by a cost-benefit analysis?"
- Reasons for discharge (Box 3-10, p. 97 Paul, 2007)
 - achieved all goals or WNL
 - achieved functional level
 - child is not progressing in treatment