
Resource Reviews

Evaluation des ressources

Piagetian Activities—A Diagnostic and Developmental Approach

Richard Copeland

Publisher: Thinking Publications, P.O. Box 163, Eau Claire, Wisconsin 54702-0163

Cost: \$24.00 (US)

Reviewer: Barbara Gaines, Alberta Children's Hospital, Calgary, AB

This book represents 62 activities based on Piagetian principles related to the development of logical thinking. The activities are defined in terms of the specific cognitive domains applied: logical classification; number; space orientation; measurement; knowing versus performing; memory and intelligence; and chance and probability.

The activities are sequenced with respect to development and referenced to the approximate age and cognitive level when mastery is expected. The goals for each task are clearly stated, and the required materials and administration procedures are well defined. The author also provides qualitative descriptions of the patterns and types of possible responses characteristic of children acquiring the preoperational, concrete, and formal operations stages of thinking. Once a child's functional level for a particular task is determined, suggestions for how to provide verbal mediation and related experiences to promote the child's further acquisition in the activity are described.

This book was intended for educators of regular classes and special education as well as for speech-language pathologists. For each activity Nancy McKinley (Thinking Publications) describes some language factors that may affect the language disordered child's ability to perform the task. Although her comments primarily represent anecdotal impressions and are not illustrated by research data, the suggestions do stimulate the reader to consider the child's comprehension of specific vocabulary terms and his/her metacognitive development which may affect performance on the task. For example, Copeland points out that a child's knowledge of principles of seriation precede his/her ability to talk about *before* and *after* concepts in time.

The intervention techniques espoused by the author are indicative of a shift in educational philosophy regarding cognitive development. It is suggested that "show and tell" modeling of problem-solving will not benefit the child in the

acquisition process. Instead, the author suggests that conceptual development can be acquired through the educator's provision of stimulating questions as well as physical and social experiences that foster the relevant abstractions based on the targeted cognitive principles.

I found this book to be a resource for both my therapy activities and my consultation with teachers. I was able to select Piagetian activities that complemented my linguistic goals in intervention and could assist teachers in using the materials to augment their learning center activities in the classroom. Although speech-language pathologists will find the discussion of language disorders to be elementary, the teachers I worked with indicated that the concrete references to the child's language difficulties were very helpful. I felt that the intervention philosophy may be suitable for normal children and some mild-to-moderately language impaired children; however, teaching more severely language impaired children may need to be augmented by modeling techniques and some basic language instruction. This book would be most helpful to clinicians involved with children who have at least acquired the preoperational stage of development. The clinician who is working with a child in the transitional phase between preoperational and concrete operations will find Copeland's comments exciting and highly successful for providing developmental opportunities.

Developmental Disorders of Language

Betty Byers Brown & Margaret Edwards

Cost: 19.95£ (sterling)

Published by: Whurr Publishers, 19b Compton Terrace, London, N1 2UN, England

Reviewer: Angela M. Murphy, Saskatoon, SK

Because of the many and varied sources of information on language disabilities which the beginning student and the practicing therapist must consider, the authors have attempted to write a comprehensive book on the developmental disorders of language. They have succeeded in guiding the reader to an appreciation of the many aspects of our current practice and how these usages have evolved, and they allude to those theories and methods presently being researched which are likely to become important in future practices. These undertakings are accomplished by including numerous references to the literature over the last thirty years, clinical case studies, and comments and comparisons of procedures used in various remedial settings.

The eight chapters of the book are clearly written and well organized. Each chapter opens with a summary of what the chapter includes. Topics covered are identified with head-

ings, and important points are highlighted. Beside the lengthy list of references which direct the reader to further resources, a glossary of terminology, a list of the principal tests cited, and an author index help the reader locate information.

The text begins with an overview chapter that describes the characteristics of the child with developmental disorders of language, reports on the prevalence of the disorder, and indicates how the child is handicapped socially, emotionally, and educationally. The authors' belief that "early identification is vital to all therapeutic and educational approaches" and the multifactorial nature of developmental disorders are explored in chapter 2.

The third chapter probes prevention and early detection of developmental disorders of language through education. The topics of detection, information, and intervention provide an excellent overview. The information on interaction and communication between the child and care-giver contains practical guidelines which could be of value to all parents as well as professionals working with young children in the emergent phase of language development.

Chapter 4 is devoted to exploring theoretical models of language development. The neurobiological, psycholinguistic, and linguistic aspects of language disorders are discussed. The literature which has been generated from these models over the past ten years is cited. Clinical subtypes that have been identified are represented (e.g., verbal auditory agnosia, semantic pragmatic group, verbal dyspraxias, phonological-syntactic deficit, and lexical-syntactic deficit) and case studies to illustrate most of the clinical subtypes are included.

Formal and naturalistic approaches to assessment are examined in chapter 6. The techniques which are discussed and many of the texts cited, though used for years, are still seen as necessary for determining a prognosis, a diagnosis from which to plan remediation, and a basis for comparative data and research. Chapter 7 includes valuable information about the nature and timing of intervention. Unfortunately, it deals more in generalities than in specifics. The text would have been enriched by including a discussion on the controversies related to specific therapy techniques and commercial language programmes. Although there may be a danger that either of these approaches could stifle initiative to create individualized programming, more definitive information could serve as a guideline for an orderly and sequential approach when working with children who have developmental disorders of language. The final chapter looks at the possibility of designing a classification of language disorders and speculates on future trends in speech-language therapy.

The theme throughout the book is that the child's language development should be viewed as a continuum ranging

from normality to deviance and should be seen in the context of other development. As such, it presents a realistic approach to identifying, assessing, and remediating language disabilities. This book is a valuable contribution to the literature.

Structured Photographic Articulation Test

Janet Dawson Kresheck & Elen O'Hara Werner

Publisher: Janelle Publications, Inc., Sandwich, IL 60548

Cost: \$69.00 (US) - Test; \$10.00 (US) - Pkg. 25 Forms

Reviewer: Gail Kamitomo, U. of A. Hosp., Edmonton, AB

The *Structured Photographic Articulation Test* (SPAT-D) was designed to assess the articulation of children ages three through nine years. It uses 48 photographs, featuring "Dudsberry" (a dog), to elicit target words spontaneously to assess 59 singleton consonants and consonant blends. The photographs are contained in a spiral bound album and show Dudsberry interacting with an object that contains the target sound(s).

Most stimuli test more than one consonant. The 23 consonant singletons are tested in three positions (initial/prevocalic, medial/intervoclic, and final/postvocalic). A few infrequently occurring phonemes, such as final voiced *th*, are not tested in all positions. The phonemes /r/, /s/, and /l/ are also tested in a variety of consonant blends. Additional words containing more complex blends are presented for the child to imitate as a further optional assessment.

The response form is color coded on a 8 x 17 inch page folded to 8 x 11 inches. It contains a list of the test stimuli, the target phonemes, space for transcription, and an analysis chart. The chart allows for analysis of consonants according to syllabic function (initial, medial, final) and manner of articulation (nasals, stops, fricatives, affricates, liquids, glides). A separate chart for consonant blends is included. A place to record stimulability is also provided.

Except for a few stimulus items, such as the word yellow to test /j/ in the initial position, word choices seem appropriate and familiar to young children. Because photographs are utilized (versus simple line diagrams) it was also felt that this test could be used with older patients without being offensive.

The response form was relatively easy to use and took a minimum amount of time to transfer to the analysis chart(s). The design of the charts allowed for ease in choosing therapy goals, regardless of whether you took a more developmental or phonological approach.

To supplement the analysis, age norms, mean scores, standard deviations, percentiles, and standard scores are provided. The reviewer found limited use for the derived scores, as the majority of patients were below the first percentile and several standard deviations below the mean. If, however, this type of information is needed to justify speech therapy services, it can be obtained from this assessment.

Reliability and validity measures were also reported by the authors. The SPAT-D had a good test-retest reliability and showed good concurrent validity when compared with results from the *Goldman-Fristoe Test of Articulation*. It was also reported that the SPAT-D differentiated well between articulation disordered children and those with normal skills.

The SPAT-D was, overall, a good assessment tool. As administration and analysis time is relatively short, it has been found useful in situations where time is a factor. I also noticed that children who were reticent to speak or provide labels to drawn pictures were often more willing to respond to the photographs of Dudsberry. The size of the test (3 x 6 inches) makes it very compact for itinerant speech-language pathologists. In summary, the SPAT-D would be a good addition to the assessment libraries of most clinics.

Disorders of Fluency

P. Dalton & W.J. Hardcastle

Cost: 14.50£ (sterling)

Published by: Cole and Whurr, 19b Compton Terrace, London, N1 2UN, UK

Reviewer: Wm. S. Yovetich, Dept. of Comm. Dis., University of Western Ontario, London, ON

This book is one of a series that approach language disabilities as a single field. David Crystal, in the preface to this book, points out that the series is not about specific syndromes or educationally narrow problems. A volume may reflect the single main area of an author's background, but Crystal states that the editorial policy was, "to ask the authors to consider the implications of what they say for the fields with which they have not been primarily concerned."

Given this policy, Dalton and Hardcastle embark on the arduous task of presenting a neurolinguistic model of speech production and how breakdowns in various aspects may result in disfluency. Carrying out this task results in a very complex and at times convoluted presentation. The chapters (2 & 3) that deal with the development of their point of view are difficult to follow and use outdated reference models. In fact the major criticism I have of this volume is that, consider-

ing it is an update of an earlier version, over 50% of the references cited are over 20 years old. Closer examination reveals that only 16% (or about 55 citations) are within that last 10 years. An example of this impression can be found in their discussion of the development of self concept in young stutters (p. 87-90). In this discussion the authors cite Van Riper (1971) and use a cryptic chart to demonstrate the different views on self concept in the literature. This chart represents material that Van Riper updated (1982) in a much clearer fashion than their interpretation. Another specific example of out-of-date information is in the section dealing with, "the treatment of stuttering in children." The authors' use references and points of view that date back to 1968-1973. This information, therefore, does not represent the contemporary approaches to remediation in children that have evolved since the late seventies and early eighties.

A final commentary relates to the stated purpose of the series, "...to provide specialized studies which can be used as texts for components of teaching courses... also hoped [is] that this orientation will place the series within the reach of the interested laymen—in particular, the parents or family of the linguistically disabled." I believe this volume does not meet these goals. The language level used, the concepts and their explanations, and the sometimes detailed presentation of arguments places the book out of reach for most laymen and students. As a professional with a few years of experience in the field I found it a very hard book to follow.

The book is not without merit. It discusses the various organic forms of disfluencies in relation to the authors' earlier stated model and attempts to make the transition from theoretical to practical. In carrying out this task the authors' remain consistent in attempting to rationalize observational and research data in terms of their neurolinguistic model. Also, it does serve to give the more serious student of disfluency a reference source for some of the best of the earlier research and views on disfluency.

Techniques for Teaching Thinking

(from the "Practitioners' Guide to Teaching Thinking" series)

Arthur L. Costa & Lawrence F. Lowery

Publisher: Midwest Publications, Critical Thinking Press and Software, P.O. Box 448, Pacific Grove, CA 93950

Reviewer: Jacqueline Peters, Edmonton Board of Health

This guidebook is written as one of a "series of reflective guides for educational practitioners" to maintain and improve teaching for thinking skills. The editors of the volumes recognize the wide number of different thinking methodologies in

existence; through looking for a common basis among these, they develop a "set of sound principles for teaching thinking that virtually all well-founded efforts should reflect." The editors emphasize that the guidelines and suggestions are set forth for educational practitioners to use to foster successful classroom practices; it is not to be used as a cookbook.

The book consists of seven well-developed chapters that target thinking skill instruction. The organization is consistent with many of the recommendations made in the book to enhance thinking; each chapter builds on the previous one and a similar organization is used throughout each chapter. The first few paragraphs introduce the chapter's topic and the main points discussed within the chapter. Each main point is well highlighted in bold-type. Throughout the text, examples of teacher student dialogue interactions are used to further illustrate the points made. Applicable research is referenced and described when relevant. Most findings discussed are reasonably current, many dated from the early to mid 1980's. At the end of the chapter a brief summary of the chapter's content is included. A relatively current reference list and/or further readings are included to round out each chapter.

Besides being very reader friendly, the information presented in the book progresses logically. An initial introduction of basic thinking skills and the authors' philosophies precede a chapter that describes ideas for structuring the classroom to facilitate the teaching of thinking skills. The second and third chapters focus on techniques for questioning and responding to students in a manner that influences thinking in a positive way. Many examples are given to illustrate the skills presented, including a section devoted to the effectiveness and appropriateness of using verbal praise. Chapter 4 describes language as a tool to enhance cognition. It stresses the connection between language and intelligence, and lists "thought-full" words to use in the classroom. The next two chapters expand on the techniques previously presented. They present ideas for teaching metacognition and for teaching thinking skills/strategies directly. Chapter 7 delves into the important task of describing behaviors that students exhibit which indicate that their thinking skills are improving. Finally, the epilogue discusses modeling as a technique to facilitate consistency between the thinking skills targeted and the teacher's behavior. R.W. Emerson is appropriately quoted there to illustrate the necessity for this consistency: "What you do speaks so loudly, they can't hear what you say."

Overall, this reviewer was impressed with the readability, organization, quality, and utility of the book. The techniques for teaching thinking were well described and seemed to be quite logical. The clarity of the instructions and the examples provided equip the professional to readily implement the ideas and techniques presented. Although not specifically directed towards speech-language clinicians, the

techniques presented are appropriate to target reasoning and problem-solving skills in language-learning disabled clients and/or adolescent clients who require a more eclectic and functional approach to language and communication programming. Depending on the clinical setting, minor adaptations may be desired. This book is an excellent resource for the speech-language pathologist; the many other books, workbooks, and computer programs in the series likely would be worthwhile investigating as well.

Implementing Augmentative and Alternative Communication: Strategies for Learners with Severe Disabilities

Joe Reichle, Jennifer York, & Jeff Sigafos

Publisher: Paul H Brookes Publishing Co., P.O. Box 10624, Baltimore, MD 21285-0624

Cost: \$46.00 (U.S.)

Reviewer: Susan Blockberger, Dept. of Comm. Dis., Sunny Hill Hospital for Children, Vancouver, B.C.

This book is intended for students and professionals interested in implementing augmentative and alternative communication systems for individuals with severe to profound mental retardation and/or autism. The title of the book is slightly misleading. The content is narrower than the title suggests in the sense that other types of severe disabilities (such as severe motor or sensory impairments) are not covered in much depth, and wider in that, although the book focuses on aided augmentative communication systems and issues, it actually addresses intervention strategies, goals, and principles of learning in a broader context than just the augmentative communication system. The philosophy of the authors is captured in the use of the word "learners." The authors' respect for learners with severe impairments is evident throughout, as they focus on what these individuals can achieve and how we can work with them.

The book includes information on the initial stages of deciding to introduce an augmentative and alternative communication system. For those of us who sometimes get "stuck" after establishing use of the AAC system for requesting, this book includes thought-provoking chapters on "establishing an initial repertoire of rejecting" and "developing communicative exchanges." The information presented in this book is a well-rounded mix of theory, research results, and case examples from clinical experience.

The overall quality of the information in this book is excellent. The quality of the writing is also very good, although as with almost every book with multiple authors, there

is stylistic variation from chapter to chapter. Nevertheless, the content is such that it is well worth persevering. There were several sections that were particularly impressive, synthesizing and summarizing information in an especially clear and helpful way. The section discussing the concept of "cognitive prerequisites" to AAC has a thorough review of the relevant literature and persuasively supports the view that "some of these cognitive milestones are simply not necessary to beginning an initial communicative repertoire, while others are important but can be incorporated into the intervention protocol" (page 41). The discussion on the advantages and disadvantages of gestural mode systems is also thorough and thought-provoking, and the book reproduces two interesting tables on the development of prehension patterns and unilateral/bilateral movement patterns used in the production of sign which is information that most speech/language pathologists would not know.

This book is recommended for individuals who are working or who want to work with learners who are severely or profoundly retarded, and who want to know not only what to do, but why.

Parent Articles: Enhance Parent Involvement in Language Learning (1988)

Margaret Schrader, Editor

Publisher: Communication Skill Builders, P.O. Box 42050, 3830 E. Bellevue, Tucson, AR 85733

Cost: \$39.00 (US)

Reviewer: Kathy Logan, Glenrose Rehab. Hosp., Edmonton, AB

The intent of *Parent Articles* is to give speech-language pathologists easy access to "useful information on a variety of communication topics in a form which can be easily understood by parents" (p.1). Over eighty reproducible articles were written by various experts in the field of speech-language pathology.

Parent Articles is divided into the following ten categories: the speech and language evaluation and therapy process; developmental sequences; early learning; learning to talk and understand; home activities for speech and language development; helping children who have common disorders (language, articulation, voice, fluency, oral motor); nonverbal communication; preparing for school; behaviour concerns; conditions associated with speech and language disabilities (mentally handicapped, hearing impairments, other conditions).

The articles are two to three pages in length and are in a highly readable format, with major and minor sub-headings.

The level of language used is easily understood, and each article contains a vocabulary list that defines difficult words. Related articles are listed. Also included are references, organizations (names and addresses), a glossary of terms, and an index.

Parent Articles provides a fairly comprehensive selection of articles suitable for dissemination to parents at the discretion of a speech-language pathologist. Most are of good quality and contain information that parents of communicatively disordered children would find useful. Some articles may be considered over-simplified. Also, some gaps were evident in the areas of motor-speech disorders and in suggestions for stimulating severely delayed infants.

In summary, *Parent Articles* would be a practical addition to the library of a speech-language pathologist. Although they could not replace direct input from a speech-language pathologist, the articles could serve as a useful adjunct to the treatment process.

Storybuilding: A Guide to Structuring Oral Narratives

Peg Hutson-Nechkash

Publisher: Thinking Publications, 1731 Westgate Road, P.O. Box 163, Eau Claire, WI 54702-0163

Cost: \$24.00 (US)

Reviewer: Janet C. J. Scott, Alberta Children's Hosp., Calgary, AB

Storybuilding was written by the author in response to a need she found for "assessment and intervention materials to address narrative skills." The guide is divided into three sections: (1) an introduction to narrative development; (2) assessment measures; and (3) a remediation program. The stated purpose of the storybuilding program is to improve children's narrative skills.

While the author does not specifically name her intended audience, her frequent reference to the role and needs of speech-language pathologists leads this reviewer to assume that this is the targeted audience. The assessment measures are intended for use with individuals producing a mean length of utterance of three words or more and a chronological age from two years to adolescence. The remediation program is designed for use with upper elementary language and learning disabled students. However, the author does indicate that some aspects of the program would be suitable for younger students as well.

The Introduction introduces the reader to the study of narrative development. This section summarizes: (1) the rationale for assessing this form of discourse; (2) the normal sequence of narrative development; and (3) patterns of difficulty in structuring oral narratives demonstrated by language and learning disabled children. The author summarizes about two perspectives for examining narratives: (1) a developmental progression consisting of six types of narrative structure followed by four more levels of narrative development and based on Piagetian levels of cognitive development; and (2) a story grammar taxonomy which looks at a story as composed of a setting and one or more episodes.

The Assessment section begins with detailed instructions about how to obtain a narrative sample. Two assessment forms are included to measure a child's ability to logically structure and relate a narrative. A third and supplementary form is provided to examine "the manner in which the narrative was told." A brief description of analysis interpretation is followed by several samples of completed forms.

The remaining three-quarters of the guide is devoted to remediation. The remediation program contains four phases: (1) familiarization with story grammar elements contained in children's literature; (2) practice constructing narrations; (3) critiquing others/own narrations; and (4) generalization of narrative knowledge across settings and to written language. Sample IEP goals are provided for each phase of the program. A short list of children's literature that may be used to facilitate narrative development is included. Student worksheets accompany the successive three phases of the remediation program.

This reviewer was delighted to find a text that includes a complete but concise summary of the findings of many studies of narrative development. The reference to these studies and the attached bibliography provides the reader with opportunities for further study if desired. While many samples of Story Grammar Assessment are provided, only one example of each level of the Narrative Levels Analysis to be used with pre-school and lower-elementary school-aged language impaired children is included. This may make analysis of these younger students' narratives more difficult. Also, there is a fairly elaborate scoring system followed by interpretation guidelines for assessment, but little more than one general statement for interpreting the results of the Narrative Levels Analysis. This trend toward more complete information for use with middle and upper elementary school-aged students is accentuated in the Remediation section of the guide.

In summary, this reviewer would recommend this guide to speech-language pathologists or special education teachers working with elementary school-aged students with language and learning disabilities who are seeking to gain some skills in narrative evaluation and remediation. It may also be a

valuable resource to those working with preschoolers to aid their understanding of the developmental progression of narrative skill development.

Acquired Apraxia of Speech in Aphasic Adults

Paula Square-Storer

Publisher: Gage Professional & Reference Books, 164 Commander Blvd., Agincourt, ON M1S 3C7

Cost: \$39.00

Reviewer: Margaret A. Nesbitt, U. of A. Hosp., Edmonton, AB

The purpose of this book is to clarify some of the terminology and identify characteristics that help the clinician distinguish between apraxia and aphasia as well as outline appropriate intervention strategies. The author has written a book for the speech-language pathologist and students in the discipline which is an excellent resource on this subject.

The text presents apraxia in a manner intended to clarify and organize our understanding of the disorder and its inter-relationship with other neurological disorders. The first section begins by giving a brief history of the terminology of neurological speech disorders. It then groups terminologies which exhibit the same characteristics and provides distinguishing features of truly different disorders. The discussion of the apraxias is enhanced by a significant review of the current literature.

Articulatory variability is discussed in relation to apraxia including the differential diagnosis of aphasic syndromes and apraxia of speech, and the advantages and disadvantages of some of the tests frequently used with these populations. The importance of recognizing the difference between these disorders at the time of initial assessment is stressed. Once the clinician recognizes the components of the patient's communication deficit, the author then guides the reader through some treatment options. The author confirms what most clinicians believe: for expedient, effective remediation of the apraxic disorder, it is essential that it be recognized and treated as a different entity from aphasia.

The next section discusses the efficiency of intervention for apraxia. Cueing, as related to the treatment of the apraxia, is discussed. Prompt is discussed and substantiated as an approach that should be considered particularly for patients who are most limited in their spontaneous verbal output and for whom other methods have not been successful. Finally, multiple input phoneme therapy is described, a very specific treatment format which has been successful with the patient having aphasia and apraxia.

The final subsection contains treatment programs and techniques in relation to apraxic mutism and apraxic individuals who might benefit from an augmentative communication devices. The discussion on mutism is very complete and well-defined. Treatment, potential time frames, ultimate prognosis, and counselling for the apraxic mute patient are included. The discussion on augmentative communication is brief and directed toward use with patients whose apraxia ultimately interferes too much to allow the use of oral speech.

This book provides the reader with an excellent understanding of apraxia and how it interfaces with other disorders such as aphasia and dysarthria. It would be a good resource for the practising clinician, as well as for graduate students.

PACT: Partners in Augmentative Communication Training. A Resource Guide for Interaction Facilitation Training for Children.

Delva M. Culp & Margaret Carlisle

Publisher: Communication Skill Builders, Inc., 3830 E. Bellevue, P.O. Box 42050, Tucson, AR 85733

Cost: \$29.95 (US)

Reviewer: Michael J. Saya, Alberta Children's Hosp., Calgary, AB

As stated, this manual is designed to improve communication between young augmentative communication technique users and their partners. The information is directed toward the speech-language pathologist or a special educator with extensive knowledge of pragmatics and at least basic knowledge of augmentative communication. The child's language skills are expected to be above the two-year level, and he should have at least 20 symbols in use. This assumes that the appropriate augmentative system has been chosen already, including a reliable means of indicating or pointing to the symbols.

Basic to understanding the procedures outlined in this manual is the identification and classification of communicative behaviours by function (communicative acts or intents), mode (speech, gesture, augmented techniques), and discourse behaviour. These behaviours are identified for both the child and the partner through the PACT Interaction Profile. Also completed in the assessment are the Partner Rating Scale and the Child Rating Scale which survey the attitudes and perceptions about communication of the child and of the partner. Videotaping of two 20-minute sessions is required, and a further two hours of analysis is recommended.

The selection and implementation of communication intervention goals in individual, group, or child/partner sessions

are described. Thirty-six PACT goals, pertinent to function, mode and discourse behaviour, are included, and a detailed list of activities for each is provided. An additional five pages describe language activities that would encourage child/partner interaction, group participation, and role playing. The final section of the book makes reference to a pilot study that looked at the psychological effects of improved communication between the child and his/her parents.

I would strongly recommend that the interested reader take the workshop undoubtedly offered by these authors. It would be an efficient way to acquire the necessary skills for reliable observation and use of the Rating Scales and the Interaction Profile. I do believe, however, that the detailed examples in the text are adequate for self training if the reader already has basic courses in augmentative technique selection and training. The manual provides an excellent format to identify priority communication behaviours, assess child/partner behaviours, set appropriate long and short term goals, and document the results. The (legally) reproducible materials make the purchase of this manual a good buy.

Tangible Symbol Systems: Symbolic Communication for Individuals with Multisensory Impairments

Charity Rowland & Philip Schweigert

Publisher: Communication Skill Builders, 3830 E. Bellevue, P.O. Box 42050, Tucson, AR 85733

Cost: \$69.00 (US) (Manual alone \$16.95 US)

Reviewer: Catherine McCarthy, Hazeldean Early Education Program, Edmonton, AB

This resource consists of a 61 page manual and an accompanying 60 minute videotape designed for teachers, speech-language pathologists, and other support staff and parents who are working with individuals with severe communication deficits. Although the title indicates that the material is suitable for those working with individuals with multisensory impairments, the author states that it may also be used with individuals experiencing severe communication deficits associated with other disabilities including autism, severe mental retardation, severe developmental disabilities, orthopaedic impairments, or a combination of these. It is suggested that tangible symbols are suitable for individuals of all ages.

The stated purpose of this material is to demonstrate how the transition from presymbolic communication (natural gestures) to abstract symbolic communication (formal language) might be made for those individuals who are not currently able to utilize standard communication displays. The first

three sections of the manual introduce the concept of tangible symbols and how they might be used with individuals with severe communication impairments. This reviewer felt the information was clear and understandable for the intended audience.

Two sections of the manual deal with constructing tangible symbol systems and embedding symbol use into functional routines. These sections do not totally adhere to the current philosophy of teaching communication within the context of naturally occurring situations. In most examples the situations were set up to facilitate the use of the tangible symbol system within a functional routine. This reviewer felt this was a valid way to initiate symbol use for individuals with severe communication impairments. Virtually all examples given in the manual were of teacher/student exchanges in a classroom situation. The information presented in this chapter was clear and well organized. Photographs of tangible symbols and their referents and photographs of individuals using tangible symbols in their daily routines greatly enhanced understanding of the concepts.

The latter section of the manual consists of a pretest and a set of data forms which may be used for tracking student progress. Although information from the pretest may be gath-

ered informally by an experienced speech-language pathologist or teacher, other staff members may need the structure provided by the test format. The data forms are helpful in dividing the activities into "chunks" which indicate the portion of the skill sequence learned.

The videotape is intended to be viewed prior to reading the manual. It provides very similar information to that included in the manual with the exception of the record keeping forms and some additional background material. It should be noted that the video does not provide action sequences illustrating the concepts in the manual, but rather uses photos identical to those in the manual.

In summary, this resource was felt to be well organized and provided a useful step-by-step reference for those working with individuals with severe communication impairments. Sections of the material could be abstracted and shown to support staff and families to enhance understanding of the concept of communicative symbol use, however it would seem prudent to ensure that consultation with an experienced speech-language pathologist is an integral part of the use of this material.