

Resource Reviews

Évaluation des ressources

Computer Software

Big Book Maker: Favorite Fairy Tales and Nursery Rhymes

Produced by: Pelican Software, 338 Commerce Drive, Fairfield, CT 06430

Cost: \$49.95 US (School version)

Reviewers: Speech-Language Pathology Department, Constance-Lethbridge Rehabilitation Centre, Montréal, PQ

Equipment required: Apple IIe with 128K, IIc, or IGS, color monitor and printer.

Description of the program: A publishing program intended to combine graphics and text to create books, activity sheets, bulletin boards, and the like using a variety of graphics and typestyles.

Program effectiveness: The program is effective in achieving its stated goals. It is logical and flexible.

User friendliness: This program is user friendly, however, it would be difficult for a child who is not familiar with the keyboard to use. It is more appropriate for an older child or an adult (teacher).

Support and documentation: Instructions are well documented with clear and concise organization of material in a large and easy to follow manual.

Primary strengths: (1) Graphics are of excellent quality; (2) The variety of type and size of print make it appropriate for all ages of children, as well as special populations such as the visually impaired; (3) There is a good variety of choices of themes which make it interesting to a wider range of children; (4) Ideas for how to use the printed material are useful; and (5) It can be adapted to French, Spanish, Italian, and other languages.

Primary weaknesses: (1) It is not indicated for which population this program is intended; it does not seem to be appropriate for a pre-school population, except for use by the teacher or therapist for preparation of materials; and (2) The process is lengthy and may not appeal to younger children with limited attention spans.

Overall impression: This program seems to be worthwhile for educators and therapists in preparation of materials or for older children who are ready to experiment with the earliest form of desktop publishing. It could be used in preparing materials for regular classrooms as well as for learning disabled populations.

Rating: 4 = excellent; 3 = good; 2 = fair; 1 = poor. Programme description = 3; Programme effectiveness = 3; User friendliness = 3; Support/documentation = 3; Overall rating = 3 (keep in mind the restrictions discussed).

Books

Biomedical Concerns in Persons with Down Syndrome

Siegfried M. Pueschel & Jeannette K. Pueschel

Publisher: Paul H. Brooks Publishing Co., Baltimore, Maryland

Cost: \$43.00 (US)

Reviewer: Patricia Ives, Speech-Language Pathologist, Moonstone, ON

The main theme of this book is to increase people's knowledge related to the care of persons with Down Syndrome. The authors believe that if persons with Down Syndrome are in good health, they may enjoy life more fully and participate to the best of their abilities. Therefore the book provides "a thorough discussion of the various biomedical concerns in a form that would be meaningful for professionals who are pursuing investigative work as well as for those who are providing care for individuals with Down Syndrome." It does not touch on developmental, educational, behavioral, psychological, social, or environmental issues.

The book is made up of 24 chapters by different contributing international authors including two Canadians. Chapter 1 outlines various phenotypic characteristics that have been described by investigators with relationship to the skull, eyes, nose, ears, lips, tongue, neck, chest, abdomen, and extremities. Chapter 2 touches on dermatoglyphics - or the study of patterns and systems of lines on fingers, palms, and soles as related to the diagnosis of Down Syndrome. Chapter 3 is an extensive review of characteristics of growth in persons with Down Syndrome. Chapter 4 discusses nutrition - both from the standpoint of possible altered metabolism of some nutrients and from the standpoint of providing nutrition planning to prevent obesity. Chap-

ter 5 discusses studies that have dealt with life expectancy of individuals with Down Syndrome. Chapter 6 to 16 inclusive and 19 to 23 inclusive discuss specific systems in which underlying pathology may be present. Of these, Chapter 7 is related to "Audiologic and Otolaryngologic Concerns." In this chapter there is some discussion of things to consider when performing audiological assessments. Chapter 17 discusses features of Alzheimer's Disease as they relate to adults with Down Syndrome. Chapter 18 reviews information available related to psychiatric conditions. Chapter 24 is titled "General Health Care and Therapeutic Approaches." It outlines regular health care issues with regard as well as touching on several unconventional treatments.

Each chapter contains an extensive list of references, which makes this a useful resource for students or clinicians working with individuals with Down Syndrome. While the book does not deal with treatment aspects, it does provide an extensive amount of information gathered into one place about the physical aspects of Down Syndrome.

Treating Phonological Disorders in Children: Metaphon - Theory to Practice

Janet Howell and Elizabeth Dean

Publisher: Singular Publishing Group, San Diego, CA

Cost: \$19.50 (US funds)

Reviewer: Barbara Bernhardt, Ph.D., University of British Columbia, Vancouver, BC

This small volume sets out to provide an overview of phonological disorder as a linguistic disorder and presents a philosophy and approach that uses metaphonological awareness and minimal pair contrast training as means of remediation.

The book is intended for clinicians working with children with phonological disorders. The volume provides a sufficient introduction to the philosophy and program for clinicians who might want to experiment with the approaches offered.

Overall, the topics are clearly presented and easy to follow, with many concrete examples provided. Some of the controversial theoretical claims are passed over quickly, however.

The book begins with a description of phonological disorder as a linguistic rather than phonetically-based disorder. Next, phonological analyses are presented for three children. An introduction to the construct of meta-

phonological awareness is followed by a description of the therapeutic approach and some case study examples. The approach has two phases: (1) awareness of the target contrast introduced, and (2) production practice with a minimal pairs contrast approach. In the production phase (2), this approach is not actually different from previous minimal pair contrast production approaches. Where it differs from some current approaches is in the first phase focus on awareness. This part of the approach could be a useful clinical addition to those remediation programs that do not already have it. Overall, the major caveat is that many children with phonological disorders also have articulatory-phonetic difficulties, and therefore will need more variety and time in production training methods. The second caveat is that performance on meta-phonological tasks and phonological change after treatment were not significantly correlated in the efficacy study presented.

Materials for Therapy

CID Phonetic Inventory: A Speech Rating Form for Hearing Impaired Children

Jean S. Moog

Publisher: Central Institute for the Deaf, 818 South Euclid, St. Louis, MS 63110

Cost: \$24.00 (US)

Reviewer: Cathy Newman, Edmonton Board of Health, Edmonton, AB

The CID Phonetic Inventory was developed to evaluate severely and profoundly hearing impaired children's speech ability at the phonetic level. The Inventory is divided into six sections: suprasegmentals, vowels and diphthongs, initial consonants, initial consonants with alternating vowels, final consonants, and alternating initial consonants. It can (usually) be administered in approximately thirty minutes. A separate score sheet can be obtained for each section as well as an overall average score. The syllable is used for rating most items; however, single phoneme rating is allowed for consonant production when the child is unable to produce that consonant in a syllable unit.

The suprasegmental subtest was designed to evaluate the ability to vocalize, control breath during speech, and vary duration and pitch. The syllable is used to evaluate these skills in order to provide a standard context. The other five sections of the test are designed to rate the articulation of speech sounds. Phoneme production is rated at the syllable level as

single syllables, repetitive syllables, and alternating syllables.

Included in the kit are: a manual, which gives information related to rationale, administration, and scoring; cue cards with the test items printed for visual reference; and a package of 25 score forms.

This test would be most useful to assess the speech production of hearing impaired children with a low level of intelligibility because the test assesses the fundamentals of speech production. The use of the cue cards assists the child in understanding the task, and because the responses are imitative in nature, the test results should indicate the child's best performance.

The test follows the general sequence of speech development that was described by Ling (1976) in *Speech and the Hearing-Impaired Child*. However, the consonant blends have been deleted. The author states that the *CID Phonetic Inventory* was designed to provide a quantitative measurement of the hearing impaired child's speech development and therefore can be used to quantify progress. The absence of reporting guidelines may result in misrepresentation of the scores.

This test could be used as one part of a total speech evaluation. In addition to looking at the production of speech sounds in syllables, sound production in words, sentences, and phrases, and overall intelligibility of spontaneous speech, should be evaluated.

Communicate Junior: An Educational Activity to Reinforce Social Skills in Elementary-Age Children

Patty Mayo, Polly Hirn, Nancy Gajewski, and Judy Kafka

Publisher: Thinking Publications, Eau Claire, WI

Cost: \$35.00 (US)

Reviewer: Joan Sullivan, Glenrose Rehabilitation Hospital, Edmonton, AB

This game was developed to fulfill the need for social acquisition at the elementary school level. It is intended for use with both regular and special education students in grades one through four. Comprehension and use of twelve basic social skills are targeted. These include: hygiene, body language, facial expressions, voice (tone and volume), following rules, manners, listening, eye contact, ignoring, conversations (starting, maintaining, and ending), time and place, and finally sharing and taking turns. The authors stress that this game

is not intended to teach initial knowledge about social skills, but rather to reinforce skills previously taught in the classroom. They discuss the emphasis on the whole language approach currently popular in education and employ this use of naturalistic language opportunities throughout the game.

Communicate Junior is intended to be used with 2 to 4 players and can be adapted for larger groups. The suggested age range is 5 through 10 years. Materials are written at a grade two level. The object of *Communicate Junior* is for each player to work their way to a party at the centre of the game board by correctly answering the social skill questions provided and by working cooperatively with all players. Thus, there is no "winner." To encourage cooperation each player listens when it is another's turn and gives help to the other players. An advantage of this game is that it is designed to be modified to suit the skill level of the children playing. For example, for younger, inexperienced children, only one skill category may be used or for older children with experience playing the game, four or more skills may be used. When all players have reached the centre of the game board it is suggested that they work as a group to "process how well they cooperated during the game." For example, they did listen to each other or did they make positive comments to each other. A group processing form is provided for duplication. The educator may determine the activities to take place during the party. Several variations of the game are provided in the rule book.

Another valuable aspect of this game is that it not only focuses on social skill development, but also encourages development of verbal processing skills. The child must listen to the question, process the information presented, ask for assistance or clarification if necessary, and then respond. A disadvantage of the game is the time required to read the rule book and prepare the materials for use in the game (e.g., photocopying, coloring, laminating). This however, only occurs during initial use as the rules are easily understood and retained, and many of the materials may be reused.

Also included with this game, but separate from it, is a book called *Super Speech Adventures, Volume No. 1, The Birthday Party Adventure*. This is a multiple outcome story that provides opportunities for practice of a variety of communication skills. It is written at a grade 1-2 reading level. For children with articulation difficulties, the phonemes /l,r,s,z/ were incorporated into the story in all word positions, providing many opportunities for practice. Opportunities exist for spontaneous generation of target sounds. There are also several valuable applications to language

intervention. A variety of activities are described aimed at problem solving development of humour or verbal absurdity skills, story reformation, language comprehension skills, and inflectional patterns.

In summary, *Communicate Junior* is a valuable tool for encouraging and reinforcing social skill development and use. It employs a cooperative approach to play and utilizes naturalistic opportunities for language use. It also encourages development of verbal processing skills. In this writers' experience, children enjoy playing the game and appear to benefit from it in a variety of ways pertaining to language and social skill enhancement. It is highly recommended for group language activities at the elementary school level.

CID Picture S.P.I.N.E. Speech Intelligibility Evaluation

Randall Mosen, Jean Moog,
Ann Geers

Publisher: Central Institute for the Deaf, 818 South Euclid, St. Louis, MO 63110

Cost: \$100.00 (US)

Reviewer: Cathy Newman, Edmonton Board of Health, Edmonton, AB

The CID Picture S.P.I.N.E. was designed to provide a measure of speech intelligibility for severely and profoundly hearing impaired children and adolescents. It was designed to give an overall rating of intelligibility and not to measure production of specific speech sounds. Speech intelligibility, as defined for this test, is "the degree to which a speaker is understood in the absence of verbal context."

Testing materials include a manual, response forms, and a box of picture cards. The 100 pictures are organized into four sets of phonetically confusable words with a practise deck for each set. The words were chosen because they were easily pictureable, within the vocabulary of young hearing impaired children, and contained phonemic contrasts that contribute to the overall intelligibility of deaf speech. Some of these phonemic contrasts are voiced/voiceless distinctions, tongue height, and small changes in format frequencies. Pictures are used to allow its use with young children and also to separate reading skills from speech production skills. However, words are printed on the cards for those who can read.

The child is required to look at and name the picture without the examiner seeing the card. The examiner is familiar with the list of words in each set but is unaware of the order of presentation by the child. The examiner is

not required to evaluate how well a word was spoken, only whether or not the word was understandable. Depending on the vocabulary level of the child and the amount of rehearsal time needed, the test requires approximately 20 to 30 minutes to administer and 10 minutes to score.

The manual is clear and easy to read and contains a good explanation of the unique characteristics of hearing impaired speech and factors influencing intelligibility. This reviewer believes that the test has some advantages over other intelligibility tests: (1) it can be administered by someone with limited experience in phonetics; (2) outside listeners are not required; (3) it is a good pre-post measure and can be used to quantify progress; and (4) young children enjoy the pictures and the seeming reversal of the teacher/student roles.

This reviewer's experience with this single-word instrument suggests that scores obtained are an overestimate of intelligibility compared with the intelligibility of spontaneous speech. Therefore caution in reporting scores is necessary to avoid possible misrepresentation of speech ability. Some illustrative examples of goal setting and treatment are provided, but the experienced clinician will use judgement and creativity to expand on these.

Metaphon Resource Pack

Elizabeth Dean, Janet Howell,
Ann Hill, and Daphne Waters

Available from: NFER-NELSON Publishing Co. Ltd., Darville House, 2 Oxford Road East, Windsor, Berkshire, SL4 1DF England

Cost: 195 Pounds Sterling (Approx. \$366.00 Can.)

Reviewer: Jillian Bechard, Waterloo County Board of Education, Kitchener, ON

The Metaphon Resource Pack (MRP) is described by the authors as "a complete assessment and therapy programme for children with phonological disorders, which brings to clinical practice the latest advances in linguistic and learning theory." It is designed for use with children up to 7 years of age.

Metaphon Theory is based on from the notion that a phonological disorder is a linguistic disorder rather than an articulatory one. Therapy emphasizes the development of communication effectiveness through active involvement of the child in shared discovery about phonemes and their properties and in strategies for repair of communication breakdown.

The Metaphon Resource Pack consists of a manual, record forms, two assessment pic-

ture books, and a set of monitoring pictures. There are three assessment procedures in the MRP: (1) *The Screening Assessment*, which provides an overview of the child's phonological development and identifies areas for further investigation; (2) *The Process Specific Probes*, which allow an in-depth analysis of previously identified areas of concern and provide a direction for intervention; and (3) *The Monitoring Procedure*, which enables the clinician to monitor change in phonological processes and evaluate the effectiveness of the intervention. Process Analysis is used to analyze the data collected. Nine systemic (speech sound) and four structural (syllable) simplifications are featured, but there is opportunity on the record form to describe other processes.

The overall aim of Metaphon Therapy is to effect a change in the central organization of the phonological system rather than to produce changes at the sound level. This is carried out through two interrelated phases. In *Phase One* the aim is to motivate the child to become interested in speech sounds and to make discoveries about the sound system. These discoveries are used in *Phase Two* in which the aim is for the child to judge communication effectiveness and use strategies to repair communication breakdown. Although the MRP manual provides a therapy outline and many excellent suggestions for implementing Metaphon Therapy, it is not intended as a "pre-packaged therapy procedure." Metaphon is better described as a philosophy or approach to therapy that readily lends itself to adaptation by individual therapists using their own creativity and expertise. This reviewer found the MRP to be very effective in meeting its stated objectives and in giving children confidence in their communication abilities by helping them to acquire the knowledge and skills needed to improve communicative effectiveness. The MRP also was effective when applied to children above the intended age range (over 7 years of age). Learning disabled children of 9 and 10 years of age seemed to benefit from the in-depth exploration of sound properties in both their spoken and written communication.

The MRP is published in the UK and consequently has some British idiosyncrasies in both vocabulary and pronunciation. However, these do not detract from the value of the MRP as an assessment tool and framework for therapy. It certainly would be a most useful addition to a clinician's assessment battery as well as a source of fresh ideas for therapy. The therapy approach fits well with the current thrust in education towards active, child-centered learning and could be of significant benefit in the school as well as the clinical setting.