

### **Test of Word Finding**

Diane J. German

Cost: \$95.00 (US)

Available from:  
DLM Teaching Resources  
Allen, Texas

Reviewer:  
Susan M. Clarke  
Nova Scotia Hearing and Speech Clinic  
Halifax, Nova Scotia

The purpose of the Test of Word Finding (TWF) is to provide a standardized assessment of word-finding skills that is supported by representative and normative data. The author feels that this test provides professionals with a systematic procedure for assessing word-finding skills, developing intervention goals, and measuring therapy progress.

The TWF items are organized into five sections of constrained naming and one section of comprehension. Naming tasks include naming pictured nouns, sentence completion naming, description naming, naming pictured verbs, and naming pictured categories. The comprehension section is used exclusively as a screening of error responses from the expressive sections, and is not meant to be a formal measure of vocabulary comprehension. An 8-paged individual response booklet is used with an easel-binder test book. An audio cassette tape recorder with a pause button and a stop watch are required for administration. Formal training is not required to present this test, however, the author recommends that the administrator have knowledge of and experience in test administration, scoring, and interpretation. Five trial administrations are strongly recommended before presenting the TWF for diagnostic use.

At first glance, the TWF appears to be fairly straightforward to administer. However, it is a timed and audio recorded test, and so presentation must be continuous and uninterrupted. Recording the child's responses can be difficult at first, as several different variables are scored during each task. For example, correct and incorrect responses are scored as "1" and "0" respectively; a completion-time measure must be recorded for some sections; the presence of gestures or extra verbalization must be noted; the subject's substitutions must be written in, along with a response code which differentiate substitution types. Also, the examiner must remember to turn on the tape recorder and stop watch after the presentation of starter items, and mark each item on the timed sections with the word "now" as the target is presented. This is done in order to measure the time required by the child to retrieve each target item. While the test should take approximately 20-30 minutes to administer, scoring will take longer because the examiner must replay and time responses to the hundredth of a second. As well, the

necessary calculations must be performed to gain an accuracy score, a word finding profile, and a comprehension summary.

The author suggests that significant insights into a child's word-finding skills can be gleaned through the use of the TWF constrained naming tasks. She notes, however, that informal language sampling analyses must be completed in conjunction with this test in order to further verify suspected word-finding difficulties in other contexts. German feels that intervention programming and client progress for word-finding problems can be developed and measured with the TWF formal and informal methods of assessment. Although McCauley and Swisher (1984b) have cautioned against the use of norm-referenced tests for such purposes, German suggests that the substitution analysis provides information about the type of naming strategies the child employs and can be used to form remedial goals. The author recommends the use of the TWF as a follow-up tool to be used at specific intervals throughout the intervention period to document progress and verify the appropriateness of remediation procedures. McCauley and Swisher (1984b) concluded that using norm-referenced tests for such purposes can lead to underestimations or overestimations of changes realized through intervention. Clinicians must be cautioned that while there is still presently only one form of the TWF available, subjects may "learn" the test items during repeated administrations.

According to McCauley and Swisher's (1984a) criteria for choosing and developing sound norm-referenced tests, the TWF is as German states, "psychometrically robust and technically sound." The large standardization sample of 1,200 children was equally distributed across grades one through six. Several measures of reliability were employed including goodness-of-fit, standard error of measurement, test-retest, and internal consistency. All reportedly met Rasch Latent Trait model criteria and traditional reliability assessments. Three types of validity—content validity, construct validity, and criterion-related validity—verified overall test validity.

To summarize, the TWF was developed to measure problems of long term memory storage which manifest as word-finding difficulties. Based on the statistical information provided, the strengths of the TWF are its sound psychometric underpinnings and norm referenced data. When paired with German's informal connected speech word-finding assessment protocol, it provides a means for identifying children with word finding problems. While its only weakness may be the somewhat time consuming administration and scoring requirements, German feels we must "bite the bullet" in order to gain valid and reliable information with regards to word finding difficulties.

#### *References*

- McCauley, R., & Swisher, L. (1984a). Psychometric review of language and articulation tests for preschool children. *Journal of Speech and Hearing Disorders, 49*, 34-42.
- McCauley, R., & Swisher, L. (1984b). Use and misuse of norm-referenced tests in clinical assessment: A hypothetical case. *Journal of Speech and Hearing Disorders, 49*, 338-348.

## **Clinical Measurement of Speech and Voice**

*R.J. Baken*

Cost: \$35.00

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Available from:

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2775 Matheson Blvd. E.

Mississauga, Ontario L4W 4P7

Reviewer:

*Philip C. Doyle*

*School of Human Communication Disorders*

*Dalhousie University*

According to the author, this book "deals with the means available for determining what the various parts of the speech system are doing to produce a speech product and with the ways of specifying the characteristics of the acoustic output in a quantitative manner" (p. 1). In undertaking this task, the author also has sought to establish the relationship between theory and the clinical assessment of speech and voice. The author has met these goals. Although Baken is careful to point out that the book is not one of diagnostics, it does provide valuable information to help the reader understand why and how instrumentation can be used diagnostically and evaluatively in the clinical setting. Baken reviews a plethora of literature, integrates varied bodies of information, provides excellent descriptions of instrumentation and measurement procedures, and compiles perhaps the most comprehensive presentation of information in the area of speech/voice measurement.

The text is comprised of the following 11 chapters: (1) Introduction; (2) Fundamentals of Electronics; (3) General-Purpose Tools; (4) Intensity; (5) Vocal Fundamental Frequency; (6) Laryngeal Function; (7) Air Pressure; (8) Airflow and Volume; (9) Spectrography; (10) Velopharyngeal Function; and (11) Speech Movements. Chapters 2 and 3 are well organized presentations of basic electronics and of instrumentation used in the measurement of speech and voice. Chapter 3 contains an excellent summary of clinical instrumentation, including useful information on instrumentation commonly found in the clinical setting (e.g., microphones, tape recorders, etc). Chapters 4, 5, and 6 include valuable summaries of previous research in the areas of intensity, vocal fundamental frequency, and laryngeal function. These chapters contain numerous tables and figures to assist the reader which contain data obtained from both normal and disordered populations of different age groups. Instrumentation for the measurement of these parameters also is included. The author's discussion of frequency perturbation in Chapter 5 is excellent. Methods of laryngeal visualization (i.e., cinematography, endoscopy, and stroboscopy) are presented briefly in Chapter 6. Collectively, Chapters 4, 5, and 6 would be of great value to students.

Chapter 7 and 8 deal with speech aerodynamics. General principles underlying aerodynamic measures and related instrumentation are presented. The use of figures and summary tables offer clarity to the discussion. Chapter 9 includes an overview, as well as comprehensive coverage of spectrography. For those unfamiliar with the technique, the author's presentation will facilitate understanding. Figures which depict elements of acoustic spectra are presented. Issues related to the spectral characteristics associated with disturbances of voice quality also are discussed (e.g., spectral noise level, harmonic-to-noise ratio). Chapter 10 contains information on assessment related to velopharyngeal function. Although this information is presented clearly, this chapter may require some sophistication on the part of the reader. The final chapter contains a brief overview of speech movements and related techniques for measurement including EMG, palatography, and plethysmography. While some of these techniques may not be used routinely in clinical settings, this information contributes to a very comprehensive view of the speech/voice production process.

The overall quality of this book is excellent. It is well organized, well-written, and provides a much needed resource in the area of speech and voice measurement. While several chapters may require the reader to have more than a basic background in the area, the author has done an outstanding job of organizing the information contained within each chapter to facilitate an understanding of the material. The text is replete with useful summary tables and figures. This book would be a valuable resource to students in speech and hearing sciences, to practicing clinicians, and to those involved in research.

## **Communication Programming for Persons with Severe Handicaps: Vocal and Augmentative Strategies (Second Edition of Communication Programming for the Severely Handicapped: Vocal and Non-Vocal Strategies)**

*Caroline R. Musselwhite and*

*Karen W. St. Louis*

Cost: \$35.00

College-Hill Press

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Available from:

Copp Clark Publishing

2775 Matheson Blvd. E.

Mississauga, Ontario L4W 4P7

Reviewer:

*Michael J. Sava*

*Speech-Language Pathologist*

*Technical Resource Centre*

*Calgary, Alberta*

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This book covers both vocal and nonvocal communication strategies and is intended to be an overview of the choices to be made when considering an augmentative communication system. It is an introductory text to the field.

The book is intended for professionals who are involved in making communication related decisions for a wide variety of client populations. Professionals designing and implementing communication programs will include speech-language pathologists, special educators, occupational therapists, physical therapists, and developmental psychologists. Social workers and rehabilitation specialists would find parts of the book useful as background information when working with people with communication problems. Families and the augmented communicators themselves would appreciate the Appendices of the book which contain a glossary of terminology, addresses of suppliers and manufacturers, and lists of pertinent organizations, agencies, and publications.

The overall structure of the book is the same as the 1982 original version; however, the quality of detail and the change in the focus on some issues is greatly improved, reflecting the rapid advances in attitudes, technology, and knowledge about teaching/learning strategies. Part one, Preliminary Issues, outlines the considerations that apply to all modes of communication including the decision-process model incorporating recent theoretical approaches; training issues around pre-requisite skills; designing, selection, and training of content; and use in appropriate environments.

Parts two and three review and describe the vocal and augmentative communication systems in existence. The term "augmentative" replaces the previous term "non-vocal" in recognition of the fact that vocal communication, being the primary and normative mode, must always be considered.

Experience has shown that the best communicators use multiple modes (vocalizations, gestures, and symbols) to enhance the success of their communicative interactions. Involvement of parents in their child's programming also is emphasized.

The chapters are logically sequenced from un-aided systems (such as sign language and gestured systems) to aided systems which require some external assistance usually in the form of low technology communication boards and, finally, to high technology electronic devices. The last chapter is a new addition; it describes the important considerations to be aware of when selecting high level technology. The devices described are very current, but the descriptions are limited in detail.

There are two helpful charts in this book: a checklist of requirements of an overall multi-component system and a needs assessment form that was developed at the University of Washington Hospital under Beukelman's guidance. I have found these to be more appropriate when dealing with adult communicators.

What you will not find in this book are detailed descriptions of "how-to's," for example, how to train visual tracking and scanning skills that are required for beginning scanning devices, or how to train early communication skills through play. These areas are covered in very useful detail in Musselwhite's other publication: *Adaptive Play for Special Needs Children*, College-Hill Press, 1984 (reviewed in the June issue of *HCC*). Assessment issues are referred to, but the interested reader would do better to consult another publication, for example, *Assessment Resource and Intervention Resource*, by Carol Goossens and Sharon Crain (from Don Johnston Developmental Equipment, 900 Winnetka Terrace, Lake Zurich, Illinois 60047).