



well

SCREENING[®]

EXAMINER'S MANUAL

RESEARCH EDITION

Barbara L. Ekelman
Debra A. Dutka
Karen St. Amour

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· P A U L · H ·
BROOKES
PUBLISHING CO.®

Baltimore • London • Sydney



Paul H. Brookes Publishing Co.

Post Office Box 10624

Baltimore, Maryland 21285-0624

www.brookespublishing.com

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(ISBN: 978-1681254791), which includes a copy of this *Well Screening Examiner's Manual*, 25 codes to complete
25 screenings, and 1 complimentary code for practice. Additional screening codes may be purchased in packs of 25
(ISBN: 978-1681255064). Visit www.brookespublishing.com/well-screening for more information.

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The *Well Screening Examiner's Manual* and Well Screening depict and describe case studies, which are composites
of real people whose situations have been masked and/or modified and are based on the authors' experiences. In all
instances, names and other potentially identifying information have been changed to protect and preserve confidentiality. Any resemblance to an actual case study, person or event is entirely coincidental.

ISBN-13 (EPUB): 978-1-68125-481-4

ISBN-13 (EPDF): 978-1-68125-480-7

Version 1.0

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About the Authors

Barbara L. Ekelman, Ph.D., CCC-SLP is a speech-language pathologist and learning specialist in private practice, adjunct associate professor in the Department of Psychological Sciences and clinical associate professor in the Department of Pediatrics, School of Medicine, Case Western Reserve University (CWRU). She established the school-aged language and literacy course at CWRU and continues to teach this graduate-level class. Dr. Ekelman has 30+ years of clinical and research experience in childhood, adolescent, and adult language and learning disorders. She has designed research, presented papers, and published articles in the areas of language-learning disabilities, childhood stroke, attention-deficit/hyperactivity disorder (ADHD), autism (hyperlexia), dyslexia, and developmental apraxia. Since 1993, she has developed and administered kindergarten screenings. Her screenings identify language and learning profiles that help guide classroom instruction and support early intervention. She serves on the advisory board for the Early Intervention Related Services Training Program at CWRU, which is funded by the Department of Education.

Debra A. Dutka, M.A., CCC-SLP began her career at the Cleveland Hearing and Speech Center, where she became coordinator of the Pediatric Speech-Language Services Department and the Language-Learning Disabilities Program. She taught the preschool language and learning course in the Department of Communication Sciences, CWRU. For the past 30+ years, Ms. Dutka has worked in private practice and has served as a consultant to area public and private schools. She evaluates and treats children with autism, speech-language delays, and language-learning disabilities.

Karen St. Amour, M.A. is a certified, licensed learning disabilities teacher specializing in dyslexia. Ms. St. Amour has worked in a variety of settings including public and private schools and private practice. She presents at local and national conferences and has conducted teacher training as a Wilson Language Trainer. As a contributing editor for Educators Publishing Service, Inc., she worked on the Multisensory Teaching Approach and Alphabetic Phonics Programs. Ms. St. Amour has been an active member of the International Dyslexia Association (IDA) for 40 years. She is the founding president of the Northern Ohio Branch of IDA and served on the board of directors and advisory board for 25 years.

CHAPTER 1

An Introduction to the Well Screening®

THE IMPORTANCE OF SCREENING

Approximately 4 million children enter kindergarten in the United States each year (United States Census Bureau, 2020). These children come from diverse socioeconomic, cultural, and educational backgrounds and also are exposed to different levels of literacy. Therefore, it is important to document patterns of relative strengths and needs for all children.

Typically, the educational team is tasked with selecting screening tools to help identify children's strengths and needs. This can be a formidable task! Some screeners are too general in scope and do not focus on essential skills that identify children at risk for disordered speech-language, literacy, and/or social communication growth. In contrast, others are too narrow and evaluate one aspect of learning in isolation (i.e., reading, language, attention, or motor skills). Further, administration may not be consistent or uniform due to examiner differences (e.g., personality, rate of speech, familiarity with the measure and student, and scope of knowledge). Some screeners only employ parent or teacher checklists with no direct contact with the student. Generally, screeners do not integrate findings for different skill areas to get an overall picture of the child's strengths and weaknesses. Finally, data is not always available to monitor children's growth throughout the kindergarten year because norms are based on different groups of children at incremental time periods rather than one group of children evaluated over time.

To evaluate children properly, a screener should be selected that taps the underlying skills supported in research that are essential for typical speech-language, literacy, and social communication growth. Given the heterogeneous learning outcomes that occur in children, early screening of multidimensional skills associated with school success can help identify children who lack exposure or are at risk for speech, language, or learning disorders in kindergarten. Remarkably, one in four children from moderate- or high-income families and one in two children from poor families are not ready for kindergarten (Williams, 2019). Researchers estimate that 8% of kindergarten students entering school will have significant language disorders that adversely affect learning (Norbury et al., 2016; Tomblin et al., 1997). Of children with language disorders, half meet criteria for a specific reading disability during elementary years (Catts et al., 2002; Snowling et al., 2000). Further, 16% to 24% of children with language disorders (Mueller & Tomblin, 2012) and 30% of children with a specific reading disability (International Dyslexia Association, 2008) also have attention-deficit/hyperactivity disorder (ADHD). Co-occurring disorders (e.g., diagnosed with both a language disorder and ADHD) may compound each other, creating additional difficulties for the child. These deficits share underlying neurological bases. For example, spoken language and written language share the same linguistic system. Attention deficits may impact the acquisition of both spoken and written language.

Research over the past 30 years indicates that identification and intervention during early childhood achieves immediate and sustained developmental benefits (Center on the Developing Child at Harvard University, 2010; Hebbeler et al., 2007). Early intervention has been shown to promote the greatest growth in targeted skill areas, thereby narrowing the gap between potential and academic performance (Ekelman & Lewis, 2019). For years, it has been documented that children who succeed early receive the most positive reinforcement, leading to a positive self-image, motivation to work hard, and success in school (Ramey & Ramey, 2006; Ramey et al., 2007). Therefore, the old recommendation to “wait and see” is no longer valid when a child is lagging behind same-aged peers, especially knowing that children who get off to a poor start in learning rarely catch up (Francis et al., 1996; Torgesen & Burgess, 1998).

Because kindergarten students are “moving targets,” a screener should be administered throughout the school year (fall, winter, and spring). This is especially true for at-risk children who are identified at the beginning of the school year. Some of the at-risk children make significant gains with more exposure and become typical learners. Other children are found to be atypical learners because of language-learning deficits. On occasion, a child who presents as a typical learner at the beginning of the school year may not progress accordingly. These children often memorize the names of letters and sight words prior to entering kindergarten but have deficits in phonological awareness and/or retrieval skills, so reading and writing development stalls.

The goal of the Well Screening® team was to develop a screener that is multidimensional and meets the following criteria:

Looks at Many Learning Development Areas Important for School Success

Key developmental domains covered by the Well Screening include:

Receptive language: Understanding and processing language when listening and reading

Expressive language: Retrieving and formulating language when speaking and writing

Social communication: Using verbal and nonverbal communication in various social contexts

Early literacy: Learning letter names and their sounds, rhyming, and sound play

Reading: Blending sounds into words (decoding) with fluency and comprehension

Attention: Maintaining focus and regulating behavior to learn and store information

Math calculation: Counting, grouping objects, and calculating simple math facts and operations

Speech sound production: Producing speech sounds that are appropriate for age and dialect

Motor skills: Moving small and large motor muscles and using eyes and hands in a coordinated and efficient way

Follows the Child’s Progress Throughout the School Year

The child’s ability in each of the previously mentioned areas should be measured continuously to monitor growth. How a child performs on these dimensions of development may be used to identify children at risk for dyslexia, language disorder, ADHD, social communication disorder, and more, while allowing for educators to implement tailored instruction.

Gives In-Depth Personalized Results That Pinpoint the Child's Strengths and Weaknesses

Clinical knowledge, scope of practice, and evidence-based research allow the professional to interpret the child's performance. Information about family history provides further insight.

Guides Instruction for Targeted Areas That Need Strengthening

The results of the screening help the speech-language pathologist, teacher, and parent guide instruction for areas that need strengthening. Instruction is dependent on the level of need and at the discretion of the professionals.

Engages the Child in a Light-Hearted and Fun Manner

Too often, children are exposed to "high stakes" testing in kindergarten. A screener should be fun, quick, and stress-free for the child.

Delivers the Screening the Same Way to Every Child, Allowing for Consistency and Uniformity

The characters in the animation administer the items on the screener for consistency and uniformity. An adult is present to monitor the process and score the child's responses.

OVERVIEW OF THE WELL SCREENING

The Well Screening is an online screening tool, available at www.wellscreening.com, designed to identify prekindergarten and kindergarten children at risk for speech, language, and learning disorders. It is a unique and comprehensive screener that draws from the specialized fields of speech-language pathology, education, psychology, and child development. Supported by more than 30 years of clinical experience, the Well Screening was normed during psychometric studies that have established the tool's reliability and validity.

The screener is individually administered to each child and takes approximately 20 minutes to complete. After the adult sets up the screening, animated characters guide the child through each subtest. This online administration allows for consistency and uniformity.

The Well Screening is designed for use with preschool, kindergarten, and entering first grade children between the ages of 4.5 and 7.0 years of age. For identifying and monitoring purposes, the Well Screening should be administered to students in the spring of pre-kindergarten and throughout the kindergarten school year (fall, winter, and spring). The 10 core subtests on the Well Screening can be given by any school-based professional or specialist in a clinical setting.

The Well Screening is most often used by school-based professionals and clinicians as a preliminary diagnostic screening tool and may be used to determine whether further testing is warranted. Speech-language pathologists, school psychologists, special education teachers, classroom teachers, and clinicians may use the information provided on the web site to help develop individualized plans of instruction.

What the Well Screening Measures

The Well Screening looks at multiple aspects of a child's development. The screening includes 10 subtests that tap skills in the following domains:

- Receptive language
- Expressive language
- Social communication

- Early literacy
- Reading
- Attention
- Math calculation
- Speech sound production

Chapter 3 provides a summary of each domain and explains why it is important to child development and school success.

What You Need to Deliver the Well Screening

To deliver the Well Screening, professionals will need:

1. Broadband Internet access
2. One device for the child to access the Well Screening (computer or tablet)
3. One device for the adult to access the Scoring Form (smart phone, tablet, or computer)

The screening should be delivered in a quiet, distraction-free environment. Headphones with a splitter may be used by both the child and adult if extraneous noise is a concern.

Components of the Well Screening

The Well Screening is primarily comprised of 10 subtests, which a child completes on the screening device. These subtests are delivered by the animated characters, who prompt the child to respond in various ways: by pointing to or tapping the correct answer on the screen or responding verbally. There are two yes/no case history questions posed on the scoring form:

1. Does the child have difficulty producing speech sounds?
2. Is English the primary language spoken in the home?

As the animated characters walk the child through the subtests, the adult helping with the screening observes the student's responses and troubleshoots with technical issues as needed. The adult follows along and scores the child's correct responses on the Scoring Form device for 7 of the 10 subtests. Three subtests are scored automatically.

If speech sound production concerns are noted on the case history portion of the scoring form, there is a supplemental Speech Sound Production Subtest with an answer form and video link at the bottom of the Learning Profile Results to be administered by professionals skilled in this scope of practice. A Motor Skills Checklist is also located here and may be delivered by school or clinic personnel. See Chapter 3 to learn more about the domains and Chapter 4 to learn more about the subtests that make up the Well Screening.

How the Well Screening Is Scored

After the child completes the screening, the adult finalizes and submits the Scoring Form (see Chapter 5 to learn more about how this works). The Well Screening web site then compares the children's performance on the screener to grade normative data, meaning that their performance is compared to same grade peers. A comprehensive learning profile is then automatically produced.

In the Learning Profile, performance on the domains and the 10 individual subtests is divided into three categories based on grade normative data: Strength to Celebrate, On Track, or Weakness to Bolster. Scaled scores are available for the 10 subtests. If the child performs below expectations on three or more subtests of the Well Screening, enrichment in these areas should be initiated and further testing should be considered if there are concerns



Figure 1.1 The characters Click (left) and Trip (right) guide the child through the screening.

about language, early literacy, attention, reading, or math skills (see Chapter 6 to learn more about interpretation and follow-up).

HOW THE WELL SCREENING WAS DEVELOPED

The Well Screening development process occurred in four main phases over 7 years: 1) item development, 2) animation and development of the script, 3) data collection, and 4) web site development.

Item Development

The Well Screening was constructed to include items that tap multiple skill areas across the disciplines of speech-language pathology, education, psychology, and child development. The creation of the items was based on developmental charts, interdisciplinary gold standard tests, and extensive review of the research on child language and learning development. Screener items were crafted to tap into areas representing a broad range of skills important for school success: language, early literacy, reading, attention, math, social communication, speech sound production, and motor skills. In addition to the authors' 30 years of clinical and research practice, experts in the fields of education, psychology, and pediatric medicine were consulted to help with item development.

Animation and Development of the Script

The characters Trip and Click (pictured in Fig. 1.1) were developed to avoid cultural bias in screener administration. The dolphin Trip directs the crab Click and the child through the screener. For most subtests, Click provides an example of how to complete the subtest. A script was written to integrate the test items into a fun, engaging, stress-free experience for children. The audio was recorded in a soundproof booth. An animation was created through Flash to match visuals with the soundtrack. The animation was then piloted over 2 years on kindergarten and preschool students between the ages of 4.5 and 7.0 to trial all items and timing of stimulus and response times allowed on the screener. Animation and soundtracks were adjusted accordingly over the 2 years.

Data Collection

The data set for the Well Screening was collected by licensed speech-language pathologists and learning specialists over a period of 5 years. A representative sample of kindergarten students that roughly reflects the demographic diversity of the suburban Midwest was sampled. The Well Screening sample is roughly comparable to United States gender and race demographics. Although socioeconomic data was not available for the Well Screening sample, the geographic area from which the data was collected (Cuyahoga County, Ohio) fits within the socioeconomic status (SES) parameters of the United States.

A total of 274 kindergarten students were assessed with the Well Screening tool at the beginning of the school year for Assessment Period 1 (K-Fall). A total of 269 of the 274 children were again screened during the middle of kindergarten for Assessment Period 2 (K-Winter), and at the end of the school year for Assessment Period 3 (K-Spring). Additionally, the Well Screening was administered to 189 pre-kindergartners at the end of the school year (Pre-K-Spring). The ages for the data set range from 4.5 to 7.0 years.

During the second year of data collection, an additional subtest was added to the screener and two subtests were modified. Subtest 7 (Language Formulation) was added to the screener because additional information on morphology was deemed important. Subtest 1 and Subtest 6 were revised. Six items were added to Subtest 6 (Calculation) to gather more information on the child's ability to "see" a small amount of objects and know how many there are without counting (i.e., the ability to subitize). Five items were added to Subtest 1 (Language Processing) and three items removed to better represent skills acquired in preschool. The final version of the Well Screening was established.

Web Site Development

The final Well Screening was built onto a web site that allowed the screener to be played and scored through the web site using a single screening code. Detailed information about the domains, subtests, administration, screening results, interpretation, and next steps is available on the web site. See Chapter 8 to learn more about the technical development and details of the Well Screening.

GETTING STARTED WITH THE WELL SCREENING

This manual is designed to help you understand what the Well Screening is, how it works, and how it can become a valuable tool for your school or program. Chapter 1 provides an introduction to the Well Screening. Chapter 2 introduces the model and theory behind the development of the Well Screening. Chapter 3 presents a brief description of what each domain measures and the behaviors observed in children who have strengths or weaknesses in the domain. Chapter 4 discusses in detail the research-based subtests that were developed to measure the eight domains. Chapter 5 shows the examiner how the screening is given and scored. Chapter 6 describes the scoring of the Well Screening and the learning profile that the Well Screening automatically generates after the Scoring Form is submitted. This chapter also covers additional factors to be considered when interpreting the results. Chapter 7 presents seven case studies of children who completed the Well Screenings. Chapter 8 provides technical details on the development and norming of the Well Screening.

We recommend that the manual be read in full prior to administration. An extra screening code is provided with each kit purchased to familiarize the examiner with the web site and screener before formal screening.