In this clinical forum, Ken Bleile requested that each participant describe a concrete, step-by-step evaluation that could be easily replicated. The first description, or “model,” was offered by Bleile (2002), and the next four respondents described their own evaluation procedures with reference to this model. Each has a particular slant to it, and so is indeed analogous to the blind men describing the elephant in that no two descriptions are alike.

However, there is one major similarity. All of the respondents conduct evaluations in a university clinic, typically, a somewhat ideal setting. There is usually a clinical secretary to handle the advance contacts and paperwork, an audiologist (with student clinician assistance), a team of SLP student clinicians to conduct the evaluation under the guidance of a faculty member, observation rooms for parents and/or clinicians, state-of-the-art equipment (mics, video, etc.), and unlimited time. Or so it would seem to someone like me—who sees a caseload of 45 children and has to fit evaluations in wherever there’s a slight opening in the schedule. Or when (hopefully) someone is absent and their slot is freed up. So, my role in this forum is to consider these five approaches and to try the litmus test on them in a more probable setting—an elementary school.

Purpose of the Evaluation

When a preschooler is referred for assessment, my goal is to answer two basic questions. The first is to determine whether the child has a communication disorder. This is an eligibility question and requires a standardized test with scores on which to base the child’s entitlement to services. The second question is to determine the goals/recommendations of intervention. Bleile includes progress reporting as a third reason to evaluate. In the school setting, reevaluation is conducted approximately every three years, while progress on IEP goals is calculated periodically (quarterly, for example) and does not require a formal reassessment.

Time Allotted

While Bleile (2002) suggests that the evaluation be completed in 60 to 90 minutes, the reality is that I have only 45 minutes. I aspire to complete the evaluation in one session. With most 4-year-olds (especially those with normal cognitive development), this is quite possible. With younger preschoolers or those 4-year-olds who are less cooperative and more involved, I may need a second 45-minute assessment block the following week. Once my report is completed, I schedule a separate parent conference/feedback session on another day. I will have had time to score the tests and consider the recommendations, which makes for a smoother feedback session. The child is usually not present, which allows for a more focused dialogue.

Reason for Referral

Bobby was referred for poor speech unintelligibility. If he is 50% unintelligible and over four years old, one wonders where he has been for the last couple of years! If this is an accurate description of Bobby’s speech, then there is likely to be an articulation/phonological disorder, as Bleile has pointed out. Most of the five participants cite references supporting the “tip of the iceberg” phenomenon: the apparent difficulty with the phonological system may be a warning that other linguistic systems (including pre-literacy) may need attention (Tyler, Lewis, Haskill & Tolbert, 2002). My focus will be on speech production, but I will attempt to include assessment of the other areas listed above in an effort to provide the parents with a comprehensive profile of their child’s communication abilities. This will also yield appropriate recommendations.

Background Information

Case History Form

All five participants wrote that they begin to gather background information a week or so prior to the evaluation date. Most send a case history form in the mail, requesting that the parents bring it with them to the evaluation. I use a fairly simple case history form, which I send home along with a permission form for testing. The parents may return these to me in advance, or bring them to the evaluation. Missing information or anything that is
unclear can be discussed with the parent during the evaluation.

Setting

All the participants conducted the evaluation in their university clinics. While some acknowledged that the home, or possibly the day care center, might be preferable for evaluating a young child, in the end the clinic was the setting. Bobby is over 4 years old and should be less influenced by an unfamiliar setting than a younger child might be. With one or both parents present, it should go smoothly and provide representative speech and language performance.

I prefer to have the parents in the room with me (as do Tyler & Tolbert) so that “interactive dialogue” can continue throughout the session. This is a balancing act: the parents provide wonderfully helpful information about Bobby’s preferences and comfort level, translate unintelligible utterances that we don’t understand (!), and remember to mention things they might otherwise forget. On the other hand, the temptation to “coach” Bobby is very strong.

When I invite them to stay, I ask them to interact with Bobby as needed to make him comfortable and at ease, but to refrain from “helping” him with test items, since the instructions are very specific and must be followed exactly.

Parent Interview

Everyone conducts a parent interview to obtain additional background information and to clarify what has been written on the case history form. It seems that this must be done during the opening segment of the evaluation, but it doesn’t have to be. If the written case history information seems fairly complete, I find it most useful to bypass the parents and focus on the child when I first greet them. I do this because the time is usually so limited that I can’t afford to lose Bobby’s attention while I chat with his parents. If necessary, I can go over the background details with the parents later in the session.

First, I give my total attention to Bobby. Preschoolers are uncomfortable if all of the adults are talking while they are expected to wait or to play on their own. Better to work with preschoolers while they are fresh and attentive due to the novelty of the occasion! Most 4-year-olds will offer a more representative conversational sample towards the end of the evaluation than at the very beginning when everything is yet unfamiliar to them.

Speech/Language Assessment

Once we are comfortably settled into our respective chairs, I look at Bobby, cover my mouth, and whisper a couple of questions or requests. “Where is your mother?” “Touch your nose.” I won’t be attempting the hearing screening until later, but I need to know if Bobby hears before I begin giving spoken probes. Or, I make a quiet, unexpected sound and note Bobby’s response if any. I also ask the parents if they ever have to whisper information that they don’t want Bobby to hear. Parents can sometimes give you a convincing example: “Bobby hears me put the key in the lock even from way back in his bedroom and comes running.” But in the end, I get the data from the hearing screening to verify that Bobby’s hearing is fine. Of course, even this is not necessary if Bobby has had a recent audiological evaluation and the parents have brought the results.

Receptive Language

All forum participants agreed that an assessment of receptive language is a must. Several suggested that receptive language be tested first, because it is less intimidating to the reticent child than an expressive speech/language task would be. I agree with those who pointed out that parents will often tell you that their child “understands everything.” They don’t realize that the context is often obvious to the child and accounts for any success on listening tasks. Again, for eligibility reasons, a standardized test of receptive language is preferable. I use the PLS-3 (Zimmerman, Steiner & Pond, 1992) whenever I can because it is easy to administer, interesting to the children, and provides a standard score and percentile rank. If time is really tight, I administer only the items from one age range (in Bobby’s case, 4;0 to 4;5) and if all are passed, I discontinue. In this case, the norms cannot be used, but I have data to support that comprehension of language is within the normal range. I can always go back and determine basal and ceiling levels later (and derive standardized scores) if needed.

Bobby’s referral information states that he has normal cognition. If receptive language scores are low, I will administer a nonverbal test during the first few sessions of therapy.

Articulation/Phonology

Here is the heart of the matter—this is the reason for Bobby’s referral. The methods of data collection and analysis vary considerably among the forum’s participants. Unlike Bleile who uses portions of a standardized test, bypassing any items that probe earlier-developing sounds, I begin with administering the GFTA–2 (Goldman & Fristoe, 2000). The pictures are big and bright, attractive to young children, and it’s quite easy to administer. I transcribe the responses to the 53 words and, depending upon the severity, can often record and total the errors on the IMF grid in the presence of the parents. This way, they get an immediate standardized score and percentile rank regarding the main reason for referral: articulation/phonology. If the percentile rank is low or if I judge the errors to be more characteristic of phonological error patterns (rather than misarticulations of specific phonemes), then I later complete the KLPA-2 (Khan & Lewis, 2002) to identify the phonological processes in need of remediation. The KLPA-2 includes a phonetic inventory and a phonological process summary. I use the “in-the-margins” transcriptions (from connected speech during the PLS-3) to compare to these single word productions. For some children, a single-word production is more accurate than the same word used in connected speech. This is
important to note as part of your assessment. This coarticulatory phenomenon is well-documented in the literature, and while the specific misarticulations may vary, the phonological patterns are usually quite similar in either sample type (Khan & Lewis, 1986).

**Expressive Language**

While few participants recommended standardized testing of expressive language, all of them included spontaneous language samples (between 50 and 200 utterances). In an effort to be efficient, spontaneous language samples were also examined to determine if there were any concerns about voice or fluency. Recordings were made in some cases for later verification of on-line transcription. This is good training for student clinicians, but can be quite time-consuming.

With my limited time for assessment and scoring, I choose not to collect a spontaneous language sample, which requires additional time to transcribe and score. I give Bobby the Expressive Communication portion of the PLS-3 (as above, either one age level or with basal and ceiling levels). Along with recording verbal responses to the questions and pictures, I fill the margins of the test booklet with transcriptions of any sentences, phrases, and words Bobby uses to give me additional information regarding articulation/phonology and utterance length and appropriateness. I listen for and record information about voice and any disfluencies. Again, I would prefer to have a standardized score as a measure of performance and as a baseline. If the expressive score is low, then Bobby probably has more to work on than articulation/phonology and I need to know that to share with the parents and develop treatment goals.

**Stimulability**

Checking stimulability helps to narrow down the targets for therapy because it is generally assumed that sounds for which a child is stimulable will develop on their own (i.e., without therapy). It bodes well for prognosis when a child demonstrates this flexibility of sound production.

Time permitting, I check stimulability for sound errors that seem to be accounting for most of the unintelligibility. Bobby might, for example, stop all fricatives and affricates. I would check stimulability, probably in final position (a “likely bet,” to use Bleile’s term), of these groups of consonants. Sometimes I put headphones on the child and try auditory bombardment to see if it facilitates production of the error sounds or suppression of the phonological process. In any case, the main reason for stimulability checking is to guide me in making a prognosis. We have no crystal balls (as I tend to tell parents), but we make an educated guess from test performance and stimulability checking.

**Voice and Fluency**

Quality of voice and speech fluency were judged during the Expressive Communication portion of the PLS-3.

**Oral-Mechanism Examination**

Bleile points out that only gross abnormalities tend to have an effect on speech production. Therefore, he, as well as others, perform a cursory examination of the structures and function of the articulators.

I first let Bobby look in my mouth. I say “ah” a few times and let Bobby watch my velum rise and lower. I am usually sitting in a child-size chair, so I have the child stand up facing me and then we are likely to be eye-to-eye for a good view. I am looking for anything grossly different: palate shape, size, color uniformity, velum elevating on phonation of “ah,” tongue shape and size, crowding in the pharyngeal area. I ask Bobby to “Do what I do:” protrude and retract tongue several times, alternate tongue tip from corner-to-corner a few times, smile, pucker his lips. With a 4-year-old, I would include puh-tuh-kuh repetitions.

**Hearing**

For several of the forum participants, sending Bobby off to the audiologist provided them with 15 minutes to pull together the assessment data in preparation for the final feedback to the parents. I have no audiologist on staff, so I perform a sweep screen of 1K, 2K and 4K at 20dB using a portable audiometer. This is the last procedure for Bobby. If he fails the screening or if he has a history of otitis media, I include tympanometry. I use a GS 38I, which is quick and easy to use and provides a printout of the results.

**Phonological Awareness Testing**

In the interest of time, I informally assess phonological awareness during the first few therapy sessions. However, during the parent feedback, similar to Bleile, I state that Bobby is at risk for written language difficulties. I encourage the parents to ask Bobby’s teachers, “Where does Bobby stand in relation to the other children in his class?” in phonics skills, reading, spelling, writing. I discourage them from asking a general question, “How is Bobby doing?” because teachers like to be positive and will say he’s doing fine (unless he’s a behavior problem). Because he is at risk, watching for and catching the problem early is proactive and possibly preventative.

**Feedback to the Parents**

**Disorder or not?**

This is the main question and should be addressed first. If I have been efficient, I have an articulation raw score, standard score, and percentile rank to share. I may also have the auditory comprehension and expressive language scores from the PLS-3 (or an estimate if I have given only one age range). So, usually, the YES/NO part of the feedback is easy. In Bobby’s case, YES, he has a disorder of articulation/phonology.

**Severity?**

This is somewhat subjective because it encompasses all levels of communication ability, even if the presenting
problem is that of articulation/phonology. I pull together all of the test and observation results, along with intelligibility considerations, and then provide an adjective: mild, moderate, or severe. Miccio recommends considering whether the nature of the phonological disorder is “typical” or “atypical.” In this case, atypical would likely be severe, and typical might be moderate.

What caused it?

Parents have a strong need-to-know regarding etiology. Unfortunately, in most cases we just do not know. If there is a history of chronic otitis media and/or failed hearing screenings, it is safe to say this probably contributed. While parents may not be totally satisfied with this statement, I usually point out that we all have strengths and weaknesses, and for Bobby, development of the speech sound system and overall intelligibility are a weakness. If I have insight about a strength, I will also mention this (visually alert, physically coordinated, etc.).

Therapy or no therapy?

I should have enough data to make a recommendation. In Bobby’s case, if he is over 4 years old and approximately 50% intelligible, I would recommend therapy without even doing the evaluation! However, I now have data to support my recommendation.

How often and for how long?

I believe in “front-loading.” That is, I would rather start off seeing a preschooler two hours per week and then reduce frequency to once per week than the reverse. It is my experience that something a bit intensive in the beginning pays off in the long run. Home activities. I give the parents something to “work on” at home. This is usually a story book with repeated phrases (e.g., Have You Seen My Cat? by Eric Carle). The parents are instructed to read the book to Bobby several times until he begins to “read” the repetitious parts. I tell them to have fun and not to be critical of Bobby’s pronunciation. I tell them that this “homework” will prepare Bobby for our first therapy session. As I use a “book-a-week” for therapy, the parents will already have the idea that it should be fun and not drill. Practice repeating phrases (and later selected target words) is fun, results in improvement, and is done in conjunction with READING (as a proactive measure).

Summary

The forum participants have described their procedures for evaluating Bobby’s speech. Each has a specific flavor to it. Bleile strives for “balancing thoroughness against efficiency” and is concerned about keeping both Bobby and his parents comfortable during the evaluation. Hodson et al. seem to center their evaluation around “readiness for literacy,” which requires a strong phonological system and metaphonological awareness. Hoffman & Norris use no standardized tests, preferring to derive all data from a “naturalistic” interaction with Bobby. Miccio is sensitive to cultural differences and the influence of the “unnatural” clinical setting on such a young child. Her evaluation is also the most thorough in its focus on the phonological system at multiple levels. Tyler & Tolbert emphasize the “multidimensional” nature of the assessment: standardized and nonstandardized evaluation, adjusting to Bobby’s personality and preferences.

What is my view of the elephant? Because of time constraints and eligibility requirements, I focus on obtaining the information required for determining eligibility: “Quick and Dirty.” For Bobby, this means a standardized articulation/phonology score, oral peripheral screening, and hearing screening. The additional information can be obtained later. Determining initial treatment goals can be accomplished at my desk after school.

This is the sixth view: from the trenches. In attempting to “balance thoroughness against efficiency,” efficiency wins. If the referral is for articulation/phonology, then that will be the focus of the evaluation. Caseload size and time constraints determine that establishing eligibility is the highest priority, followed by the development of initial treatment goals. If I haven’t completed Bobby’s language testing during the evaluation session, at the very least I will have gathered preliminary evidence to suggest the presence or absence of a language impairment. Further evaluation of the communication system may be completed during the first few therapy sessions. As additional information is gathered, IEP goals are revised or augmented as needed. Bobby is on his way to intelligibility.

References


Received February 8, 2002
Accepted April 5, 2002
DOI: 10.1044/1058-0360(2002/027)

Contact author: Linda M. Khan, MS, International School of Kenya, P.O. Box 14103, 00800 Nairobi, Kenya.
E-mail: Linda_Khan@hotmail.com