The Profile of Multiple Language Proficiencies: A Measure for Evaluating Language Samples of Deaf Children

Gayle Goldstein and James M. Bebko
York University

This article reports the process of creating a developmental measure that assesses the multilingual capabilities of deaf children and the problems that were encountered. Because deaf children may be using more than one method of communication (e.g., sign language skills and spoken language skills), it is important to evaluate their skills as completely as possible. In a pilot study, we used a nominal scale that assessed language skills based on a single continuum, with good English and good American Sign Language (ASL) skills as its two extremes and approximately equal skills in both as the midpoint. In the main study, a more complete measure was created, the Profile of Multiple Language Proficiencies (PMLP). The PMLP uses a single scale that represents the different stages of language development that can be observed in both English and ASL. The PMLP showed reasonable initial reliability and has good promise as an easy-to-use measure of developing language skills in children who use multiple modalities of communication. Using the PMLP as a prototype, we discuss some of the issues that influence the reliability and validity in evaluating such a scale and how these can be overcome or avoided.

Past developmental research has shown significant differences among hearing, deaf, and hard-of-hearing (HH) children in the development of language and abilities associated with language (e.g., Lindsay, Shapiro, Musselman, & Wilson, 1988; Mayer & Akamatsu, 1999; Schirmer, 1989; Yoshinaga-Itano, 1997). Hearing children of hearing parents live in language-rich environments and are immersed in such an environment from birth. Except for deaf children of deaf parents, most deaf children are more often exposed to inconsistent or less complete language stimulation from birth (Akamatsu & Musselman, 1998). The exposure of deaf children to a formal language system may be delayed, sometimes until they reach school age (Marschark, 1993). As a result, language development and other language-associated abilities are usually affected.

Many deaf children are exposed to and develop communication skills that involve more than one modality (e.g., auditory and/or visual) or language (e.g., spoken English, subsets of Manual Codes of English, or American Sign Language [ASL]). This variety of language skills presents a challenge to the accurate assessment of the child’s full range of language abilities.

There are measures that evaluate expressive ASL skills, such as the Sign Communication Proficiency Interview (Newell, Caccamise, Boardman & Holcomb, 1983), or expressive English communication, such as the Conversational Proficiency Interview (Akamatsu & Musselman, 1998), but few that evaluate more than one modality, auditory and visual, or single language. Therefore, because differences were used, comparisons of an individual’s skills across different languages or modalities are difficult. Yet knowledge of an individual’s multiple competencies could be useful, for example, for researchers examining language development or for educators who would wish to employ appropriate and
specific teaching methods to promote and strengthen future educational and language development in the various domains of expressive language for the child. Knowledge about both spoken and signed skills in relation to a single standard versus across different measures could prove of great benefit, such as comparing spoken and signed skills within individuals.

In this article, we will identify important issues in the development of a reliable and sensitive measure of language development. Specifically, the goal was to create a measure that can be used to evaluate the expressive skills of deaf or HH children in English and ASL separately but using a single standard. This instrument differs from the Language Proficiency Profile (LPP; Bebko & McKinnon, 1998) because the LPP assesses global communication proficiency, combining all means of expression, whereas the present measure will be useful in examining different systems of communication independently.

Language Development of Hearing and Deaf Children

The acquisition of language occurs very early in childhood. Rules of phonology, syntax, semantics, and pragmatics are learned at an early age and with great speed (Moskowitz, 1978). Across these early years, identifiable stages of language acquisition can be observed; for an example, see Dworetzky’s (1996) description of stages of language development. The emergence of individual stages may occur later in some children but all children who learn to speak normally appear to pass through them in the same order.

Recently it has been found that approximately 96% of deaf children are born to nondeaf or -HH parents (Mitchell & Karchmer, in press). The remaining 4% of deaf children have one or more deaf or HH parents, and these children will typically be immersed in an ASL environment from birth. Their pattern of language development is generally analogous to that of hearing children (e.g., Marschark, 1993; Pettito, 1987, 1994). Studies based on the language development of deaf children of deaf parents, however, have tended to be based on the initial stages of language from birth to 2 years, whereas there is a dearth of research on the later stages of language development for this group of deaf children. Conversely, for deaf children born to hearing parents, language development is dependent on at least two factors: the age at which the child is identified as having a hearing loss and the age at which subsequent appropriate intervention is initiated. Parents may take a strictly oral approach, a signing-only approach, or a combination of the two approaches, using both sign and oral communication. If a hearing loss is detected early and communication is presented to the child, he or she can begin to learn the rules and pragmatics of the desired language at an early age; otherwise, the systematic acquisition of these skills is delayed.

Deaf individuals who are able to use both oral and manual communication are bilingual across communication modalities, although the fluency level in either may be highly variable. Many deaf students have been termed *semilinguals* because they have a certain amount of fluency in both or all languages the child knows (e.g., Kannapell, 1989; Suty, 1986). In addition, a single modality such as manual communication is based on different languages, and as a result, one could be considered bilingual within the manual category alone. Different forms of manual communication are often used in different environments. It is this flexibility with language and bilingualism that many deaf individuals possess that makes the task of assessing true language capabilities difficult (Lou, Fischer & Woodward, 1987).

When a modality-specific evaluation technique is used, language proficiencies can be detected and understood in that specific communication domain. For example, the Grammatical Analysis of Elicited Language (GAEL) developed by Geers, Moog, and Schick (1984) uses 16 categories based on English grammar to assess spoken language only. The aim of this measure was to establish norms based on oral English skills among deaf children. Based on these terms, deaf children with good oral capabilities are likely to be evaluated more accurately than those who do not use oral English extensively (however, the GAEL Simple Sentence Level, 2nd edition does provide limited norms for deaf children who have been in Total Communication programs).

Other measures, such as the Sign Communication Proficiency Interview (SCPI; Caccamise, Newell, & Mitchell-Caccamise, 1983), are based on evaluating only sign language and sign systems. The SCPI is an evaluation of communication skills based on a contin-
uum of proficiency in ASL. However, Caccamise et al. (1983) recognized that this measure is primarily used to evaluate adult language samples and cannot evaluate the development of language in children using ASL. Further, it ignores other language or modality skills that an individual can possess.

Bebko and McKinnon (1998) and Thompson, Biro, Vethivelu, Pious, and Hatfield (1987) reviewed a number of measures that have been developed for or used with deaf populations. These measures have tended to use one of two general strategies. One has been to use a language-free approach to evaluate the child’s overall skills independent of specific language. The second has been to examine the child’s skills separately in each language, as used in the GAEL and SCPI.

An example of the first approach is the LPP (Bebko, Calderon & Treder, 2003; Bebko & McKinnon, 1998). This measure is not language-specific, enabling the profile to be administered across populations of young children with varied skills. This scale is developmental in focus and comprises five subscales of language development whose markers are embedded within contextual questions. It is easy to use across both hearing and deaf populations, and the resulting scores are a measure of the child’s overall communicative skills, considering all modalities together. As a result, the measure does not separate scores by modality or language.

The other approach is typified by measures that have been developed specific to one modality of expression—English or ASL—or occasionally both modalities separately. Concurrent with publication of the Bebko and McKinnon (1998) review, Akamatsu and Musselman (1998) presented a dynamic type of assessment, the Conversational Proficiency Interview (CPI). The CPI was proposed as a method to assess deaf adolescents’ and adults’ precision and sophistication in language in terms of understanding. Participants are interviewed three different times to assess separately language competence in three modalities: ASL, English, and Simultaneous Communication. The CPI therefore assesses both English and ASL and the individual’s ability to combine the two modalities (Simultaneous Communication). However, like many of the other measures outlined above, the CPI is not primarily developmental in nature, and the information generated pertains primarily to adolescents or adults and not to children.

In this article, we will discuss the development of a measure that has two primary goals: an instrument that is developmental in nature and one that can be adapted to assess the various expressive language skills of children who are deaf. Because the instrument has yet to be fully validated, in this article we will focus on the process of its development to serve as a heuristic for other researchers who may decide to construct similar measures.

Thus, it is important to place this measure in its proper context. Bebko & McKinnon (1990) conducted a study based on the memory and rehearsal characteristics of profoundly deaf children. As a part of the original project, the LPP (Bebko & McKinnon, 1998; and see Bebko, Calderon & Treder, 2003) was developed to link the participants’ memory skills with their overall communicative competence. As an unrelated part of that study, language samples were also collected to establish rapport with the participants and to obtain a general idea of the students’ actual language use in everyday conversational contexts. We subsequently realized that these language samples provided another important resource of information: an opportunity to evaluate the actual language the participants used in everyday interactions or school situations. The language samples involved the participant conversing in a semistructured conversation and telling short stories based on picture books.

There were several concerns with using semistructured, time-limited, naturally occurring language samples. One is that the available sample contains information about what the child actually did in one particular context and with one individual versus what the child was capable of doing. As a result, we would be evaluating the “performance” versus the “competence” of the child. Therefore, these language samples may not demonstrate the range of skills that some of these children did possess. For example, the children may have tended to use one or two types of communication and perhaps not to their best abilities. As a result, samples containing all the forms of communication that the child knew were not obtained. Furthermore, the child may not have used his or her most advanced language skills because the types of tasks involved may have been too elementary or too advanced.

Another consideration was that the choice of com-
communication used by the child might have been influenced by the interviewer’s choice of communication method (Simultaneous Communication) and ability to use this form. The child may have altered his or her communication to match the interviewer’s type of communication or, because the interviewer was an adult, the child may have tailored his or her language to the type of social setting.

Nonetheless, some of the strengths of such an approach include access to language skills that are spontaneously produced by participants in such a situation and occur naturally in the context of a conversation versus a purely question-and-answer interview. Participants were not restricted to using a particular language or modality of expression, and there was a range of activities provided for variety.

This project involved two steps: a pilot project and the main study. In the pilot study, a hybrid of the two approaches outlined above was used to evaluate ASL and English language skills along a continuum of skill. This led to the development of a new measure, the Profile of Multiple Language Proficiencies (PMLP). Both studies were based on the same set of dynamic language samples produced by participants in the context of semistructured conversations with a partner.

Pilot Study

This study was in essence a test of whether a continuum that evaluates ASL and English skills relative to one another in the context of naturalistic semistructured conversation captures the true linguistic diversity of this population when both languages might freely occur. The alternative hypothesis was that a continuum might implicitly pit oral and signing skills in opposition with each other: That is, it does not recognize that a child may be strong in both. Another related difficulty was its inability to discriminate between, for example, a child with highly developed skills in both languages and a child with lower level skills in both languages. Therefore, it was apparent that a newly designed scale was needed that could evaluate the levels of ASL and English skills separately.

The Profile of Multiple Language Proficiencies

In the pilot study, we demonstrated that describing the language skills of children who use multiple means of communication could not be accomplished using only a single continuum that contrasted one language system against another. In this study, a different approach was taken. The goal was to construct a single developmental scale that could be used to describe concurrent skills in different modalities of communication among children who are deaf or HH.

The resulting measure, the PMLP, examines separately three means of communication that are common among deaf and HH individuals: spoken English (spE), signed English (siE), and ASL. The primary goal of the PMLP is to be developmental in nature, incorporating important stages in spE, siE, and ASL language development outlined by Dworetzky (1996), Pettito (1987, 1994), and Marschark (1993) and continuing well past the early stages into full fluency of each modality or language. By evaluating these three means of communication separately but using a single developmental scale, the intent was to capture both the unilingual and multilingual capabilities of deaf and HH children.

Method

Participants

The sample of children included in the study was 31 students from two schools for deaf children in the cen-
tral and eastern Ontario areas. The language samples were collected as part of another larger study on memory and language proficiency (see Bebko, Bell, Metcalfe-Haggert, & McKinnon, 1998; Bebko & McKinnon, 1998). None of the present data were a part of the previous studies. These participants are a subset of those in Bebko, Calderon, and Treder (2003), for whom complete language samples were available (those who understood the instructions and carried out each task in its entirety).

All children were profoundly deaf, with a hearing loss of at least 75 dB in the better ear. The participants ranged in age from 7 to 13 years old with a mean age of 10 years, 4 months; 14 were boys and 17 were girls. Two of the children had deaf parents. Excluded from the study were students whose deafness was secondary to illness or other nonhereditary reasons and students with identified emotional, behavioral, medical, or learning difficulties (Bebko et al. 1998) or whose language samples were incomplete.

Three raters were used to evaluate the language samples using the PMLP, and they did not know the participants prior to this study. The raters were all familiar with different levels of language development in deaf children in both English and ASL. The first rater, F-CODA, who also participated in the pilot study, was a hearing university student and a daughter of deaf parents. M-D, the second rater, was a deaf high school teacher who was fluent in both spE and ASL communication forms. He also possessed excellent lip-reading skills. The third, F-H, was a hearing woman who had been trained as an educational interpreter. During the time of this study, she was working as an educational assistant. All three raters had extensive knowledge and use of both ASL and English and were asked to rate all three types of communication (spE, siE, and ASL) to match the pilot study design in having all three raters evaluate the samples in the same manner.

Procedure

Participants were brought individually to the interview room where two cameras were used to capture the language sample. One camera was placed behind the interviewer and was focused on the participant. The other was behind the participant and focused on the interviewer. Later, the two tapes were combined onto an edited tape so that the participant was shown on the full screen while the interviewer was superimposed in the lower right-hand corner. In this way, coders could view both participant and interviewer signing and/or speaking.

Participants were informed that they could use the communication mode of their choice and that the interviewer would use both voice and sign language (Simultaneous Communication). Three different components comprised the interview. First, four charts from the Rapid Automatized Naming Task (RAN) (Denckla & Rudel, 1976) were given (colors, numbers, animals, and objects). The purpose of this task was to find how quickly the child could linguistically access a fixed set of labels; it is often used as a measure of automatized language skills. After assuring that each child could label the five basic items that comprised each chart, the child was instructed to name by speech or sign (depending on preference) all 50 of the stimuli as quickly as possible from left to right and top to bottom without making any errors. Second was a short, interview-like conversation that allowed the child to direct the conversation to a topic of interest, which allowed and encouraged the child to communicate more socially. The interviewer asked questions about the child’s school, language preference, family, and hobbies. The last component involved looking at a series of pictures and telling stories about them. This was done by giving the participant a book without words and having him or her explain what is taking place in the pictures. The purpose of this task was to provide a more structured context to examine language used to tell stories. Interviews lasted 30–45 min for each participant. The 31 taped language samples were viewed at a later time by each of the three raters independently of each other.

The raters used the PMLP to identify features of three different modes of communication and competence of the children in spE, siE, and ASL (see Appendix). The PMLP is a synthesis of developmental and dynamic language measures that provide criteria for the three different modes of communications targeted. Specifically, the Speech and Language Development Chart (Gard, Gilman, & Gorman, 1980), the Pragmatic Development Chart (Schulman, 1983), the Kendall Communicative Proficiency Profile (KCPP; Kendall
Demonstration Elementary School, 1980), a portion of the CPI (Akamatsu & Musselman, 1998), and work by Dworetzky (1996) and Phillips (1999) were used to build the developmental criteria in the PMLP.

The basic structure of the PMLP is derived from the seven levels of English language development outlined in Phillips (1999): Pre-Word, Pre-Sentences, 3-Word Combinations, Simple Sentence, Compound Sentences, Complex Sentences, and Native Fluency. However, the PMLP expands the scale by one level to make eight levels of development to evaluate more precisely language skills approaching full fluency. This additional level, the Early Fluency Level, was interpolated after Phillips’s (1999) Compound Sentences level and before the Native Fluency level, the latter of which was renamed Full Fluency. Because the goal was to develop a scale that could be used to evaluate both English and ASL skills, the PMLP also included the language and communication milestones in the development of pragmatics, syntax, and classifiers of ASL described by Marchark (1993), Vernon and Andrews (1990), Strong (1988), Wilbur (1980), Pettito (1987; 1994), the CPI (Akamatsu & Musselman, 1998) and the KCPP (Kendall Demonstration Elementary School, 1980), which were linked developmentally to the associated English milestones.

General summaries of each level of the PMLP (see Appendix) are as follows: Level I (Pre-Linguistic) of the PMLP describes the initial stage of language development. Level II (Word Combination) shows that the individual has begun to exhibit basic language skills and can use one- or two-word utterances to express himself or herself. Level III (Beginning Sentence) indicates the use of subject-verb combinations to express more than wants. Level IV (Full Simple Sentence) describes the development of sentence patterns and social uses of language. Level V (Compound Sentence) focuses on the individual’s ability to use new vocabulary in social contexts and to use language more easily. Level VI (Complex Sentence) incorporates compound sentences and properly used language that is stylistically advanced. Level VII (Early Fluency) describes the ability of the individual to play with language but there continues to be a lack of competence in some areas of communication. Level VIII (Full Fluency) recognizes the individual’s ability to use language consistently using the grammatical and syntactical rules without error.

The PMLP has two major linguistic categories: English Skills with subcategories corresponding to spE and siE modalities of expression and ASL Skills. The single developmental scale is applied to all three subcategories but with different specific criteria to adapt it to the unique qualities of the language or modality in question. The instructions to the raters were: To satisfy the criterion for any stage, a child should have at least half of the skills that characterize that level, most of the skills that characterize lower levels, and only one or two of the skills that characterize higher levels. When rating a specific single language sample, it was recognized that it might be more difficult to observe a majority of skills within any one stage because of the time constraints of the sample.

The raters were asked to read the levels of the PMLP and the instructions on how to use the rating scale until they understood the criteria. They were then asked to mark a developmental level for each subcategory (spE, siE, and ASL) for each child. Thus, each child would have a rating for each subcategory by each rater. If one language or modality was not displayed in the language sample, a rating of level 1 was given. The raters were provided with a tabular form for use in entering their scores.

Results

The means for the three raters across all three subcategories of ratings are represented in Table 1. They tended to be close in range and clustered near the lower end of the scale for each subcategory. As in the pilot study, the degree of concordance among raters was evaluated to find the error range that was required to reach approximately 75–80% agreement between raters. An allowable error of ± 1 rating level on the scale yielded 71–84% agreement between each pair of raters within both the spE and ASL subcategories (Table 2). For the siE subcategory, the same band of error (± 1) resulted in 68–90% agreement between two pairs of raters and 55% between the remaining pair (M-D and F-H). An error band of ± 2 for the siE ratings increased agreement to 87–100%. These initial results demonstrated that raters with varied backgrounds were able to use the
PMLP to rate the developing language skills of the children in different modalities with a moderate to high degree of concordance within a narrow to moderate range of allowable error.

**Discussion**

The overall purpose of this study was to provide background information on the process of developing a language scale that is developmental in focus and can be used to describe the development of language skills of children who are deaf or HH and use varied modalities or languages of communication. Clearly, it is still a work in progress; however, this project has helped us to isolate a number of important issues and has enabled us to draw several conclusions.

The approach taken in the pilot study of using a single continuum to describe the children’s language skills was found to be too narrow and unreliable. Although a measure of that nature may be useful for a more restricted purpose, such as describing whether a child uses English or ASL more, it is insensitive to the likelihood that some children may be skilled (or poor) in both modalities or languages. It is also not developmental enough in focus to enable a child’s acquisition of skills in one or both modality or language to be monitored.

However, the approach taken in the PMLP yielded a more successful outcome. The single rating scale that provided corresponding developmental levels for both English (spE and siE) and signed language (ASL) maintained the strong developmental focus necessary to describe emerging language skills. The degree of agreement provided by a small margin of error allowance (± 1) in eight of nine interrater comparisons indicates that the PMLP can be used reliably by raters with a range of linguistic backgrounds but familiar with oral and manual languages. Although an error allowance of zero would obviously be preferable, it may not be attainable when using descriptive levels such as in the PMLP and from brief and semistructured language samples. It may be possible to narrow the error allowance by adopting a more stringent threshold at each level (e.g., the child must show all the criteria but one versus 50% of the criteria). Another improvement would be to elicit a more comprehensive and structured language sample that challenges the limits of the child’s language skills (e.g., telling a favorite joke, giving complex instructions) and related structured activities. These samples should be collected separately for each method of communication being evaluated.

More comprehensive language sampling would thus provide “challenge” situations where the participants are encouraged to use communication skills to their best ability, reducing the problem of evaluating competence versus performance. In this context, we would expect language skills to be observed across a wider range of the PMLP scale than the reduced range that was observed in this study. Additional research with the instrument and with new language samples should help clarify this issue.

Interestingly, the varied background of the raters helps to clarify the interrater reliability findings. The highest level of agreement for the two English language categories was found between the two raters for whom English was currently the dominant language (F-CODA and F-H). Similarly, the highest agreement for the ASL subcategory was between the two raters for whom ASL was the native language (F-CODA and M-D). It is surprising, however, that the agreement be-

<table>
<thead>
<tr>
<th>Raters</th>
<th>spE</th>
<th>siE</th>
<th>ASL</th>
</tr>
</thead>
<tbody>
<tr>
<td>FCODA and M-D</td>
<td>80.6</td>
<td>67.7</td>
<td>80.6</td>
</tr>
<tr>
<td>FCODA and F-H</td>
<td>83.8</td>
<td>90.3</td>
<td>74.1</td>
</tr>
<tr>
<td>M-D and F-H</td>
<td>77.4</td>
<td>54.8</td>
<td>70.9</td>
</tr>
</tbody>
</table>
between both hearing raters and the deaf rater for the spE subcategory was good, considering that the latter did not have access to the auditory component of the children’s language samples. Although an unexpected finding, M-D had been raised in a hearing environment and learned ASL during university prior to becoming a certified ASL instructor. Therefore, his speech-reading skills were well developed and likely contributed to this finding.

The lack of significant correlation between age and performance on the scale suggests a limit on the developmental sensitivities of the PMLP. However, these low correlations were not surprising findings because previous studies (e.g., Bebko & McKinnon, 1990) have shown that age is not a good predictor of language level or of cognitive activities that benefit from language development. Bebko and McKinnon (1990) found that the number of years during which the children had been consistently exposed to their current dominant language was a stronger predictor of their use of language-based cognitive strategies than was age. We reexamined PMLP performance in terms of the same language experience measure, and correlations indeed strengthened (e.g., to .266 for the spE subcategory) but remained non-significant.

The ratings in the PMLP are derived largely from the morphosyntactic structure of the children’s language productions. These changing structures are well correlated with children’s overall developing language skills, representing increasingly complex linguistic usage. The increase in complexity is associated in turn with increases in vocabulary (e.g., ability to play with words), greater metalinguistic skills, and further development in other related areas (e.g., Bloom, Lahey, Hood, Lifter, & Fiess, 1988). Therefore, this focus is a reasonable one for a measure that is intended as a general barometer of the child’s level of language skills in each subcategory of communication.

Finally, a secondary goal in developing the PMLP was to have a measure that would be readily usable without a substantial amount of training, such as in classroom settings. The PMLP can provide educators with a means of obtaining a measure of the student’s language skills in each modality or language, thus indicating areas of strength or weakness in each or across modalities or languages. This in turn might initiate further formal or informal assessments or encourage educators to use different teaching tools to promote educational and language development. The finding that three raters of varied backgrounds could use the scale reliably with little training other than reading the basic instructions and familiarizing themselves with the descriptions of the levels indicates that this goal was satisfied. However, additional research using classroom teachers as raters will be beneficial to enhance this goal further. In addition, varying the degree of training on the PMLP prior to use would be beneficial to determine whether the variance between raters might be reduced.

Overall, this study chronicles some of the challenges in developing a comprehensive and developmental measure for deaf and HH children. These include evaluating a child’s language competence versus performance, collecting a suitable language sample, and narrowing the amount of error between raters to increase reliability and validity of the PMLP. As well, the scoring criteria of the measure itself could perhaps be more stringent to capture a more precise picture of the children’s developing language skills.

The significance of developing such a measure is that it provides an opportunity for professionals to gain a picture of a deaf child’s true overall language capabilities at a specific period of time as well as to gauge development over time. These important pieces of information can help guide educators in providing the best type of teaching tools that could be individualized for a child and his or her own language needs, therefore fostering better language development and overall learning.

Appendix

Profile of Multiple Language Proficiencies

General Criteria (all Levels)

To satisfy the criterion for any level, the child should have at least half of the skills that characterize that level, most of the skills of the lower levels, and one or two of the skills from higher levels. All three categories must have a rating (i.e., if a child barely exhibits any of the skills in a particular modality, the lowest level of 1 is scored).

Note that the subscale corresponding to siE,

**Level I: Pre-Linguistic**

I-A: English.
- I-A(i): Spoken English (spE)
- I-A(ii): Signed English (siE)
  - has no command of English syntax
  - expresses him or herself through facial expressions and natural gestures
  - includes vocalizations and imitations
  - has the ability to imitate sounds or signs of adults immediately after hearing or seeing them

I-B: American Sign Language (ASL).
- expresses him or herself through facial expressions and natural gestures
- includes vocalizations and imitations
- has the ability to imitate signs of adults immediately after seeing them

**Level II: Word Combination**

II-A: English.
- II-A(i): spE
- II-A(ii): siE
  - uses one- and two-word English structures
  - verbalizes immediate experiences
  - uses phrases containing a noun and a verb, or two nouns
  - uses at least 25 recognizable words
  - indicates preference when offered a choice
  - may begin to use adjectives
  - able to answer questions correctly where it is appropriate to respond with one- or two-word answers

II-B: ASL.
- exhibits one- and two-sign structures that may be displayed in PSE or ASL
- has some success communicating using isolated gestures

**Level III: Beginning Sentence**

III-A: English.
- III-A(i): spE
- III-A(ii): siE
  - able to use English combinations of nouns, pronouns, verbs, prepositions, adjectives, conjunctions, “wh” questions, and negative markers
  - uses at least 100 recognizable words
  - spontaneously relates experiences in simple terms
  - delivers a simple message
  - able to ask and answer basic questions
  - able to construct short, novel language samples

III-B: ASL.
- able to combine isolated signs to create simple questions, stereotypical phrases, and expressions
- uses single signs and some memorized material to satisfy immediate conversation needs
- uses at least 100 recognizable signs
- delivers a simple message
- able to ask and answer basic questions
- able to construct short, novel language samples

**Level IV: Full Simple Sentence**

IV-A: English.
- IV-A(i): spE
- IV-A(ii): siE
  - able to use a variety of the five simple sentence patterns:
    - NP + VP
    - NP + be + NP
    - NP + be + ADJ
NP + VP + NP
NP + be + ADV
• describes, asks and answers basic questions, and uses social phrases
• uses sentences of four or more words
• communicates in full sentences
• asks questions beginning with the five “wh” words and is able to answer such questions
• able to say at least 500 recognizable words
• auxiliary “is/am” and “ing” (e.g., boy is running)
• uses verbs with regular past tenses

IV-B: ASL.
• describes, asks and answers basic questions, and uses social phrases
• has begun to use basic sign grammatical features, such as facial expressions for emphasis
• uses vocabulary that can meet everyday requirements yet still exhibits some difficulty
• expresses complete thoughts including four or more signs
• asks questions beginning with the five “wh” words and is able to answer them

Level V: Compound Sentence
V-A: English.
V-A(i): spE
V-A(ii): siE
• able to use adverbial phrases or clauses when combining simple sentence patterns or compound sentences but with some errors or hesitations
• uses appropriate rhythm and stress
• no longer uses circumlocution
• able to use a variety of constructions to produce clearly connected text
• uses language that is interesting and stylistically varied
• has well-developed storytelling ability
• able to shift perspectives within storytelling
• expresses ideas in more than one way without assistance
• able to give complex directions to others
• able to use approximately 1000–1500 words
• able to use negatives consistently

VI-B: ASL.
• able to narrate, describe, compare, or contrast
• still evidences circumlocution in language sample
• has enough vocabulary to discuss everyday topics
• able to relate experiences in detail when asked
• may use conjunctions such as and, but, or, then, so, and because when needed
• able to relay a story, joke, fairy tale easily
• uses larger sign in conjunction with facial and body expressions
• English word order generally not prevalent; however, its structure may be evident at certain times
• has well-developed storytelling ability using signs
• able to shift perspectives within a story
• expresses ideas in more than one way without assistance
• has strong spatial relation skills
• has strong use of facial and body expressions
• use of timelines may not yet be explicitly clear
• beginning to use repetition for plurality
• grammatical organization is largely ASL (ASL user)
• able to use both English sign and ASL vocabulary interchangeably but with some errors

**Level VII:** Early Fluency

**VII-A:** English.
**VII-A (i):** spE
**VII-A(ii):** siE

- able to use at least 1500–2000 words
- able to tell a long story with detail using a variety of constructions to produce a clearly connected discourse
- able to use slang
- uses pronouns consistently
- able to use *if* and *so*
- beginning to use word play
- handles some abstract topics with difficulty
- can give directions but often with insufficient detail

**VII-B:** ASL.

- developing larger sign vocabulary (signs not specific to English signs)
- uses timelines clearly but not always when needed
- able to give directions to others but with insufficient detail
- has begun to play with words
- to use culturally ascribed storytelling or joke techniques
- able to use slang
- able to tell a long story with detail, using a variety of constructions to produce a clearly connected discourse
- handles some abstract topics with difficulty

**Level VIII:** Full Fluency

**VIII-A:** English.
**VIII-A(i):** spE
**VIII-A(ii):** siE

- uses syntactical structures naturally and consistently without errors or hesitations.
- able to tailor language to audience
- uses vocabulary that is broad and “nativelike” with appropriate cultural reference
- able to play with language
- uses grammar that is “nativelike”
- uses paralinguistic devices (e.g., varies rhythm and stress to enhance meaning)
- describes in detail plans or events in the future
- announces topic shifts or makes topic shifts clear from context
- able to role play; can take another’s perspective
- able to give complex directions with sufficient detail

**VIII-B:** ASL.

- uses appropriate syntactical structures naturally and consistently without errors or hesitations
- able to play with language
- use of grammatical structures is mature and stylistically varied
- varies rhythm and stress to enhance meaning
- describes in detail plans or events in the future
- varies facial and body expression to stress meaning, tone, and importance during conversation
- uses clear, expressive signs
- able to invent signs
- uses repetition appropriately for plurality when needed
- has excellent command of timelines
- able to give complex directions with sufficient detail

**References**


Received December 22, 2002; revisions received April 22, 2003; accepted May 20, 2003.