



8

The QUILS in Practice

Interpreting Results Through Five Case Examples

This chapter presents five cases of children who completed the QUILS with different results. Their stories illustrate the differences between the scores of a typically developing child versus those of a child who should be recommended for follow-up assessment. These are actual cases drawn from students in the QUILS standardization study, some of whom may have had language issues. (Their identities are masked for privacy protection.) *Note:* All family income levels were identified based on the volunteered self-report of the mother's educational level.

Case 1: Screening Indicates Typical Development

Terrence is a 4-year-old (4;11) boy of mixed racial heritage. He is non-Hispanic and lives in a household with five other siblings and two parents. The family's income level was identified as low SES (based on the mother having achieved a high school education). Terrence attends an English-speaking preschool, and no languages other than English are spoken in the home. Terrence's QUILS results are shown in Table 8.1 as well as his Student Brief Report in Figure 8.1.

As displayed in Table 8.1, Terrence showed very good skills in all three areas of the QUILS: Vocabulary, Syntax, and Process. He scored above the 83rd percentile rank overall compared to other 4-year-olds. Given this profile, there is no need for follow-up language assessment.

Table 8.1. Terrence's profile on the QUILS

Area	Standard score	Percentile rank*
Vocabulary	105	73.4
Syntax	108	76.0
Process	115	90.9
Overall	108	83.8

*Compared to age peers.



Student Brief Report

Student Information

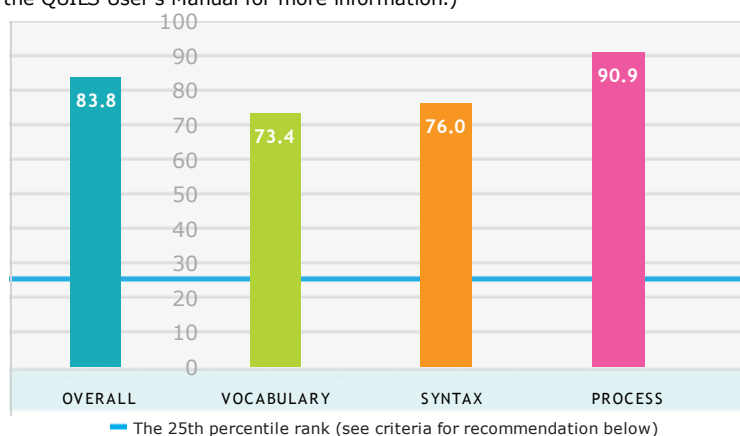
Student Name: Terrence A.
Student ID: 121214

Date of Birth: 03/10/2012
Date of Screening: 02/12/2017
Age at Screening: 4 years

Strong language skills are essential for every student's success in school and in life. The QUILS measures a student's emerging abilities in Vocabulary, Syntax, and Process and offers an overall rating. These results are expressed as standard scores and percentile ranks. (See Chapter 9 of the QUILS User's Manual for more information.)

Terrence A.'s Performance

On 02/12/2017, Terrence A.'s language skills were screened using the Quick Interactive Language Screener™ (QUILS™). The overall percentile rank of 83.8 means that Terrence A. scored as well as or better than 83.8% of 4-year-olds in the standardization sample. In addition to the overall results, standard scores and percentile ranks for each of the three areas of the QUILS were calculated. Based on these calculations, a recommendation is listed below for Terrence A.'s results.



Overall		Vocabulary		Syntax		Process	
Standard Score	Percentile Rank	Standard Score	Percentile Rank	Standard Score	Percentile Rank	Standard Score	Percentile Rank
108	83.8	105	73.4	108	76.0	115	90.9

Vocabulary area asks about words students use or understand, including ordinary things (nouns), actions (verbs), prepositions, and conjunctions.
Syntax area asks about structure of sentences including *wh*-questions, tense markers (past tense), prepositional phrases, and embedded clauses.
Process area asks about learning new words (verbs, nouns, and adjectives) and about how children use syntax, such as converting active sentences to passive sentences.

Recommendation:

Based on Terrence A.'s performance on the QUILS, Terrence A.'s language comprehension appears to be within the typical range relative to age, and no follow-up evaluation is recommended at this time.

Criteria for recommendation:

- Students with an overall percentile rank below 25 should be referred for follow-up evaluation.
- Students with a percentile rank below 25 in the Process area (regardless of the Vocabulary and Syntax scores) should be referred for follow-up evaluation.
- Students with percentile ranks below 25 in both Vocabulary and Syntax (regardless of the Process score) should be referred for follow-up evaluation.

Figure 8.1. Screenshot of Terrence's (Case 1) QUILS results from the Student Brief Report indicate typical development.

Case 2: Screening Reveals a Mixed Profile

Amelia is a 3-year-old (3;6) African American girl living with four other siblings and three adults in an English-speaking family with no significant exposure to other languages. The family is from a low SES background (based on the mother having achieved a high school education). Amelia attends an English-speaking preschool. Her profile of language comprehension on the QUILS is shown in Table 8.2 as well as her Student Brief Report in Figure 8.2.

Overall, Amelia’s language is in the low-normal range, but her profile is very uneven. Her Vocabulary score is surprisingly weak—less than the 7th percentile—especially relative to her score at a typical level in the Syntax area. Her ability to pick up and extend new words and structures (Process), however, is in the typical range for her age. The recommendation would be to wait 12 months and rescreen because her language skills and new exposure to preschool may raise her Vocabulary score into the typical range. If not, then follow-up evaluation would be recommended at that time.

Table 8.2. Amelia’s profile on the QUILS

Area	Standard score	Percentile rank*
Vocabulary	70	6.9
Syntax	101	61.5
Process	100	51.5
Overall	91	36.6

*Compared to age peers.



Student Brief Report

Student Information

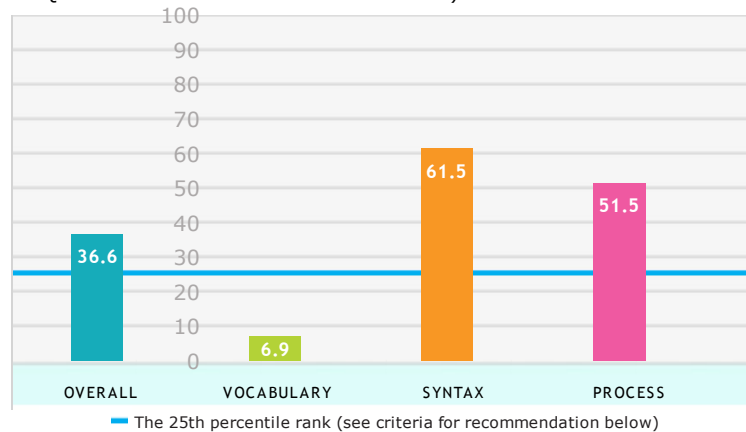
Student Name: Amelia B.
Student ID: 264

Date of Birth: 08/10/2013
Date of Screening: 02/12/2017
Age at Screening: 3 years

Strong language skills are essential for every student's success in school and in life. The QUILS measures a student's emerging abilities in Vocabulary, Syntax, and Process and offers an overall rating. These results are expressed as standard scores and percentile ranks. (See Chapter 9 of the QUILS User's Manual for more information.)

Amelia B.'s Performance

On 02/12/2017, Amelia B.'s language skills were screened using the Quick Interactive Language Screener™ (QUILS™). The overall percentile rank of 36.6 means that Amelia B. scored as well as or better than 36.6% of 3-year-olds in the standardization sample. In addition to the overall results, standard scores and percentile ranks for each of the three areas of the QUILS were calculated. Based on these calculations, a recommendation is listed below for Amelia B.'s results.



Overall		Vocabulary		Syntax		Process	
Standard Score	Percentile Rank	Standard Score	Percentile Rank	Standard Score	Percentile Rank	Standard Score	Percentile Rank
91	36.6	70	6.9	101	61.5	100	51.5

Vocabulary area asks about words students use or understand, including ordinary things (nouns), actions (verbs), prepositions, and conjunctions.

Syntax area asks about structure of sentences including *wh*-questions, tense markers (past tense), prepositional phrases, and embedded clauses.

Process area asks about learning new words (verbs, nouns, and adjectives) and about how children use syntax, such as converting active sentences to passive sentences.

Recommendation:

Based on Amelia B.'s performance on the QUILS, Amelia B.'s language comprehension appears to be within the typical range relative to age, and no follow-up evaluation is recommended at this time. Amelia B. may benefit from specific activities in Vocabulary.

Criteria for recommendation:

- Students with an overall percentile rank below 25 should be referred for follow-up evaluation.
- Students with a percentile rank below 25 in the Process area (regardless of the Vocabulary and Syntax scores) should be referred for follow-up evaluation.
- Students with percentile ranks below 25 in both Vocabulary and Syntax (regardless of the Process score) should be referred for follow-up evaluation.

Figure 8.2. Screenshot of Amelia's (Case 2) QUILS results from the Student Brief Report highlighting how an uneven or mixed profile could influence resulting recommendations.

Case 3: Screening Indicates Atypical Development

Brandon is a 3-year-old (3;9) African American boy of non-Hispanic heritage living in a household with one sibling and two parents. The family was identified as low SES (based on the mother having achieved a high school education). Brandon hears no languages other than English in the home and attends an English-speaking preschool. Brandon's QUILS results are shown in Table 8.3 as well as his Student Brief Report in Figure 8.3.

Brandon provides an interesting profile, one that should send up red flags. Although his overall score as well as his standard scores in the Vocabulary and Syntax areas are well within normal range, he is very weak in learning new words and structures, scoring in the lowest possible percentile rank in the Process area. Remarkably, he did not get a single item correct in the Process domain, but consistently chose the wrong answers. In addition to the QUILS, he was one of the children from the standardization study who also took the Auditory Comprehension Subtest of the PLS-5 (Zimmerman et al., 2011) to test for concurrent validity (see Chapter 9), and his score on the PLS-5 was only in the 12th percentile for his age. Brandon's case makes clear that the Process area adds something distinctive to a student's profile of skills, and that is why it is recommended that a child who scores poorly in the Process area alone should be given follow-up evaluation.

Table 8.3. Brandon's profile on the QUILS

Area	Standard score	Percentile rank*
Vocabulary	105	68.5
Syntax	96	40.8
Process	73	5.4
Overall	92	39.4

*Compared to age peers.



Student Brief Report

Student Information

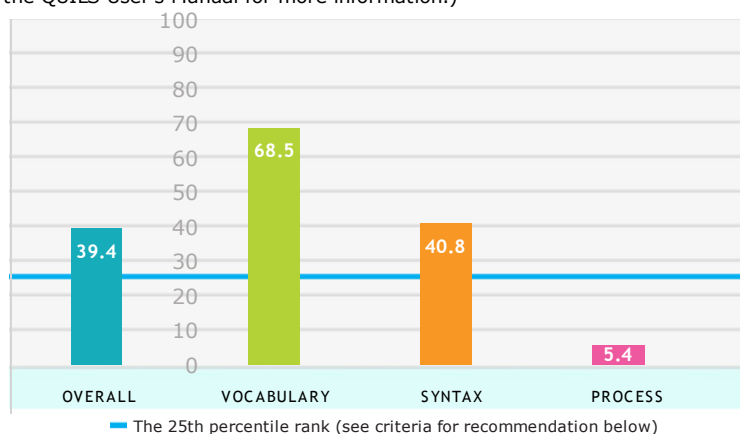
Student Name: Brandon C.
Student ID: 850

Date of Birth: 05/08/2013
Date of Screening: 02/12/2017
Age at Screening: 3 years

Strong language skills are essential for every student's success in school and in life. The QUILS measures a student's emerging abilities in Vocabulary, Syntax, and Process and offers an overall rating. These results are expressed as standard scores and percentile ranks. (See Chapter 9 of the QUILS User's Manual for more information.)

Brandon C.'s Performance

On 02/12/2017, Brandon C.'s language skills were screened using the Quick Interactive Language Screener™ (QUILS™). The overall percentile rank of 39.4 means that Brandon C. scored as well as or better than 39.4% of 3-year-olds in the standardization sample. In addition to the overall results, standard scores and percentile ranks for each of the three areas of the QUILS were calculated. Based on these calculations, a recommendation is listed below for Brandon C.'s results.



Overall		Vocabulary		Syntax		Process	
Standard Score	Percentile Rank	Standard Score	Percentile Rank	Standard Score	Percentile Rank	Standard Score	Percentile Rank
92	39.4	105	68.5	96	40.8	73	5.4

Vocabulary area asks about words students use or understand, including ordinary things (nouns), actions (verbs), prepositions, and conjunctions.
Syntax area asks about structure of sentences including *wh*-questions, tense markers (past tense), prepositional phrases, and embedded clauses.
Process area asks about learning new words (verbs, nouns, and adjectives) and about how children use syntax, such as converting active sentences to passive sentences.

Recommendation:

Based on Brandon C.'s performance on the QUILS, Brandon C.'s language comprehension appears to be outside the typical range relative to age, and follow-up evaluation is recommended at this time. Brandon C. may benefit from specific activities in Process.

Criteria for recommendation:

- Students with an overall percentile rank below 25 should be referred for follow-up evaluation.
- Students with a percentile rank below 25 in the Process area (regardless of the Vocabulary and Syntax scores) should be referred for follow-up evaluation.
- Students with percentile ranks below 25 in both Vocabulary and Syntax (regardless of the Process score) should be referred for follow-up evaluation.

Figure 8.3. Screenshot of Brandon's (Case 3) QUILS results from the Student Brief Report indicate atypical development in the Process area (learning new words and structures). Recommendations include follow-up evaluation.

Case 4: Screening Indicates Atypical Development

Emma is a 3-year-old (3;6) girl living with both her parents and attending an English-speaking low-income Head Start program. She is of Hispanic heritage but has no exposure to languages other than English and is monolingual. Emma’s QUILS results are depicted in Table 8.4 as well as her Student Brief Report in Figure 8.4.

Emma’s overall standard score of 88 places her in the 28th percentile, just over the cutoff (25th percentile rank) recommended for follow-up assessment. However, her profile reveals that she has weak skills in both the Syntax (20th percentile) and the Vocabulary (22nd percentile) areas for her age group. Despite performing in the average range (50th percentile) in the Process area with an overall score above the cutoff, her poor performance on *both* the Vocabulary and Syntax areas places her in the category of risk. The recommendation would be for follow-up evaluation by a speech-language pathologist.

Table 8.4. Emma’s profile on the QUILS

Area	Standard score	Percentile rank*
Vocabulary	85	21.5
Syntax	83	20.0
Process	100	51.5
Overall	88	27.7

*Compared to age peers.



Student Brief Report

Student Information

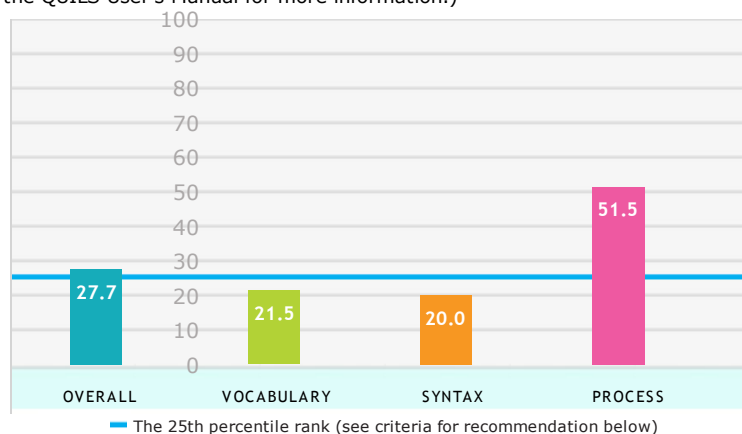
Student Name: Emma D.
Student ID: 434

Date of Birth: 08/05/2013
Date of Screening: 02/12/2017
Age at Screening: 3 years

Strong language skills are essential for every student's success in school and in life. The QUILS measures a student's emerging abilities in Vocabulary, Syntax, and Process and offers an overall rating. These results are expressed as standard scores and percentile ranks. (See Chapter 9 of the QUILS User's Manual for more information.)

Emma D.'s Performance

On 02/12/2017, Emma D.'s language skills were screened using the Quick Interactive Language Screener™ (QUILS™). The overall percentile rank of 27.7 means that Emma D. scored as well as or better than 27.7% of 3-year-olds in the standardization sample. In addition to the overall results, standard scores and percentile ranks for each of the three areas of the QUILS were calculated. Based on these calculations, a recommendation is listed below for Emma D.'s results.



Overall		Vocabulary		Syntax		Process	
Standard Score	Percentile Rank	Standard Score	Percentile Rank	Standard Score	Percentile Rank	Standard Score	Percentile Rank
88	27.7	85	21.5	83	20.0	100	51.5

Vocabulary area asks about words students use or understand, including ordinary things (nouns), actions (verbs), prepositions, and conjunctions.
Syntax area asks about structure of sentences including *wh*-questions, tense markers (past tense), prepositional phrases, and embedded clauses.
Process area asks about learning new words (verbs, nouns, and adjectives) and about how children use syntax, such as converting active sentences to passive sentences.

Recommendation:

Based on Emma D.'s performance on the QUILS, Emma D.'s language comprehension appears to be outside the typical range relative to age, and follow-up evaluation is recommended at this time. Emma D. may benefit from specific activities in Vocabulary and Syntax.

Criteria for recommendation:

- Students with an overall percentile rank below 25 should be referred for follow-up evaluation.
- Students with a percentile rank below 25 in the Process area (regardless of the Vocabulary and Syntax scores) should be referred for follow-up evaluation.
- Students with percentile ranks below 25 in both Vocabulary and Syntax (regardless of the Process score) should be referred for follow-up evaluation.

Figure 8.4. Screenshot of Emma's (Case 4) QUILS results from the Student Brief Report indicate atypical development in Syntax and Vocabulary. Recommendations include follow-up evaluation by a speech-language pathologist.

Case 5: Screening Reveals Possible Language Delay

Kevin is a 5-year-old (5;5) white non-Hispanic boy living in a monolingual English-speaking household with two adults and one other sibling. His family is mid-SES (based on the mother having attended college), and his mother is the primary caregiver. He attends an English-speaking preschool. Kevin’s QUILS results are given in Table 8.5 as well as his Student Brief Report in Figure 8.5.

Kevin’s Vocabulary score is well below the norm for his peers, being only at the 8th percentile rank compared to other 5-year-olds. His Syntax and Process scores are also poor on this screening. Figure 8.6 illustrates Kevin’s profile through a sample of representative responses to the screener in all three areas.

The recommendation is that Kevin should receive a thorough diagnostic evaluation by a speech-language pathologist on the basis of this profile.

Table 8.5. Kevin’s profile on the QUILS

Area	Standard score	Percentile rank*
Vocabulary	79	8.4
Syntax	85	16.0
Process	87	21.4
Overall	81	13.7

*Compared to age peers.



Student Brief Report

Student Information

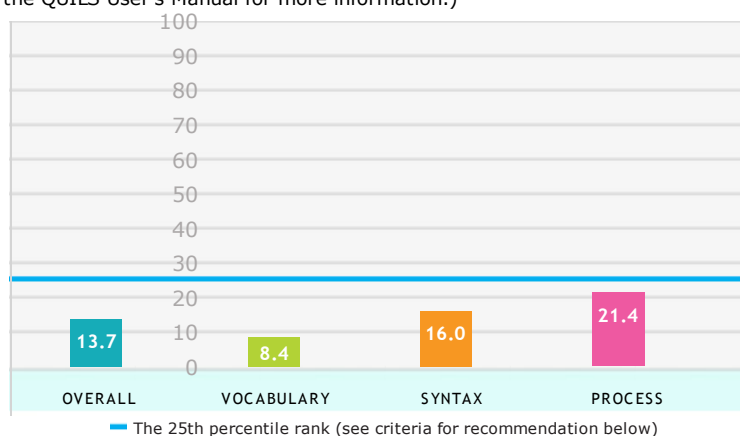
Student Name: Kevin E.
Student ID: 667

Date of Birth: 09/03/2011
Date of Screening: 02/12/2017
Age at Screening: 5 years

Strong language skills are essential for every student's success in school and in life. The QUILS measures a student's emerging abilities in Vocabulary, Syntax, and Process and offers an overall rating. These results are expressed as standard scores and percentile ranks. (See Chapter 9 of the QUILS User's Manual for more information.)

Kevin E.'s Performance

On 02/12/2017, Kevin E.'s language skills were screened using the Quick Interactive Language Screener™ (QUILS™). The overall percentile rank of 13.7 means that Kevin E. scored as well as or better than 13.7% of 5-year-olds in the standardization sample. In addition to the overall results, standard scores and percentile ranks for each of the three areas of the QUILS were calculated. Based on these calculations, a recommendation is listed below for Kevin E.'s results.



Overall		Vocabulary		Syntax		Process	
Standard Score	Percentile Rank	Standard Score	Percentile Rank	Standard Score	Percentile Rank	Standard Score	Percentile Rank
81	13.7	79	8.4	85	16.0	87	21.4

Vocabulary area asks about words students use or understand, including ordinary things (nouns), actions (verbs), prepositions, and conjunctions.
Syntax area asks about structure of sentences including *wh*-questions, tense markers (past tense), prepositional phrases, and embedded clauses.
Process area asks about learning new words (verbs, nouns, and adjectives) and about how children use syntax, such as converting active sentences to passive sentences.

Recommendation:

Based on Kevin E.'s performance on the QUILS, Kevin E.'s language comprehension appears to be outside the typical range relative to age, and follow-up evaluation is recommended at this time. Kevin E. may benefit from specific activities in Vocabulary, Syntax, and Process.

Criteria for recommendation:

- Students with an overall percentile rank below 25 should be referred for follow-up evaluation.
- Students with a percentile rank below 25 in the Process area (regardless of the Vocabulary and Syntax scores) should be referred for follow-up evaluation.
- Students with percentile ranks below 25 in both Vocabulary and Syntax (regardless of the Process score) should be referred for follow-up evaluation.

Figure 8.5. Screenshot of Kevin's (Case 5) QUILS results from the Student Brief Report indicate a possible language delay.

In the Syntax area, he answered none of the past tense items correctly.

Past Tense	6	Where was the boy raking the leaves?	Left side	Middle	Right side		0
	7	Where was the hat?	Yellow hat on girl	Hat in air	Empty boy's head		0
	8	Where was the girl painting the fence?	Brown fence	Girl painting fence	Fence painted white		0
	9	Where was the wheel?	Red car without wheel	Wheel	Blue car with wheel		0

In the Process area, he missed about half the items, failing to extend to new examples.

Noun Learning	32	Show me the pluff on the table.	Violin sitting on a black table	Instrument sitting on brown square table	Instrument	Bowl sitting on a round table	
		Can you show me another pluff?	String instrument	Hat sitting on a table	Instrument with teal coloring	Trumpet	0
	33	Show me the merf.	Pigeon	Goose	Tool with wheels on it	Green bird	
		Can you show me another merf?	Green bird	Animal with spikes	Green/orange bird	Brown bird	0
	34	Show me the taff.	Green circular object	Cream-colored flower with a green center	Rose	Daisy	
		Can you show me another taff?	Sunflower	Yellow flower	Blue ribbon forming an organic shape	Pink flower with a green center	0
	35	Show me the gelp with the hat.	Snowmobile	Cat wearing a blue hat	Lizard wearing a tan hat	Dog wearing a red hat	
		Can you show me another gelp?	Pig wearing a cowboy hat	Blue and yellow polka-dotted lizard	Purple animal	Horse	0

In the Vocabulary area, he did not know any simple spatial prepositions, although most 5-year-olds do.

Prepositions	36	Show me the doll is above the present.	Doll sitting on a shelf below present	Doll sitting on a shelf above present	Doll sitting behind present, on the same shelf		0
	37	Find the ball is behind the pail.	Ball is above the pail	Ball is behind the pail	Ball is below the pail		0
	38	Show me the apples are in front of the bowls.	Apples are in between bowls, but not in bowls	Apples are behind the bowls	Apples are in front of the bowls		0
	39	Find the firefighters are between the chairs.	Firefighters are between the chairs	Firefighters are in front of the chairs	Firefighters are behind the chairs		0
	40	Find the umbrella is below the swing.	Umbrella is on the swing	Umbrella is above the swing	Umbrella is below the swing		0

He missed all of the items about clause conjunctions, such as *after* and *because*.

Conjunctions	46	Who ate the food before the cat jumped on the table?	Gray cat	Tan dog	Black dog		0
	47	Who came down the slide after the school bus arrived?	School bus	Boy in a green shirt	Girl in a blue shirt		0
	48	Who picked up the cake because the baby ate it?	Mother	Boy	Baby		0

Figure 8.6. Screenshots of sample responses that could result in scores similar to Kevin's performance. Blue, bolded cells indicate the correct answer, and yellow cells indicate the student's answer. Yellow bolded cells indicate when the student chose the correct answer.

A new tool for screening children's language skills in early childhood



AT A GLANCE:

What is the age range?

Ages 3 through 5 years

In what settings is it used?

Early childhood settings: public and private preschools, Head Start, child care programs

Who completes it?

The child, with minimal supervision from a teacher, paraprofessional, classroom aide, parent, or other classroom volunteer

How is it administered?

On any tablet, laptop, or desktop with touchscreen technology and Internet access

Who uses the results?

Early childhood educators and administrators, reading specialists, literacy coaches, speech-language pathologists, psychologists

How long does it take?

Approximately 15–20 minutes

What is the number of items on the screener?

48 items

What is the research base?

Psychometric studies have established the QUILS' reliability and validity and ensured that all items are culturally neutral

By Roberta Michnick Golinkoff, Ph.D., Jill de Villiers, Ph.D.,
Kathy Hirsh-Pasek, Ph.D., Aquiles Iglesias, Ph.D., & Mary Sweig Wilson, Ph.D.

Early identification is the first step to helping young children with language delays improve their skills—proficiencies that are so important to later reading success. But how do you find the children who might need help? It's simple with the Quick Interactive Language Screener™ (QUILS™), a web-based screening tool that helps you evaluate whether children are making language progress appropriate for their age group.

Administered during the regular day, typically one child at a time in a quiet area of the classroom, the QUILS is a helpful addition to kindergarten entry assessments (KEAs) and an ideal tool for use in individual classrooms or centers. The format ensures standardized delivery for each child, while automatically generated scores save time for busy teachers—providing cut scores by age level, standard scores, percentile ranks, and reports to share with colleagues and families. And this game-like interactive measure is so much fun, children might even ask if they can do it again!

SCREEN IN 3 KEY AREAS:

Vocabulary

This area looks at word knowledge. Do children know the words they hear on the QUILS?

Syntax

This area looks at how words go together in sentences. For example, how do children understand questions that begin with where, when, and how?

Process

This area looks at skill in learning new words and grammar structures. How good are children at learning language items when they are new?



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Your annual QUILS subscription gives you access to a website that includes the screener; an online User's Manual and Quick Start Guide; student, parent, and group reports; and activities and tips that support language development.

Learn more, at www.myquils.com