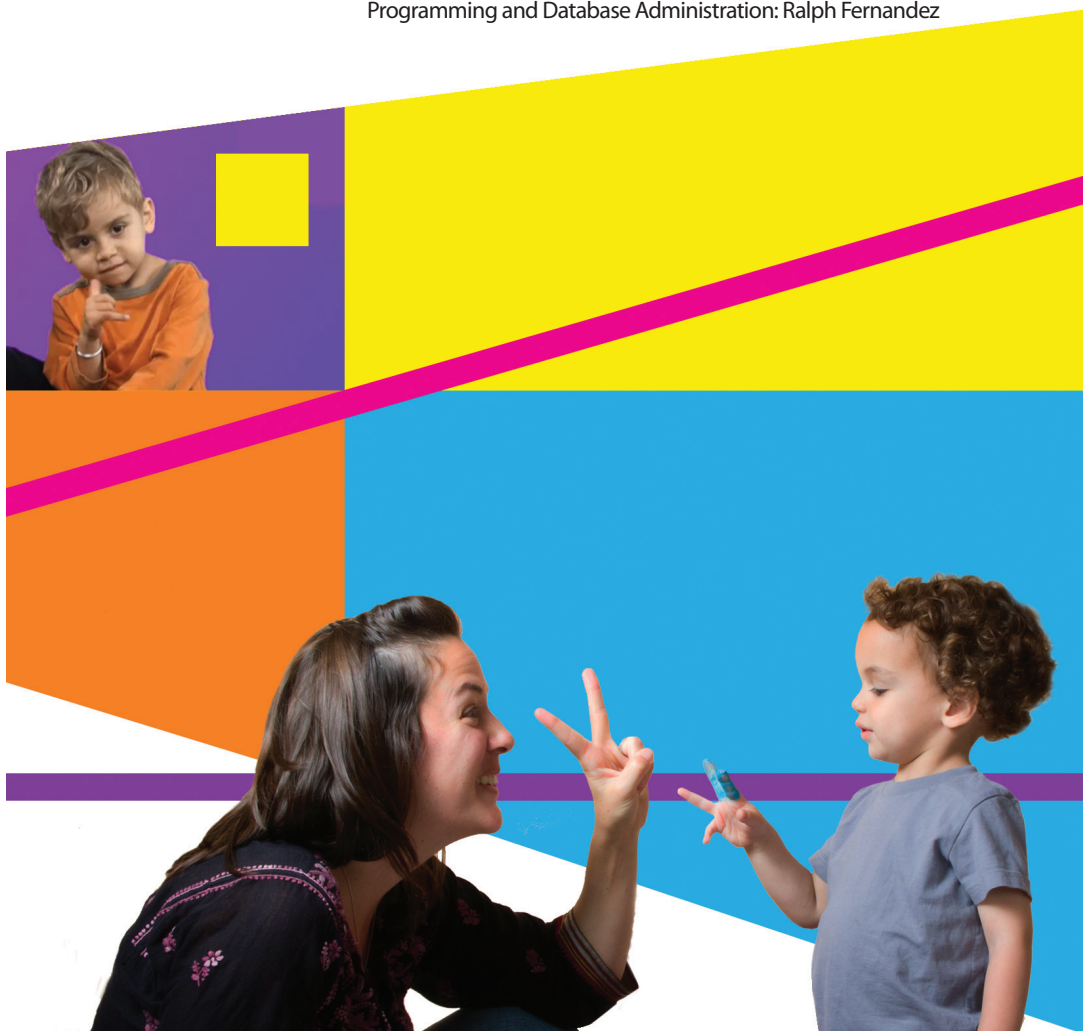# The Visual Communication and Sign Language Checklist: Online (VCSL:O)

Part of the VL2 Online Assessment System

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The Early Education and Literacy Lab (EL2), one of four Resource Hubs of the National Science Foundation/Gallaudet University Science of Learning Center on Visual Language and Visual Learning (VL2), is proud to present The Visual Communication and Sign Language Checklist: Online (VCSL:O), a tool for assessing American Sign Language (ASL) development in visual language learners ages birth to five.

Standardized with a national sample of deaf children from signing families and first published as a paper-pencil checklist in 2013[1], the VCSL:O employs state-of-the-art online assessment technologies that provide for increased reliability, ease of use, automated scoring and report generation, and data storage and retrieval.

The VCSL:O has great utility for tracking language development for signing infants, toddlers, and preschoolers. Through its tracking of children's learning of ASL, it can help identify gaps in development and provide a means for tailoring individual learning activities using skills that are emerging or have already been mastered.

The VCSL:O is a part of the VL2 Online Assessment System[2], a cross-platform, secure, web-based tool for designing, administering, and scoring tests that require ASL (or other video-based) prompts and response options. The tool was created to help test developers and researchers produce tools that either assess ASL skills or use ASL as the language of test administration.

Every item in the VCSL: O has a link to a video of an age-appropriate child demonstrating the checklist item.

[1]Simms, L., Baker, S., & Clark, M.D. (2013). The standardized Visual Communication and Sign Language Checklist for signing children. Sign Language Studies, Volume 14, 101-124.

[2]Allen, T. & Fernandez, R. (2017). The VL2 Online Assessment System. http://vl2.gallaudet.edu/assessment-system

What is the VCSL?

The Visual Communication and Sign Language Checklist (VCSL) is the world's first and only standardized assessment tool for measuring ASL growth and development for deaf and hard of hearing children from birth to age five. The VCSL addresses the national need for a test that can accurately measure ASL development and determine whether children are meeting visual language milestones that correspond to spoken language milestones achieved by hearing children.

The VCSL allows parents and educators to track deaf and hard of hearing children's language acquisition. It also enables teachers to create individualized learning plans to support their students' growth. Results from the checklist can be used to ensure that children are acquiring sign language at age-appropriate times.

The VCSL was developed and modified from already-existing ASL checklists. To create norms, the VCSL was administered to a national sample of deaf children from signing families. It can be used with a broad range of deaf children, including bilingual/bimodal children with hearing aids or cochlear implants who are learning to listen/speak and sign.

The VCSL fills a gap in early intervention tools for deaf babies and toddlers.

The VCSL fills a gap in early intervention tools for deaf babies and toddlers. In the absence of standardized visual language assessments, teachers often modify English assessments that are designed to measure spoken language. Because ASL is a visual language with a unique grammar, structure and vocabulary, using English assessments to test a child's visual language skills will most often produce results that are misinterpreted, leading to missed opportunities for appropriate early language support. Inadequate language support in the pre-school years inevitably leads to language delays that adversely impact academic performance and social-emotional development.
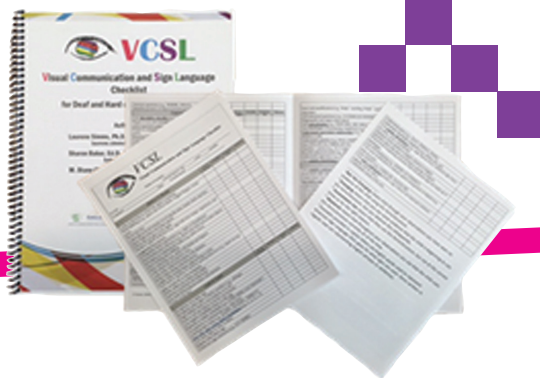
VCSL: Now Online!

The VCSL:O, a secure and confidential online version of the VCSL, employs many state-of-the-art technologies to provide educators and parents with expertly prepared reports of their children's sign development. These include:

The entire VL2 Assessment System is web-based and can be deployed on all platforms.

✔ **Adaptive testing**
In order to most efficiently determine a child's developmental level in signing, the VCSL:O selects each item for rating, based upon what it has already learned about the skill levels of the child. It uses the child's age as a starting point.

✔**Computer scoring**
Based upon the pattern of ratings, the computer calculates all score information, including basal and ceiling levels of performance, and using information from the standardization of the items, calculates an age range representing the developmental level of the child.

✔**Video examples with age-appropriate signing models**
The VCSL:O provides links to video clips for each of the 114 checklist items. Each clip demonstrates the behavior of the signing skill represented by the item using children who are at an appropriate age for the skill being demonstrated. The videos help ensure both the validity and reliability of VCSL ratings.

✔**Automated informed consent**
When children are registered into the secure and confidential online assessment environment, parents are automatically sent via email an informed consent document that allows them to indicate how their child's results may be used by their schools, by test developers, and by researchers in the future.

✔ **Using an e-signature and return email, parents can specify one of three levels of data release for their children:**
1) The child can be assessed, but no data may be retained in the VCSL:O database.
2) The child can be assessed and results retained, but they are only to be released to the test authors and to VL2 staff for the purpose of test improvements.
3) The data may be archived and released to researchers studying early language development.

✔**Multiple platforms**
The entire VL2 Assessment System is web-based and can be deployed on all platforms, including Windows, OS, iOS, Android, etc. Internet service is required for use.

✔ **Background family, child, and school data**

The VCSL:O includes a set of family, child, and school background questions detailing characteristics of the child's early life that have been shown in previous research to impact language development. Responses are permanently stored with student ratings data and can be useful for contextualizing a child's developmental progress.

✔ **Input and storage of evaluator comments and recommendations**

Evaluators can add comments to their ratings directly online. These are stored with student data and can add valuable information and recommendations when ratings are being reviewed and shared with parents and educators.

✔ **Automatically captures item, background, child, and score data for later research or reporting purposes**

All data from the VCSL:O is captured for later retrieval, reporting, and research—and made available only with parental consent. The stored data (the children's names are never stored and released) has the potential for broadening our understanding of language acquisition and its role in child development.

✔ **Automated reports generated in PDF format for sharing and storing with child records**

Automatically generated score reports provide a full record of ratings, scores, background information, and evaluator comments. These reports are individually tailored to each child based on their results, and indicate areas of strength as well as those that need improvement.

Uses complex handshapes (e.g., X, R, M, N, T, 8)

Forms two-sign sentences (e.g., EAT MORE)

Rating and Scoring

In the evaluation process, children are rated on each item according to their level of mastery:

- *Not Yet Emerging*
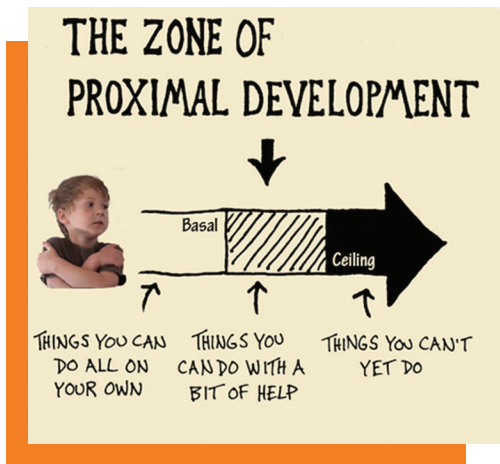- *Emerging*
- *Inconsistent Use*
- *Mastered*

Each item tested has a pre-set developmental range based on the age at which a given percentage of children achieved mastery during the national standardization project. Specifically, the VCSL:O reports three percentile levels for each item:

- *25th percentile:* the age at which 25% of children from signing families demonstrate mastery of an item
- *50th percentile:* the age at which 50% demonstrate mastery
- *75th percentile:* the age at which 75% demonstrate mastery

If children are acquiring language skills following a "typical" pattern, they will consistently demonstrate mastery of items whose developmental ranges are below their chronological ages, and fail to demonstrate mastery for items above their chronological ages. Based on the actual ratings, the VCSL:O is able to provide estimates of the child's developmental level.

Additionally, the VCSL:O determines both Basal and Ceiling Scores.   The Basal Score identifies the developmental level below which the child always demonstrates mastery. The Ceiling Score identifies the developmental level above which the child never demonstrates mastery. The range between the Basal and Ceiling Scores represent skills where children demonstrate inconsistent mastery. This area between the Basal and Ceiling Scores (also called the "Zone of Proximal Development or ZPD")[3] provides, for individual children, insights into needed areas of instruction and guidance.

THE ZONE OF PROXIMAL DEVELOPMENT

Basal
Ceiling

THINGS YOU CAN DO ALL ON YOUR OWN
THINGS YOU CAN DO WITH A BIT OF HELP
THINGS YOU CAN'T YET DO

[3] Vygotsky, L. (1987). Zone of proximal development. Mind in society: The development of higher psychological processes, 5291,157.

Sample Report: Grid Showing the Evaluator's Actual Ratings

3 YEARS TO 4 YEARS	Not Yet Emerging	Emerging	Inconsistent Use	Mastered
Uses plain verbs to connect subjects and objects (e.g., HE LIKE ICE CREAM)				X
Answers questions (e.g., HOW, WHY, DO++)				X
Uses verb modification (e.g., Walk-strolling; Walk-quickly; Walk-long time)		X		
Uses rhetorical questions (e.g., FATHER GO WHERE? WORK)				X
Fingerspells own name when asked			X	
Uses topicalization (e.g., HOT DOG, ME LIKE)			X	
Uses handshapes of increasing complexity (e.g., W, D, P, 3, V, H)		X		
Understands part/whole relationships (e.g., ARM/BODY, WHEEL/CAR)		X		
Understands quantity (e.g., FULL, EMPTY, SOME)			X	
Uses TWO-OF-US, THREE-OF-US		X		
Uses classifier + action (e.g., CL:V Man climbing up a pole)		X		
Describes physical needs (e.g., ME HUNGRY)				X
Understands opposites (e.g., COLD/HOT, BIG/LITTLE)	X			
Uses complex handshapes (e.g., X, R, M, N, T, 8)	X			

Pricing and Purchasing

Purchases of the VCSL Paper–Pencil version and e-tickets for access to the VCSL:O can be made through the VL2 Products page at http://vl2.gallaudet.edu/products. A single manual costs $149, plus individual rating forms that are used for hand administration and scoring cost $1.10 each.
VCSL:O assessments cost $10 for each assessment.

Discounts for bulk-purchases of both the manuals and e-tickets available:

VCSL Paper-Pencil: Price Chart		VCSL-Online: Price chart	
Number of manuals ordered	Price per manual	Number of tickets ordered	Price per ticket
1-9	$149	1-9	$10
10-19	134	10-19	$9
20-29	119	20-29	$8
30-39	104	30-39	$7
40-49	89	40-49	$6
50+	74	50+	$5

The purchase of e-tickets for the VCSL:O will automatically register the purchaser as an evaluator in the system. New evaluators will be sent a link requesting that they go online and select a password, ensuring the confidentiality of all individual assessments.

For assistance with purchasing, or credit card ordering, contact:
Julian Kirkland, 202-651-5866. Email: julian.kirkland@gallaudet.edu
FAX: 202-448-7513

For more information about the VCSL:O, email vcsl@gallaudet.edu or visit http://vl2.gallaudet.edu/resources/vcsl/.

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Credits:
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