What is the Virginia Language & Literacy Screening System?

VKRP includes a coordinated set of assessments that measure a student's skills in early literacy (through Virginia Literacy Partnerships), mathematics, self-regulation, and social skills. Virginia Literacy Partnerships collects data using the Virginia Language and Literacy Screening System (VALLSS) and includes the Virginia Language & Literacy Screener: Pre-K (VALLS: Pre-K) and the Virginia Language & Literacy Screener: Kindergarten (VALLS: Kindergarten). VALLS: Pre-K measures early language and literacy skills for 3- and 4-year-old children. VALLS: Kindergarten assesses important language and literacy fundamentals that are predictive of future reading success. Both measures have fall, mid-year, and spring assessment periods.

More information regarding the VALLSS can be found on the Virginia Literacy Partnerships' (VLP) [website](#).

What is the EMAS?

The Early Mathematics Assessment System (EMAS) is a reliable and valid research-based assessment of early mathematical thinking that draws on modern cognitive science as well as developmental and educational research. Created by Dr. Herb Ginsburg and colleagues at Teachers College, Columbia University[1], and expanded and adapted by researchers at CASTL, the EMAS is designed to measure a broad range of mathematical content in pre-kindergarten and kindergarten.

EMAS at a glance

- Teachers administer the assessment to students individually, using a flipbook and manipulatives.
- The assessment takes approximately 20–25 minutes per student to administer.
- Items are designed to capture a wide range and variety of early mathematics skills.
- It uses hands-on materials to engage students and to help teachers observe students' thinking.
- The skills and knowledge assessed with the EMAS align, but do not perfectly correspond with Virginia's Early Learning and Development Standards (ELDS; 2021), Virginia Standards of Learning (SOL; 2023), and Clements and Sarama's Mathematics Learning Trajectories (2009)[2].
- The EMAS is not an SOL assessment.
- It is given in the fall and spring of pre-kindergarten and kindergarten, with the option of giving the EMAS at the mid-year time point.

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[1] Ginsburg, H. P., Pappas, S., & Lee, Y. (2010). Early Mathematics Assessment System. An unpublished assessment measure created as part of the NIH supported project Computer Guided Comprehensive Mathematics Assessment for Young Children (Project number 1 RO1 HD051538-01).

[2] Clements, D. H., & Sarama, J. (2009). Learning and teaching early math: The learning trajectories approach. New York: Routledge

What skills are assessed with the EMAS?

The EMAS focuses on key foundational mathematics skills that set students on a successful early mathematics trajectory. The EMAS is comprised of four subdomains: Geometry, Patterning, Numeracy, and Computation. The number of items in each subdomain varies based on the time of year the assessment is given and differs in pre-kindergarten and kindergarten.

Module 1	Module 2	Module 3	Module 4
Geometry	Patterning	Numeracy	Computation
• Shape Recognition • Shape Matching • Shape Properties • Composing and Decomposing Shapes • Disembedding Shapes	• Imitating Patterns • Recognizing Patterns • Reproducing Patterns • Extending Patterns • Creating Patterns • Fixing Patterns • Translating Patterns	• Recognizing Quantities • Counting and Cardinality • Subitizing • Comparing and Ordering Numbers • Composing and Decomposing Numbers • Recognizing and Writing Numerals • Changes in Sets • Equipartitioning (Sharing Fairly)	• Addition • Subtraction • Part-Part-Whole • Fractions

What is the Child Behavior Rating Scale?

The Child Behavior Rating Scale (CBRS; Bronson et al., 1990) is a teacher report measure of children's self-regulation and social skills.

- **Self-regulation skills**: skills that support children to manage their attention, emotions, and behaviors to adapt to the demands of the school environment (e.g., listen to others, follow expectations and multi-step directions, and stay focused on tasks).
- **Social skills**: skills that support children to successfully navigate interactions and build relationships with peers and adults (e.g., cooperate in a group, express thoughts and emotions, and resolve conflicts in a positive way).

The Virginia Kindergarten Readiness Program (VKRP) uses the CBRS to measure these two sets of skills because it has been proven to be reliable and valid across culturally diverse contexts.

CBRS at a glance

- The CBRS is a short rating scale that teachers complete outside of instructional time.
- It assesses a teacher's perception of a child's behavior with other children, adults, and materials and tasks in the classroom.
- It includes a set of 17 items that are completed using a rating scale from one to five to determine the frequency of certain behaviors.
- It takes approximately one to three minutes to complete per child using the online system.
- It is completed both in the fall and spring of pre-kindergarten and kindergarten with an option of assessing at mid-year.

CBRS – Mental Health Well-Being Items

Understanding students' social-emotional skills and mental health well-being can help teachers, schools, programs, and divisions better individualize support for students' developmental needs. Teachers also report on five items that focus on students' mental health well-being. There is also an item that allows teachers to indicate whether they have concerns about a student's mental health. These items are designed to provide standardized information about teacher perceptions of students' mental health well-being. This information can help facilitate conversations between teachers, instructional leaders, and families on how to best support students.