ELS

EARLY LEARNING SCALE

Preschool Assessment

Authentic

- Observation-based assessment
- Easy to integrate into everyday classroom activities

Flexible

- Aligns with any preschool curriculum
- Appropriate for all students

Manageable

- Practical for teachers of all experience
- Data collection is meaningful and simple

Economical

- Sophisticated digital resources and tools enhance teacher productivity
- Online self-paced eLearning modules lower cost of PD
- Efficient systems and fair pricing provide lowest total cost of ownership

www.myelsonline.org

NIEER: National Institute for Early Education Research

THE CENTER
Resources for Teaching and Learning

About NIEER

An affiliate of Rutgers, the State University of New Jersey, the *National Institute for Early Education Research (NIEER)* conducts and communicates research to support high-quality, early childhood education. In addition, *NIEER* offers professional development as well as independent research-based advice and other technical assistance throughout the United States.

About THE CENTER

Nationally recognized for its many contributions to education from early through adult learning, *The Center: Resources for Teaching & Learning* provides a wide range of professional development services and instructional resources for educators. In addition, *The Center* specializes in the development of technology systems designed to automate data collection & reporting with the goal of improving academic outcomes for all learners.

Assessment doesn't have to be overwhelming.

Introducing the ELS.

In this era of standards and accountability, we understand the anxiety educators feel when they hear the word "assessment." But by focusing on key aspects of learning, assessment can be a practical tool for understanding a child's development and informing instruction. As the following pages will show, the ELS (Early Learning Scale) provides teachers & administrators with the tools they need to assess *all* students—in a concise, manageable manner that uses rich data to improve learning and quality of instruction at the same time.

Shannon Riley-Ayers, Ph.D.
Lead Author of the ELS
NIEER

Why Choose the ELS?

It's Authentic

The ELS is an informal, observation-based assessment that measures children's performance over time and in the context of typical, daily activities.

By assessing performance in real classroom situations over three scoring cycles annually, the ELS makes it possible for educators to effectively:

- Assess progress toward early learning standards
- Inform teaching and plan instruction
- Communicate with parents & caregivers

It's Flexible

The ELS is not specific to any curriculum—making it a great fit for almost any early learning program designed for 3- to 5-year-olds. So, who is the ELS for?

- Typically developing children
- Children with special needs
- Advanced children
- English language learners

It's Manageable

Designed specifically for teachers of all levels of experience, the ELS measures 10 key items across three domains.

The domains of the ELS are Math/Science, Social-Emotional/Social Studies, and Language and Literacy. The items within each domain (see pages 10-11) have been carefully selected based on the following criteria:

- They are measurable
- They develop on a continuum
- They are critical to present and future learning

The ELS also includes the Arts & Physical Development in the collection of data, but does not score on a continuum for these domains.

It's Economical

By emphasizing authenticity, flexibility, manageability and efficient use of technology, the ELS aims to optimize the value of teacher time spent collecting and analyzing evidence with the instructional value of the student information produced. Furthermore, its not-for-profit developers are committed to provide a high quality assessment system at a price preschools can afford.

The Research

The ELS

Drawing on extensive early childhood research and longitudinal studies from over 75 authors and experts in the field, the ELS is a systematic assessment used to assess children's progress toward learning standards and expectations, including the *Head Start Child Development and Early Learning Framework*.

Rationales

The ELS guides instruction along a developmental continuum

A primary function of assessment is to guide instructional decisions in the classroom—a component of any high-quality early childhood program (*National Association for the Education of Young Children* and *National Association of Early Childhood Specialists in State Departments of Education*, 2009).

The ELS is a systematic assessment that measures progress over time

Effective assessment requires teachers to observe children over time and in varied situations—in which educators interact with students while simultaneously observing their behavior to assess what each child is capable of doing (Jablon, Dombro, and Dichtelmiller, 2007).

The ELS is an authentic, observation-based assessment

Performance-based assessments are important for young children in particular because performance can vary widely from one day to the next. As such, performance-based assessments are able to capture children's skills and knowledge in real experiences over time. This manner of assessment compares children to themselves, focusing on their strengths and interests (Riley-Ayers, Stevenson-Garcia, Frede, and Brennemann, 2011).

The ELS helps educators evaluate program effectiveness

The data for individual children can be aggregated to examine the needs of a program or center as a whole (National Research Council, 2008). Professional development interventions, materials or other supports can then be put into place based on these findings.

Reliability

Teacher reliability was examined with 125 educators trained in the use of the ELS. Inter-rater agreement was determined by comparing participants' scores on data to the true scores agreed upon by experts in the field. The average inter-rater reliability for this sample was 76%, which is above that or comparable to other highly regarded performance-based assessments.

Validity

The statistical measure of Cronbach's alpha demonstrated high internal consistency at .91 for the ELS. Concurrent validity was examined using the *Early Literacy Skills Assessment* (DeBruin-Parecki, 2005) and the *Child Math Assessment* (Klein & Starkey, 2006). Appropriate levels of correlation were found between these measures and the ELS for the 285 children assessed.

The Assessment Process

Assessment and instruction are truly interrelated and connected.

Watch and listen as a participant-observer—looking for demonstrations of skills and knowledge across the three domains.

Utilize the assessment process to inform teaching, target the needs of individual students and scaffold future learning.

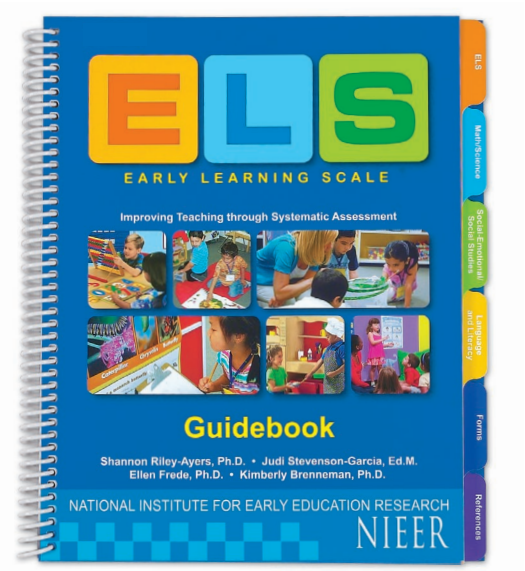
Record and reflect on how student behaviors indicate growth and progress.

Use data to plan new activities, individualize instruction, provide new materials, and guide interaction with children.

Evaluate and score performance three times a year—but make analysis an ongoing aspect of instruction.

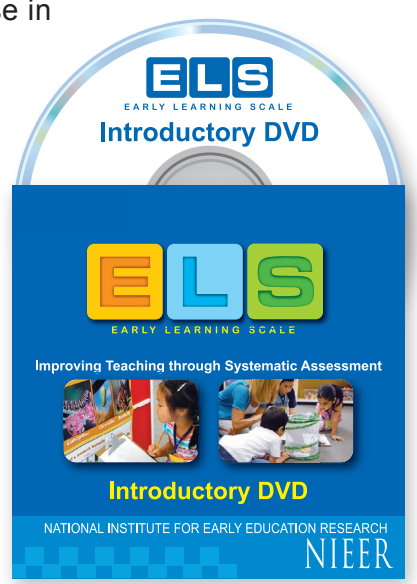
The ELS makes it easy to collect rich data that can be used to make accurate evaluations and inform teaching.

Components of the ELS



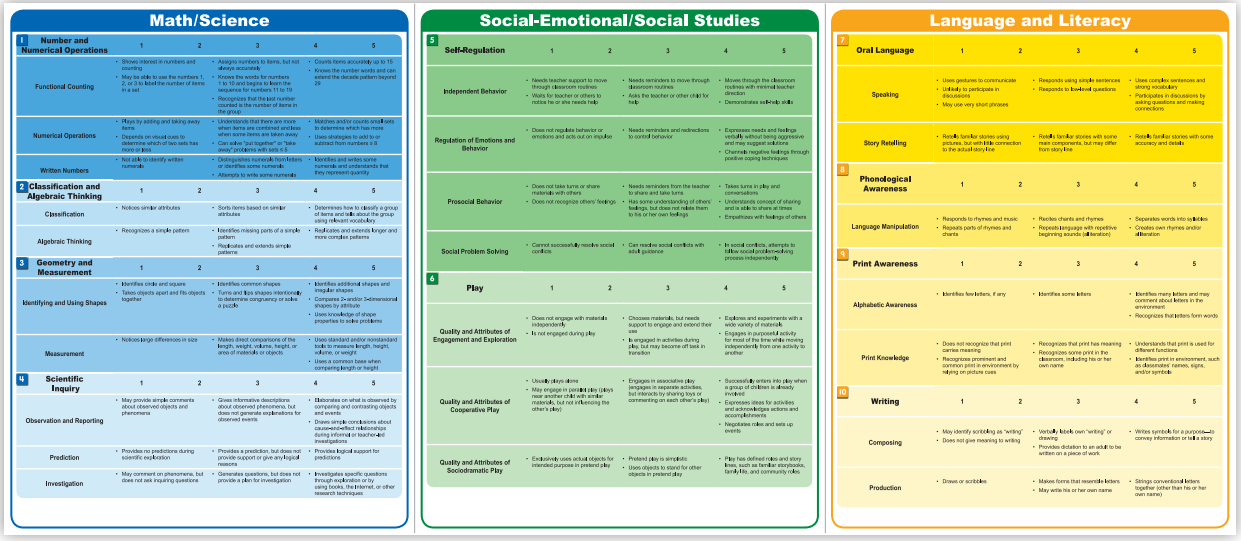
Introductory DVD

- Summary of the ELS
- Examples of use in the classroom
- Expert opinion



The Guidebook

- Provides system overview and research base
- Includes detailed continuum descriptors
- Support for teachers



The ELS Instrument

- Includes domains, items, strands & indicators
- Provides a developmental trajectory with a 5-point scoring continuum

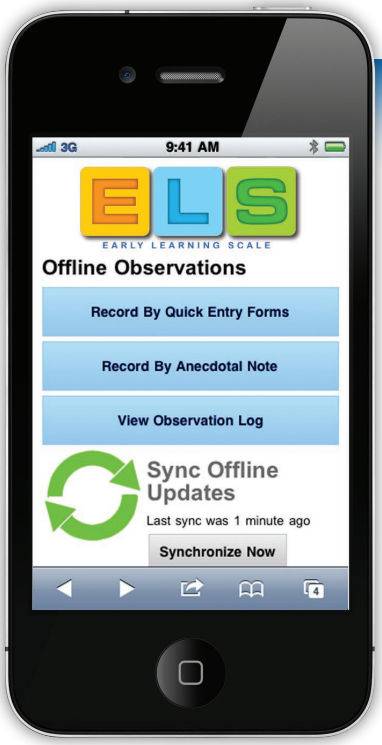
The ELS Online

My ELS Online

For preschool programs that are online-capable, the ELS is also available in a paperless format over the Internet.

The online version of the ELS scores just like the print version—only the data is available for immediate analysis. The website also features narrated, step-by-step videos that instruct teachers on how to use myelsonline.com—from adding student information to scoring and reporting.

In addition to other valuable features, myelsonline.com allows users to record demographic information and compare data by student, across the class or across the entire program.



Handheld Capabilities

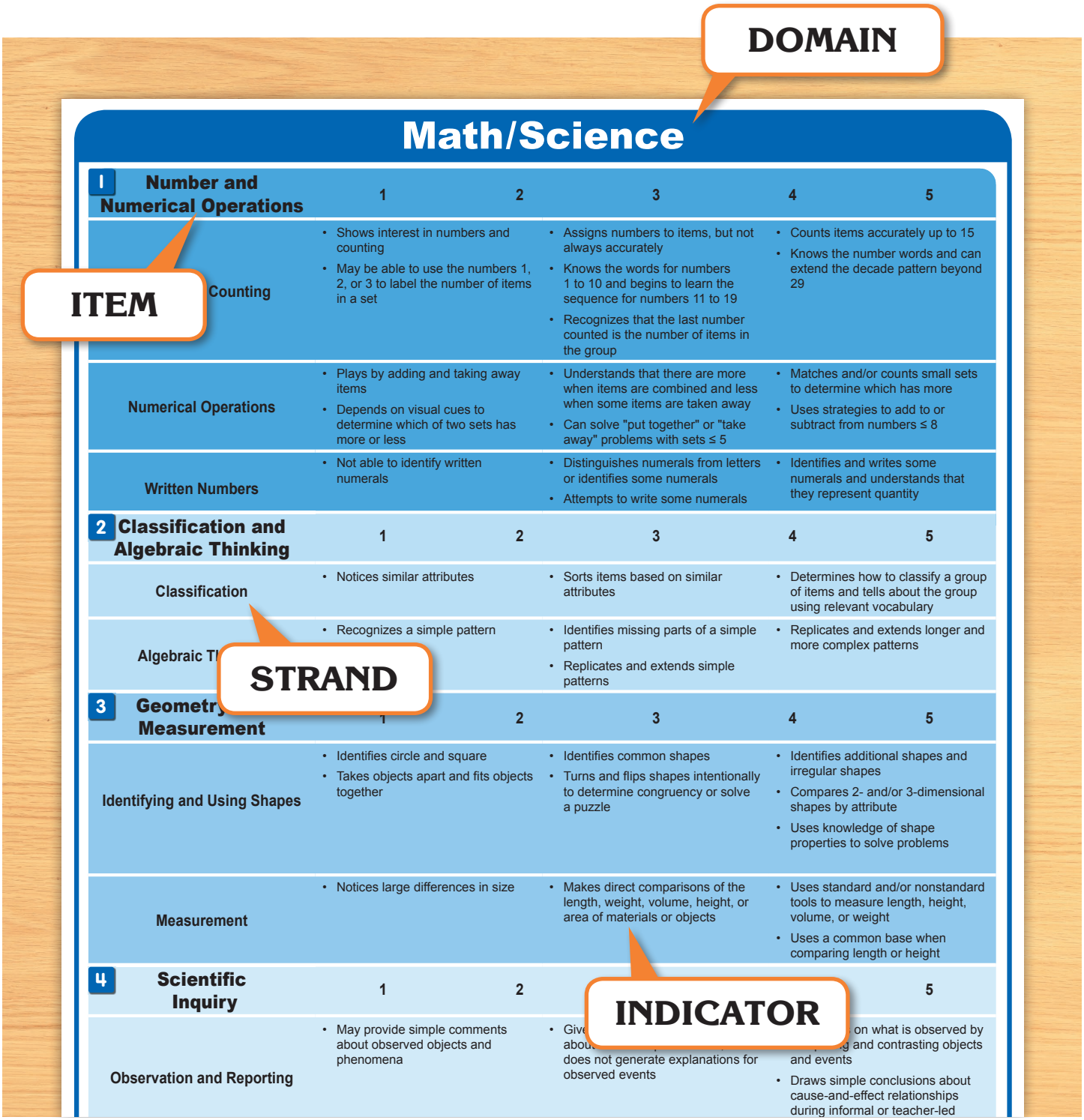
Recording anecdotal observations is fast, efficient… and saves valuable time in the classroom.

Using a smart phone or tablet, teachers can record observations in real time, then upload them to myelsonline.com—where observations will be automatically linked to items on the ELS! No pen, no paper and no delay in planning or assessment.

The Early Learning Scale mobile app requires iOS 8.0 or later and Android 4.0 or later and a WiFi connection.

The Early Learning Scale

The goal of the ELS is to improve teaching and learning in a practical way. That's why the authors at NIEER chose to cover three domains and ten items most critical to future learning. Each item is divided into strands based on current early learning standards and expectations. Plus, each strand features observable indicators scored on a 5-point continuum—so it's easy to assess progress and plan instruction quickly and efficiently.



Math/Science

1 Number and Numerical Operations	1	2	3	4	5
Counting	• Shows interest in numbers and counting • May be able to use the numbers 1, 2, or 3 to label the number of items in a set		• Assigns numbers to items, but not always accurately • Knows the words for numbers 1 to 10 and begins to learn the sequence for numbers 11 to 19 • Recognizes that the last number counted is the number of items in the group	• Counts items accurately up to 15 • Knows the number words and can extend the decade pattern beyond 29	
Numerical Operations	• Plays by adding and taking away items • Depends on visual cues to determine which of two sets has more or less		• Understands that there are more when items are combined and less when some items are taken away • Can solve "put together" or "take away" problems with sets ≤ 5	• Matches and/or counts small sets to determine which has more • Uses strategies to add to or subtract from numbers ≤ 8	
Written Numbers	• Not able to identify written numerals		• Distinguishes numerals from letters or identifies some numerals • Attempts to write some numerals	• Identifies and writes some numerals and understands that they represent quantity	
2 Classification and Algebraic Thinking	**1**	**2**	**3**	**4**	**5**
Classification	• Notices similar attributes		• Sorts items based on similar attributes	• Determines how to classify a group of items and tells about the group using relevant vocabulary	
Algebraic T	• Recognizes a simple pattern		• Identifies missing parts of a simple pattern • Replicates and extends simple patterns	• Replicates and extends longer and more complex patterns	
3 Geometry Measurement	**1**	**2**	**3**	**4**	**5**
Identifying and Using Shapes	• Identifies circle and square • Takes objects apart and fits objects together		• Identifies common shapes • Turns and flips shapes intentionally to determine congruency or solve a puzzle	• Identifies additional shapes and irregular shapes • Compares 2- and/or 3-dimensional shapes by attribute • Uses knowledge of shape properties to solve problems	
Measurement	• Notices large differences in size		• Makes direct comparisons of the length, weight, volume, height, or area of materials or objects	• Uses standard and/or nonstandard tools to measure length, height, volume, or weight • Uses a common base when comparing length or height	
4 Scientific Inquiry	**1**	**2**			**5**
Observation and Reporting	• May provide simple comments about observed objects and phenomena		• Giv abou does not generate explanations for observed events	on what is observed by g and contrasting objects and events • Draws simple conclusions about cause-and-effect relationships during informal or teacher-led	

Domains

Math/Science

Item 1: Number and Numerical Operations
Item 2: Classification and Algebraic Thinking
Item 3: Geometry and Measurement
Item 4: Scientific Inquiry

From basic counting and measurement to identifying shapes and observing the natural world, the strands within these items target those math and science skills that are the true building blocks of future learning and academic success.

Social-Emotional/Social Studies

Item 5: Self-Regulation
Item 6: Play

Current research indicates that unless children achieve a degree of social competence by the age of 6, they have a high probability of being at risk throughout their lives. By focusing on skills related to self-regulation, prosocial behavior and cooperative play among others, the ELS provides teachers with an accurate and appropriate measure of each child's social development.

Language and Literacy

Item 7: Oral Language
Item 8: Phonological Awareness
Item 9: Print Awareness
Item 10: Writing

Given the pivotal role teachers play in supporting early language development, the authors of the ELS focused on those items that support core aspects of later literacy and language competence.

Speaking in sentences of varying complexity, retelling familiar stories, identifying letters as well as writing them—the ELS uses pragmatic indicators like these to help teachers make valid assessments of each child.

Physical Development

Item: Gross Motor Movements
Item: Object Control and Manipulation

Written by Dr. Linda Carson and developed by Lakeshore, this tool is designed to help teachers make observation-based assessments about preschool-age children's progress toward selected physical development standards. This tool includes the information teachers need to observe, evaluate and enhance the fundamental motor skills of preschool children.

The Arts

While not scored on the ELS, a research base and data collection are provided for this domain.

Even at the preschool level, standards often indicate that children should explore the arts in an appropriate capacity. While this is cognitively and emotionally beneficial, progress is difficult to document objectively, and not conducive to placement on a continuum such as the ELS.

Support for Teachers

Sample Anecdotes

In addition to a comprehensive introduction to the ELS as well as its domains, the Guidebook features sample observational anecdotes as exemplars for teachers.

Outside

The students find an unusual rock while on a walk in the neighborhood. Suraj asks to take it back to the classroom so he can observe it with a magnifier. While he looks at it with the magnifier, he asks the teacher what kind of rock it is. She says she doesn't know, but she wonders if he has any ideas how they could find out. Suraj suggests looking in a book about rocks.

Maria and Bryan are digging next to the fence. They are very excited to discover a worm. Maria asks if she can pick it up and move it so she can watch how it moves. She observes carefully, saying, "It wiggles and wiggles like this. Except it doesn't have legs like me!" She starts dancing and wiggling. Then she says, "Hey, guys, do the worm dance with me! Wiggle like this!" Bryan and other classmates join Maria's dance, giggling.

Discovery Center

The teacher asks, "Which side of the scale do you think will go down if I put the heavy cylinder in this bucket?" Sabrina responds, "Oh, this side, with the heavy one, because it's heavy."

The class has been growing bean seeds. Kadejah is recording the plants' growth in her science journal. She says, "I need green 'cause it's green." When her drawing is complete, she makes some linear marks and says, "See? I wrote the name right there."

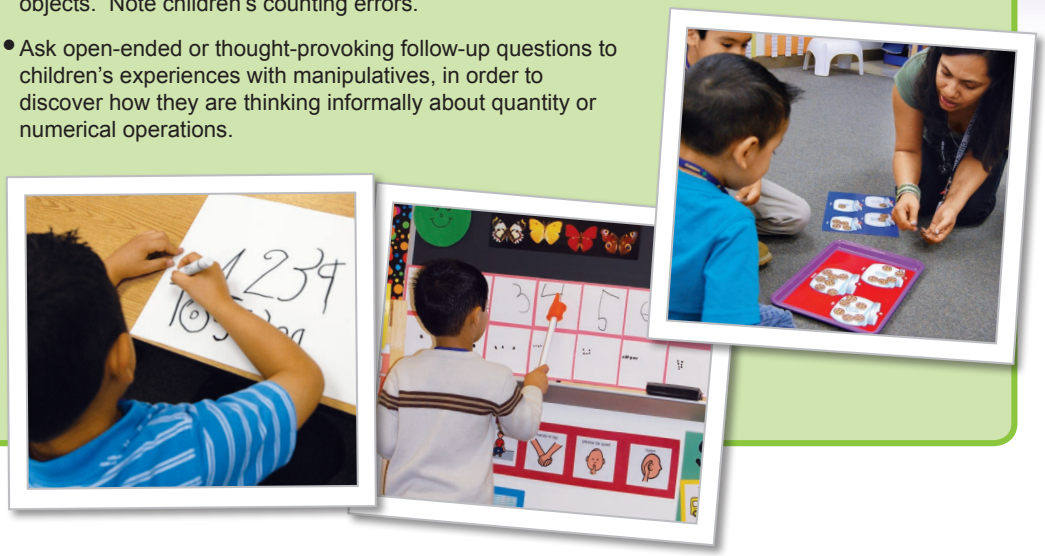
Block Area

Jose says, "I can put these shapes on the slides and see what comes first. Look, this one will win." The teacher asks him why that one will win, and he says, "Because that one is really round, like a ball. So it will come first. The other one is not so round, so it will lose."

Manipulatives

Jared is playing with the balance scale and beads. He puts all the small beads on one side and the large beads on the other side. When the side with the large beads goes down, Jared says, "Hmm...how come that side is down?" He looks at the side with the small beads, saying, "There's more beads in here."

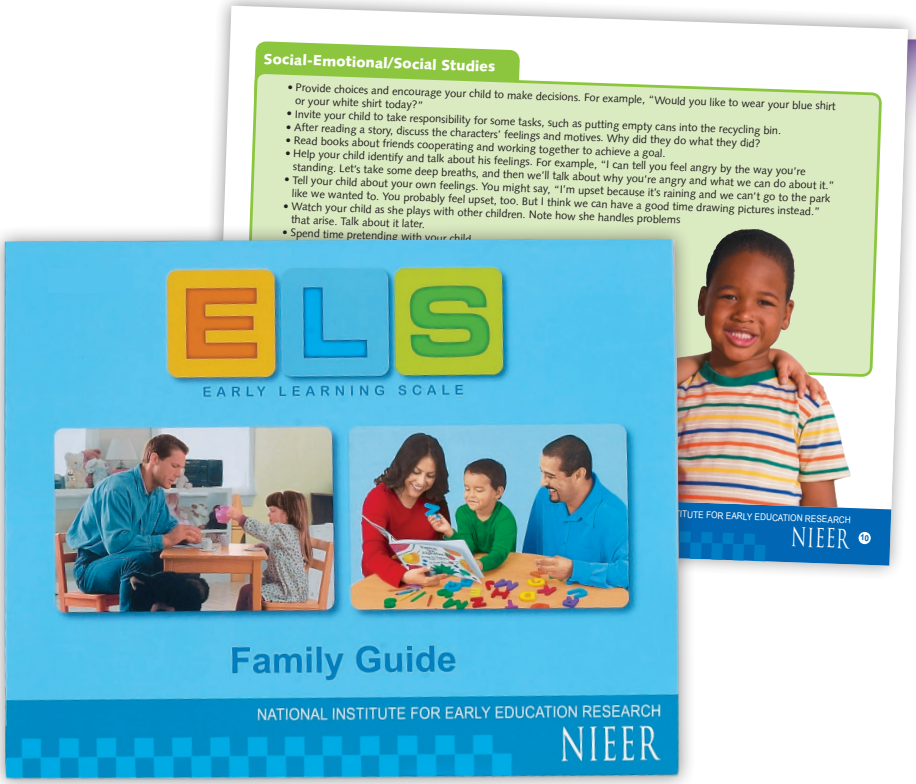
- Use children's natural interests in numbers to decide which materials and activities to provide for them. Many materials should be available that encourage counting and are easy for children to count. There should also be many materials that present number symbols in various ways, and children should be encouraged to write number symbols in ways that are purposeful.
- Assist children in counting activities and encourage them to compare and contrast groups of objects. Note children's counting errors.
- Ask open-ended or thought-provoking follow-up questions to children's experiences with manipulatives, in order to discover how they are thinking informally about quantity or numerical operations.



Ideas for Teaching and Documenting

The Guidebook also provides teaching tips & activities that target each item of the ELS—plus it includes lists of published resources that are easy to read and accessible to all teachers.

Support for Families



Connecting with Parents

A primary goal of the ELS is to help parents and caregivers become active partners in their child's education. The English/Spanish Family Guides come complete with:

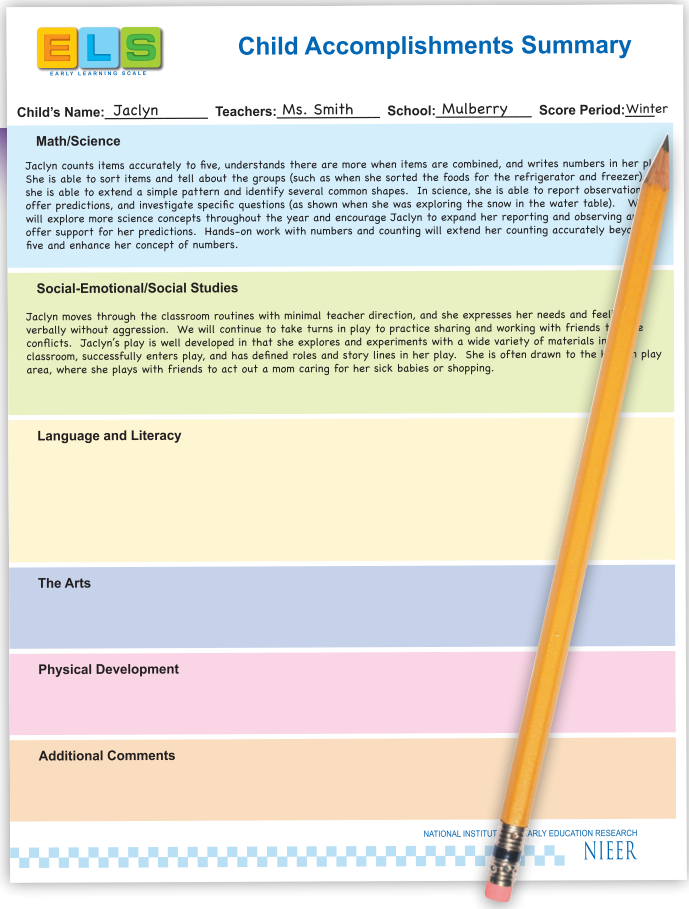
- An introductory letter for families
- An overview of the ELS
- Tips for creating a successful teacher/parent partnership
- Practical activities for the home that correspond to the domains of the ELS

Sharing Progress & Data

Child Accomplishments Summaries provide a narrative of each child's development and help educators plan instruction based on the collected data. Plus, they provide teachers with a practical way to discuss child performance with parents and caregivers.

Use at formal parent/teacher conferences to:

- Guide discussion
- Pinpoint areas for reinforcement at home
- Give parents an opportunity to share observations about their child



Training and Support

In-Person Training

Flexible, live training offers an in-depth experience that provides insight into the role of assessment—and verifies the effectiveness of the ELS in the classroom.

From a one-day, live kick-off session supported by online professional development to five days of intensive, in-person training, we will customize training to fit your needs and your budget. Just tell us what you need—and we'll make it happen.

Online Training

This interactive option is self-paced so teachers can complete their ELS training in a time frame that's convenient for them.

Along with covering the same material as the live training, this version allows participants to review their online training sessions at any time for a brief refresher course.

Reliability Certification

The final step in live or online training.

Essential to the effective, long-term use of the ELS, online certification is available to all participants who complete the training.

EARLY LEARNING SCALE

ELS Pricing & Training Options

To provide customers with the flexibility they need, in-person and online workshops are available. Pricing represents the standard cost of the ELS assessment and training. If your program requires any customization of materials or training, contact us at 224-366-8581.

ELS Online Assessment System and Observations App

Annual Subscription

1-99 students / $15.95 per student

100-499 students / $13.95 per student

500-1,499 students / $11.95 per student

1,500-2,499 students / $10.95 per student

2,500+ / $9.95 per student

ELS Digital Resources

$125 one-time fee per classroom

- ELS Instrument
- ELS Guidebook
- ELS Family Guide
- Motor Domain Supplement
- Online Reliability Test Module
- Website Video Tutorials
- Reproducible PDFs for Observation Notepads & Child Accomplishment Summaries

In-Person ELS Workshop

$3,500 for 2-day workshop

This in-person workshop offers an in-depth experience that provides insight into the role of assessment and verifies the effectiveness of the ELS in the classroom! Additionally, each session features an open-ended question and answer format that allows participants to engage in a meaningful way.

Online ELS e-Learning (Assessment System Modules)

$125 per Classroom

This interactive option is self-paced so teachers can complete their ELS training in a time frame that's convenient for them, and covers the same content as the In-Person ELS Workshop. Plus, this version allows participants to review their online training sessions at any time!

The Early Learning Scale

Assessment simplified.

Children learn best while playing...

When I explore nature, I am learning how to use tools to gather information.

When I play with dinosaurs, I am developing my imagination and creative thinking abilities.

When I play with blocks, I am making discoveries about sizes and shapes.

When I play with table toys, I am strengthening my fine motor skills.

...and we learn best about children by observing, documenting, and evaluating their learning through play.

When I play dress-up, I am developing role-playing skills and learning how to express

To learn more about the ELS, visit www.myelsonline.org to download our brochure or contact us at your convenience at (224) 366-8581 or support@myelsonline.org!