

Preschool Assessment

Motor Domain Supplement also available



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

V<u>Reliable</u>

- Based on the latest research
- Reliability-tested

NATIONAL INSTITUTE FOR EARLY EDUCATION RESEARCH

Developed in conjunction with **THECENTER** 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.

The ELS & Assessment

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



V 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.



V It's Reliable

As documented in the research, the ELS is a reliable assessment system. With an interrater reliability of 76%, it is one of the most effective assessments available.

For complete information on the ELS's inter-rater reliability and concurrent validity, **view the full technical report at www.nieer.org**.



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 participantobserver-looking for demonstrations of skills and knowledge across the three domains.



target the needs of individual learning.

Utilize the assessment process to inform teaching, students and scaffold future

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

Exporthesizing

Planning

Instructing

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

Documenting Reflecting

Analyzing Evaluating

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

Observing Investigating

Record and reflect on how student behaviors indicate growth and

progress.

Components of the ELS



The Early Learning Scale Poster

- At-a-glance reference for teachers
- Includes each domain's items and strands

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



 Regulation of Emotions
 and Behavior Social Problem Solving 6. Play

2. Classification and Algebraic Thinking

4. Scientific Inquiry

Social-Emotional/Social Studies

 Observation and Reporting Prediction Investigation

-

5. Self-Regulation

Prosocial Behavior

Math/Science

Functional Counting
 Numerical Operations

Written Numbers

100

1. Number and Numerical Operations

 Classification Algebraic Thinking

3. Geometry and Measurement Identifying and Using Shape Measurement

nt Behavior

· Quality and Attributes of Engagement and Exploration

Quality and Attributes of Cooperative Play
 Quality and Attributes of Sociodramatic Play



8







25 Child Portfolios

- Stores work samples
- Organizes observation notes by score period
- Includes score record form for complete scoring cycle



10 Observation Notepads

- Record anecdotal observations
 - Connect anecdotes to domains & items observed
 - Sized to fit in pockets for easy access



100 Child Accomplishments Summaries

- Summarizes
 development and
 learning
- Ideal for sharing with parents, caregivers and peers
- Provides next steps plus suggestions for home

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25 English/Spanish Family Guides

- Describes the ELS in parent-friendly terms
- Stresses importance of play as method of learning
- Includes activities for supporting learning goals at home

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/S	cience		
Number and Numerical Operations	1 2	3	4	5
TEM 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 always accurately Knows the words for numb 1 to 10 and begins to learn sequence for numbers 11 Recognizes that the last n counted is the number of i the group 	but not Counts items : Knows the numeration of the 29 to 19 umber tems in	accurately up to 15 mber words and can cade pattern beyond
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 when items are combined when some items are take Can solve "put together" o away" problems with sets 	e more • Matches and/e and less to determine v in away • Uses strategie r "take subtract from i ≤ 5	or counts small sets which has more es to add to or numbers ≤ 8
Written Numbers	 Not able to identify written numerals 	 Distinguishes numerals fro or identifies some numera Attempts to write some nu 	m letters · Identifies and numerals and they represent	writes some understands that t quantity
2 Classification and Algebraic Thinking	1 2	3	4	5
Classification	Notices similar attributes	 Sorts items based on simil attributes 	er • Determines he of items and te using relevant	ow to classify a group ells about the group vocabulary
Algebraic TI	Recognizes a simple pattern	 Identifies missing parts of pattern Replicates and extends sin patterns 	a simple • Replicates and more complex	d extends longer and patterns
3 Geometry Measurement	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 intr to determine congruency of a puzzle 	 Identifies addi irregular shap Compares 2- a shapes by attr Uses knowled properties to s 	tional shapes and es and/or 3-dimensional ibute ge of shape olve problems
Measurement	Notices large differences in size	Makes direct comparisons length, weight, volume, he area of materials or object	of the ight, or s volume, or we Uses a comm comparing len	l and/or nonstandard ire length, height, ight on base when gth or height
4 Scientific Inquiry	1 2		ATOP	5
Observation and Reporting	 May provide simple comments about observed objects and phenomena 	Give about does not generate explanation observed events	ations for and events • Draws simple	what is observed by d contrasting objects conclusions about

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.

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

cial-Emotional/Social Studies



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

	Child Accol	mplishments	Summary
Child's Name: Jaclyn	Teachers: Ms. Smith	School: Mulberry	Score Period:Winter
Math/Science Jaclyn counts items accurately t She is able to sort items and tel she is able to extend a simple pr offer predictions, and investigat will explore more science concep offer support for her predictions five and enhance her concept of	o five, understands there are more I about the groups (such as when s ittern and identify several common specific questions (as shown when is throughout the year and encour is. Hands-on work with numbers an numbers.	when items are combined, and he sorted the foods for the re shapes. In science, she is abl she was exploring the snow in age Jaclyn to expand her repa d counting will extend her cou	writes numbers in her p frigerator and freezer) e to report observation the water table). W vring and observing av nting accurately beyc
Social-Emotional/Social Jaclyn moves hrough the classr verbally without aggression. We conflicts. Jaclyn's play is well d classroom, successfully enters pl area, where she plays with frien	Studies com routines with minimal teacher e will continue to take turns in play eveloped in that she explores and e ay, and has defined roles and story ds to act out a mom caring for her	direction, and she expresses h to practice sharing and work steperiments with a wide variet lines in her play. She is ofter sick babies or shopping.	er needs and feel ing with friends t a y of materials in n drawn to the l a play
Language and Literacy			
The Arts			
Physical Development			
Additional Comments			
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# The ELS Online

## My ELS Online

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

At myelsonline.com, 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 off-line 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.

At present, handheld capabilities require a Wi-Fi connection and the use of an iPad[®], iPhone[®], iPod touch[®] or devices running the Android[™] OS with the Google Chrome[™] browser.

# 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.



# The Early Learning Scale



EARLY LEARNING SCALE

Early Learning Scale Preschool Assessment KT2850 – \$249.00

Movement ad Physical Development Assessment "The ELS extends credibility to pre-k teaching. It provides a comprehensive framework that offers integrity within our field of expertise...and has the potential to drive excellence across a variety of learning environments."

> Melissa Workman Associate Director/Pre-K Teacher West Virginia University Preschool

Movement Guide Assessment KT4318 – \$29.95

To learn more about the ELS, contact us at your convenience.



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