



Fall Kindergarten Inventory Training Session

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Today's Training Session

- Provide Context for this Data Collection
- Overview of the Kindergarten Inventory Instrument and Research
- Overview of the Administration and Data Submission Process
- Role of the District Contact

ACCOUNTABILITY



Marcy Nighswander/AP-File

“Accountability, flexibility, tougher standards, a results-oriented system—all of these have got to be out there on the table.”

President George H.W. Bush
(Remarks at the education summit in Charlottesville, Va., Sept. 27, 1989)



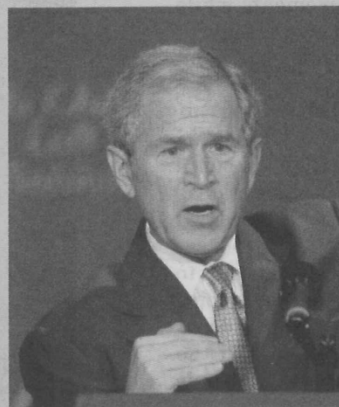
J. Scott Applewhite/AP-File

“All successful schools have followed the same proven formula: higher standards, more accountability, so all children can reach those standards.”

President Bill Clinton
(State of the Union Address, Jan. 27, 2000)

Sound Familiar?

The four most recent occupants of the White House have stressed similar themes on education.



Matt Rourke/AP-File

“We will insist on high standards and accountability because we believe that every school should teach and every child can learn.”

President George W. Bush
(Presidential radio address, Jan. 3, 2004)



Jim Watson/AFP/Getty Images-File

“We’re seeing what children from all walks of life can and will achieve when we set high standards, have high expectations, when we do a good job preparing them. ... [W]e will cultivate a new culture of accountability in America’s schools.”

President Barack Obama
(Address to the Hispanic Chamber of Commerce, in Washington, March 10, 2009)

Taken from
[Education Week](#)
June 17, 2009

Accountability Trickles Down to Early Childhood

- States invest in providing preschool to young children and targets those most at risk.
- CT invests ~\$80,000,000 per year since 2000.
- State-funded preschool programs promote school readiness and closing the achievement gap.
- Achievement gaps remain stubbornly intact.

Why does Connecticut have a Fall Kindergarten Entrance Inventory?

- Legislators wanted to provide:
 - beginning baseline data on children's readiness for kindergarten as a point of reference for policy makers and educators, and
 - a way to see if the state's investment in preschool programs was making a difference.
- CT Legislature began to implement the Results-Based Accountability (RBA) process to look at statewide trends and program performance. Early childhood programs, including education, were the pilots for RBA implementation.

Statutory Mandate for a Kindergarten Assessment

- **The 2007 Legislation required that:** “(h) Within available appropriations, the Commissioner of Education shall, not later than October 1, 2007, develop and implement a state-wide **developmentally appropriate kindergarten assessment tool that measures a child’s preparedness for kindergarten**, but shall not be used as a measurement tool for program accountability pursuant to section 10-16s, as amended by the act.”

INSTRUMENT DEVELOPMENT

Early Development Questions

- Direct assessments of young children are limited and expensive (unfunded mandate).
- Evaluation of all facets of early childhood, not just the cognitive skills (the whole child).
- Information on behavioral skills, in particular, can only be provided by the child's teacher.
- How many items (domain-level vs. item-level)?

Fall Kindergarten Entrance Inventory Development

- This instrument was designed to provide a statewide snapshot of the skills and behaviors students demonstrate, based on teachers' observations, at the beginning of the kindergarten year (mid-October).
- The Fall Inventory covers six domains of early childhood development, as recommended by early childhood experts.
- Each domain is defined by a series of indicators.

Fall Kindergarten Entrance Inventory Development

- The indicators on the Inventory reflect the state curriculum framework and the standards for the beginning of the kindergarten year.
- A committee of preschool and kindergarten teachers reviewed the indicators and provided the Department of Education with recommendations on their appropriateness.

What is the Purpose of the Fall Kindergarten Entrance Inventory?

- The Fall Kindergarten Entrance Inventory was developed to provide kindergarten teachers, administrators and other stakeholders with aggregated information about the level of skills and behaviors that students exhibit at the beginning of kindergarten.

Fall Kindergarten Entrance Inventory Development

- Includes Six Domains of Early Childhood Development
 - Language Skills
 - Literacy Skills
 - Numeracy Skills
 - Physical/Motor Skills
 - Creative/Aesthetic Skills
 - Personal/Social Skills

Performance Level Descriptors

- Performance Level 1 – Students at this level demonstrate **emerging** skills in the specified domain and require a **large degree** of instructional support.
- Performance Level 2 – Students at this level **inconsistently** demonstrate the skills in the specified domain and require **some** instructional support.
- Performance Level 3 – Students at this level **consistently** demonstrate the skills in the specified domain and require **minimal** instructional support.

RESEARCH

Validity evidence

1. Test content
 - *Does the test content match the curriculum?*
2. Response processes
 - *How do teachers evaluate and judge students' skills and behaviors?*
 - *How do students process the test questions?*
3. Internal structure
 - *Do the data match our expectations for test functionality?
(Quantitative analyses)*
4. Relations to other variables
 - *Are scores consistent with scores on similar assessments?*
5. Test consequences
 - *Are the intended benefits of the assessment being realized?*

How does this work?

1. What is the stated purpose of the assessment?
2. What is assumed within that purpose?
3. What evidence already exists?
4. What evidence must be created?
5. How well does the evidence support the interpretations and uses of the test scores for their stated purpose(s)?

Assumptions and Evidence/ TEST CONTENT

- Assumption:
 - The Inventory content reflects the Preschool Assessment Framework.
 - The Inventory reflects the skills students should demonstrate at the beginning of the kindergarten year.
- Evidence:
 - Documentation of procedures used to develop the Inventory **
 - Review of the literature
 - Alignment study

Assumptions and Evidence/ RESPONSE PROCESSES

- Assumptions
 - Teachers understand the rating scale.
 - Teachers interpret the domains accurately.
 - Teachers have assessed their students' skills and abilities across the domains by October.
 - Teachers assign ratings that reflect students' skills and abilities.
 - Teachers use the Inventory consistently within their classrooms.
 - Teachers use the Inventory consistently across schools.

Assumptions and Evidence/ RESPONSE PROCESSES

- Evidence: Ask the teachers!
 - Fall teacher surveys **
 - Inter-rater reliability studies
 - Teacher training workshops and online documentation **

Assumptions and Evidence/ INTERNAL STRUCTURE

- Assumptions
 - Relationships among the test components conform to the construct the test is intended to measure.
- Evidence
 - Descriptive test data by gender, race/ethnicity, lunch status, special education status, English language learner status, student age **
 - Dimensionality **
 - Differential item functioning
 - Internal consistency measures**

RELATIONS TO OTHER VARIABLES

- Assumptions
 - The Inventory measures kindergarten students' skills in a manner that is similar to other measures.
- Evidence
 - Correlation to scores from other standardized measures of early literacy/numeracy
 - Inventory as a predictor of kindergarten retention
 - Patterns of Inventory data and patterns of CMT scores across the state

Assumptions and Evidence/ TEST CONSEQUENCES

- Assumptions
 - Data from the Inventory is used in the aggregate to better understand the skills and behaviors that students exhibit at the beginning of kindergarten.
 - The Inventory is not used to evaluate individual students.
 - The Inventory is not used to evaluate preschool or kindergarten programs.
- Evidence
 - Surveys
 - Focus groups

District Data Study

- Indicator level data collection
- 1,670 incoming kindergarten students
- Exploratory factor analysis
 - Does a structure exist within the data set?
- Confirmatory factor analysis
 - Does the identified factor structure fit the data?

Exploratory factor analysis

- Academic readiness
 - All Literacy items
 - All Numeracy items
 - 4 of 6 Language items
- Social readiness
 - All Personal/Social items
 - Language items:
Communicates feelings and needs/ Listens attentively to a speaker
- Readiness for activities
 - All Physical/Motor items
 - All Creative/Aesthetic items

Confirmatory factor analysis

- There are groups of items within each domain
 - Language: speaking, listening, retelling a story
 - Literacy: books, letters, emergent writing
 - Numeracy: counting, shapes/patterns, sequencing
 - Physical/Motor: gross motor, fine motor
 - Personal/Social: expressing oneself, following routines and working with others
 - Creative/Aesthetic

RESULTS

How will the Results of the Fall Kindergarten Entrance Inventory be used?

- The Inventory results are used to describe kindergarten students across the state using a standardized approach.
- The results are aggregated to the district and state levels, grouping students into three performance levels by domain. This report is sent to the superintendent and the district contact.

How will the Results of the Fall Kindergarten Entrance Inventory be used?

- In 2009 statewide results were presented by the Early Childhood Cabinet to the CT Legislature as an indicator of “Entry to Kindergarten Readiness”.
- The Cabinet was reconfigured due to federal Head Start legislation and lack of legislative support. There was no obligation to report results to the Appropriations committee in 2010.

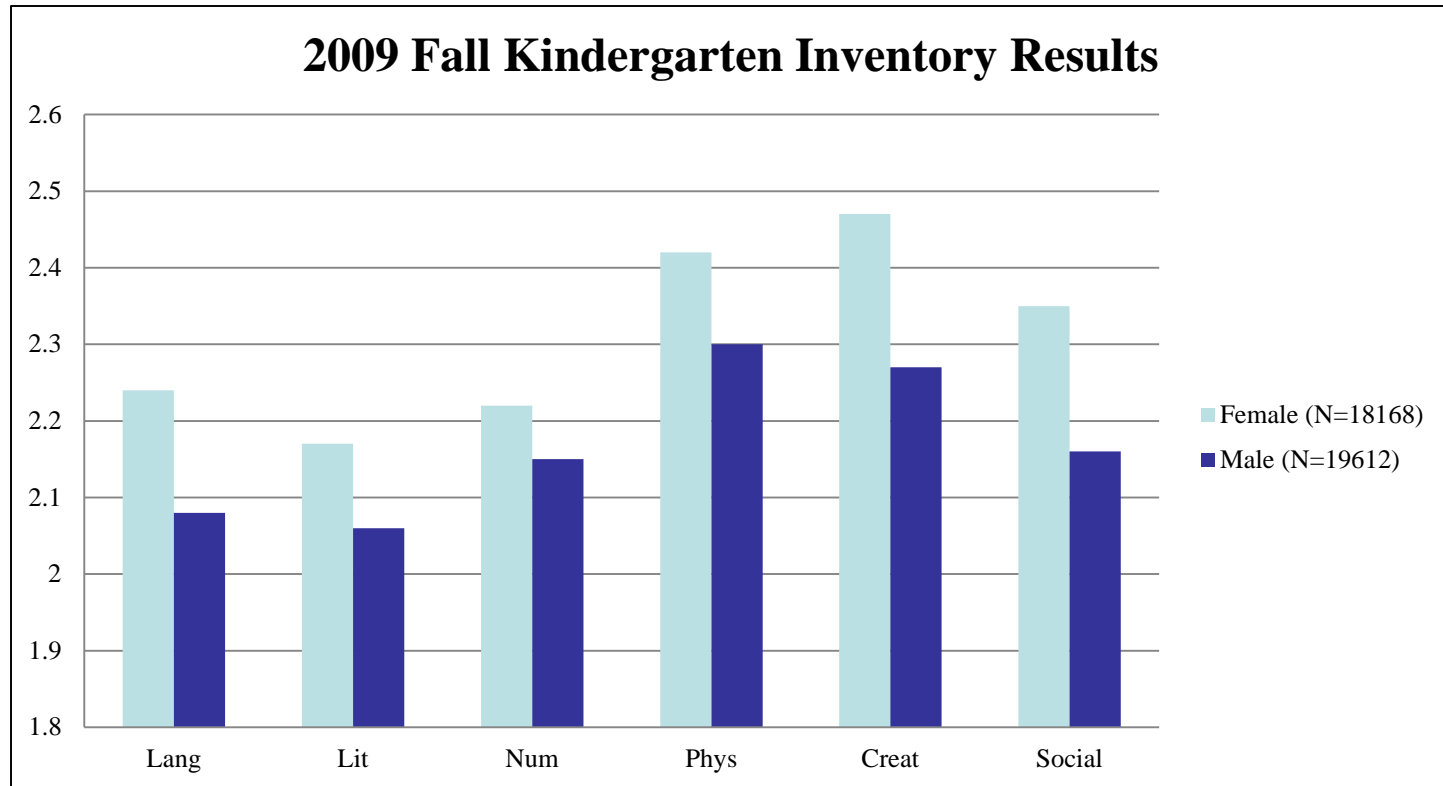
2009 Fall Kindergarten Inventory Results

Domain	PL1	PL2	PL3
Language	22%	41%	37%
Literacy	24%	41%	35%
Numeracy	19%	43%	38%
Physical	11%	42%	47%
Creative	11%	42%	47%
Personal	16%	43%	41%

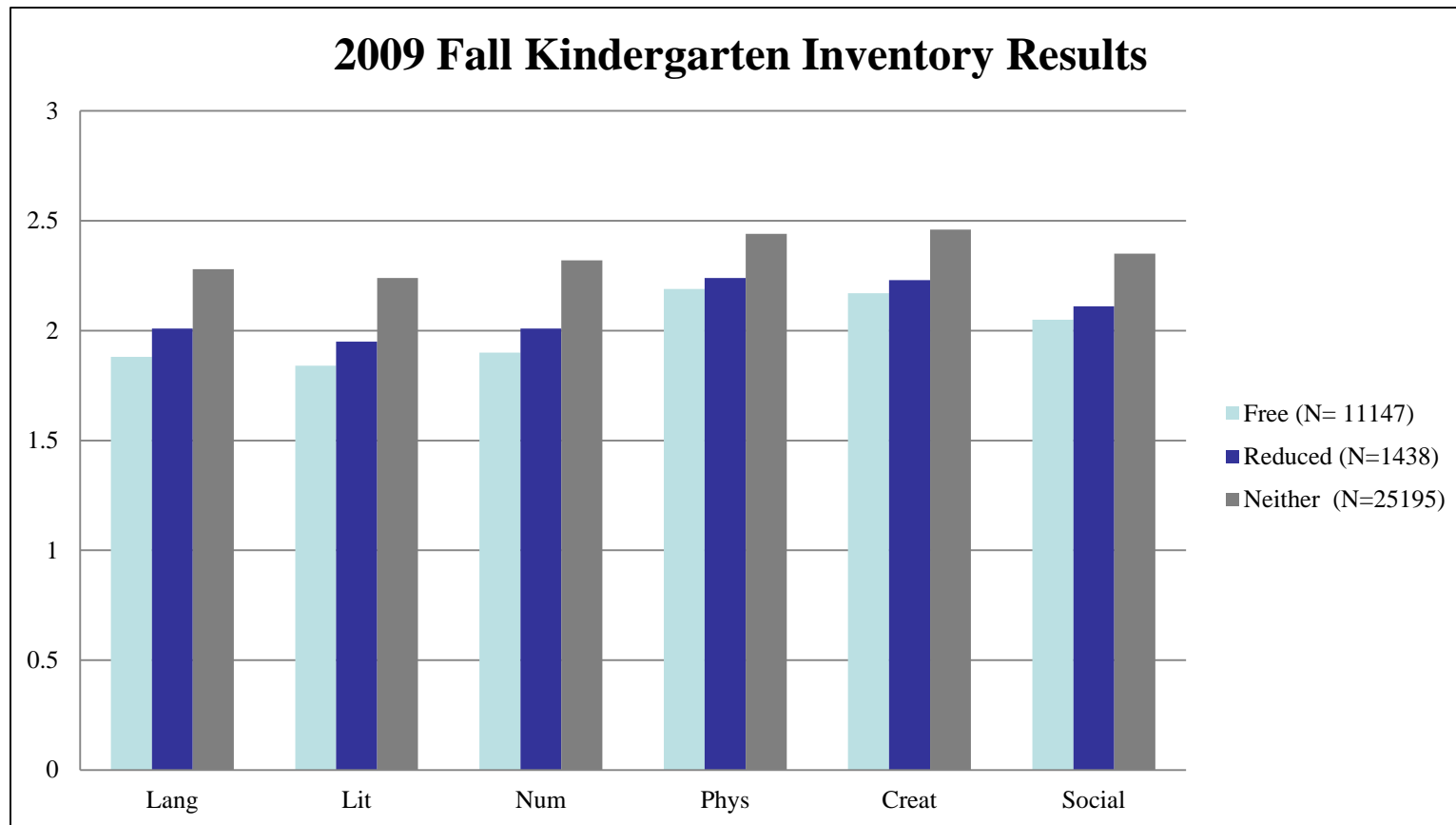
2007 - 2009 Fall Kindergarten Inventory Results

Results		2007	2008	2009
Language Skills	PL1	25%	23%	22%
	PL2	40%	40%	41%
	PL3	35%	37%	37%
Numeracy Skills	PL1	24%	20%	19%
	PL2	44%	44%	43%
	PL3	32%	36%	38%
Personal/Social Skills	PL1	19%	17%	16%
	PL2	43%	43%	43%
	PL3	38%	40%	41%

Domain Means by Gender



Domain Means by Free Lunch Status



TEACHER RATINGS

Classifying Student Performance

- Teachers will classify each of the students in their class(es) into one of three performance levels for each domain.
- **Every** student in the class will be put into a performance level under each domain; no student is exempt from being rated.
- Focus on the criterion or indicators. Try **not** to group students within the class as high, middle, or low.

Classifying Student Performance

- Students cannot be classified into more than one performance level. If a student is on the borderline between two performance levels, the teacher must use his/her best judgment to put students into the appropriate category.
- The Inventory can be completed with the assistance of other teachers who provide a support role; however, the classroom teacher is ultimately responsible for the data that are entered.

How are Special Education Students Assessed?

- Students who have an IEP and have been given accommodations should be assessed within their communication mode.
- Designated communication modes are Braille, sign language, voice recognition technology, etc.

How are ELL Students Assessed?

- Students should be assessed using their native language whenever possible.
- Teachers need to make judgments about students who do not speak English by observing student behaviors.

DISTRICT CONTACTS

Role of the District Contact

- Liaison between CSDE and kindergarten teachers in their district.
- Provide content information to and answer questions from kindergarten teachers.
- Help facilitate the data collection process.

Role of the District Contact

- Provide school login and passwords for the website to each school in the district.
- Contact Karen Adesso or Tom Schenking with irregularities or unusual situations.

DATA SUBMISSION

Data Submission

- This year data collection will begin on Friday, October 22nd and will close on Friday, November 12th.
- A data collection form has been designed to help teachers organize their ratings before they enter the website. This spreadsheet is posted at <http://www.csde.state.ct.us/public/cedar/assessment/kindergarten/fall07.htm>

Data Submission

- Data will be entered online at www.ctlearning.net
- Each school will receive a unique login and password. Every teacher in the school will use the same login and password to access the roster of students in the school.
- The district contact will have a unique login and password that allows access to all of the schools in the district simultaneously.

Data Submission

- The roster of students for your school may be incomplete or contain students who are no longer attending. Students can be added to the roster or marked as no longer attending online.
- Demonstration of the www.ctlearning.net website.

Links to Information

- The Fall Kindergarten Entrance Inventory instrument, Teacher Handbook, Data Collection form, Training module, and directions for entering data online are available at the State Department of Education website at <http://www.csde.state.ct.us/public/cedar/assessment/kindergarten/fall07.htm>

Contact Information

- Karen Addesso, Program Manager for the Kindergarten Inventory. By email @ karen.addesso@ct.gov or by telephone @ (860) 713-6827
- Tom Schenking, Technical Support, EASTCONN. By email @ tschenking@eastconnn.org or by phone @ 860-455-1548

THANK YOU!!