Measuring Quality of Early Learning:
Overview and Introduction to Issues

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Purposes of Measuring Quality of Early Learning

- To **describe** children's experiences in early learning environments
- To **identify** experiences in early learning programs that are positively associated with children's development
- To **improve** the quality of early learning programs
- To **rate** the quality early learning programs
- To **make decisions** about renewing program funding

3 Issues in Measuring Quality of Early Learning

1. ## Definitional
   - How do we define "quality of early learning"?

2. ## Measurement
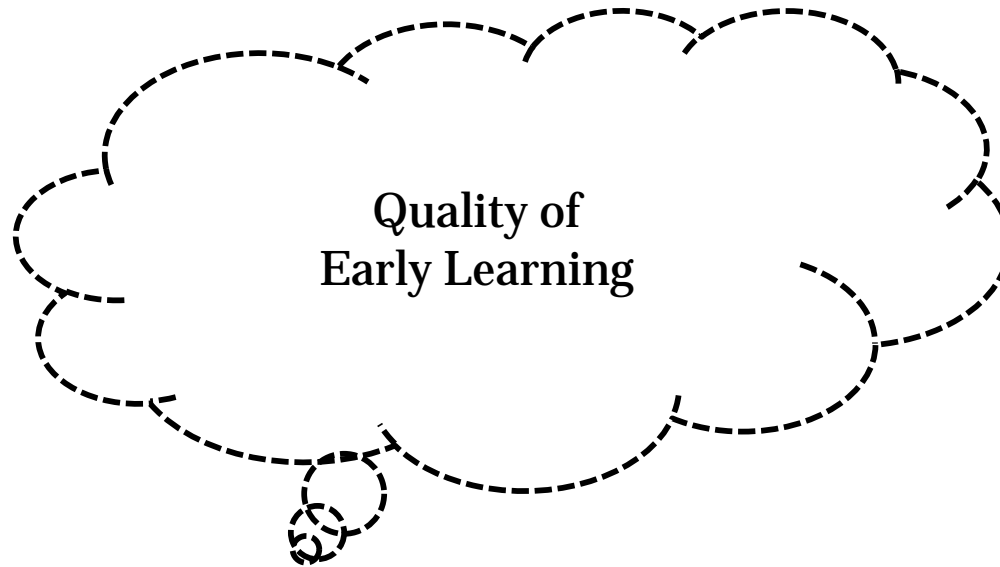   - How well do our measures assess "quality of early learning"?

3. ## Use
   - Are decisions we make and actions we take based upon our measures justified and fair?

Defining Quality of Early Learning

Defining Quality of Early Learning

Quality of
Early Learning

Settings?

Dimensions?
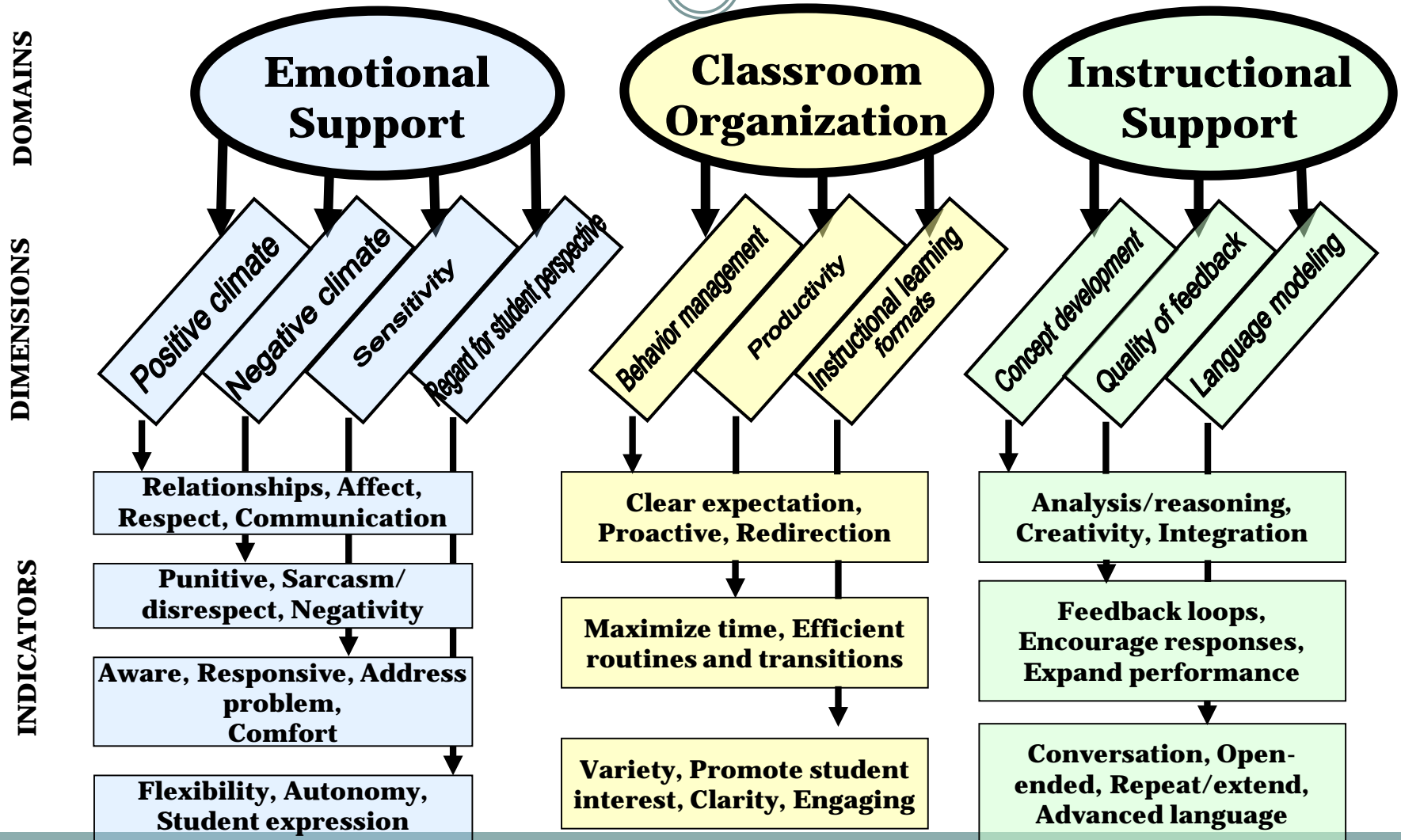
Ages?

Structural Quality in Early Learning Programs

QUALITY STANDARDS CHECKLIST

POLICY	STATE PRE-K REQUIREMENT	BENCHMARK	DOES REQUIREMENT MEET BENCHMARK?
Early learning standards	Comprehensive	Comprehensive	☑
Teacher degree	BA (public); AA (nonpublic)[1,2]	BA	☐
Teacher specialized training	AA in ECE	Specializing in pre-K	☑
Assistant teacher degree	CDA	CDA or equivalent	☑
Teacher in-service	15 clock hours/year	At least 15 hours/year	☑
Maximum class size		20 or lower	☑
3-year-olds	17		
4-year-olds	20		
Staff-child ratio		1:10 or better	☑
3-year-olds	2:17		
4-year-olds	1:10		
Screening/referral and support services	Vision; hearing; height/weigh; blood pressure; immunizations; psychosocial/behavioral; dental; developmental; full physical exam; and support services	Vision, hearing, health; and at least 1 support service	☑
Meals	Depends on length of program day[3]	At least 1/day	☑
Monitoring	Site visits and other monitoring	Site visits	☑

TOTAL BENCHMARKS MET

9

Barnett, W. S., Friedman-Krauss, A. H., Gomez, R. E., Horowitz, M., Weisenfeld, G. G., & Squires, J. H. (2016). *The State of Preschool 2015: State Preschool Yearbook.* New Brunswick, NJ: National Institute for Early Education Research

Process Quality in Early Learning Programs

DOMAINS

Emotional Support

Classroom Organization

Instructional Support

DIMENSIONS

Positive climate · Negative climate · Sensitivity · Regard for student perspective

Behavior management · Productivity · Instructional learning formats

Concept development · Quality of feedback · Language modeling

INDICATORS

Emotional Support
- Relationships, Affect, Respect, Communication
- Punitive, Sarcasm/disrespect, Negativity
- Aware, Responsive, Address problem, Comfort
- Flexibility, Autonomy, Student expression

Classroom Organization
- Clear expectation, Proactive, Redirection
- Maximize time, Efficient routines and transitions
- Variety, Promote student interest, Clarity, Engaging

Instructional Support
- Analysis/reasoning, Creativity, Integration
- Feedback loops, Encourage responses, Expand performance
- Conversation, Open-ended, Repeat/extend, Advanced language

Structural Quality vs. Process Quality

Measures of Classroom Quality in Prekindergarten and Children's Development of Academic, Language, and Social Skills

Andrew J. Mashburn, Robert C. Pianta, Bridget K. Hamre, and Jason T. Downer
*University of Virginia*

Oscar A. Barbarin, Donna Bryant, Margaret Burchinal, and Diane M. Early
University of North Carolina at Chapel Hill

Carollee Howes
University of California at Los Angeles

This study examined development of academic, language, and social skills among 4-year-olds in publicly supported prekindergarten (pre-K) programs in relation to 3 methods of measuring pre-K quality, which are as follows: (a) adherence to 9 standards of quality related to program infrastructure and design, (b) observations of the overall quality of classroom environments, and (c) observations of teachers' emotional and instructional interactions with children in classrooms. Participants were 2,439 children enrolled in 671 pre-K classrooms in 11 states. Adjusting for prior skill levels, child and family characteristics, program characteristics, and state, teachers' instructional interactions predicted academic and language skills and teachers' emotional interactions predicted teacher-reported social skills. Findings suggest that policies, program development, and professional development efforts that improve teacher–child interactions can facilitate children's school readiness.

Mashburn, A., Pianta, R., Hamre, B., Downer, J., Barbarin, O., Bryant, D., Burchinal, M., Early, D., & Howes, C. (2008). Measures of pre-k quality and children's development of academic, language and social skills. *Child Development, 79*, 732-749.

# Structural Quality <u>and</u> Process Quality
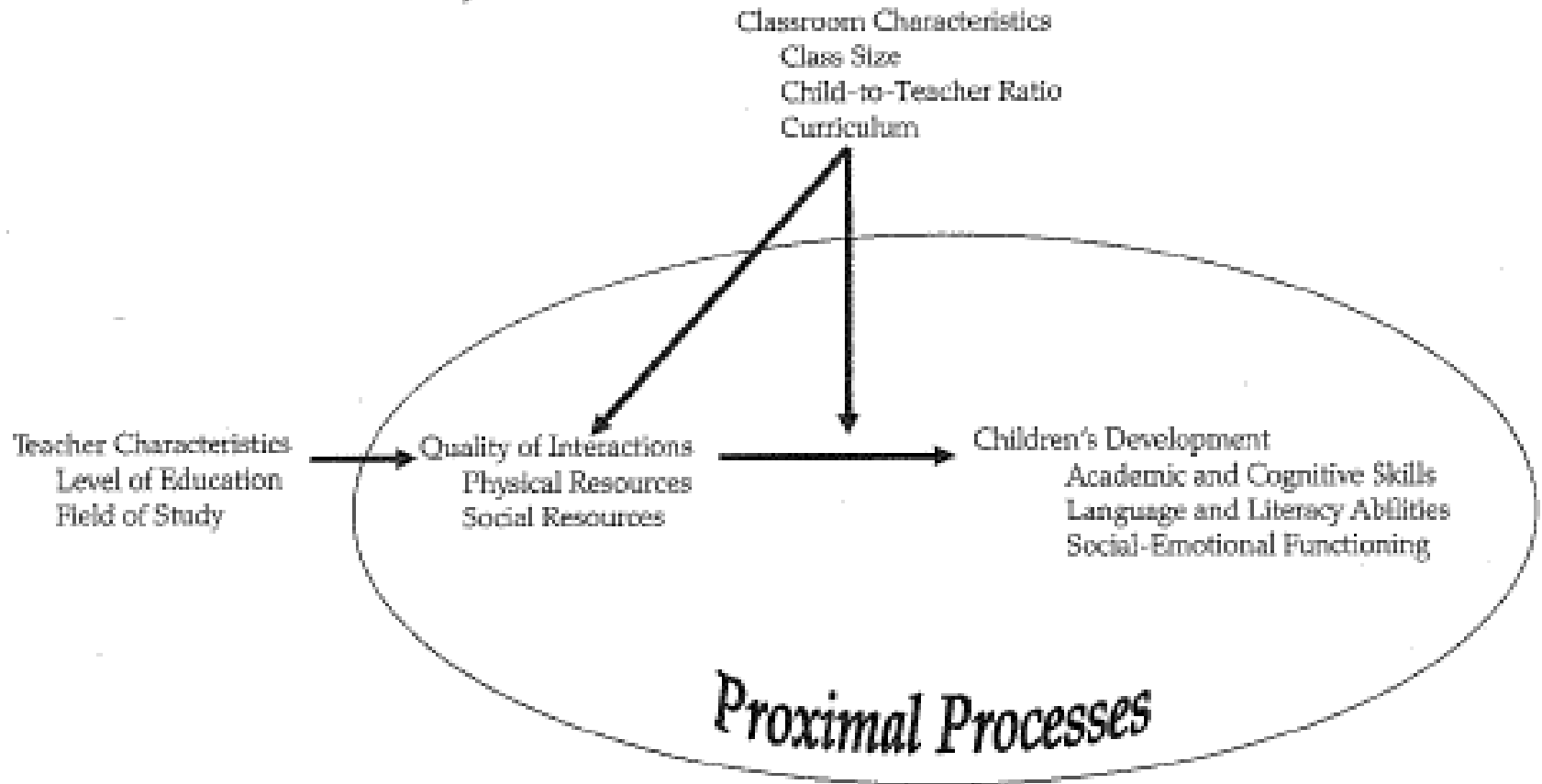
Mashburn, A., & Pianta, R. (2010). Opportunity in early education: Improving teacher-child interactions and child outcomes. In A. Reynolds, A. Rolnick, M. Englund, & J. Temple (Eds.), *Childhood Programs and Practices in the First Decade of Life: A Human Capital Integration* (pp. 243 - 265). New York, NY: Cambridge University Press.

Measuring Quality of Early Learning

Measuring Quality of Early Learning
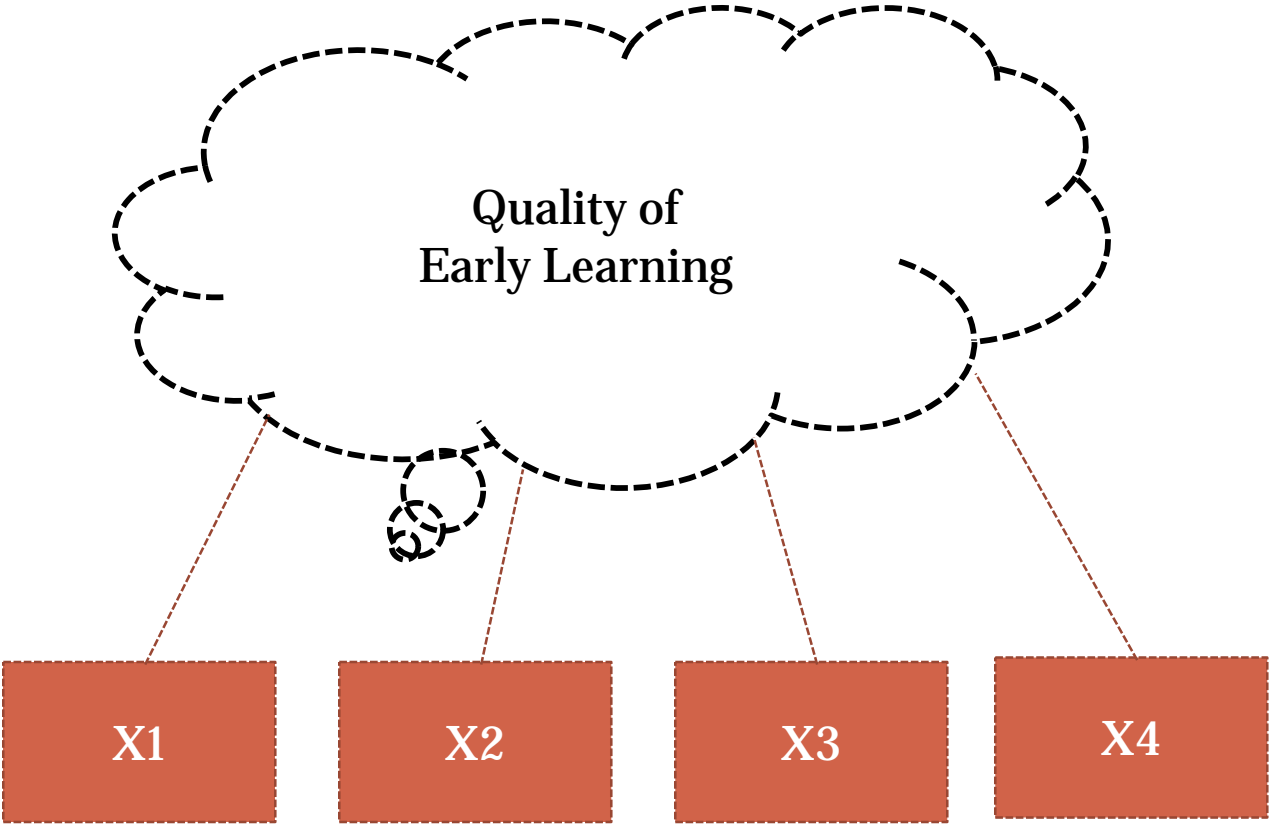
Quality of
Early Learning

| X1 | X2 | X3 | X4 |

Evaluating How Well Our Measures Assess Quality of Early Learning

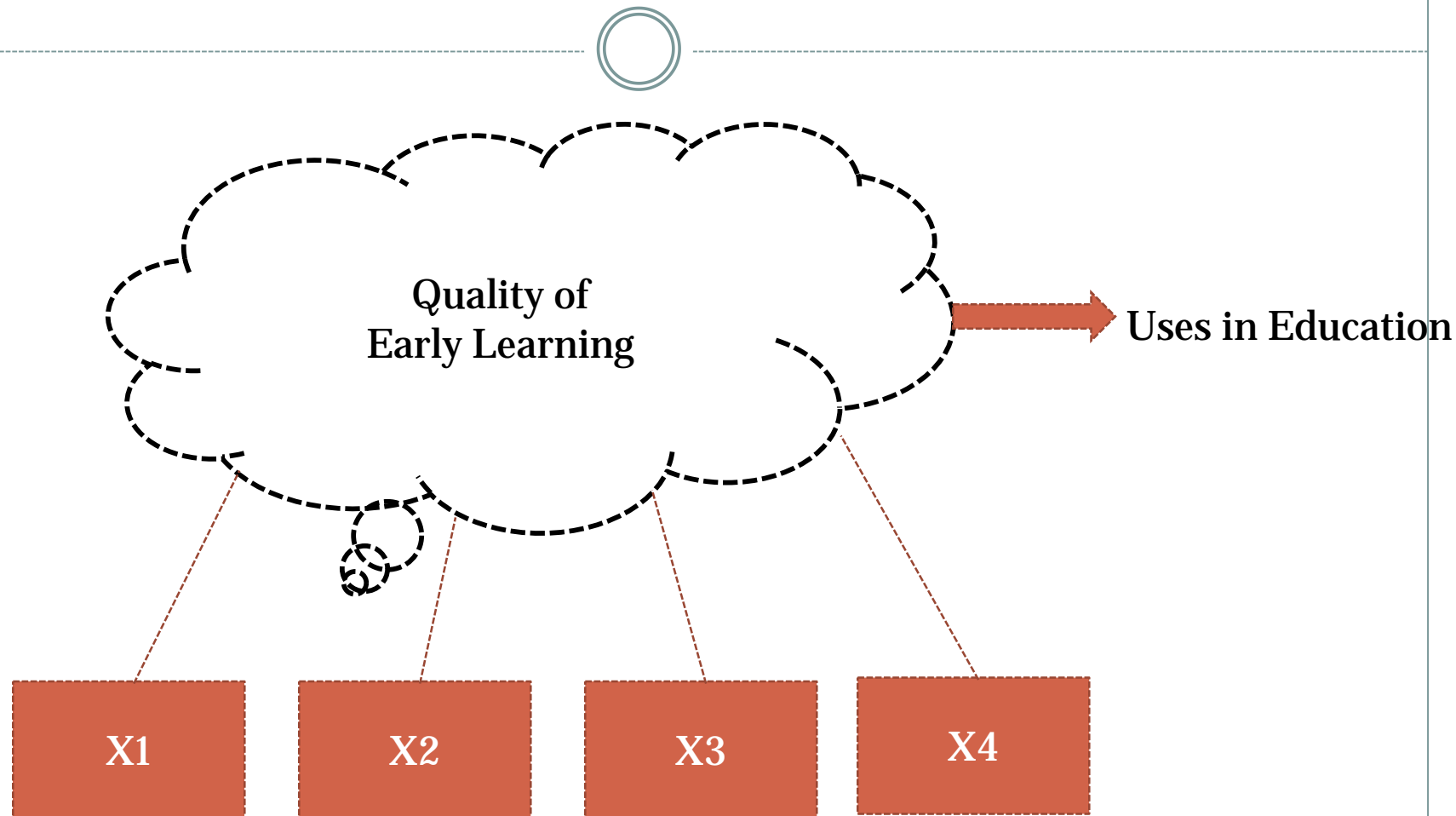Quality of Early Learning

X1 X2 X3 X4

1. **State assumptions about measures of quality. For example,**

    a. The content of the measures assess **relevant** aspects of quality of early learning

    b. The content of the measures **represents** all aspects of quality of early learning

    c. The scores from the measures are **positively associated** with children's outcomes

    d. The items comport with expectations about how they should be measuring the **quality of early learning**

    e. The scores are **stable** (e.g., across time, raters/observers)

2. **Compile evidence to evaluate the plausibility of each assumption**

Mashburn, A. (*in press*). Evaluating the validity of classroom observations in the Head Start Designation Renewal System. *Educational Psychologist.*

Using Measures of Quality of Early Learning

Using Measures of Quality of Early Learning

Quality of
Early Learning

Uses in Education

X1

X2

X3

X4

Using Measures of Quality of Early Learning

- After defining quality of early learning, and evaluating how well our measures assess quality, we can make assertions as to whether...

  the decisions we make and actions we take based upon the measures are justified and fair

- The **higher the stakes** we attach to our measures, the **stronger the evidence** we need that our measures are assessing quality of early learning

- For each of the next presentations, consider these 3 issues...
  - How is "quality of early learning" defined?
  - How well do the measures assess "quality of early learning"?
  - Are decisions made or actions taken based upon the measures justified and fair?