



Professional Development Strategies that Support Outcomes for Children

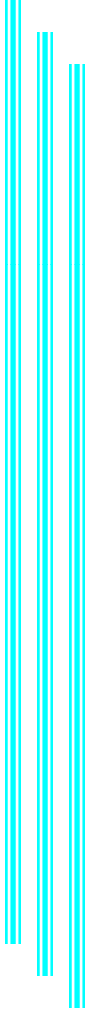
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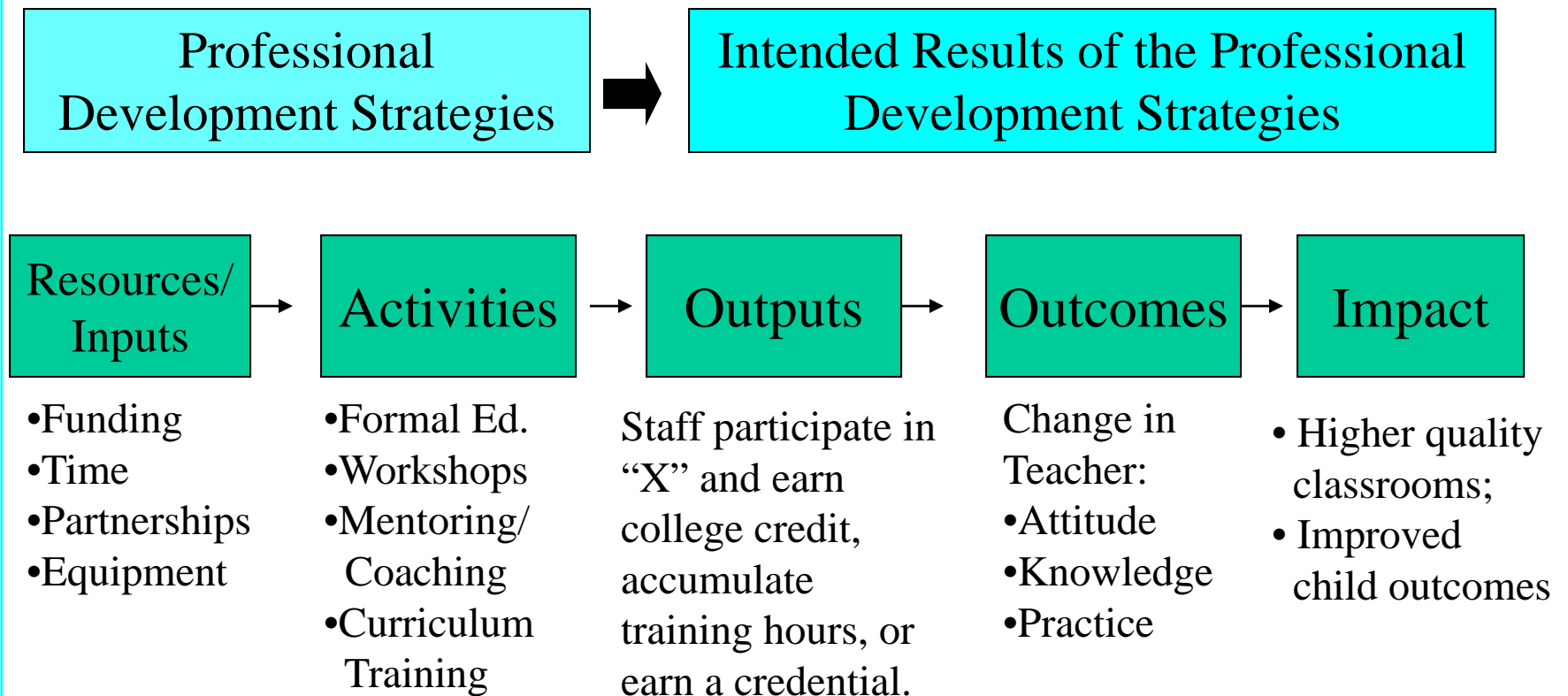
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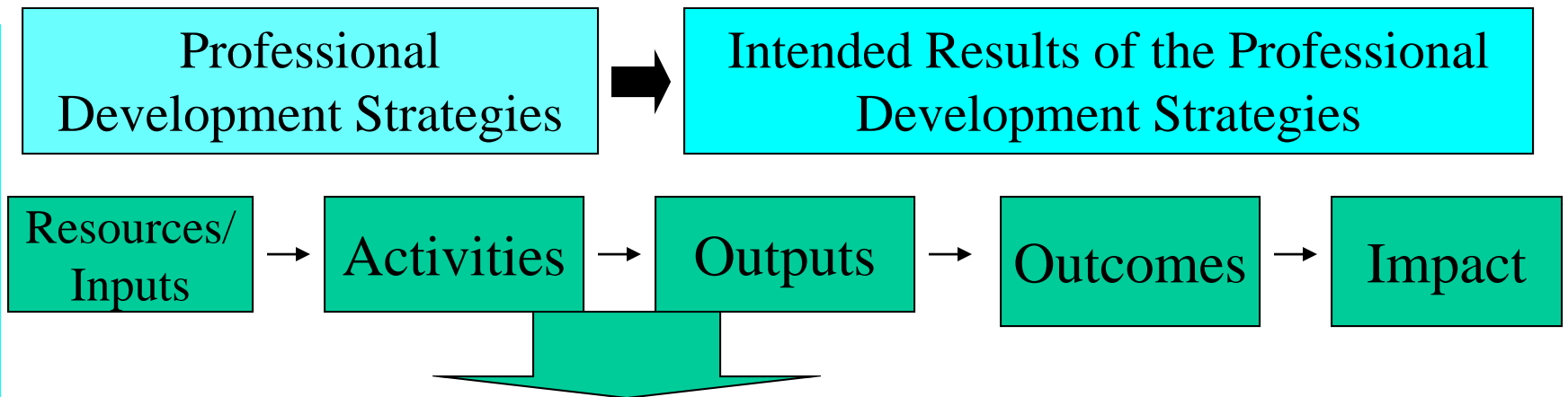
The Complete Logic Model*



* Recognizing the varied approaches to developing a logic model, this logic model reflects an approach presented in the W.K. Kellogg Foundation Logic Model Development Guide.



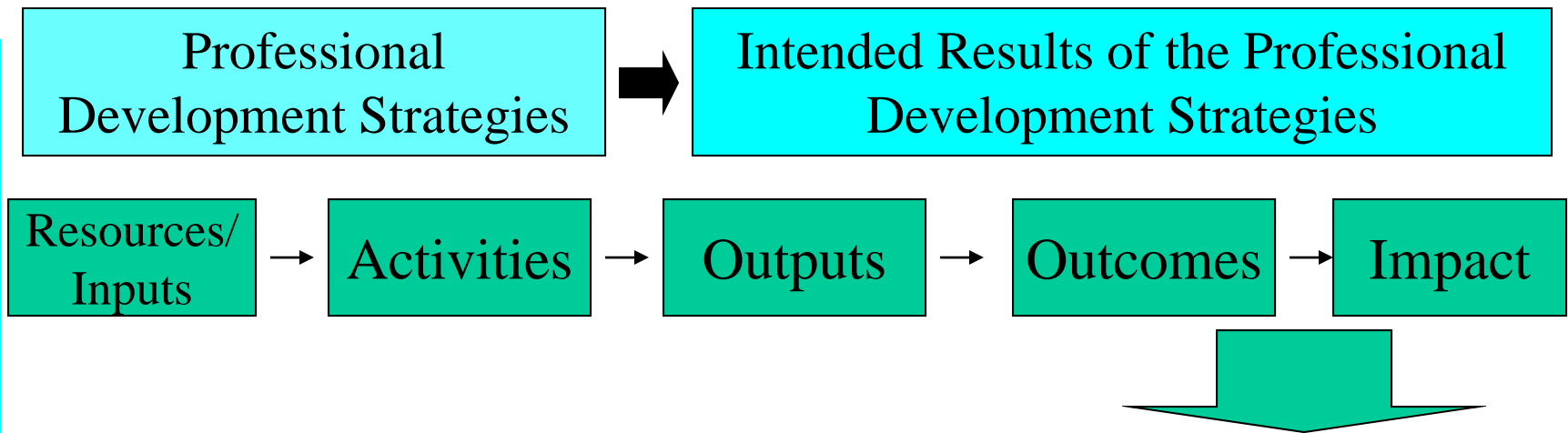
Four Areas to Strengthen the Logic Model



1. Define and measure terms such as formal education, training, and credentials
2. Assess fidelity of implementation of the professional development activity including: adherence to the training materials; the quality of the training; and the dosage of the training.



Four Areas to Strengthen the Logic Model

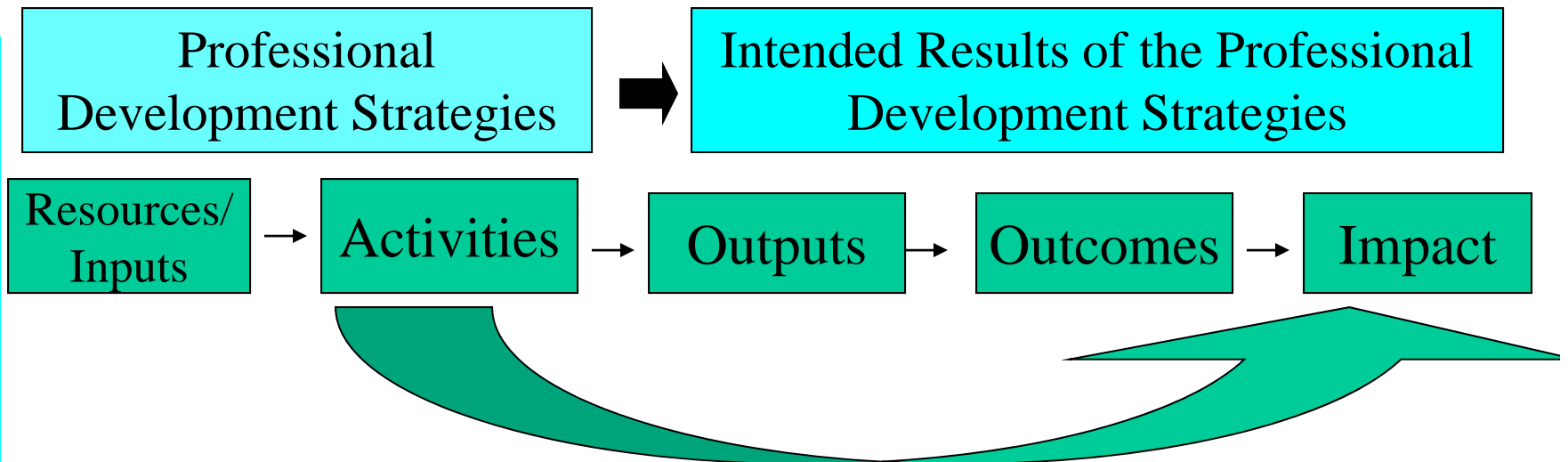


3. Assess change in teacher attitude, knowledge, and/or practice as directly related to the goals of the professional development activity.
4. If applicable, assess the teacher's fidelity of implementation.



The “Incomplete Logic Model”*

(Assumptions We Make in Research)

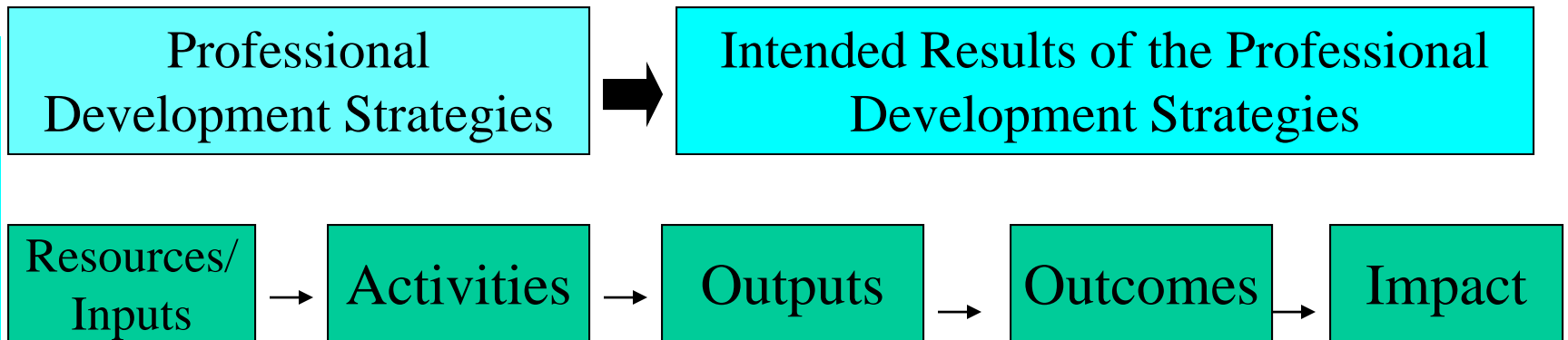


We **assume** professional development improves classroom quality and/or child outcomes without carefully examining the professional development activities and their relation to the outputs (the quality of the activity and the resulting credential) and outcomes (changes in teacher attitude, knowledge, and practice).

Snow, K. (2006). Completing the model: Connecting early child care worker professional development with child outcomes. In M. Zaslow, & I. Martinez-Beck (Eds.), *Critical issues in early childhood professional development*. Baltimore: Brookes Publishing.



Two Current Studies as Examples of a More Complete Logic Model



1. Quality Rating System Study: Defining and measuring professional development and its relation to program quality and child outcomes.
2. Early Reading First: Defining and measuring professional development, fidelity of implementation, classroom quality and child outcomes.



Midwest QRS Study

- Four states (IA, KS, MO, NE) piloted and gathered preliminary validity evidence for state-specific Quality Rating Systems (QRS)
- Data were collected at two time points (with about one year between them).
 - Environment Rating Scales (ECERS-R, ITERS-R, FDCRS)
 - Caregiver Interaction Scale
 - ECERS-E
 - Survey about program attributes and program supports, including professional development
 - Staff demographic surveys



Midwest QRS Study

- 150 homes and 100 centers were rated across the two time points.
- Regarding validity, the following were correlated with overall QRS ratings at Time 1 across the states:
 - ERS scores
 - CIS scores
 - ECERS-E scores
 - Lead teacher highest level of education
 - Lead teacher hourly wage



Midwest QRS Study

- Some state-specific findings:
 - In MO, onsite TA was found to be significantly related to change in QRS ratings.
 - In NE, for family child care homes, director/owners with more annual training hours were more likely to have higher QRS ratings at Time 1 and to see greater gains in QRS ratings over time.
 - In KS, centers and homes receiving onsite TA significantly increased environment rating scale scores.

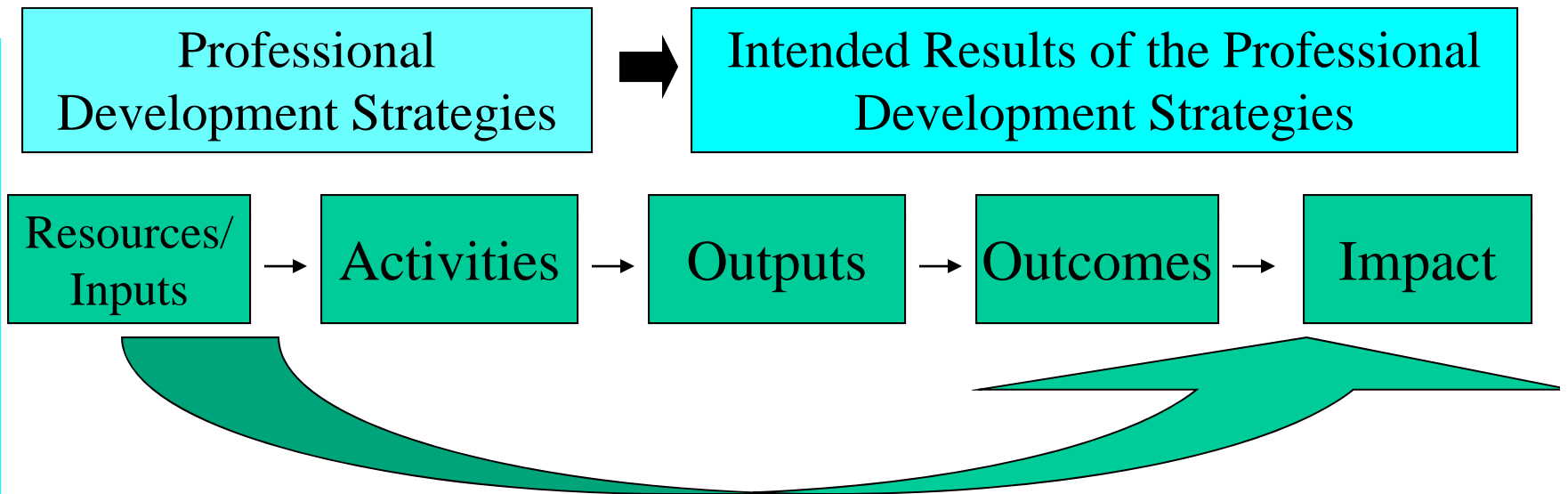


QRS School Readiness Study

- To determine whether QRS ratings are related to gain in child outcomes (predictive validity)
- About 60 programs (both centers and homes) will participate.
- About 800 children ages 3½ to 5 will be assessed in fall 2008 and spring 2009.
- Child gains on various measures will be correlated with QRS ratings, controlling for age, gender, race/ethnicity, attendance, and free/reduced lunch status.



Evaluating Missouri's Quality Rating System



1. Examination of statewide EC systems and funding.
2. Verification of all professional development activities per participating ECE staff member.
3. Currently examining the relation between program quality (QRS rating) and child outcomes.



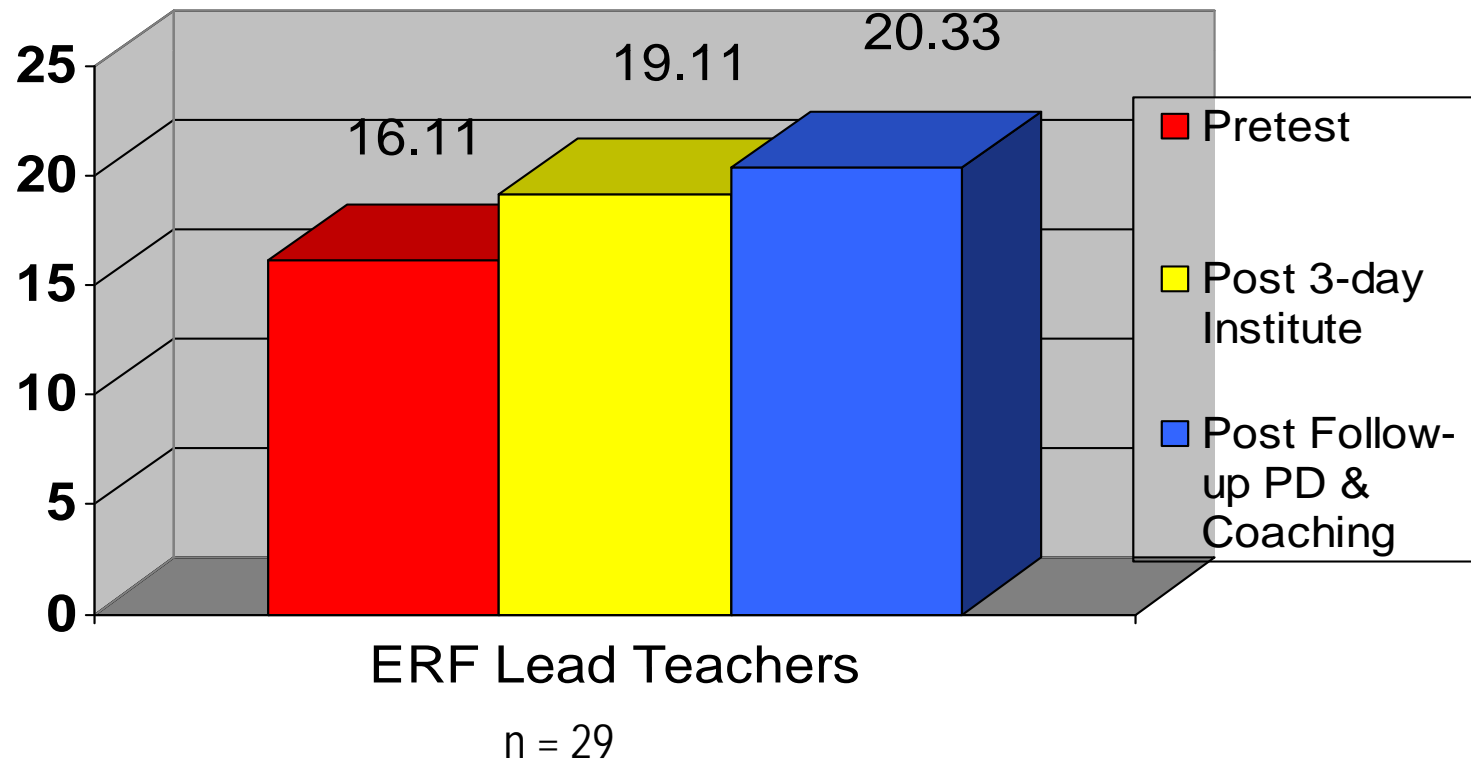


Early Reading First

- Implementing the *Emerging Language and Literacy Curriculum* (ELLC) in five early childhood programs in rural MO.
 - Quasi-experimental design: four comparison sites
- Intensive professional development:
 - Initial curriculum training
 - Monthly follow-up trainings
 - Coaches and Speech/Language Pathologists spend 8-10 hours per week in each classroom

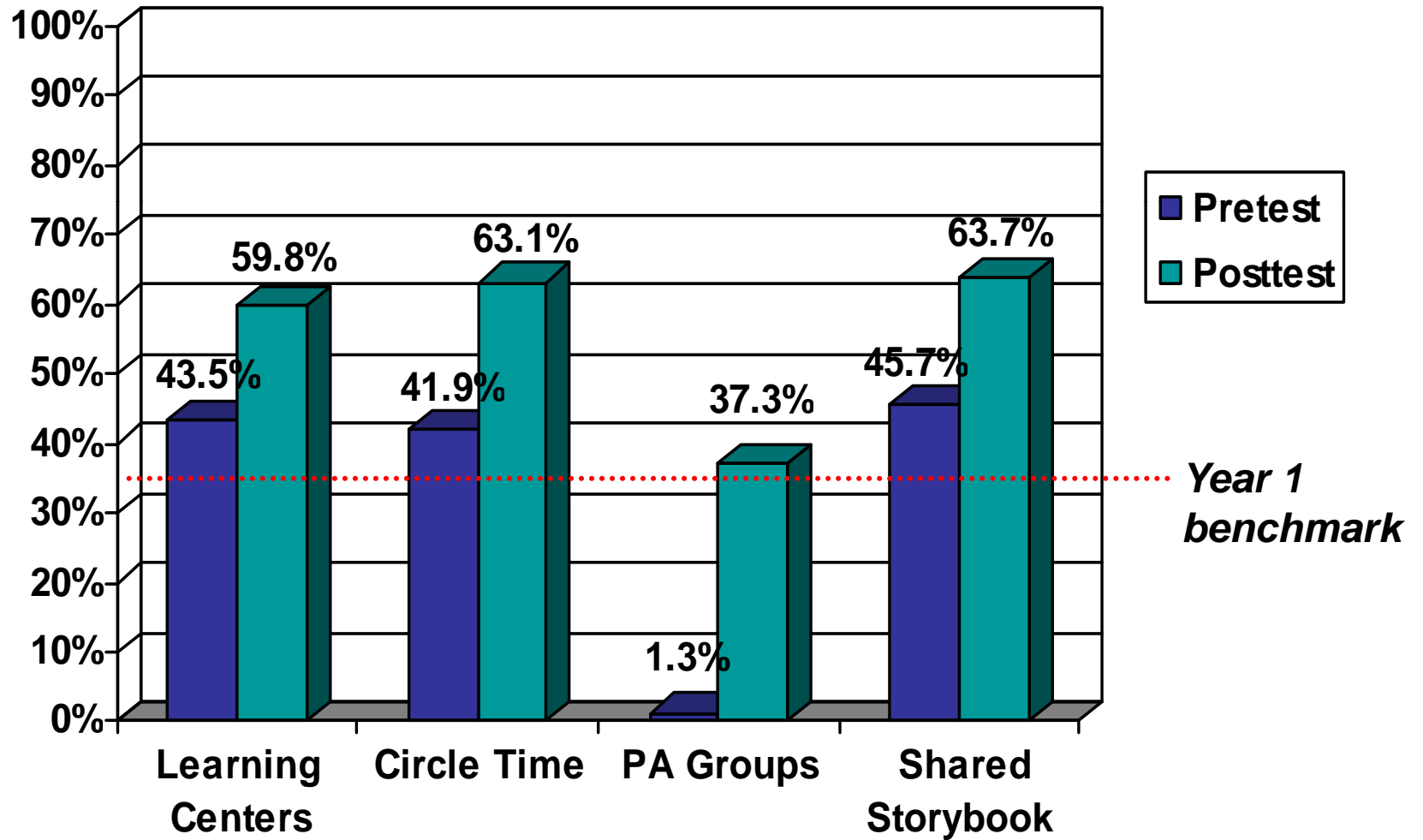


Year 1 ERF Teacher Early Literacy Knowledge



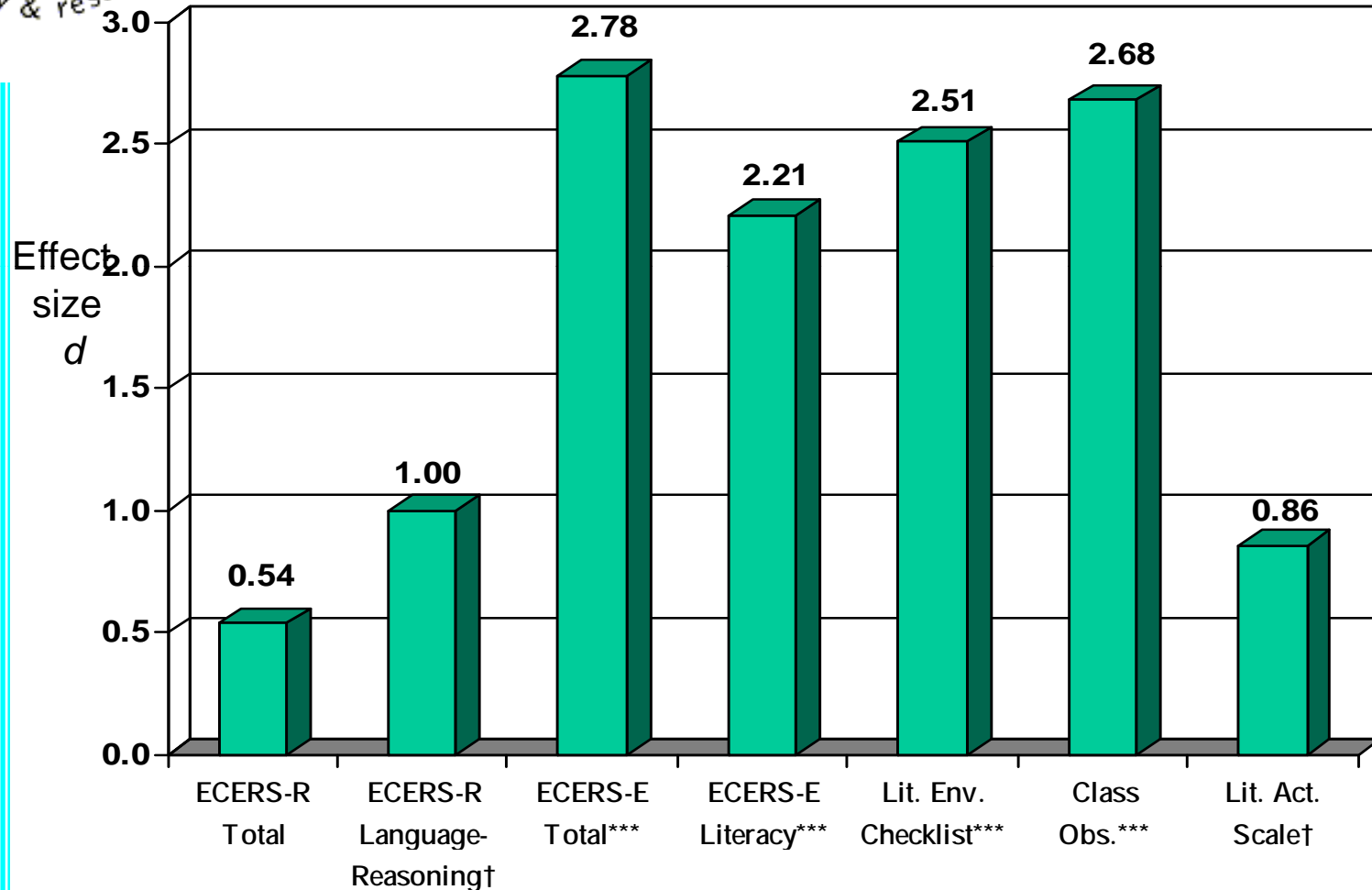


Year 1 ERF ELLC Fidelity Measures





Year 1 ERF Effect Sizes for Observation Measures

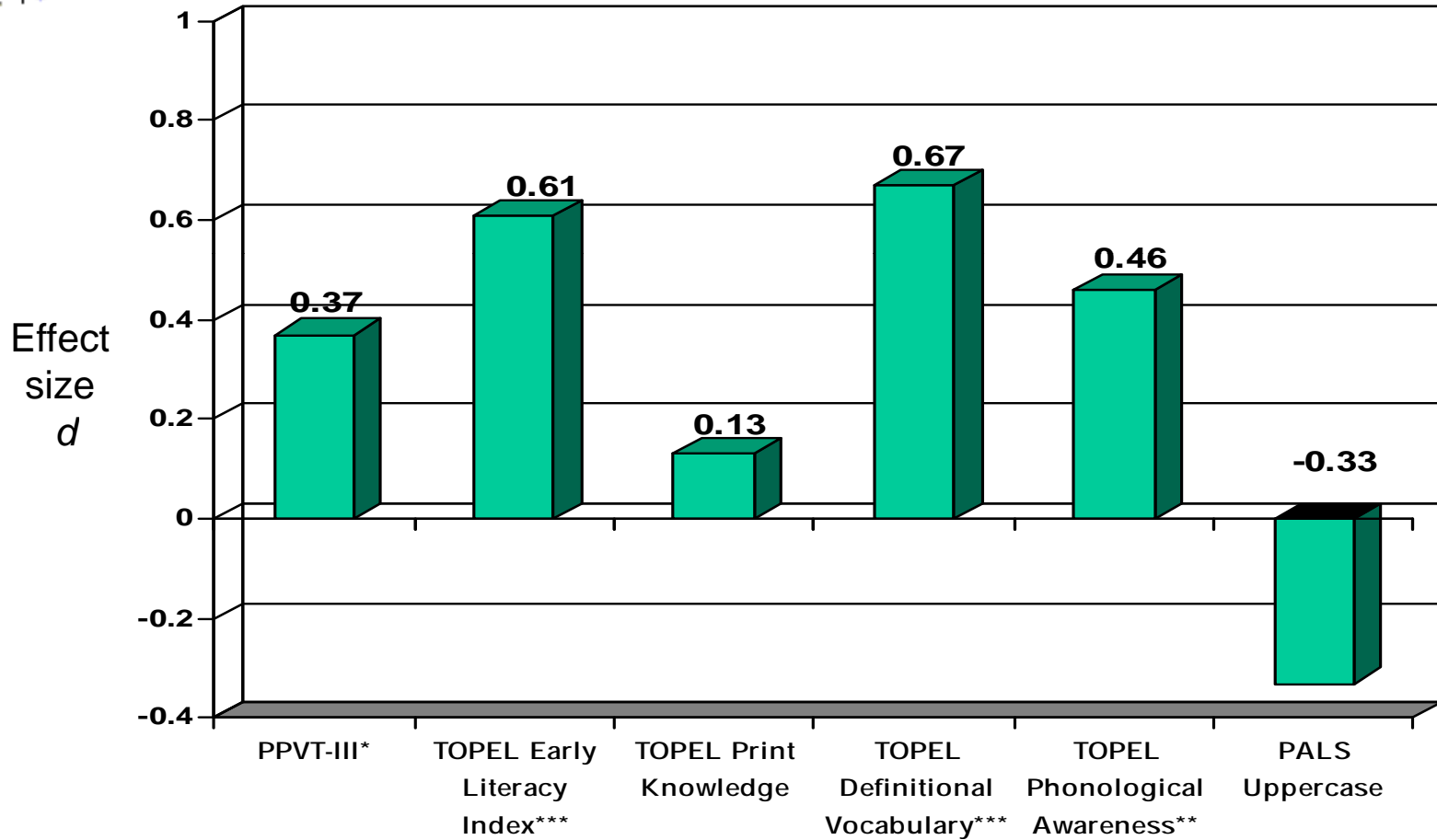


ERF classroom n = 9; Comparison classroom n = 7

† $p < .10$ * $p < .05$. ** $p < .01$ *** $p < .001$



Year 2 ERF Effect Sizes for Child Outcomes



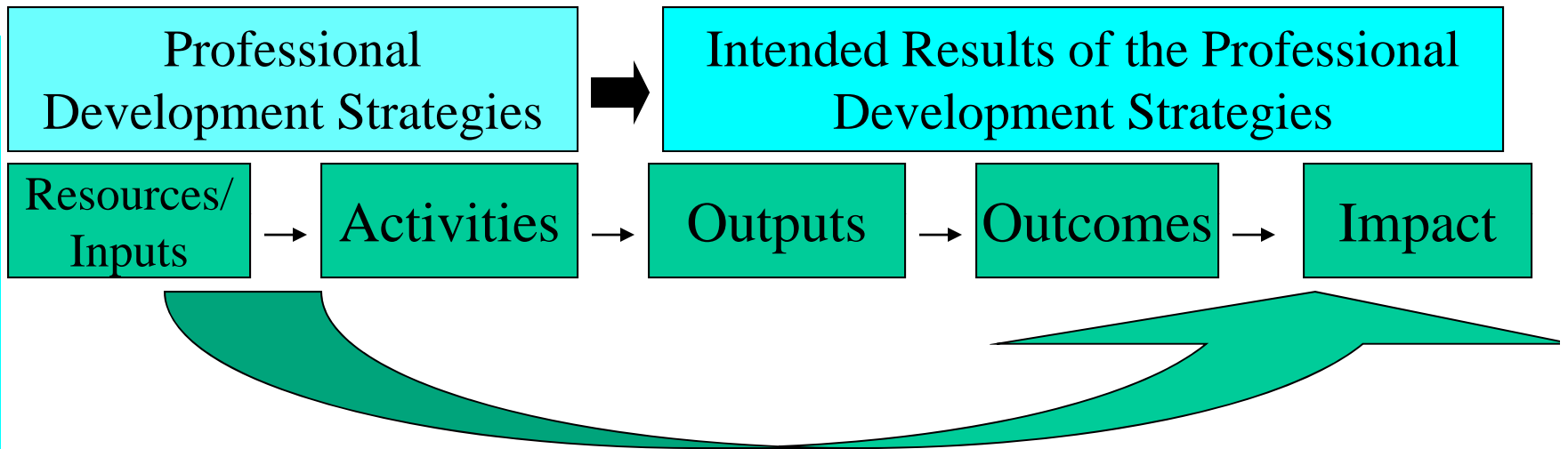
Gender, minority status, IEP, maternal education, and age were entered as covariates.

ERF n = 107; Comparison n = 46

* $p < .05$. ** $p < .01$ *** $p < .001$



Early Reading First



1. Partnered with local agency and used federal funds.
2. Emphasis on curriculum training and on-site mentoring.
3. Teachers completed comprehensive PD (app. 500 hours)
4. Multiple assessments of change in teacher knowledge, instructional practice, and fidelity of the curriculum implementation.
5. Multiple assessments of classroom quality and child outcomes.



Food for Thought

1. Environmental Rating Scale → Child Outcomes

We can raise the classroom quality score but that doesn't always translate into intentional teaching practices.

	Time 1	Time 2
Mean QRS star rating***	2.18	3.41
% of teachers w/ CDA or 9 college credits (6 approved) and above***	42.3%	55.8%
Overall environment rating scale score mean***	3.72	4.66
Overall ECERS-E mean	3.05	3.04

*** $p < .001$

n = 22



Food for Thought

2. Fidelity of Implementation

We need to assess fidelity during the professional development process to ensure teachers are participating in high quality learning experiences.

3. Account for Familial Influence

In the logic model process, our research design must account for the influence of the family.

