

# **Impact of the Literacy Collaborative Professional Development on Teachers' Instructional Practice and Student Achievement: Preliminary Findings from a Four-Year Longitudinal Study**

**A research and development partnership involving the Literacy Collaborative at Lesley University and The Ohio State University, University of Chicago, Stanford University, and Teachscape**

# Overview of the Overall Project

- An interrelated set of investigations over 4 years on the efficacy of:
  - The Literacy Collaborative Professional Development Program
  - Adding a Web-based Collaborative Learning Environment (PDS<sup>2</sup>) to support this work
  
- An embedded set of design research inquiries on PDS<sup>2</sup>
  
- **Today's symposium focuses on emerging evidence on the first objective—efficacy of the Literacy Collaborative program**

# Key Features of the Literacy Collaborative

- Began in 1993, in over 750 schools in 22 states
- Developed by The Ohio State University and Lesley University, with Georgia State University as a dissemination partner
- A research-based literacy framework focusing on reading, writing and word study/phonics
- A comprehensive professional development model
  - **A new professional role--school-based literacy coordinator**—combines in-school PD sessions with one-on-one classroom coaching (**Paper 1**).
  - Extensive initial training (Ohio State and Lesley)
  - Ongoing support from both a local and national network of colleagues, including an annual institute

# The Literacy Collaborative

- Serves a diverse array of schools
  - Over 1/3 of the schools enroll either primarily African American or Latino students
  - 75% of the schools have over 50% low income students
  - 40% of the schools have over 75% low income

(Source: 2003 Literacy Collaborative Annual Report.)

# The Literacy Collaborative: Deepening the Evidence Base

- Internal evidence is encouraging but...
  - No evidence that actually assess students' reading skills longitudinally
  - Possible selection effects
  - No follow through to grade 3, a critical external accountability time point
  
- Need for a more rigorous longitudinal research design

# Core Study

- I. Quasi-experimental evidence on overall effects of LC
  - **Assess changes in teachers' instructional practices** over 3 years using the Developing Language and Literacy Teaching Observational System. **(paper 2)**
  - **Assess changes in students' growth over time** using a new developmental-metric based on DIBELS and Terra Nova tests. **(papers 3 and 4)**
  - **Relate classroom-level value-added trends** in student learning to changes in teaching practice and other teacher- and school-level covariates.
    - (An exploration of the causal cascade from design of PD to changes in instructional practice to changes in student learning.)

# Core Study

- II. Randomized clinical trial on effects of adding PDS2 to LC on teachers' practices and student learning
  - 9 matched pairs, one each randomly assigned to LC versus LC + PDS<sup>2</sup>
  - A topic for another day

# Core Data Collection

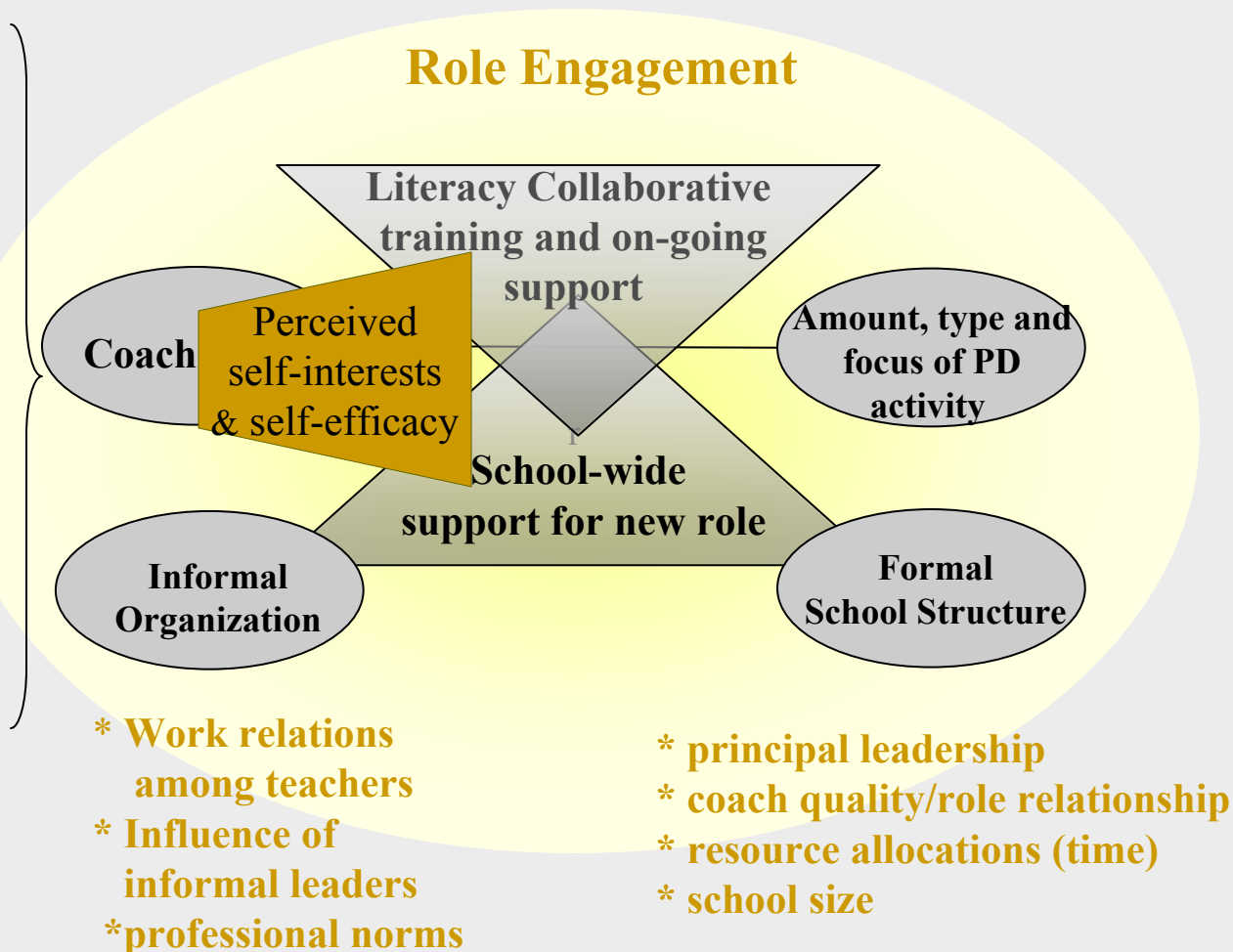
- Literacy assessments on all students (K-3) in both fall and spring for 4 years to assess change over time in students' literacy learning.
- Systematic observation of teacher practice in years 2 through 4 to document changes in practice.
- Teacher surveys years 1 and 4 to assess individual agency, school organizational properties and possible changes here too.
- A mix of quantitative and qualitative evidence on the professional development and work practices of the literacy coordinators as well.

**A basic activity theory framework  
for examining potential changes in  
the work of coaches and teachers**

# Examining How Literacy Coaches Engage their New Role

## Background

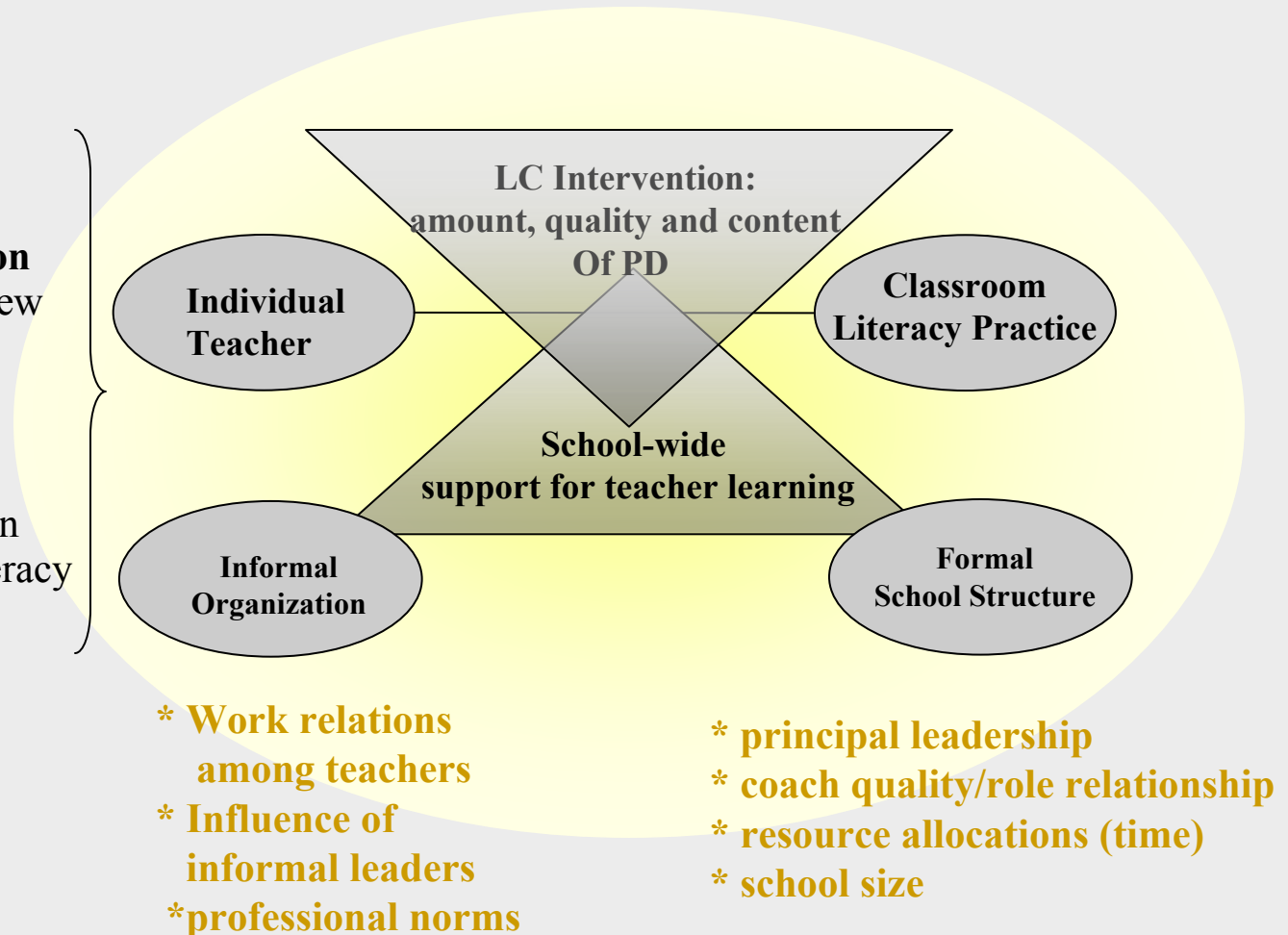
- **Expertise**
  - Prior knowledge in literacy teaching and learning
  - Prior experience as an adult educator
- **Willingness to engage instructional innovation**
  - Experiment with new practices in their classroom
- **Role conception**
  - Engaging school colleagues



# Examining Teachers' Take Up and Use of Literacy Professional Development

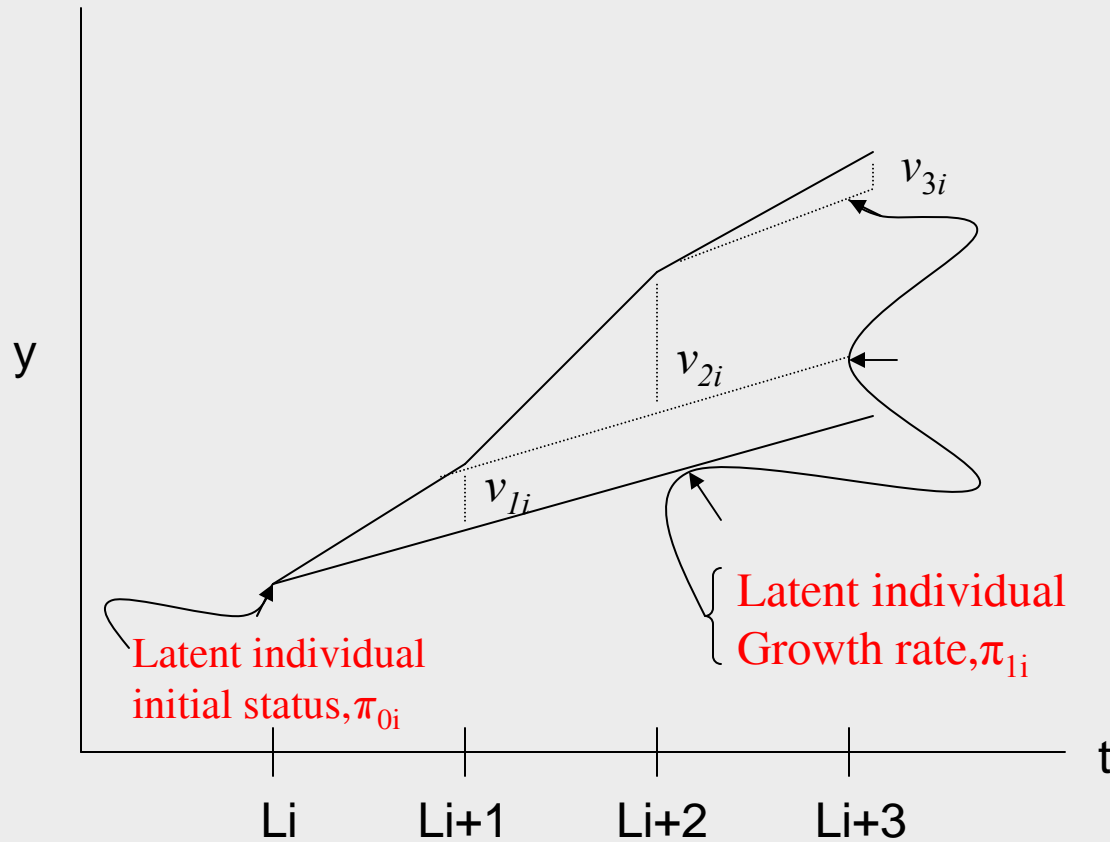
## Background

- **Willingness to engage instructional innovation**
  - Experiment with new practices in their classroom
- **Expertise**
  - Prior experiences in comprehensive literacy teaching (ZPD)



**A value added framework for  
examining potential effects on  
student learning**

# The Logic of a Value-Added Model for Assessing Impact on Student Learning



$$\hat{y}_{0i} = \pi_{0i}$$

$$\hat{y}_{1i} = \pi_{0i} + \pi_{1i} + v_{1i}$$

$$\hat{y}_{2i} = \pi_{0i} + 2\pi_{1i} + v_{1i} + v_{2i}$$

$$\hat{y}_{3i} = \pi_{0i} + 3\pi_{1i} + v_{1i} + v_{2i} + v_{3i}$$

$$\hat{y}_{4i} = \pi_{0i} + 4\pi_{1i} + v_{1i} + v_{2i} + v_{3i} + v_{4i}$$

Gain from year  $t-1$  to  $t = \pi_{1i} + v_{ti}$

# The Papers

- Lisa Walker, Allison Atteberry, Patricia Scharer and Irene Fountas *The Quantity and Quality of K-2 Coaching Literacy Collaborative Schools: What are coaches actually doing and what might account for the variability in their activities?*
- Heather Hough, Gay Su Pinnell, Anthony S. Bryk, and David Kerbow. *Measuring Change in the Practice of Literacy Teachers.*
- Gina Biancarosa, David Kerbow, Stuart Luppescu, and Anthony S. Bryk. *Creating a Metric for Measuring Early Student Literacy Development: A Rasch Analysis of DIBELS Assessment Data.*
- Anthony S. Bryk, Gina Biancarosa, Allison Atteberry, and Emily Dexter. *Assessing the Value-Added Effects of Literacy Collaborative Professional Development on Student Learning.*