

# **ENABLING SCHOOL SUCCESS: FIRST YEAR EVALUATION OF THE CHILD DEVELOPMENT PROJECT**

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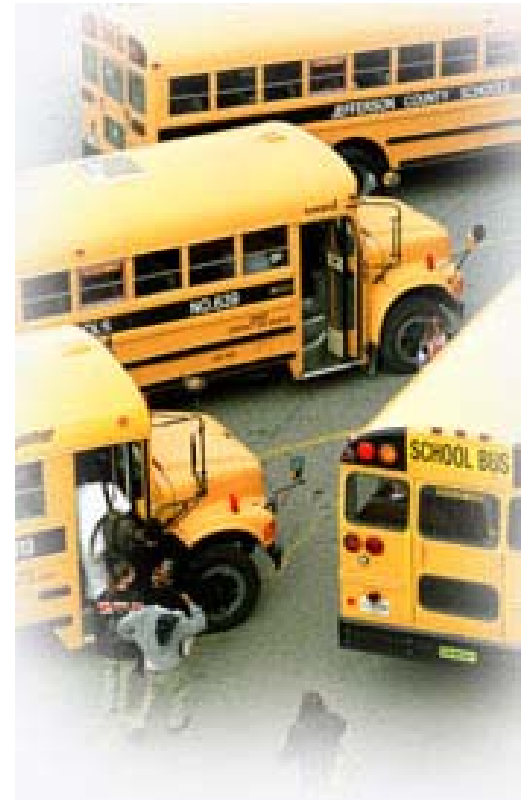
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# Research Context: Jefferson County Public Schools

- **29<sup>th</sup> largest school district in U.S.**
- **96,500 students**
  - 58% White
  - 36% African-American
  - 6% Other
- **152 schools**
- **52% in poverty**
- **54% single-parent homes**



# Brief Model Description

- Child Development Project (CDP) is an ecological intervention (Bronfenbrenner, 1977) that influences multiple aspects of the schools.
- The concept is that CDP will promote social, ethical, and academic growth in all students.
- CDP helps schools become “caring communities of learners” (Battistich & Hom, 1997; Brandt, 1992; Schaps & Solomon, 1990).

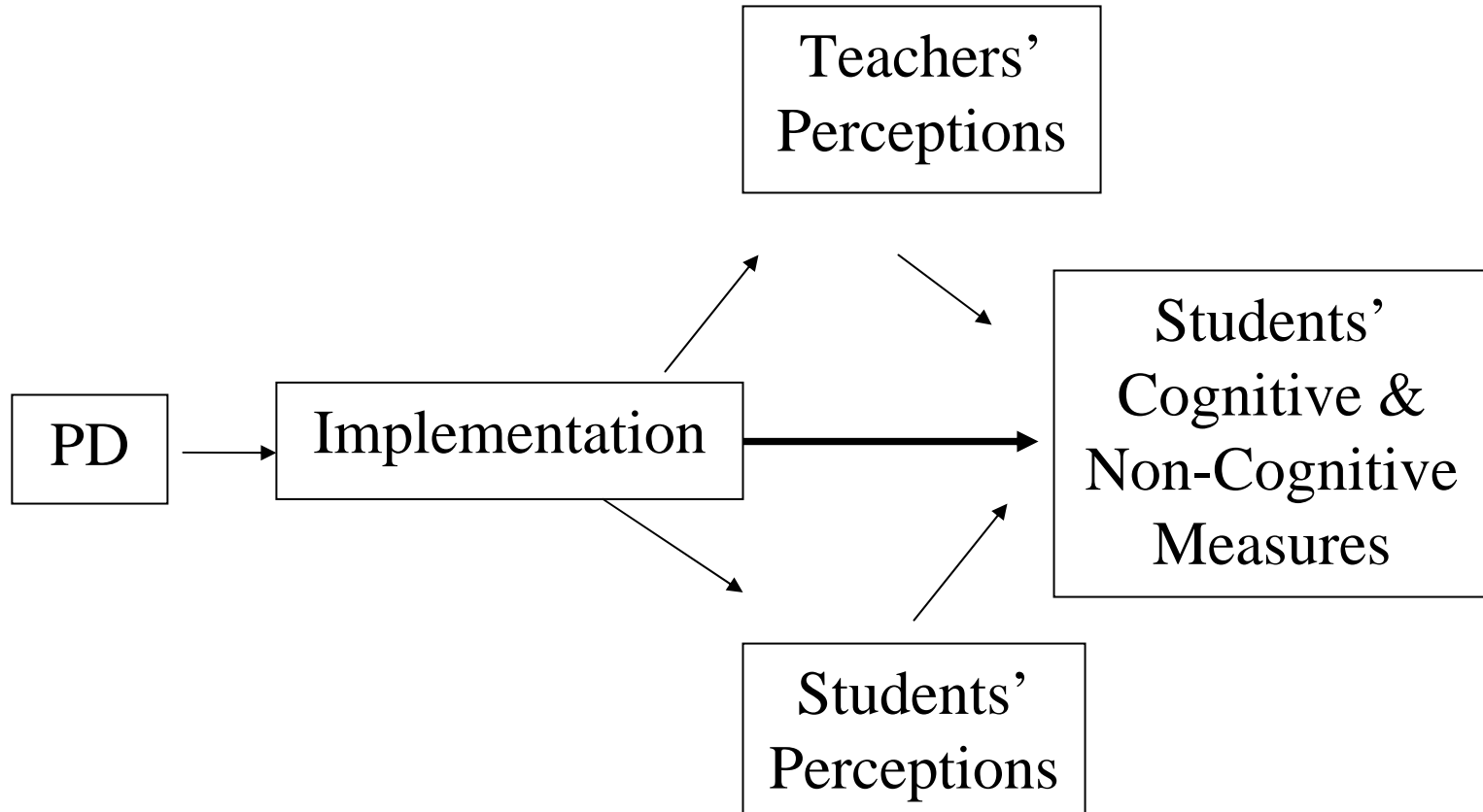
# Community Reading and Conversation Components

- **CDP's *Reading for Real*** uses literature to integrate character development into the curriculum, supports respect for diversity and an understanding of other points of view, develops instructional conversation and critical thinking skills, and builds a sense of community and caring within the classroom.
- **CDP's *Making Meaning*** focuses on building students' reading comprehension skills and providing students with specific comprehension strategies while integrating approaches for building the classroom community and fostering social/ethical understanding using cooperative learning, class meetings and instructional conversation.

# Logic Model

Proximal  
Outcomes

Distal  
Outcomes



# Implementation Timelines

- Year 1 (2002/2003)
  - Planning year; three-tier selection process
  - Staff orientation and training (Summer Institute)
- Year 2 (2003/2004)
  - *Reading for Real*: read-aloud/partner reading and unity building; cooperative learning; morning and class meetings; and, routines and procedures.
  - After School Program: *KidzLit* (reading component)
- Year 3 (2004/2005)
  - *Making Meaning*: comprehension, cooperative work, and focus on social development; developmental discipline approach.
  - After School Program: *KidzLit* (reading component)
- Year 4 (2005/2006)
  - *Buddies Program*, CDP school-wide projects (service learning, family nights, developmental discipline)
  - After School Program: *KidzMath* (math component)

# Research Questions

- (a) What effects does CDP have on student perceptions on measures such as feelings about the classroom, feeling about the school, and social/moral orientations?
- (b) What effects does CDP have on teacher perceptions on measures such as educational beliefs and attitudes, feelings about self as a teacher, and school climate?
- (c) Does CDP result in improved student attendance?
- (d) Does CDP positively influence student discipline?
- (e) Does CDP affect the overall student achievement\* as measured on standardized reading test scores?

\*Achievement data will be analyzed when it becomes available at the end the current school year

Treatment and Control Schools Matched on Key Characteristics (N = 16)

| <u>School</u>                    | <u>% Poverty</u> | <u>% ECE</u> | <u>% Mobility</u> | <u>% Single Parent Household</u> | <u>NCE CTBS</u> | <u>CATS Total Academic Index</u> |
|----------------------------------|------------------|--------------|-------------------|----------------------------------|-----------------|----------------------------------|
| School A                         | 25.4             | 3.7          | N/A*              | 41.9                             | N/A*            | N/A*                             |
| Control A                        | 25.4             | 7.1          | 6.9               | 34.1                             | 62.4            | 84.5                             |
| School B                         | 60.3             | 6.8          | 11.9              | 57.7                             | 46.9            | 69.5                             |
| Control B                        | 60.2             | 6.1          | 12.7              | 64.4                             | 50.1            | 65.5                             |
| School C                         | 50.4             | 6.8          | 10.5              | 51.2                             | 49.9            | 68.7                             |
| Control C                        | 47.7             | 7.5          | 7.1               | 47.7                             | 52.1            | 73.8                             |
| School D                         | 49.6             | 9.8          | 8.6               | 62.9                             | 55.0            | 65.2                             |
| Control D                        | 48.0             | 7.8          | 7.9               | 50.6                             | 53.4            | 60.7                             |
| School E                         | 70.2             | 5.4          | 10.6              | 70.5                             | 49.8            | 50.7                             |
| Control E                        | 68.8             | 7.2          | 13.6              | 62.5                             | 42.9            | 56.3                             |
| School F                         | 51.4             | 10.6         | 7.5               | 49.9                             | 53.0            | 62.9                             |
| Control F                        | 49.3             | 9.0          | 14.0              | 59.7                             | 50.7            | 56.5                             |
| School G                         | 84.5             | 9.3          | 8.0               | 65.4                             | 51.9            | 71.9                             |
| Control G                        | 76.2             | 13.0         | 9.0               | 75.5                             | 50.0            | 67.0                             |
| School H                         | 27.9             | 3.8          | 14.0              | 44.4                             | 53.1            | 68.7                             |
| Control H                        | 28.1             | 7.4          | 8.5               | 41.9                             | 57.0            | 77.6                             |
| Avg. Treatment Schools           | 52.5             | 7.0          | 10.2              | 55.5                             | 51.4            | 65.4                             |
| Avg. Control Schools             | 50.5             | 8.1          | 10.4              | 54.6                             | 50.9            | 65.3                             |
| Avg. District Elementary Schools | 59.1             | 7.4          | 10.4              | 49.4                             | 51.5            | 67.4                             |

\* New school beginning with the 2002-2003 school year

# Primary Data Collection Instruments

- Students/Grades 3-5

To capture the perceptions associated with the classroom, school, and social/moral orientations.

- Teachers/Grades 3-5:

To survey the educational beliefs, self-efficacy, and school climate perceptions of the teachers.

- Note: Written permission as well as technical information (validity, reliability) obtained from instrument developers.

- Approved by the Human Subjects Committee of local university.

# Scales of the Student Questionnaire

- Student Autonomy and Influence in the Classroom (SAIC) (Cronbach's  $\alpha = .65$ )
  - 10 items, minimum score = 10, maximum score = 50
- Classroom Supportiveness (CS) (Cronbach's  $\alpha = .73$ )
  - 10 items, minimum score = 10, maximum score = 50
- Liking for School (LS) (Cronbach's  $\alpha = .69$ )
  - 7 items, minimum score = 7, maximum score = 35
- Trust and Respect for the Teachers (TRT) (Cronbach's  $\alpha = .82$ )
  - 8 items, minimum score = 8, maximum score = 40
- Concern for Others (CO) (Cronbach's  $\alpha = .67$ )
  - 10 items, minimum score = 10, maximum score = 50

# Scales of the Teacher Questionnaire

- Feeling of Success, Efficacy as a Teacher (FSET)  
(Cronbach's  $\alpha = .73$ )
  - 4 items, minimum score = 4, maximum score = 20
- Enjoyment of Teaching (ET) (Cronbach's  $\alpha = .78$ )
  - 7 items, minimum score = 7, maximum score = 35
- Positive Relations Among Students (PRAS)  
(Cronbach's  $\alpha = .82$ )
  - 5 items, minimum score = 5, maximum score = 25
- Principal Supportiveness (PS) (Cronbach's  $\alpha = .82$ )
  - 8 items, minimum score = 8, maximum score = 40
- Parent Supportiveness (PS) (Cronbach's  $\alpha = .77$ )
  - 5 items, minimum score = 5, maximum score = 25
- Faculty Collegiality (FC) (Cronbach's  $\alpha = .88$ )
  - 7 items, minimum score = 7, maximum score = 35

# Results of Implementation Check

- Classroom Observations
- Ratings:
  - 4 = Exemplary Implementation
  - 3 = Good Implementation
  - 2 = Some Implementation
  - 1 = Not Evident or Visible, Poor Implementation
- Overall Implementation Rating:
  - 2 = Some Implementation
- Range of Implementation Ratings: 1.44 – 2.32

# Descriptive Statistics of Students' Treatment (1) and Control (0) Group

|      | Group | Mean    | Std. Deviation | N    |
|------|-------|---------|----------------|------|
| SAIC | 0     | 22.3157 | 7.37660        | 567  |
|      | 1     | 24.8178 | 7.14698        | 472  |
|      | Total | 23.4524 | 7.37578        | 1039 |
| CS   | 0     | 29.7513 | 8.45733        | 567  |
|      | 1     | 31.0932 | 8.27139        | 472  |
|      | Total | 30.3609 | 8.39601        | 1039 |
| LS   | 0     | 21.8907 | 7.91822        | 567  |
|      | 1     | 23.0275 | 7.74660        | 472  |
|      | Total | 22.4071 | 7.85740        | 1039 |
| TRT  | 0     | 28.5767 | 8.55128        | 567  |
|      | 1     | 29.1250 | 8.07865        | 472  |
|      | Total | 28.8258 | 8.34039        | 1039 |
| CO   | 0     | 28.8377 | 7.76545        | 567  |
|      | 1     | 30.2733 | 7.84209        | 472  |
|      | Total | 29.4899 | 7.82932        | 1039 |

# Between-Subjects Test of Students' Treatment (1) and Control (0) Group

| Dependent Variable | Sum of Squares | Df   | Mean Square | F      | Sig. |
|--------------------|----------------|------|-------------|--------|------|
| SAIC               | 1612.571       | 1    | 1612.571    | 30.484 | .000 |
|                    | 54856.821      | 1037 | 52.900      |        |      |
| CS                 | 463.819        | 1    | 463.819     | 6.615  | .010 |
|                    | 72707.835      | 1037 | 70.114      |        |      |
| LS                 | 332.925        | 1    | 332.925     | 5.415  | .020 |
|                    | 63751.862      | 1037 | 61.477      |        |      |
| TRT                | 77.431         | 1    | 77.431      | 1.113  | .292 |
|                    | 72128.038      | 1037 | 69.555      |        |      |
| CO                 | 530.828        | 1    | 530.828     | 8.724  | .003 |
|                    | 63096.816      | 1037 | 60.846      |        |      |

# Program Impact on Students When Compared to Control Schools

## **Gains:**

- Liking for School
- Student Autonomy and Influence in the Classroom
- Concern for Others
- Classroom Supportiveness

## **No Improvement:**

- Trust and Respect for the Teachers

# Descriptive Statistics of Students' Experimental and Control Group

|                                   |                    | N   | Mean    | Std. Deviation |
|-----------------------------------|--------------------|-----|---------|----------------|
| Feeling of Success as a Teacher   | Control Group      | 66  | 16.6970 | 2.23242        |
|                                   | Experimental Group | 166 | 16.3976 | 2.15147        |
|                                   | Total              | 232 | 16.4828 | 2.17416        |
| Enjoyment of Teaching             | Control Group      | 65  | 28.3846 | 5.04880        |
|                                   | Experimental Group | 165 | 28.8727 | 3.96811        |
|                                   | Total              | 230 | 28.7348 | 4.29523        |
| Positive Relations Among Students | Control Group      | 65  | 18.1231 | 3.56856        |
|                                   | Experimental Group | 166 | 17.8795 | 3.16380        |
|                                   | Total              | 231 | 17.9481 | 3.27665        |
| Principal Supportiveness          | Control Group      | 60  | 31.8667 | 6.68027        |
|                                   | Experimental Group | 158 | 34.1646 | 4.59557        |
|                                   | Total              | 218 | 33.5321 | 5.33585        |
| Parent Supportiveness             | Control Group      | 67  | 18.1642 | 3.40497        |
|                                   | Experimental Group | 165 | 17.6545 | 2.99319        |
|                                   | Total              | 232 | 17.8017 | 3.11877        |
| Faculty Collegiality              | Control Group      | 67  | 27.1791 | 4.65450        |
|                                   | Experimental Group | 157 | 29.1210 | 4.16541        |
|                                   | Total              | 224 | 28.5402 | 4.39814        |

# Between-Subjects Test of Students' Treatment and Control Group

|                                   |                | Sum of Squares | df  | Mean Square | F     | Sig. |
|-----------------------------------|----------------|----------------|-----|-------------|-------|------|
| Feeling of Success as a Teacher   | Between Groups | 4.233          | 1   | 4.233       | .895  | .345 |
|                                   | Within Groups  | 1087.698       | 230 | 4.729       |       |      |
|                                   | Total          | 1091.931       | 231 |             |       |      |
| Enjoyment of Teaching             | Between Groups | 11.110         | 1   | 11.110      | .601  | .439 |
|                                   | Within Groups  | 4213.712       | 228 | 18.481      |       |      |
|                                   | Total          | 4224.822       | 229 |             |       |      |
| Positive Relations Among Students | Between Groups | 2.771          | 1   | 2.771       | .257  | .613 |
|                                   | Within Groups  | 2466.606       | 229 | 10.771      |       |      |
|                                   | Total          | 2469.377       | 230 |             |       |      |
| Principal Supportiveness          | Between Groups | 229.620        | 1   | 229.620     | 8.338 | .004 |
|                                   | Within Groups  | 5948.655       | 216 | 27.540      |       |      |
|                                   | Total          | 6178.275       | 217 |             |       |      |
| Parent Supportiveness             | Between Groups | 12.376         | 1   | 12.376      | 1.274 | .260 |
|                                   | Within Groups  | 2234.503       | 230 | 9.715       |       |      |
|                                   | Total          | 2246.879       | 231 |             |       |      |
| Faculty Collegiality              | Between Groups | 177.087        | 1   | 177.087     | 9.504 | .002 |
|                                   | Within Groups  | 4136.551       | 222 | 18.633      |       |      |
|                                   | Total          | 4313.638       | 223 |             |       |      |

# Program Impact on Teachers When Compared to Control Schools

## **Gains:**

- Faculty Collegiality
- Principal Supportiveness

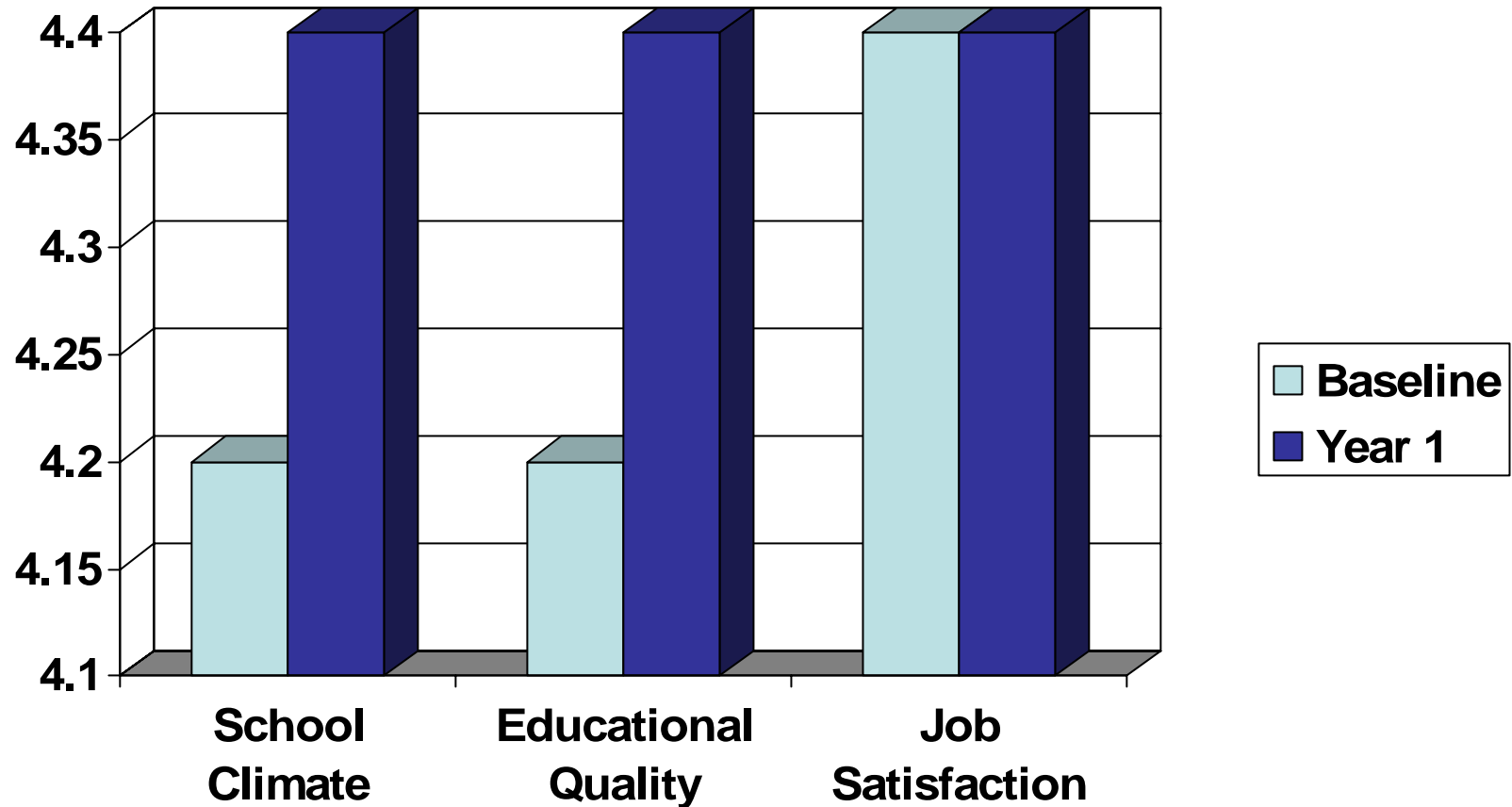
## **No Improvement:**

- Enjoyment of Teaching Feeling of Success, Efficacy as a Teacher
- Positive Relations Among Students
- Parent Supportiveness

# Preliminary Non- Cognitive Outcomes (7<sup>th</sup> Pupil Month)

- Out of school suspensions
  - No statistical difference, but practically significant difference is favoring the control ( $M = 4.38$ ,  $SD = 3.20$ ) over the program ( $M = 8.25$ ,  $SD = 5.20$ ) schools  
 $F = 3.22$ ,  $p = .09$ ,  $ES = -.84$
- Attendance rate
  - No statistically significant differences between program ( $M = 96.43$ ,  $SD = .52$ ) and control ( $M = 96.14$ ,  $SD = .33$ ) schools  
 $F = 1.71$ ,  $p = .21$

# Teachers' Perceptions (N = 150) in Program Schools



# Parents' Perceptions (N = 1,390) in Program Schools

