

MIDWEST CHILD-PARENT CENTER EXPANSION: PREK-3RD GRADE SCHOOL REFORM MODEL

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UNIVERSITY OF MINNESOTA

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HCRC BROWN BAG SEMINAR

MIDWEST CPC
PreK-3rd
EXPANSION

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MIDWEST CPC

A partnership between the University of Minnesota and 4 school districts to implement and sustain this Prek-3rd Grade School Reform Model

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Midwest Expansion of the Child-Parent Center (CPC) Education Program, Preschool to Third Grade



SPOTLIGHT

[2013 CPC Annual Report](#) [pdf]

[2013-2014 CPC Schools](#)

[CPC Program Guidelines](#) [pdf]

[Lorraine M. Sullivan Memorial Fund](#)

What is it?:

- The "Midwest Expansion of the Child-Parent Center Education Program, Preschool to Third Grade" or "Midwest CPC Expansion" project is a targeted school reform effort in three Midwestern states. The CPC aims to strengthen achievement of

SPOTLIGHT

Early Childhood Research and Innovation Endowment - [Learn More](#) / [Donate](#)

Lorraine M. Sullivan Memorial Fund of the Child-Parent Education Centers - [Learn More](#) / [Donate](#)

[Brown Bag Faculty Research Seminars, 2013 - 2014 Sessions](#)

[Closing the Achievement Gap with Early Education](#), article featuring Aaron Sojourner [off site]

[Early Learning Adds Up: Using Research to Drive Policy](#), June 5, 2014, Event co-sponsored by HCRC [off site]

[New PreK-3 Registry](#) [off site]

[Support all high quality Pre-K programs equally](#), Twin Cities Daily Planet, July 23, 2014 [off site]

[Past News and Events](#)

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FUNDERS

USDE Investing in Innovation Fund

Boeing Corporation

McCormick Foundation

Pritzker Family Foundation

Kellogg Foundation

Foundation for Child Development

Target Corporation

McKnight Foundation

Greater Twin Cities United Way

Finnegan Family Foundation

Evanston Community Foundation

Saint Paul Foundation

District 65 Foundation

Lewis-Sebring Family Foundation

Northwestern University

PROJECT ACTIVITIES

Midwest CPC Program Development

Program Refinements

Research Design Elements

Program Implementation with Districts

Fidelity Assessment and Progress Monitoring

Assess Outcomes and Impacts

Documenting Differential Impacts

Collaborate with SRI in Independent Evaluation

Data Sharing with Districts

Program Manual

Dissemination and Outreach

Social Impact Bonds/Pay for Success

New Expansion Partners

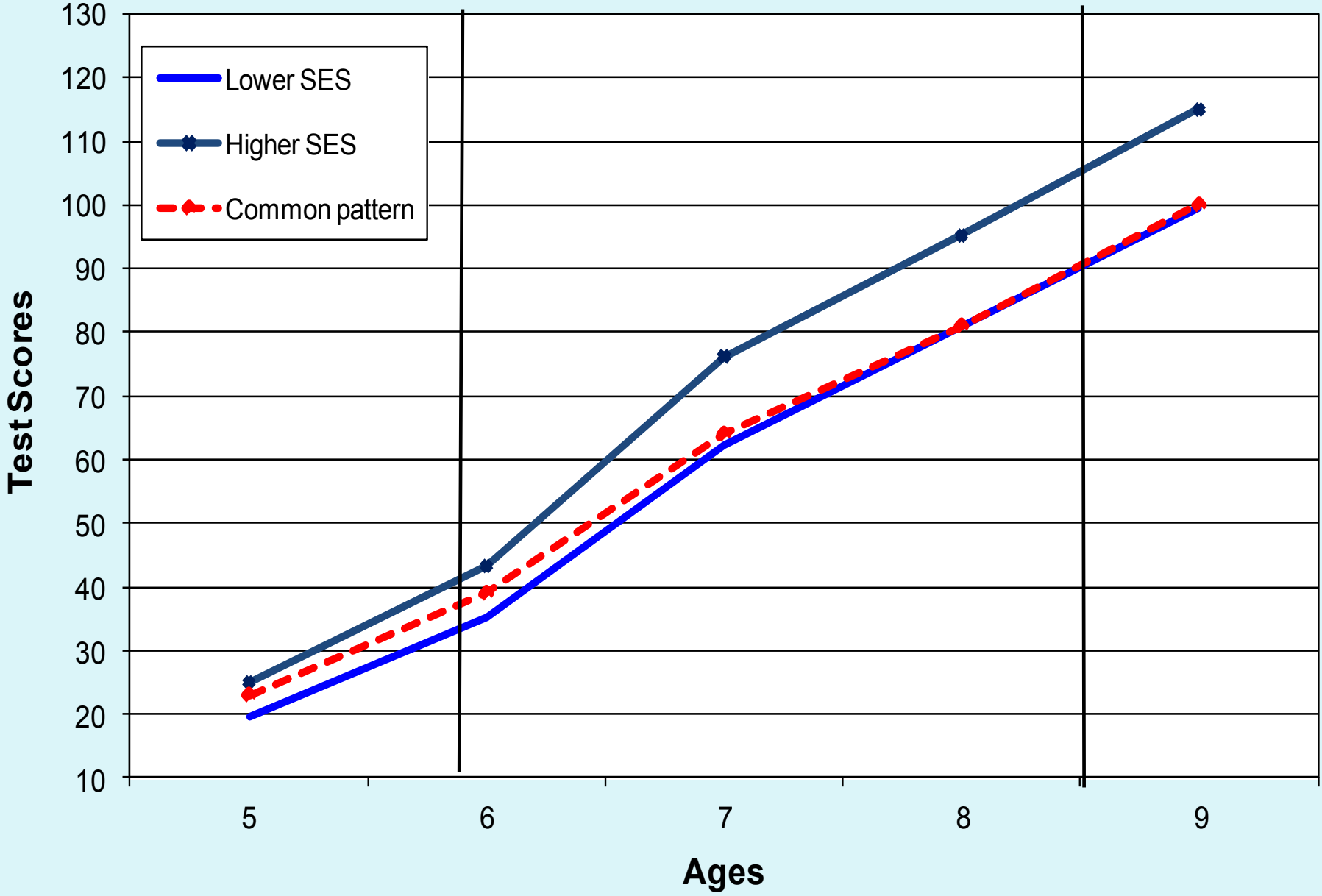
Case Studies

Costs and Initial Benefits

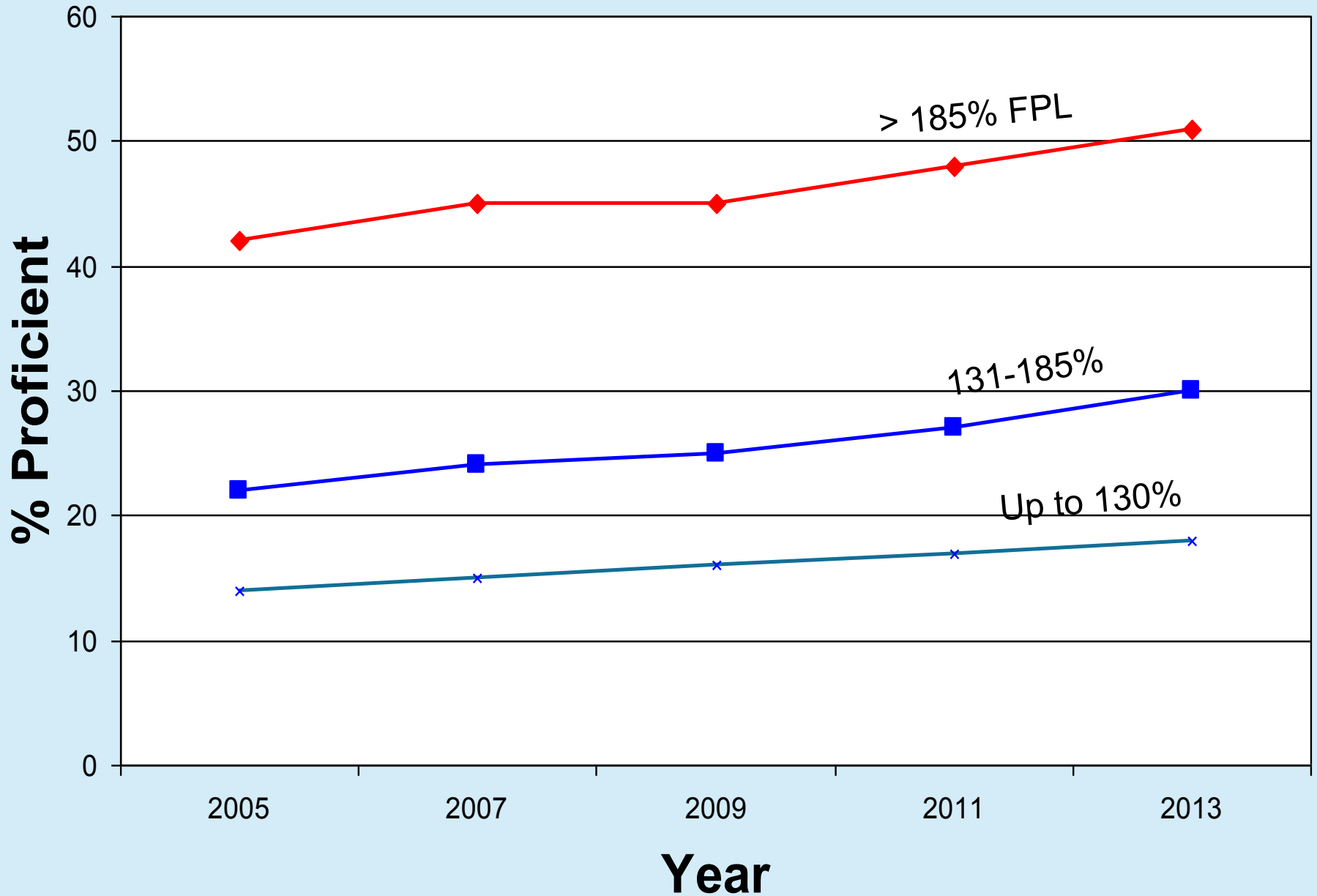
EARLY SCHOOLING TRENDS

1. Less than half of children enter kindergarten fully ready to succeed.
2. 3rd and 4th grade underachievement is the norm in U.S. schools.
3. Most previous efforts to strengthen continuity from preschool to 3rd grade have not had sustained effects.

ECLS-K Reading Learning by SES: K to 3rd Grade



4th Grade NAEP Reading by Income



State MCA Reading, % Proficient

Category	2014	2013
Up to 185% poverty	40	39
185% poverty	71	71
Limited-English	23	22
Not Limited-English	63	62

CHILD-PARENT CENTERS

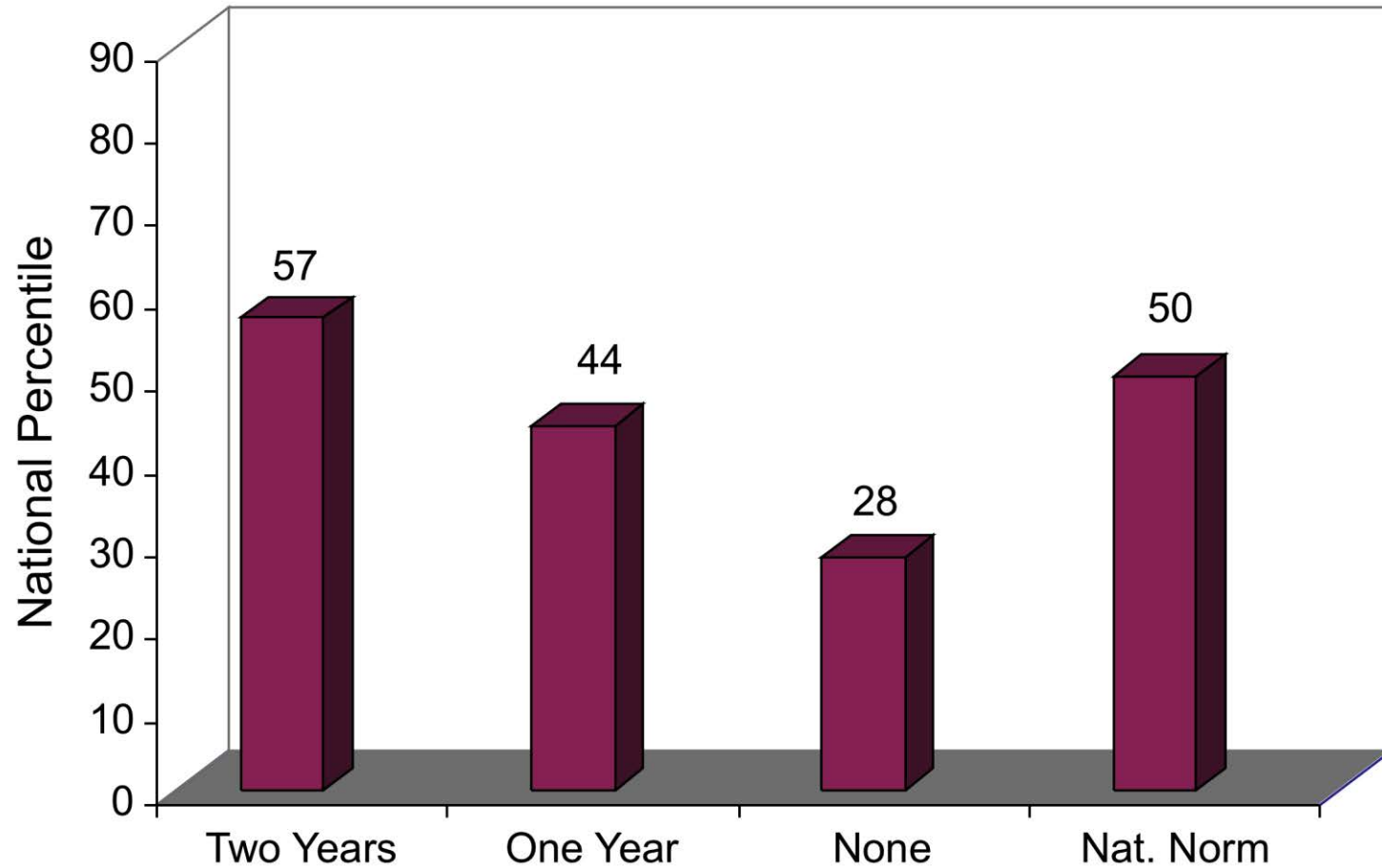
2nd oldest federally funded preschool program; First PK-3rd program.

School-based educational enrichment and family-support services.

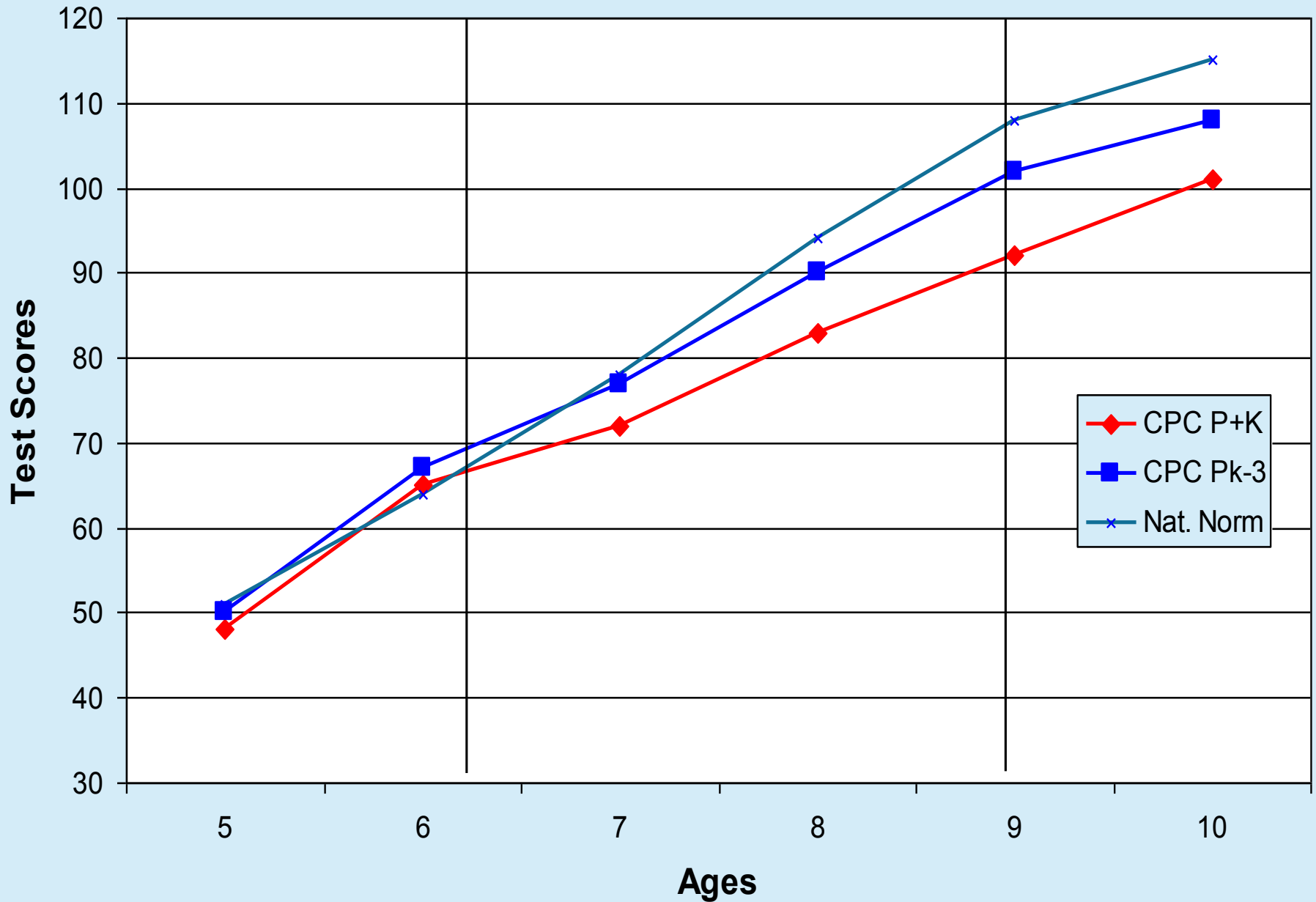
Leadership team, public-school teachers with small classes; whole-child focus on basic skills (language, math, socio-emotional, physical).



CPC PRESCHOOL AND READINESS



Reading Advantage of CPC



CPC PUBLIC RETURN PER CHILD

	Public return	B/C ratio	Total return that is public
Prek	\$61,246	7.21	66%
Gr 1-3	\$8,000	2.11	53%
PK-3 (relative to < 4 yrs)	\$26,884	5.21	63%

CPC STAGES

First generation showed that early enrichment and parent involvement powerfully impact school readiness.

Second generation established a structure of an effective PreK-3rd grade system in a high poverty context.

Third generation is focused on the generalizability and sustainability of a contemporary yet expanded model of school reform.

MCPC EXPANSION GOALS

1. Implement CPC model with high levels of quality using established program principles.
2. Assess the quality of implementation.
3. Evaluate impacts on achievement & parental involvement using a rigorous, multi-faceted design.
4. Implement a sustainability plan to facilitate maintenance and expansion.

Midwest CPC

Collaborative Leadership
Aligned Curriculum
Continuity and Stability

School
Entry

P

K

1-3

Effective Learning Experiences
Professional Development
Parent Involvement &
Engagement

Achievement

Excellence

CORE ELEMENTS

Collab. Leadership

HT, PRT, SCR with Principal

Effective Learning

Class size, Length, Balance

Curric. Alignment

Plan completed, integration

Parent Involvement

Plan completed, assessment

Prof. Development

On-line modules, facilitation

Continuity & Stability

90%+ continuity K to 1 plus
instructional supports

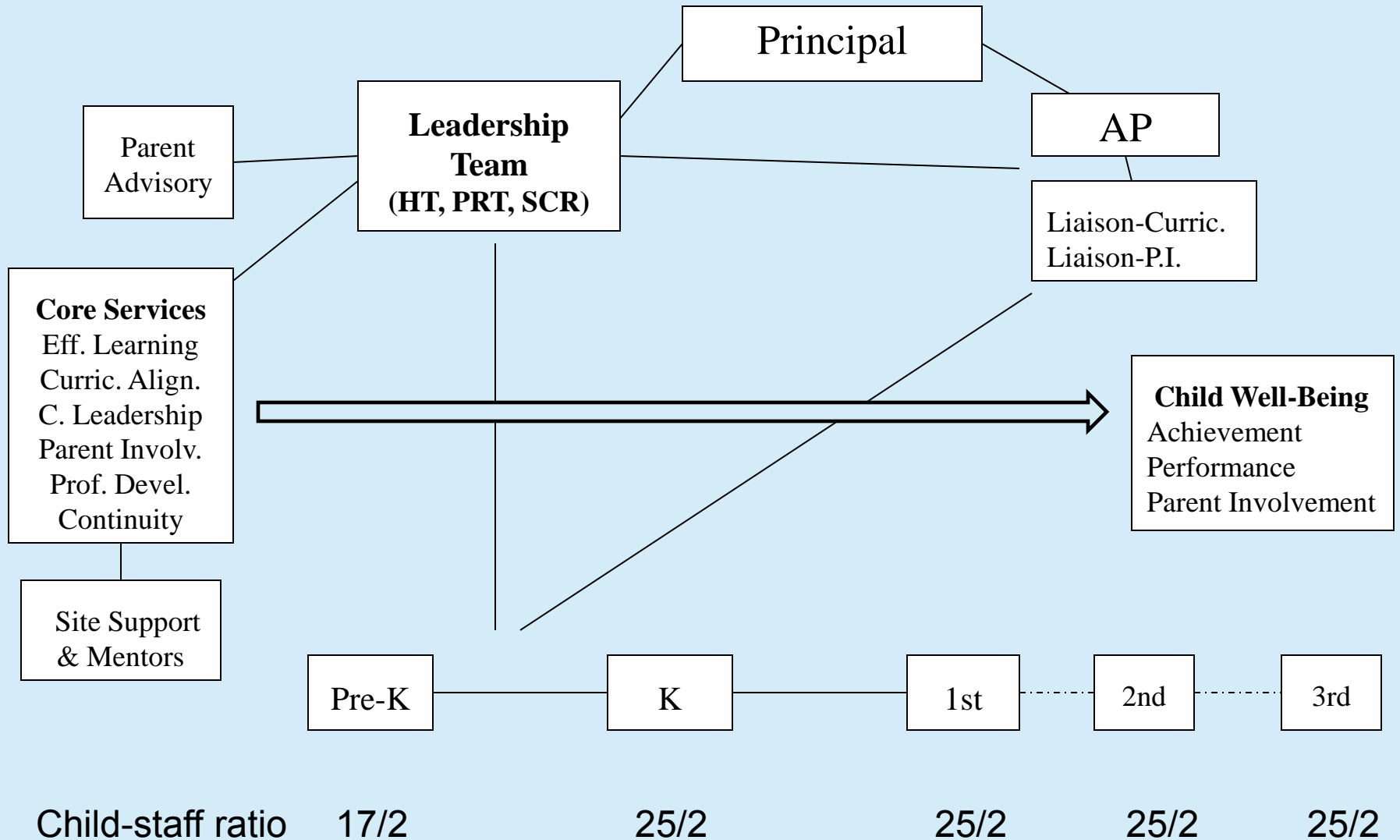
CPC Core Elements

<u>Collab. Leadership</u>	Old Low Principal Involvement	Midwest High Involvement
<u>Effective Learning</u>	T-directed Part-day	Balance Full-day
<u>Curric. Alignment</u>	None	Endorsed Plans
<u>Parent Involvement</u>	School focus	Menu system Home, Sch.

CPC Core Elements

	Old	Midwest
<u>Prof. Development</u>	None	Full system: Modules Coaching
<u>Continuity & Stability</u>	Limited	Major outreach Staff support Site mentors 80%+ stability

Program Structure



Principal's Lead Role

1. CPC leadership team works on behalf of the Principal.
2. Creates climate for across-grade collaboration.
3. Budget support (varies by district).
4. Assigns curriculum, parent liaisons
5. Endorses curriculum plan.
6. Endorses parent involvement plan.
7. Ensures teacher time for PD and monitoring.
8. Prioritizes gaps to address (e.g., full-day prek, TA support, attendance).

Leading Indicators of Adherence

	Prek	K-
1. EL: Max. ratio	17/2	25/2
2. EL: Instructional balance of 65/35 (TD/CI)		
3. CL: Manage operations	3 leads	Liaisons
4. PI: Menu-based system with center, tailoring		
5. AC: Curriculum plan continuously improved.		
6. PD: Modules implemented with principal support.		
7. CS: High student continuity	80%	80%

STRUCTURES

Co-located: Saint Paul, McLean
Chicago

Close proximity: Chicago

Community-based: Evanston, Chicago

MCPC PARTICIPATION

	2012-13 PreK	2013-14 Kinder.	2014-15 1 st grad
Schools/ Centers	26	26	26
Children	2364	2000	1800
Classrooms	90	97	95
Total children served:	6,164		

SUSTAINABILITY ACTIVITIES

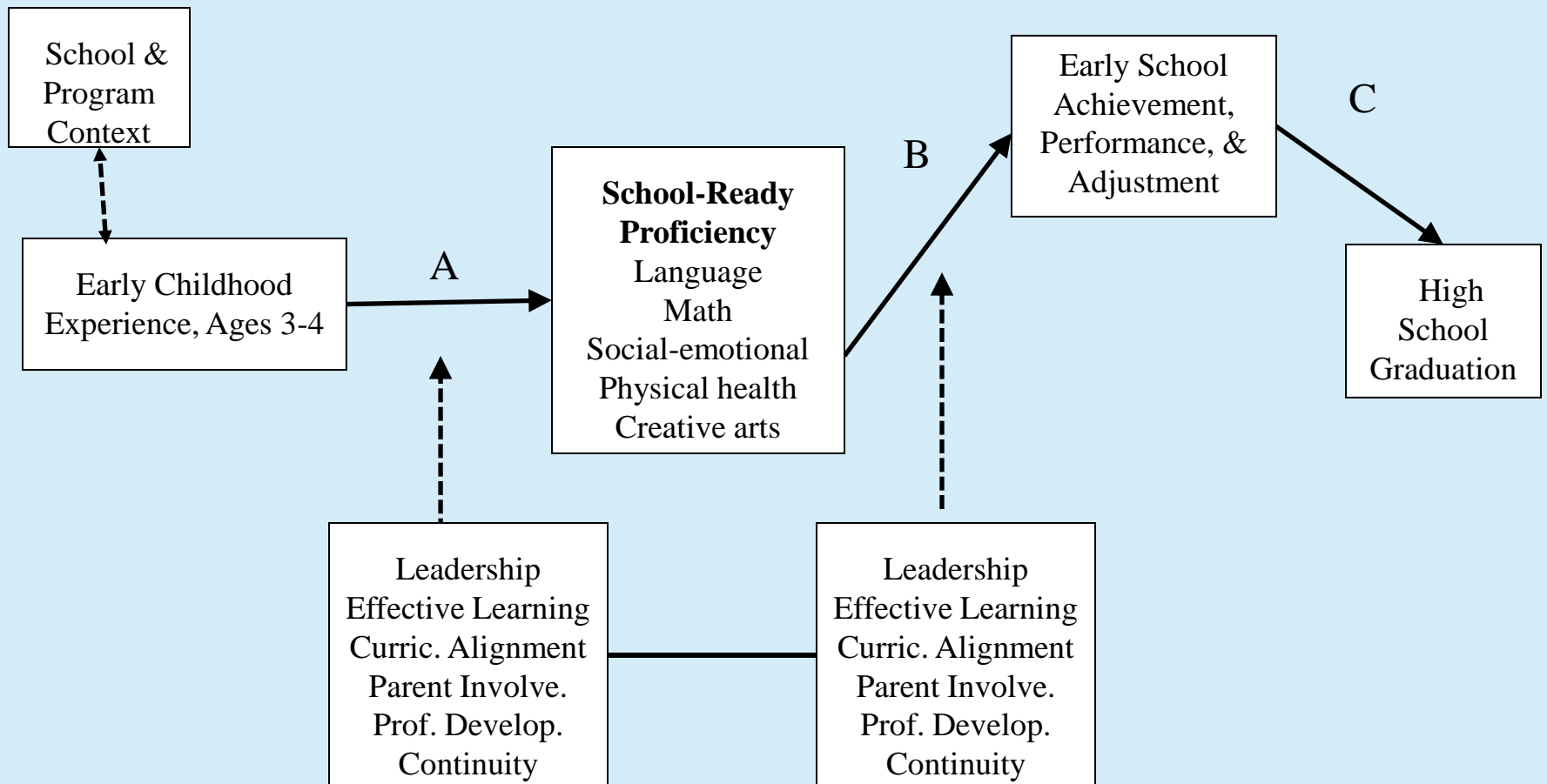
1. Partner with schools and districts to sustain without external funding.
2. Matching contributions from districts, schools and stakeholders.
3. Convening forums on dissemination.
4. Establish Lorraine Sullivan Memorial Fund.
5. Innovative financing through Social Impact Bond/Pay for Success.
6. Program manual for further expansion.

SCHOOL REFORM INITIATIVES

- Schools and districts have provided > \$3 million in matching contributions. Most from principals.
 - Full-day Prek in Chicago, led to Saint Paul and McLean County opening classes.
 - Teaching assistants in all districts, both matching and district-sustained.
 - School leadership team members (HT, PRT, SCR).

Midwest CPC Continuity

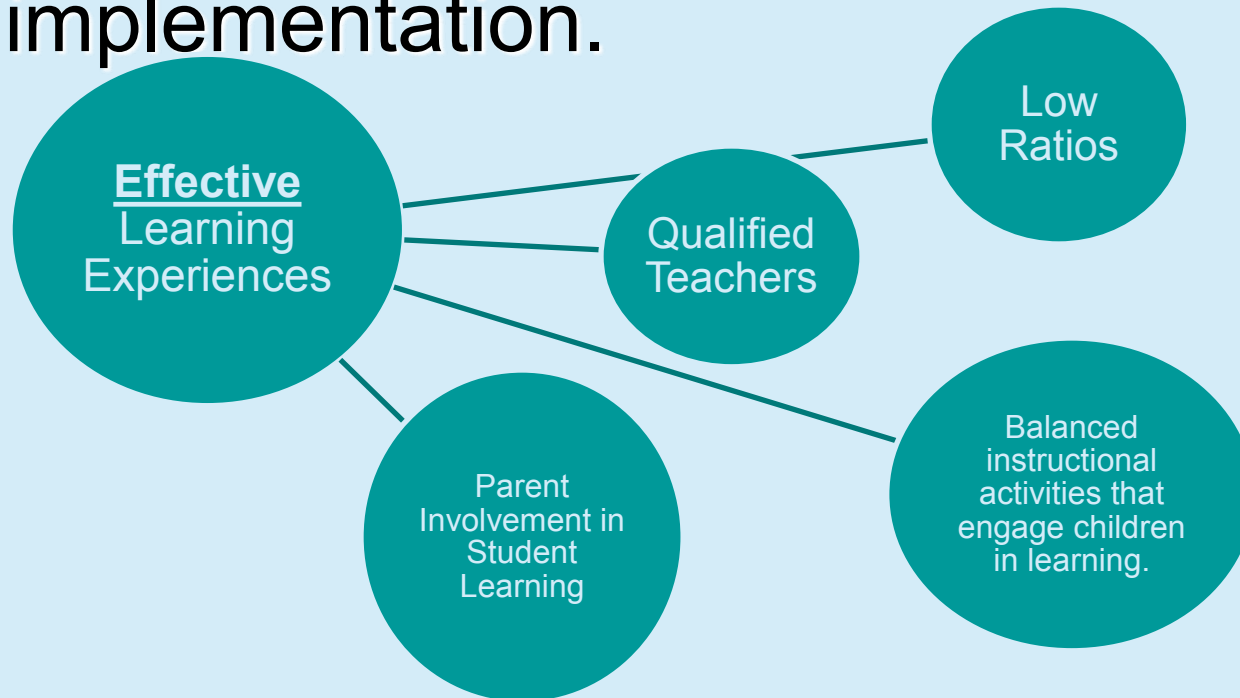
CPC program participation
Prek ————— 3rd



Effective Learning

Effective Learning Experiences

CPC has a long history of demonstrated results, for the i3 Midwest CPC Expansion project, this is closely linked to fidelity of implementation.



CLAC

➤ Overview:

- 8 trained observers visited classrooms October '13 through early January '14
- 66 kindergarten classrooms observed; 25 control sites
- Average length: 29 minutes
- Average 1.9 staff; 20.5 students per classroom

Classroom Learning Activities Checklist (CLAC)

Overall Task Orientation/Engagement of Mod. High to High

	Year 1 (PK)	Year 2 (K)
CPC	81%	82%
Control	50%	56%

SPPS: Balanced Curriculum

Balance of Teacher Directed and Child-Initiated Activities			
	Literacy	Math	Science
PreK	56.5% (TD) 43.5% (CI)	58.1% (TD) 41.9% (CI)	57.7%(TD) 42.3% (CI)
Kindergarten	45.2% (TD) 54.8% (CI)	49% (TD) 51% (CI)	39.6% (TD) 60.5% (CI)

The threshold for a balanced curriculum (a balance of teacher-directed and child-initiated activities) falls between 65% and 35%.

100% of teachers who completed the MCAR met the balanced curriculum threshold.

Year 2 MCAR Summary (CPS)

CHICAGO DISTRICT AVERAGE DOMAIN BREAKDOWN

Grade and Year	PreK 2012 – 2013 Year 1	PreK Fall 2013 Year 2	K Fall 2013 Year 2
Literacy	48%	37.4%	43.5%
Math	19%	20.3%	24.5%
Science	8%	15%	12%
Socio-Emotional, Motor Activities, etc.	25%	27.3%	20%

- The percent of time allocated to Science and Math increased in PreK from Year 1 to Year 2.
- Kindergarten classrooms allocated more time to literacy and math activities than PreK classrooms did in Year 2.

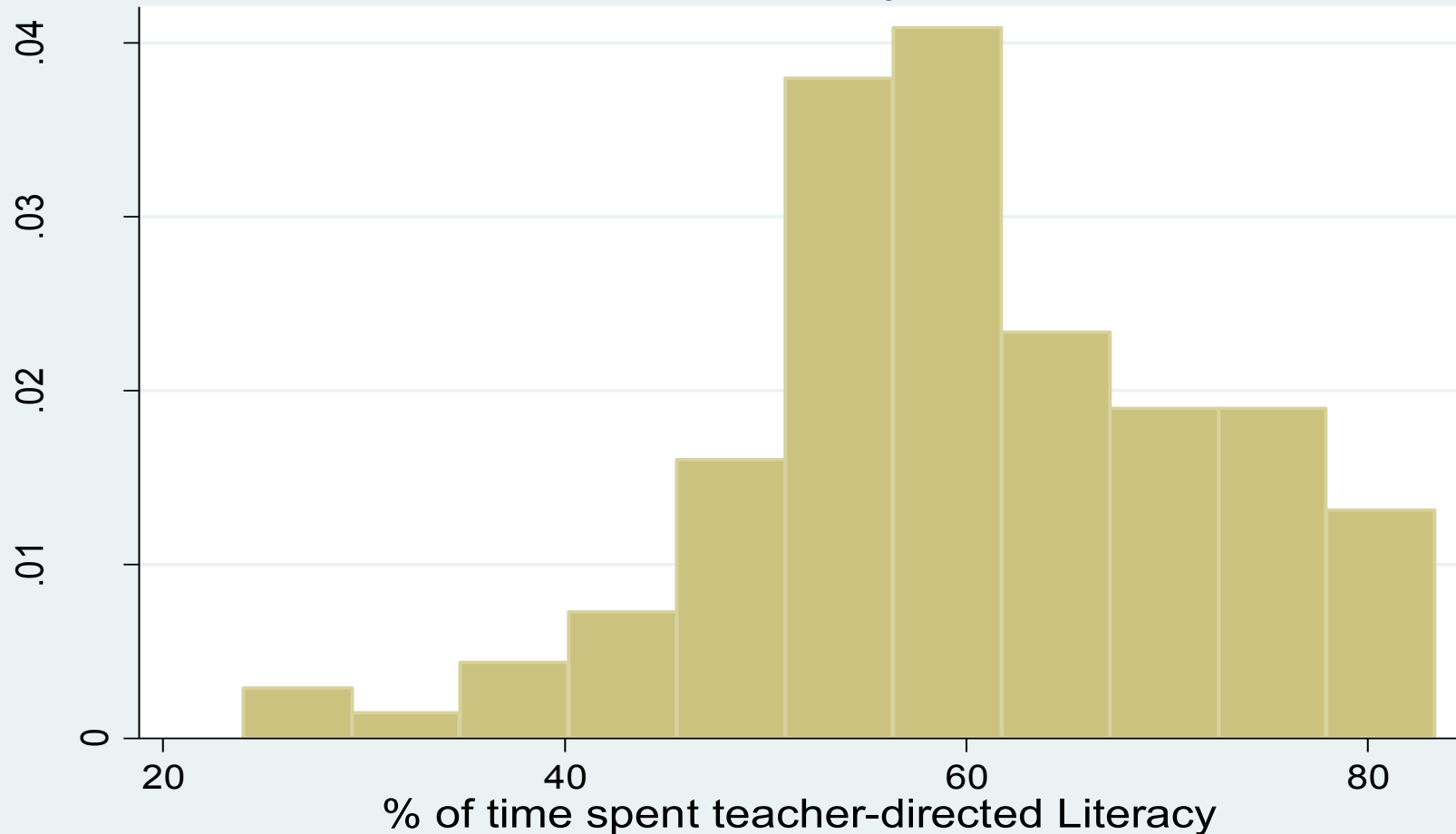
Balanced Curriculum

Percent of teachers falling within threshold for balanced curriculum

Teacher	Literacy	Math	Science
PreK and Kindergarten combined (n=108 teachers)	58%	59%	55%
PreK teachers (n=68)	65%	65%	62%
Kindergarten teachers (n=40)	48%	50%	43%

Ex. Teacher-directedness in Literacy Instruction

Teacher-Directed Literacy in K Classrooms



Average Time in Instruction by TA Time, Kindergarten

	<u>High TA</u> 75%+	<u>Med. TA</u> 50-74%
<u>Literacy</u>		
T-Directed	63.2%	74.4%
C-Initiated	36.3%	25.7%

PD Modules Prek & K with Erikson Institute

Prek

1. Fostering Children's Thinking
2. Drama, writing, drawing, dictating
3. Movement & construction
4. Transition

Kind.

5. Math, science, & writing
6. Inquiry in math & science

Findings

Research Design (SRI)

26 program schools in five districts will implement starting in fall 2012. Primarily Title I schools in high-need areas. 2,564 Prek participants will be followed to 3rd grade.

23 control schools matched to program schools based on propensity scores of school, family, and child attributes. Prek as usual (N = 1,226)

Assessments of children will be in preschool, kindergarten, and up to third grade.

Midwest CPC: K, 2013-14

	<u>Minn.</u>	<u>Illinois</u>			Total
<u>CPC Pre-K</u>	St. Paul	Chicago	Normal	Evanston	
# Sites	5	16	1	4	26
# Classrooms	20	60	3	14	97
# Children	296	1724	85	227	2385
# Control group	200	906	--	120	

MCPC Chicago, 2012-13

<i>Format</i>	<i>Hours/ Day</i>	<i>Hours/ Year</i>	<i>Time in child- initiated</i>
Full-day	7 (6:15)	936	49%
Part-day	3 (2:40)	418	43%

Note. Based on 11 schools offering Full-day. Teacher report of hours per year. (Allocated instruction time).

Group Characteristics

Attribute	Full-Day	Part-Day
Girls	53%	51%
Black	89%	93%*
Age in months	51.6*	45.8
Mother HS grad	80%	78%
< 130% poverty	90%	92%
Special ed.	4.6%	3.8%
Baseline Readiness	193.2	190.2
Met national norm	14.2%	16.2%

Estimation

Comparison among 11 CPC schools with 1 or more full-day classes (982 3- and 4-year-olds) opened in Fall 2012. Tracked to Spring 2013.

Marginal Means Model, Generalized Estimating Equations (GEE).

- No assumption of multivariate normality
- Multi-level, correlated structure accounted for
- Huber/White “sandwich” robust SEs
- Consistent, unbiased SEs even if correlation structure misspecified.

Year 1 School Readiness Outcomes: Full-Day Prek, Chicago (N = 808)

Score	Full-Day Prek	Part-Day	Diff.
Met Norm, Language	81%	62%	19p
Met Norm, Math	84%	72%	8p
Met Norm, Socio-emot.	73%	56%	17p

Note. Adjusted for baseline differences. Children are from the same 10 schools offering full-day Prek. Readiness norm is from Teaching Strategies GOLD, Spring 2013.

Year 1 School Readiness Outcomes: Full-Day Prek, Chicago (N = 982)

Score	Full-Day Prek	Part-Day	Diff.
Met Norm, Total Readiness	81%	59%	22p
Average Attendance	85%	80%	5p
Absent 20%+ School Days	21%	39%	-18p

Note. Adjusted for baseline differences. Children are from the same 10 schools offering full-day Prek. Readiness norm is from Teaching Strategies GOLD, Spring 2013.

Group Characteristics, Chicago

Attribute	CPC	Control
Girls	52%	50%
Black	64.1%*	45.6%
Age in months	48.4	48.6
Mother HS grad	73.8%*	63.4%
< 130% poverty	85.4%	83.2%
Special ed.	9.6%	9.2%
Baseline Readiness	193.7	190.8
Met national norm	14.2%	11.5%
Fall baseline after Oct.	51.3%*	36.7%

Year 1 School Readiness Outcomes: CPC, Chicago (N = 1,880)

Score	Any CPC	Control	Diff.
Met Norm, Literacy	78%	57%	21p
Met Norm, Math	74%	60%	14p
Met Norm, Socio-emot.	67%	46%	21p

Note. Adjusted for baseline differences. Children are from the same 10 schools offering full-day Prek. Readiness norm is from Teaching Strategies GOLD, Spring 2013.

Year 1 School Readiness Outcomes: CPC, Chicago (N = 2,630)

Score	Any CPC	Control	Diff.
Met Norm, Total Readiness	70%	52%	18p
Average Attendance	85%	87%	-2p
Absent 20%+ School Days	26%	20%	6p

Note. Adjusted for baseline differences and demographic factors. Program N = 1,724 and Control N = 906. Readiness norm is from Teaching Strategies GOLD, Spring 2013.

Program Groups, SPPS

Attribute	CPC	Control
Girls	51%	48%
Black	31%*	33%
Asian	46%*	31%
Age in months	54.0	53.6
Mother HS grad	73%*	87%
< 130% poverty	82%*	63%
Fall PALS, Alphabet score	7.5	11.3*
Fall PALS, Lower Alphabet	5.7	8.2
Fall PALS, Print Concepts	4.2	5.1*

Note. N = 279 (P=192, C=87). Fall 2012.

SPPS, Prek 2012-13: PALS- Alphabet Recognition

	Fall	Sp	Gain
Program 1(46)	11	22	11
Control 1(55)	14	22	8
Program 2 (41)	7	20	13
Control 2 (41)	11	21	10
Program 3 (36)	5	16	11
Program 4 (22)	8	25	17
Program 5 (23)	6	21	15
Control 3 (52)	11	23	12

Note. (% 3rd graders reading proficiently, MCA 2012).

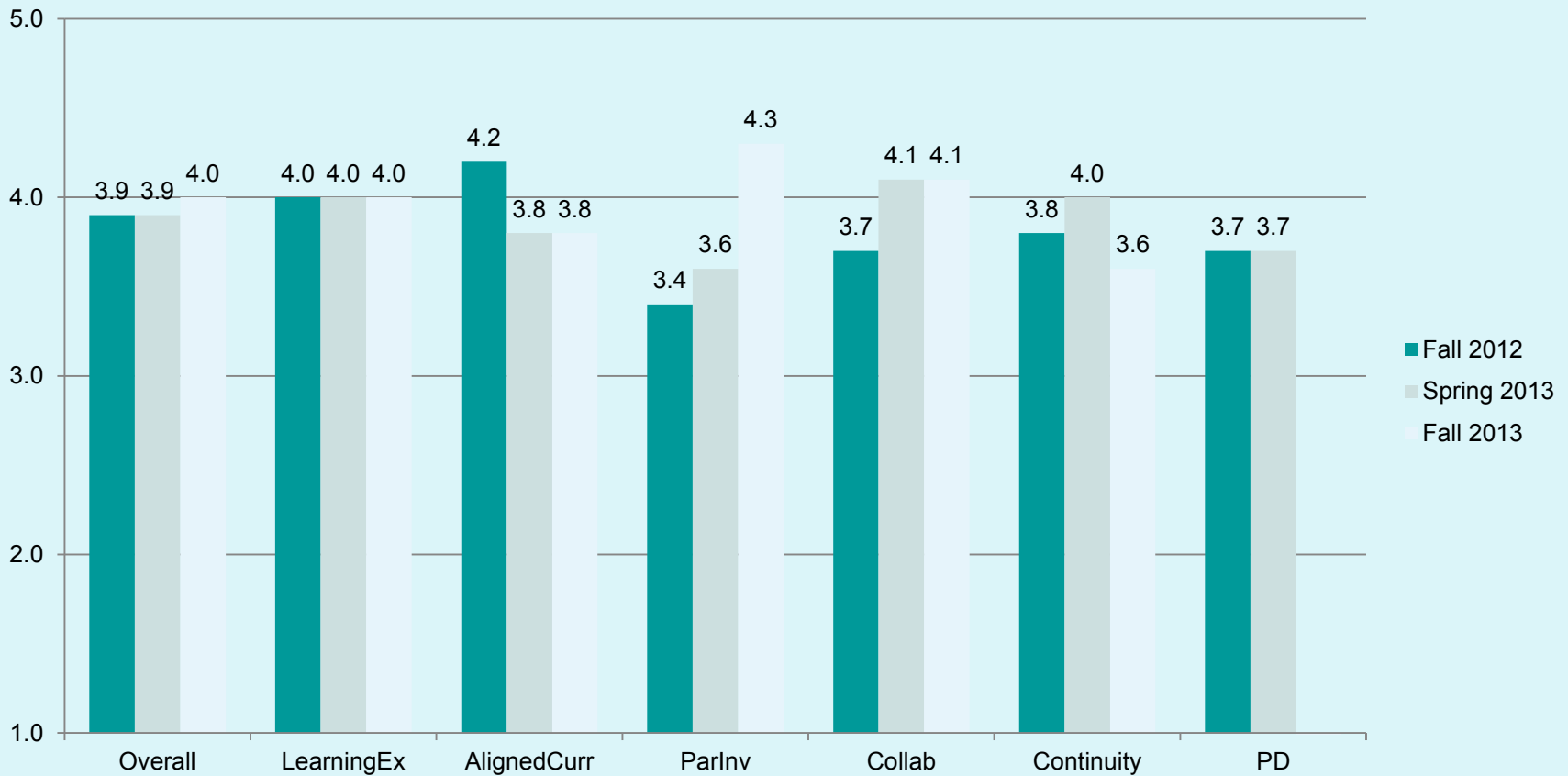
Implementation Fidelity

Implementation Fidelity

1. Site Visits and Interviews; Rating Form
2. Observation of Instruction: Classroom Learning Activities Checklist (CLAC) and CLASS
3. Teacher, Parent, & Principal Surveys (Spring)
4. Progress Monitoring (On-line)
 - a. Classroom Activities Report
 - b. Parent Involvement Logs
5. Parent involve., Curriculum Alignment Plans
6. Professional Development Checklist

FIDELITY RATINGS, YEARS 1 AND 2

Site Ratings Years 1 and 2



OVERALL FIDELITY

- 80% of sites received a rating of 3 or higher (scale 1-5) on Fall fidelity ratings.
- Retaining students in spite of mobility challenges: 80% continuity is the goal
- More difficult to meet requirements on: designated parent-resource room (3 sites), class sizes and ratios.

Parent Involvement

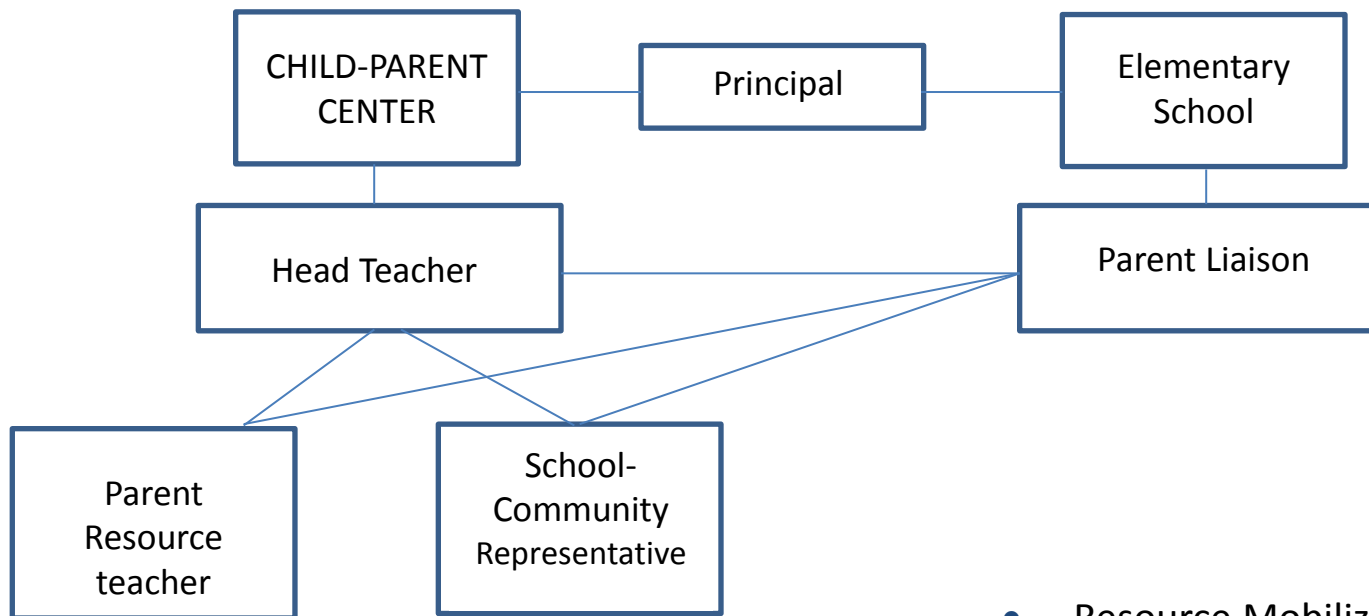


Parent Involvement in MCPC

- PreK to 3rd grade (PK-3) program designed to improve low-income children's school success, in part through enhancing parental involvement in their children's education.
- Menu-based system of education and family support services from PK-3
 - Family engagement involves a 2-generation (parent and child) approach to enhancing the parent and the child's educational skills.
 - Comprehensive services led by:
 - Parent Resource Teacher, Parent Liaison, and School-Community Representative in collaboration with the Head Teacher.
 - **Services:** multi-faceted events and opportunities to engage parents and families, and mobilize community resources.
 - **Intent:** increase parent participation in children's education by forming a school-family partnership and creating a welcoming culture for families

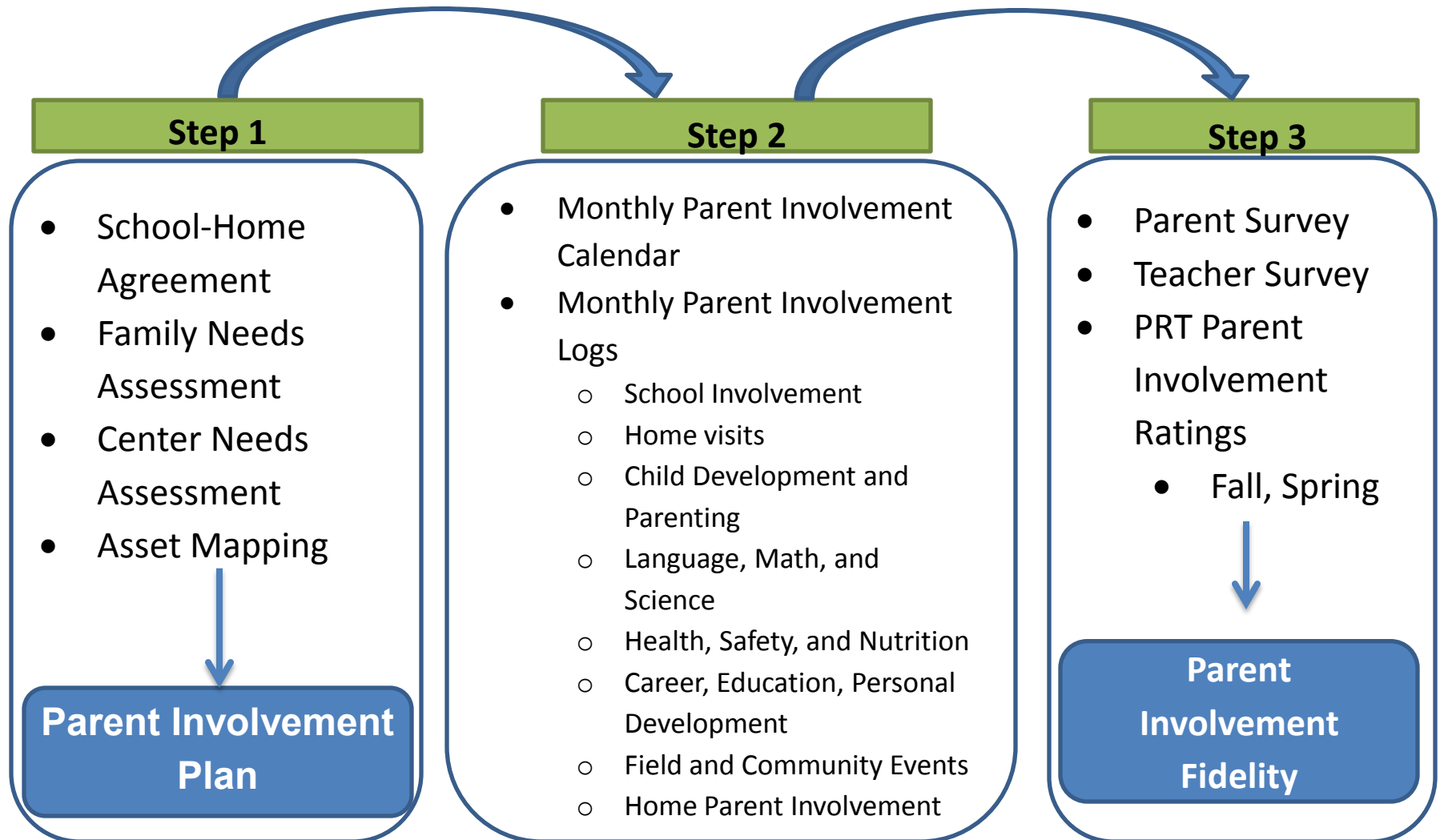


Parent Involvement Structural Components



- Resource Mobilization
- Home Visitation
- Parent Conferences
- Parent Resource Room Activities
- Classroom Volunteering
- School Activities
- Home Support

Design and Methods: MCPC Parent Involvement Process



PROGRAM REQUIREMENTS (10F2)

Program Element	# of Req's	Example
Parent Involvement & Engagement	11	<ol style="list-style-type: none"> 1. The PRT and SCR work closely with the HT and PL to maintain a parent program <u>across grades</u>. 2. School-home agreement -parents agree to participate at least <u>2.5 hours per week</u>. 3. Maintain records participation in an online portfolio. 4. <u>Parent involvement plan</u> based on a <u>needs assessment</u> that balances home, school, and community participation and personal development. 5. PRTs and PL create and distribute a <u>monthly parent involvement calendar</u>, reflecting the needs of the families. 6. PRTs and PL are available to families and teachers to discuss progress in the parent program. 7. There is a <u>resource room</u> dedicated to family and parent participation opportunities.....



Study Question: What is the impact of the MCPC on family engagement?

Sample.

- With an i3 grant from USDE, implementation of the MCPC began in 24 preschool sites and 2 child care centers across Illinois and Minnesota.
- In the preschool year (2012-13), 2,345 children were enrolled.
- Furthermore, 1,237 students were enrolled in demographically matched comparison schools.
 - At the start of preschool, 33% were 3 year olds, and 67% were 4 years old.
 - 68% of the MCPC children and 69% of the comparison children received free lunch.

Methods.

- We collected data from Parent Resource Teachers who collected monthly logs of all parent participation in school events.
- Also collected Parent ratings of average involvement & teacher ratings of average school involvement (F&Sp)



Results

Table 1.

Average number of events parents participated at school in PreK

District	Group	N	Avg number of events	Min participation	Max participation
Overall	Comparison	696	2.7*	0	21
CPC vs. comparison	CPC	2028	12.4	0	217
Chicago	Comparison	504	2.9*	0	21
	CPC	1541	14.4	0	217
Evanston	Comparison	32	1.3*	0	10
	CPC	118	2.9	0	25
Unit 5	Comparison	N/A	N/A	N/A	N/A
	CPC	71	6.3	0	32
Saint Paul	Comparison	125	2.7*	0	6
	CPC	247	8.4	0	157

Note: * Denotes significant difference ($p < .01$) between CPC and Comparison family engagement



Results

Table 2.

District Comparisons of Trichotomized Family Engagement by CPC vs. Comparison

		9+ as High PI		
		No PI	Low PI	High PI
Chicago	Comparison	79%	17%	4%
	CPC	35%	36%	30%
Evanston	Comparison	72%	25%	3%
	CPC	10%	83%	7%
Unit 5	Comparison	N/A	N/A	N/A
	CPC	9%	66%	24%
Saint Paul	Comparison	20%	80%	0%
	CPC	29%	55%	16%

Documentation of School Parent Involvement

- PRTs document frequency and type of activities parents are engaged in through the monthly parent involvement logs
 - Monthly logs stored in family folders
 - Ever child has a family folder

Avg. number of events parents participated in school in PreK

	N	Avg. num events	Min	Max
CPC	2028	12.4	0	217
Comparison	696	2.7	0	21

- Home parent involvement survey
- Parent survey
 - home and school parent involvement
 - frequency and by type





Sensitivity Analysis

Triangulation of Data

- Teacher ratings of school involvement compared to PI logs
 - Correlation $\sim .20$
- Parent ratings of school involvement compared to PI logs
 - Correlation $\sim .25$



Discussion

- Family engagement was **higher** among Child-Parent Center participants compared to comparison schools – **across all districts!**
- Through a strong dual-capacity framework for family-school partnerships, we embedded a recursive feedback process within the CPC program
 - integral to overcoming hurdles
 - critical to successfully forming a strong school-family-community partnership



Implications & Future Directions

Implications

- Our study demonstrates the importance of an **adaptive, menu-based** system within a structure with **recursive feedback**.
- Our data demonstrates the MCPC as a successful program that increases parent involvement for economically disadvantaged families across ethnically diverse populations.

Future Directions

- Further examine the variation in frequency of participation by district
- Examine association between family engagement and children's achievement and socio-emotional development
- Identify specific types of family engagement activities associated with children's development