

# As Seen in JAMA - Full-Day vs Part-Day Preschool: School Readiness, Attendance, and Parent Involvement

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## Historical and Current Context

The **Child-Parent Center** (CPC) program is a comprehensive PreK-3<sup>rd</sup> grade intervention from targeting low-income children and their families. Cost-benefit analyses have demonstrated returns of over \$8 per dollar invested. The CPC model has proven effects on cognitive, socio-emotional, and economic gains throughout the life course (Reynolds et al., 2011).

The **Midwest Child-Parent Center Expansion Project** began in 2012 to expand the CPC model to 30 schools across the Midwest through an Investing in Innovation grant from the US Department of Education.

**Core Program Elements** include:

- Effective Learning Experiences, PreK-3<sup>rd</sup>
- Aligned curriculum
- Parent involvement and engagement
- Collaborative Leadership Team
- Continuity and Stability
- Professional development system



## Research Question

The goal of this study was to evaluate the impacts of the first year of the Midwest CPC Expansion Project on key academic outcomes. Using data from 11 CPC sites, we compared the impacts of the full-day versus part-day versions of the CPC program in terms of:

- 1) Academic achievement
- 2) Attendance rates and chronic absence
- 3) Parent involvement

## Methodology

Linear and probit regressions in the generalized estimating equations approach were used to analyze the data of 982 students in 11 schools that had both full-day and part-day CPC classrooms.

Robust standard errors were estimated through clustering at the school level.

Missing test scores were multiply imputed using the expectation-maximization algorithm. Sensitivity analyses were conducted to confirm results.

Adjusted marginal means were calculated while controlling for: sex, race/ethnicity, free lunch status, age in months, special education status, school level achievement, fall baseline scores and a dummy variable indicating timing of assessment.

We analyzed impacts on: (a) average attendance rates; (b) 2 measures of chronic absence; (c) TSGOLD assessment scores; and (d) parent involvement.

## Sample

	Full-Day CPC	Part-Day CPC
CPC Preschool	409	573
# of classrooms	23	19
Original CPC site	285	529
4 year olds at entry	351	215
3 year olds at entry	58	358

## Adjusted Means

Outcome	Full-Day	Part-Day	P-value	Std. Mean Diff
<b>TSGOLD % at national norm</b>				
Literacy	85.1%	74.6%	.03	0.37
Language	81.2%	61.7%	.01	0.57
Math	84.4%	72.3%	.01	0.41
SEM	73.4%	56.0%	.05	0.46
Physical Health	82.2%	68.6%	.07	0.42
Total	80.9%	58.7%	.008	0.65
<b>Attendance</b>				
Average daily	85.9%	80.4%	.001	-0.41
Chronic absence, 10%	53.0%	71.6%	.001	-0.50
Chronic Absence, 20%	21.2%	38.8%	<.001	-0.53

## Results

### TSGOLD Achievement

- Full-day students had significantly higher test scores in literacy, language, math, socio-emotional development, physical health and total scores.
  - Significant both for raw test scores and the percent of students scoring at or above the national average.
- Only cognitive development was insignificant.

### Attendance Rates and Chronic Absence

- Full-day students had significantly higher rates of attendance.
- Full-day students had significantly lower rates of chronic absence.

### Parent Involvement

- No significant differences in parent involvement emerged.

## Policy Implications & Future Directions

This research attests to the effectiveness of full-day early elementary programs. Opening full-day classrooms can enhance schools' abilities to effectively meet family needs and to promote early school readiness. .

- The availability of full-day PreK increased program enrollment at many of the sites in the current study.
- Based on preliminary results, Chicago Public Schools has recently expanded their full-day offerings.
- Replication is necessary to examine other contexts.

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