

As the Twig is Bent...Sustained Effects of Contemporary Public PreK Programs

Arthur Reynolds, Chair

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Effects of Tulsa's Universal PreK Program on Middle School Outcomes, William Gormley & Sara Anderson

Long-Term Effects of Michigan's State Funded Preschool Program
Tomoko Wakabayashi, Lawrence Schweinhart, & Zongping Xiang

Sustained Effects of the Child-Parent Centers: Chicago Public Schools and the Midwest Expansion, Arthur Reynolds, Suh-Ruu Ou, Brandt Richardson, & Sangyoo Lee

SRCD Conference, March 21, 2019

Why Sustaining Gains are More Important than Ever

1. Enhance impact of existing programs.
2. Reduce the risk of drop-off in effects.
3. Reduce 3rd grade and later gaps.
4. Increase ROI.

History of ECE Program (1960s to today)

1960s	New models of early education
1970s	Does ECE work?
1980s	Cognition to competence and long-term effects
1990s	Expansion and growing evidence
2000s	ROI, for whom, what, how?
2010s	Preschool for all but all do not benefit

2020s?: Universal Participation, Quality, Continuity

Building and maintaining systems of support, leadership, training, and financing

Key drivers of effectiveness

Cornell Consortium for Longitudinal Studies (1983)

“As the Twig is Bent...Lasting effects of
Preschool Programs”

11 projects of diverse programs including
3,676 children and followed from early
childhood to adulthood

Projects

Early Training Project

Gray

Perry Preschool Program

Weikert

Parent Education Program

Gordon

U of IL Early Interv. Study

Karnes

Louisville Experiment

Miller

Harlem Study

Palmer

Projects

Mother-Child Home Program Levenstein

Micro social learning environ. Woolman

New Haven Head Start/
Zigler

Follow Through

Philadelphia Study Beller

IDS Program Deutsch

Findings in summary

“The low-income mostly black children who participated in this diverse range of programs and curricula were more likely to succeed in school than were similar children [control groups]..They also felt better about themselves, had more realistic vocational expectations and were prouder of their achievements than were the nonparticipants” (Lazar, 1983).

Findings in summary

“The data suggest that program effectiveness can be enhanced by a combination of the following characteristics:

1. Intervention begun as early as possible.
2. Services provided to the parents as well as to the child.
3. Frequent home visits.
4. Involvement of the parents in the instruction of the child.
5. As few children per teacher as possible”
(Royce et al., 1983).

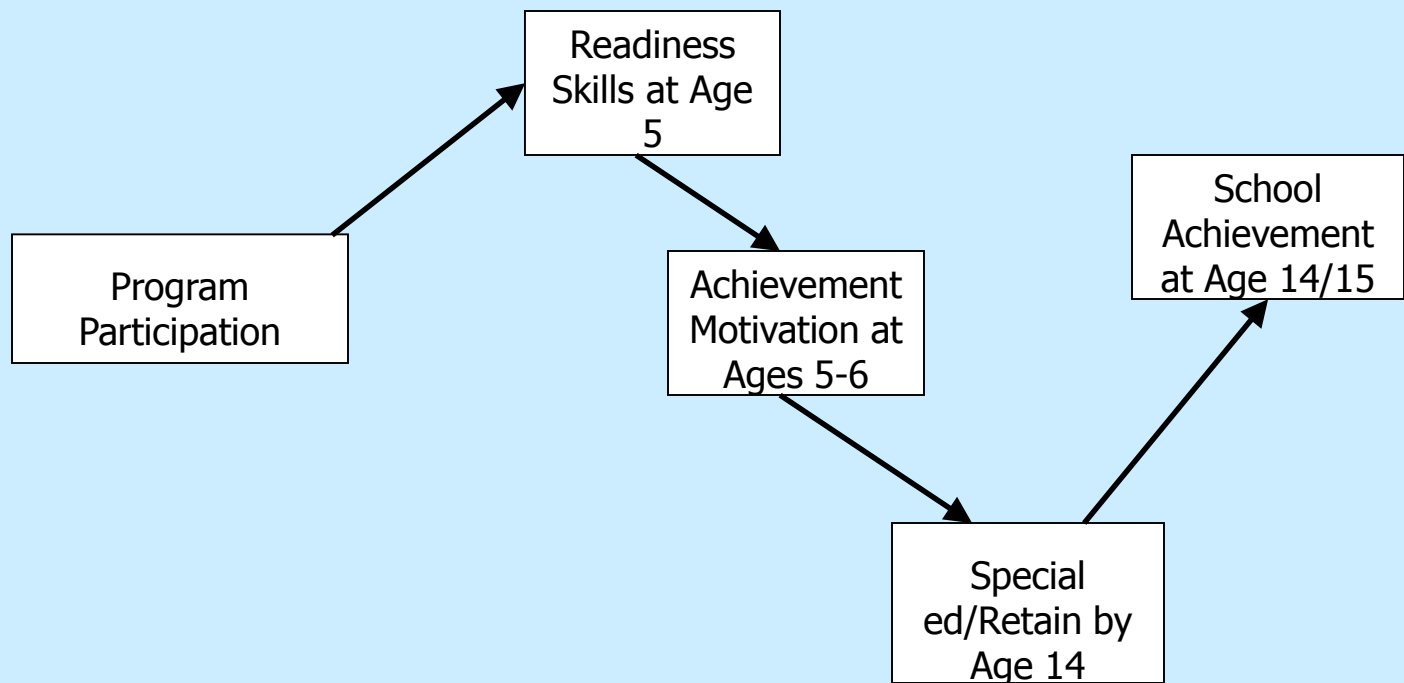
Common Elements in Landmark Studies

1. Child to Staff Ratios no higher than 17:2
2. Intensive focus on readiness skills within a developmental philosophy
3. Comprehensive family services
4. Teachers with at least BAs or compensation competitive with public schools
5. Frequent monitoring and feedback for improvement
6. Well-supported organizational context

Process explained

“There begins a system of mutual reinforcement between the parent and child, the teacher and child, and the combination that ‘teaches’ that academic success is valuable. It is this continuing mutual reinforcement that could be responsible for the long-term effects: a reinforcement system that is started by the child’s participation....and that changes parent aspirations for the child. This ‘feedback’ loop can be initiated as easily in a home-based program as at a center-based preschool” (Lazar, 1983).

Common Paths of Influence Across Three Studies



Note. Perry, Abecedarian, and CPC studies. Covariates include mothers' education and gender.

2013 SOTU

“I propose working with states to make high-quality preschool available to every child in America. Every dollar we invest in high-quality early education can save more than seven dollars later on – by boosting graduation rates, reducing teen pregnancy, even reducing violent crime.”
(President Obama)

Sources for Economic Returns

	CPC 2002, 2011	Perry 1993-2005
Public Ret.	\$7.20	\$7.16
Total Ret.	\$7-11	\$4-16
Cost (2017)	\$9,999	\$21,454
Scale	Large	One site

Reviews on Sustained Effects

1. McCoy et al. (2017) in Educational Researcher
“Impacts of early childhood education...”
2. Cannon et al. (2017) in RAND Corp. volume
“Investing early: Taking stock of outcomes and economic returns...”
3. Meloy et al. (2019) Learning Policy Institute
“Untangling the evidence on preschool effectiveness...”

Public Programs with Sustained Gains

Oklahoma PreK

Michigan Great State Readiness Program

Child-Parent Centers (Original & Current
Expansion)

Boston PreK

New Jersey Abbott Preschool

North Carolina PreK

PSID Head Start

Sustaining Early Childhood Learning Gains

Program, School,
and Family Influences

Edited by Arthur J. Reynolds
and Judy A. Temple

First book on
sustaining gains

15 chapters

Cambridge, 2019

HCRC Human
Capital
Research
Collaborative

Defining EC Scope

“We adopt a broad definition of early childhood as the entire first decade of life...This would include through the 3rd grade year as a general endpoint. The historical convention of the preschool period from ages 3 to 5 as defining early childhood has encouraged an unfortunate separate classification of programs and experiences that limit integration. The focus on the continuum of experiences supports a more complete spectrum of services and research approaches.”

“As an operationalization of this continuum, P-3 reinforces the need to optimize learning environments as children grow.” (p. 13)

Examples

Program

Dosage and duration matter (Wasik)

School

Teacher collaboration across grades (Stipek)

Family

Improved parenting through home visits

Progress since “Eager to Learn” (Bowman)

Continuity Model

Collaborative Leadership
Aligned Curriculum
Continuity and Stability

Early
Ed

P

K

1-3

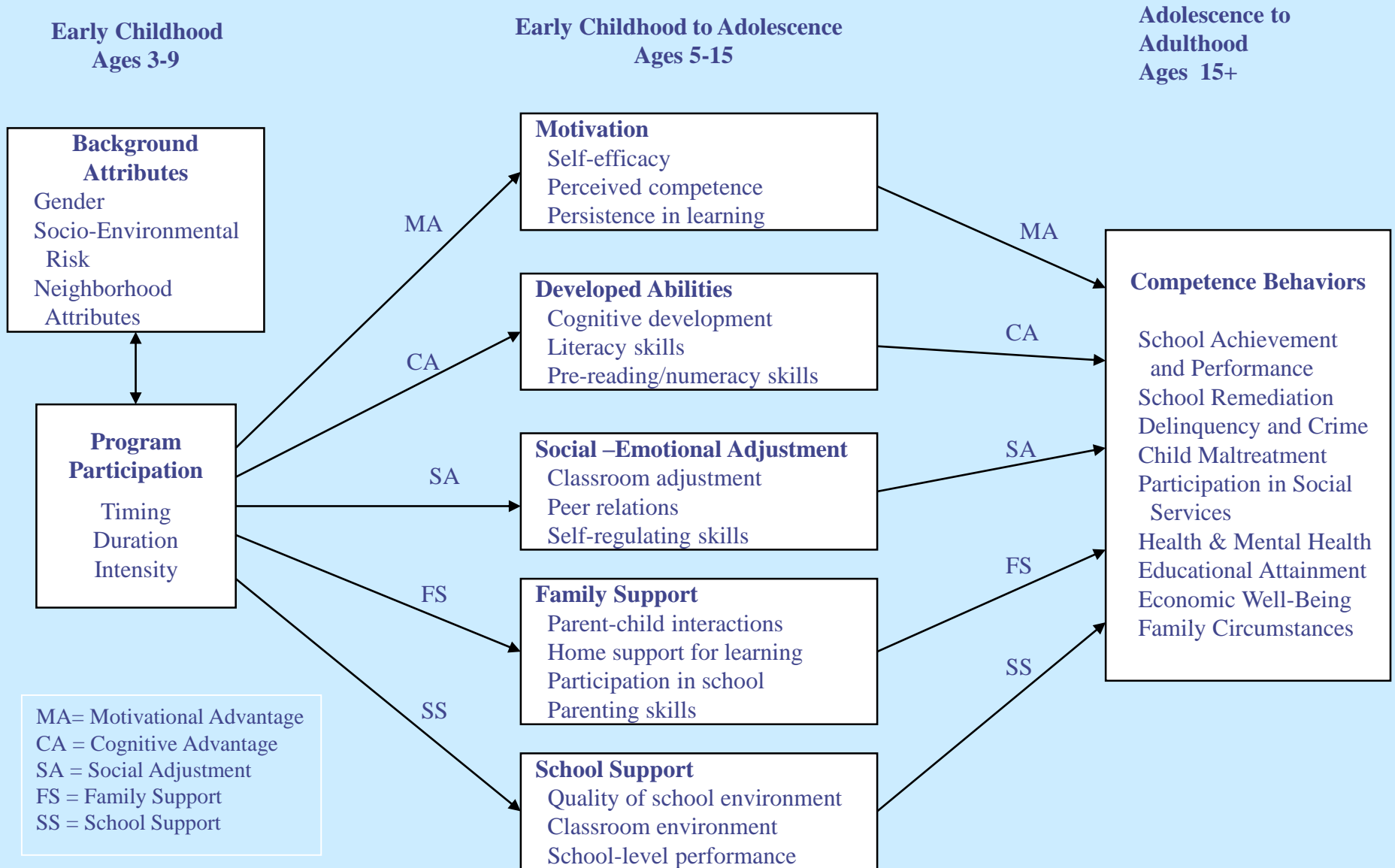
Achievement

Well-Being

Effective Learning Experiences
Professional Development
Parent Involvement & Engagement



Paths of Influence from Early Childhood to Adult Well-Being



4th Grade MN NAEP Reading

