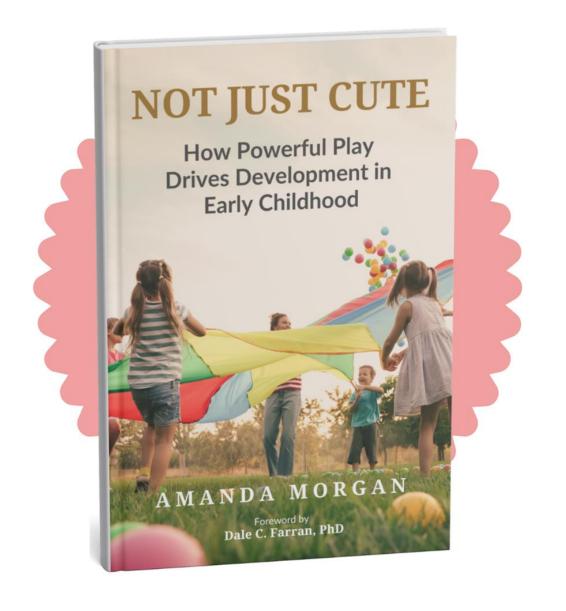




# The Science of Play: A framework for deep, joyful, and developmentally essential learning









Perry Preschool Project 1962-1967















Tennessee Voluntary PreK Program (TNVPK) "Effects of a statewide pre-kindergarten program on children's achievement and behavior through sixth grade" (Dev. Psychology, 2022)



"It's like saying spinach is really good for you, but we can't afford spinach. But here, I've got this Easter grass. Maybe that will be just as good."

Dale Farran
 Vanderbilt University, Lead Researcher on TNVPK Study

(via "The Tennessee Pre-K Debate: Spinach Vs. Easter Grass." NPR, 2015)





### EdWorkingPaper No. 23-885

## Why are Preschool Programs Becoming Less Effective?

Anamarie A. Whitaker University of Delaware Margaret Burchinal University of Virginia Jade M. Jenkins University of California, Irvine Drew H. Bailey University of California, Irvine

Tyler W. Watts Teachers College, Columbia University Greg J. Duncan University of California, Irvine Emma R. Hart Teachers College, Columbia University Ellen Peisner-Feinberg University of North Carolina

High-quality preschool programs are heralded as effective policy solutions to promote low-income children's development and life-long wellbeing. Yet evaluations of recent preschool programs produce puzzling

Published: "Why are preschool programs becoming less effective?" (Journal of Policy Analysis and Management, 2026)





Good News:

Bad News:



### Pre 2000 vs Post 2000

Good News:

Outcomes have improved for all preschoolers.

Bad News:

Published: "Why are preschool programs becoming less effective?" (Journal of Policy Analysis and Management, 2026)



### Pre 2000 vs Post 2000

### Good News:

Outcomes have improved for all preschoolers.

### Bad News:

WHAT and HOW we teach has changed.

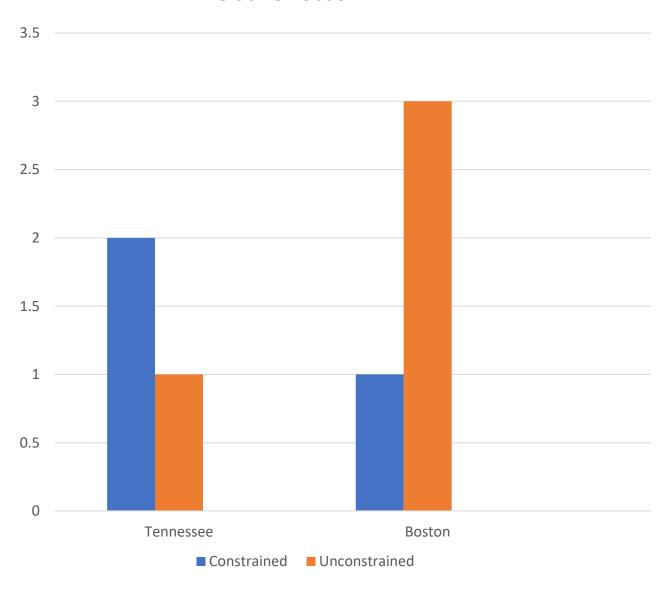


### Pre 2000 vs Post 2000

# POLL:

What change do you think has most impacted this outcome?

### Relative Focus





McCormick, Weiland, Hsueh, Pralica, Weissman, Moffett, Snow, Sachs.

"Is Skill Type the Key to the PreK Fadeout Puzzle?..."

(Child Development, 2021)





Dale C. Farran, PhD
"Early Developmental
Competencies or Why
PreK Does Not Have
Lasting Effects"
(DEY, 2022)







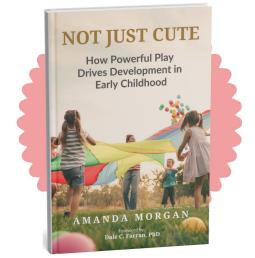




### Why We Play

# POLL:

What misconceptions do people have about why we play in ECE?



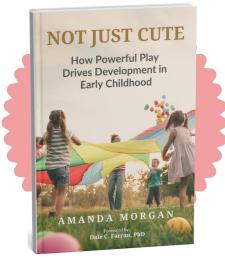




...essential for mental health and wellness.

...ideal for promoting **learning** and **brain** development.

...full of golden opportunities for **soft skill** development.



Play is... ... essential for mental health and wellness.

Peter Gray

"The Decline of Play and the Rise of Psychopathology in Children and Adolescents"

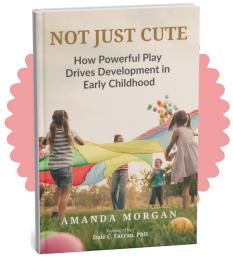
(American Journal of Play, 2011)

Gray, Peter, et al.

"Decline in independent activity as a cause of decline in children's mental well-being: Summary of the evidence."

(The Journal of Pediatrics, Sept. 2023)



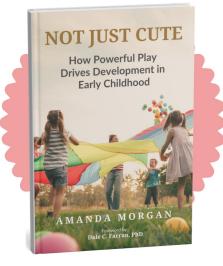


### Play is... ... essential for mental health and wellness.



# "Pervasive Passivity"



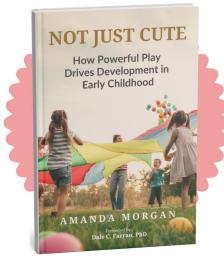


### Play is... ... essential for mental health and wellness.





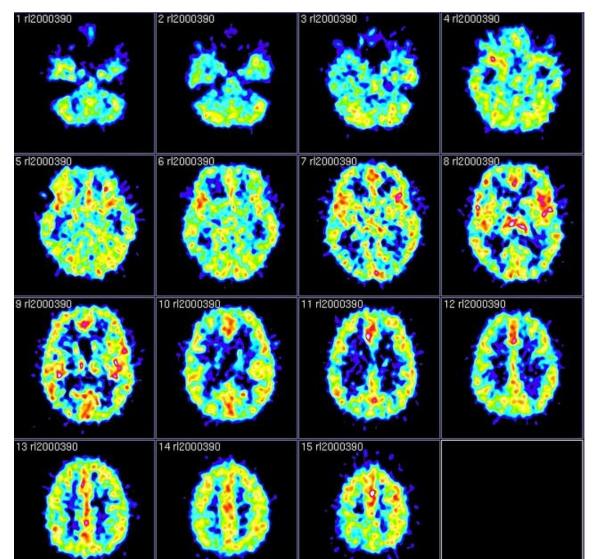
# PLAY = Joy + Agency



**Play is...** ...ideal for promoting **learning** and **brain** development.



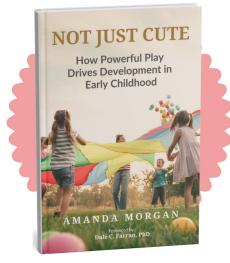
**Play is...** ...ideal for promoting **learning** and **brain** development.





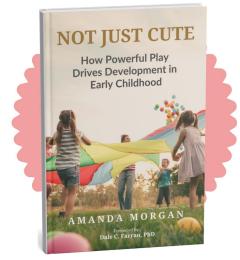
"Neuroimaging research reveals the disturbances in the brain's learning circuits and neurotransmitters that accompany stressful learning environments...Joy and enthusiasm are absolutely essential for learning to happen -- literally, scientifically, as a matter of fact and research."

-Judy Willis MD (edutopia)



**Play is...** ...ideal for promoting **learning** and **brain** development.

# "We want RIGOR."



**Play is...** ...ideal for promoting **learning** and **brain** development.

Fisher, Hirsh-Pasek,
Newcombe, & Golinkoff
"Taking Shape: Supporting
Preschoolers' Acquisition
of Geometric Knowledge
Through Guided Play."
(Child Development, 2013)





# PLAY = Joy + Agency



# RIGOR = Joy + Agency

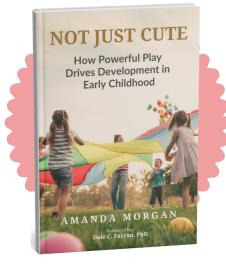


## PLAY

is the method.

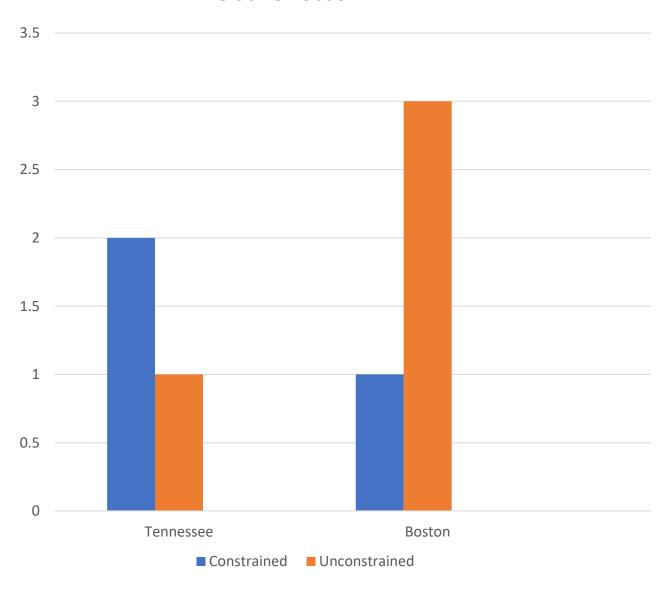
## LEARNING

is the outcome.



**Play is...**..full of golden opportunities for **soft skill** development.

### Relative Focus





McCormick, Weiland, Hsueh, Pralica, Weissman, Moffett, Snow, Sachs.

"Is Skill Type the Key to the PreK Fadeout Puzzle?..."

(Child Development, 2021)

- Peer Problem Solving
- Understanding People's Feelings
- Shares Materials with Others
- Cooperates with Peers
- Is Helpful to Others
- Listens to Others' Point of View
- Can Share Ideas/Opinions Tactfully
- Is Friendly

Soft Skills

Jones, et al, "...The Relationship
Between Kindergarten Social
Competence and Future Wellness"
(American Journal of Public Health,
2015)









#### **Walter Gilliam**

"Pre-kindergartners Left Behind: Expulsion Rates in State Prekindergarten Systems" (FCD Policy Brief, 2005)

(NAEYC Presentation, 2009)

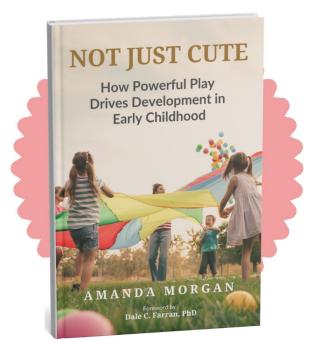
Bassok, Latham, Rorem "Is Kindergarten the New First Grade?" (AERA Open, 2016)





"It seems that in a developmentally appropriate, play-based approach to early childhood education, children have the opportunity to practice and build soft skills.

In inappropriate environments, they're punished for not already having them."









### "Sleeper Effect"

- No influence on short term measures like standardized test scores in elementary or middle school
- More likely to graduate high school, take the SAT, and go to college.
- Less likely to be suspended or incarcerated

Gray-Lobe, Pathak, & Walters

The Long-Term Effects of Universal PreK in Boston"

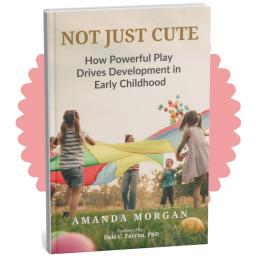
(NBER, Policy Brief, 2021)



### PLAY = Joy + Agency



# SOFT SKILLS = Joy + Agency



#### Play is...



...essential for **mental health** and wellness.

...ideal for promoting **learning** and **brain** development.

...full of golden opportunities for **soft skill** development.



#### Why do we need play?

#### Because we're human.







"(A) crucial factor that sets children apart from Als is

the way that they learn socially, from other people.

Als can learn from very specific and controlled kinds

of human supervision. But human children learn

from the people around them in much more

sophisticated ways."

-Dr. Alison Gopnik, Psychologist, UC Berkley

(via "The Ultimate Learning Machines" Wall Street Journal, 2019)



"Another secret of children's learning...they are

insatiably curious and active experimenters...Als

have mostly been stuck inside their mainframes

passively absorbing data... We're collaborating with

computer scientists...who try to make Als that

are similarly curious, active learners."

-Dr. Alison Gopnik, Psychologist, UC Berkley

via "The Ultimate Learning Machines" Wall Street Journal, 2019)







### Play is Not Just Cute.



RECOGNIZE "Why"

EMPHASIZE "How"

MAXIMIZE

"WOW"



- Play's Potential
- Dev. Objectives
- Child's Needs

**EMPHASIZE** 

MAXIMIZE



#### RECOGNIZE

- Invitations
- Implementation
- Interactions

MAXIMIZE



"They knew that what we were doing was good for kids. But they didn't necessarily have the why, or the research, or the facts to confidently defend it to others, and to advocate for it, and to explain it.

And to take it a little bit deeper.

I feel like my teachers see themselves more as early childhood professionals."







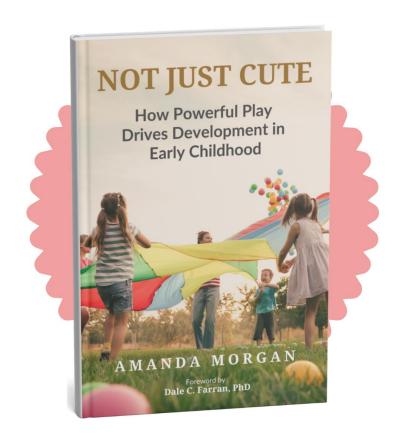


# Take Your Team Deeper into PLAY:

Not Just Cute Book Study



notjustcute.com/book





### Take Your Team Deeper into PLAY:





notjustcute.com/powerful play



# Take Your Team Deeper into PLAY:



notjustcute.com/speaking





PLAY is often talked about as if it were a relief from

Serious Learning.

But for children, play IS serious learning.

PI\_AY is really

the work of childhood.

notjustcute.com

- Fred Rogers



