

Play-Based Learning in the Kindergarten Classroom and Beyond

October 15, 2024



Panelist



Kathy Hirsh Pasek, Ph.D.
Professor of Psychology
Temple University

Commentators



Loretta Brady, Ph.D.
Professor
Saint Anselm College



Kristi Kallam
Early Childhood Educator



Debbie Leslie, Ph.D.
*Director of Early Childhood
Initiatives, UChicago STEM
Education*
University of Chicago



Kimberly Nesbitt, Ph.D.
*Primary Investigator, Early
Childhood Initiative*
University of New Hampshire

Moderator



Diana Greene, Ph.D.
Chief Executive Officer
Children's Literacy Initiative

Active Playful Learning:

Using a 3-part equation to support optimal student outcomes



Kathy Hirsh-Pasek
Temple University
Brookings Institution

As Yuval Noah Harari wrote in 2021



The Industrial Revolution has bequeathed us the production-line theory of education....It is easy to laugh at this model, and almost everybody agrees that no matter its past achievements, it is now bankrupt.

What the Year 2050 has in Store for Humankind

While the research is mixed “...there is evidence of the potential for today’s early education programs to accomplish their goals of improving long term outcomes for many children” (Burchinal et al., *Science*, 2024, p. 506)



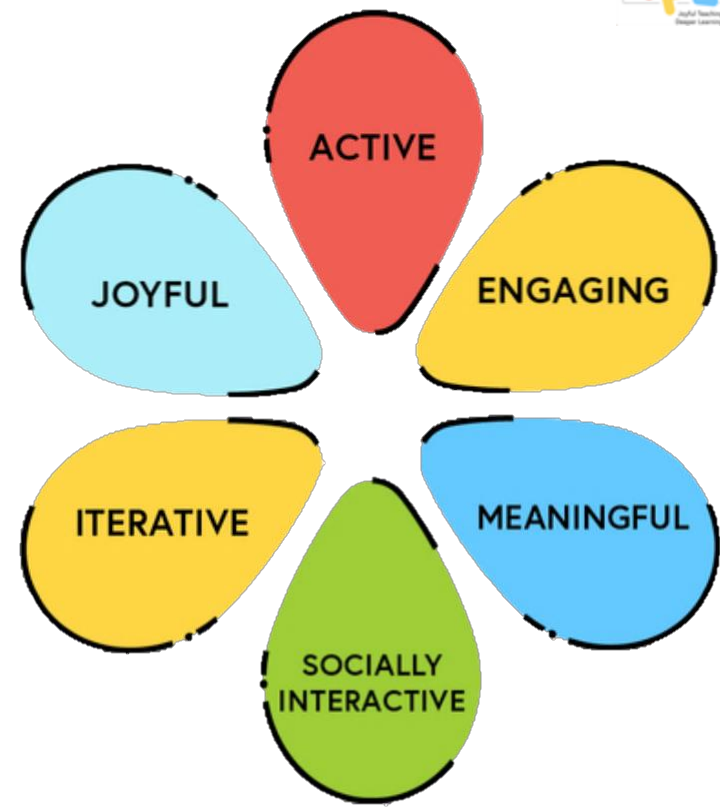
How do we meet this
promise?

**We teach in the way that
human brains learn**

This applies across curricula!!!

The science that shows us children grow when experiences are...

These pillars are embodied in the concept of active playful learning



When we focus on *how* children learn, we support *what* they need in school and life

THE 6 C's

COLLABORATION

COMMUNICATION

CONTENT

CRITICAL THINKING

CREATIVE INNOVATION

CONFIDENCE





From the home to the school to the neighborhood to the broader community, to be successful we should align our efforts to the contexts in which children live. Creating two-way interactions between home and school creates agency for parents and > learning for students.

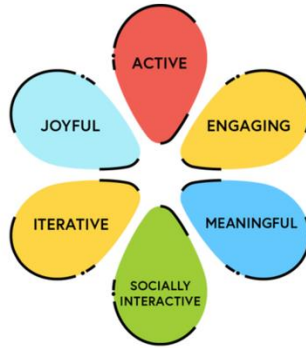
Active Playful Learning

An evidence-informed, 3-part equation to bring joy and deeper learning back to children's lives



Community + Family
Values

+



The science of *how* children
learn

+

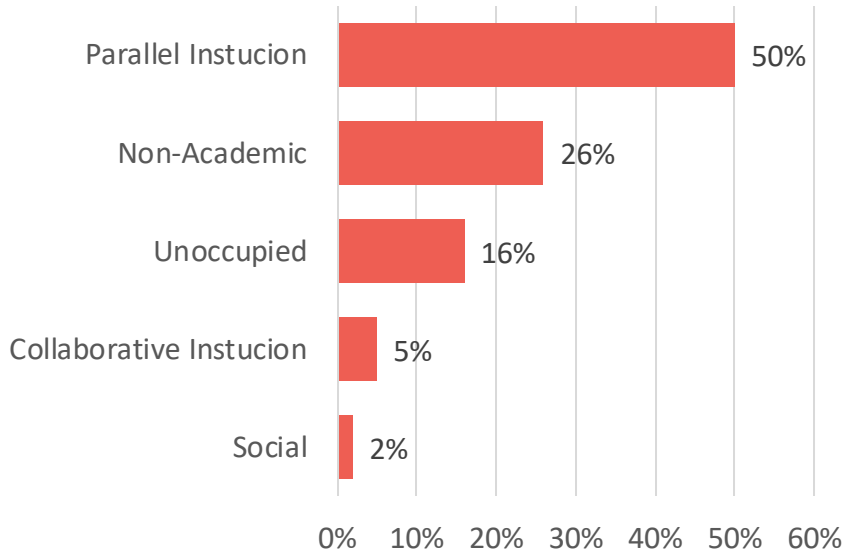


The science of *what* children should
learn

Evidence of why schools need Active Playful Learning...

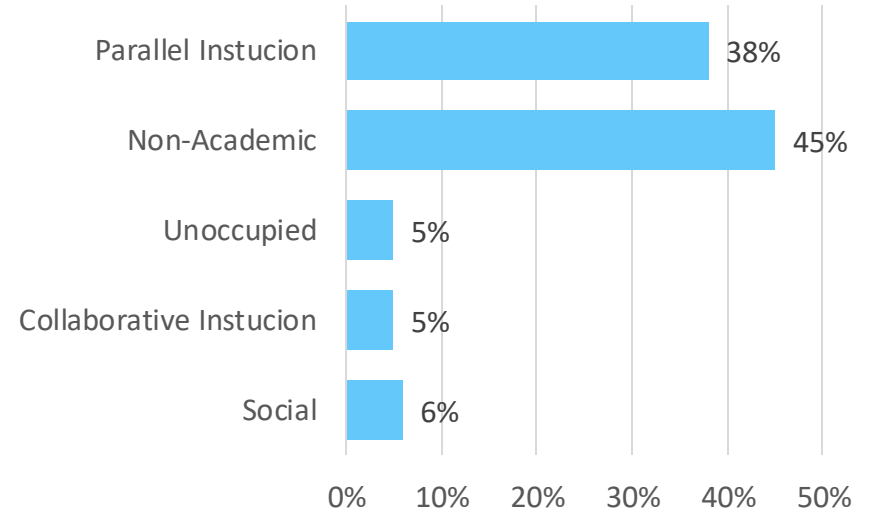
How K and Grade 1 Spends The School Days

APL 3-Hour Instructional Block



Tennessee All-Day Observations

(Christopher & Nesbitt, 2023)



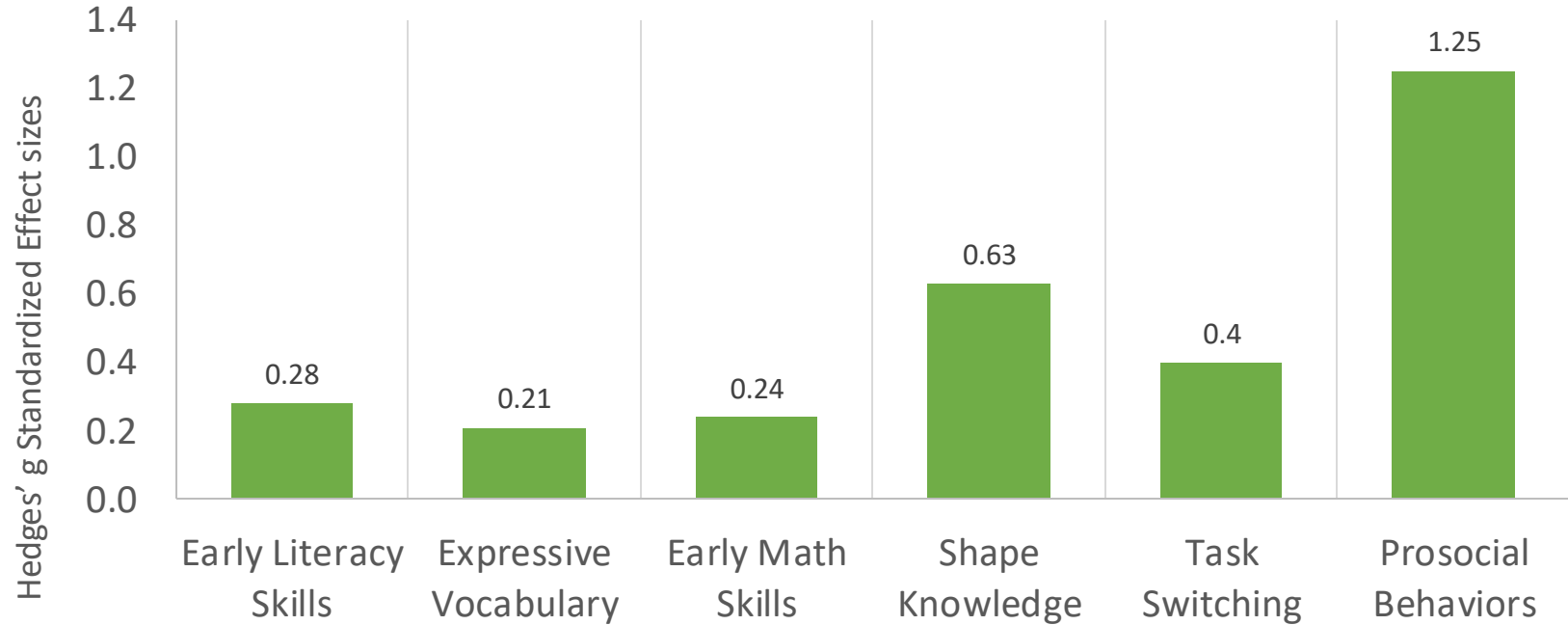
Maximizing APL in the Classroom



	Free Play	Guided Play	Playful Instruction	Direct Instruction
Explicit Learning Goal	No	Yes	Yes	Yes
Initiated by	Child	Teacher	Teacher	Teacher
Child Active Involvement	Yes	Yes	Yes	No
Child Agency/Choice	Yes	Yes	No	No

Active Playful Learning

Playful Learning vs. Direct Instruction

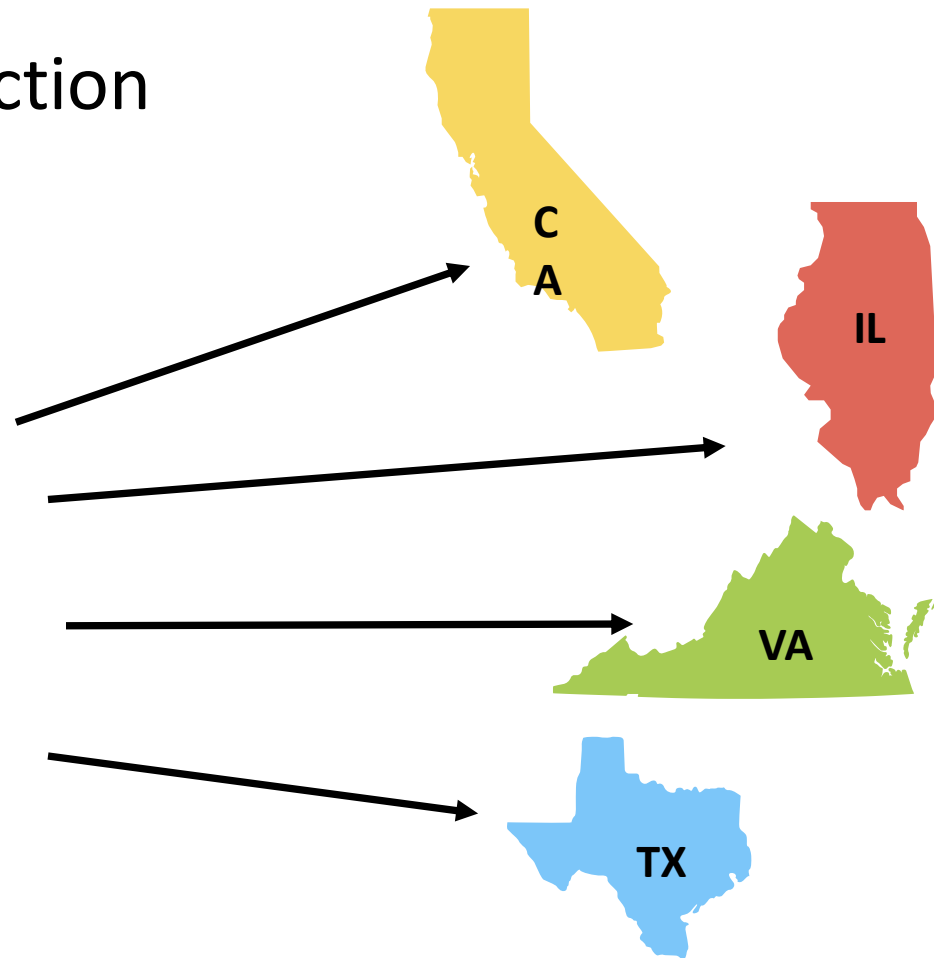


Active Playful Learning In Action

A coach-based intervention in grades K to 4th



The
LEGO
Foundation



To date, we are coaching teachers to try 6 new behaviors that correspond to how children learn

1. Use **small and paired groups**
2. Increase **students' contributions** to interactions with peers and teachers
3. Support **hands-on and minds-on** exploration, discovery, and inquiry
4. Give students **choice and voice** in their own learning
5. Help students **connect their learning** to other experiences both in and out of school
6. Infuse **enthusiasm and positivity** into learning experiences

A taste of what it looks like...



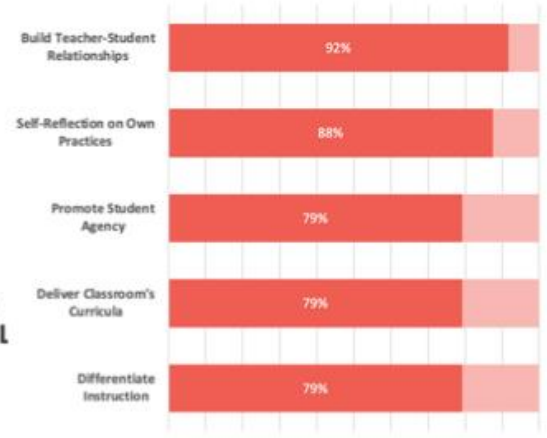
1. [Math lesson in Santa Ana, CA](#)
2. Teaching Practice Video Library
 - [Example - Small & Paired Groups](#)

What APL Teachers are saying...

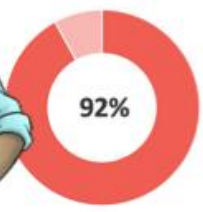
APL helps students grow in ...



Percent of teachers who find APL beneficial for the following teaching practices

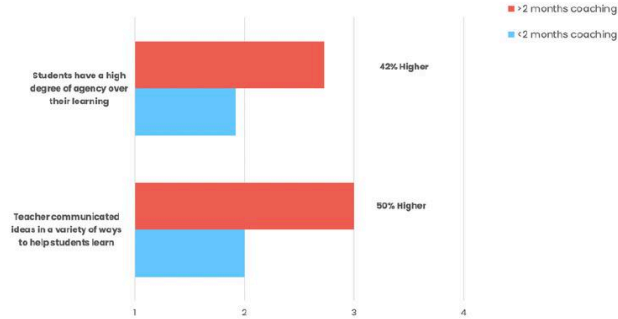


Percent of Teachers Who Recommend APL



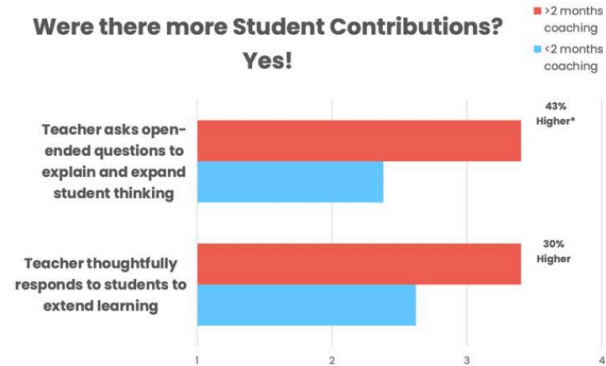
Observations of classrooms revealed...

Did students have more Voice & Choice? Yes!



*Percent Higher reflects observer rating of classrooms with more than 2 months of APL compared to classrooms with less than 2 months of

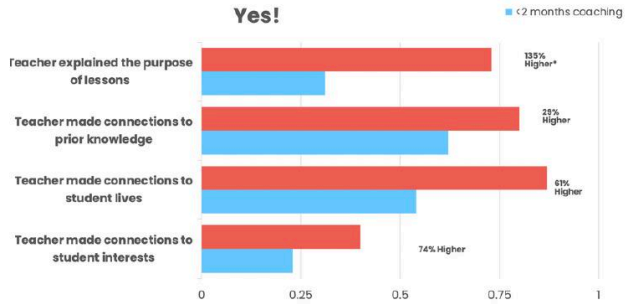
Were there more Student Contributions? Yes!



*Percent higher reflects observer rating of classrooms with more than 2 months of APL compared to classrooms with less than 2 months of APL.



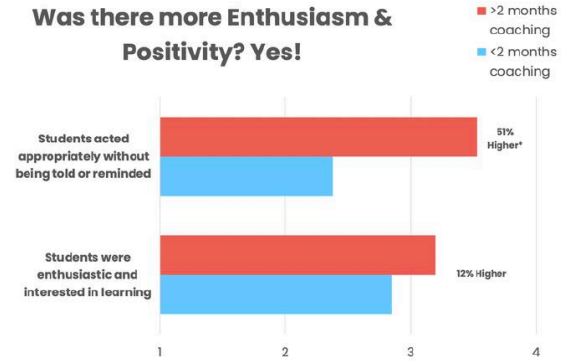
Were there more Meaningful Connections?



*Percent higher reflects observation of the practice for classrooms with more than 2 months of AP, compared to classrooms with less than 2 months of AP.



Was there more Enthusiasm & Positivity? Yes!



*Percent higher reflects observer rating of classrooms with more than 2 months of AP, compared to classrooms with less than 2 months of AP.



Stay tuned for more!

To learn more about APL,
 please visit
activeplayfullearning.com



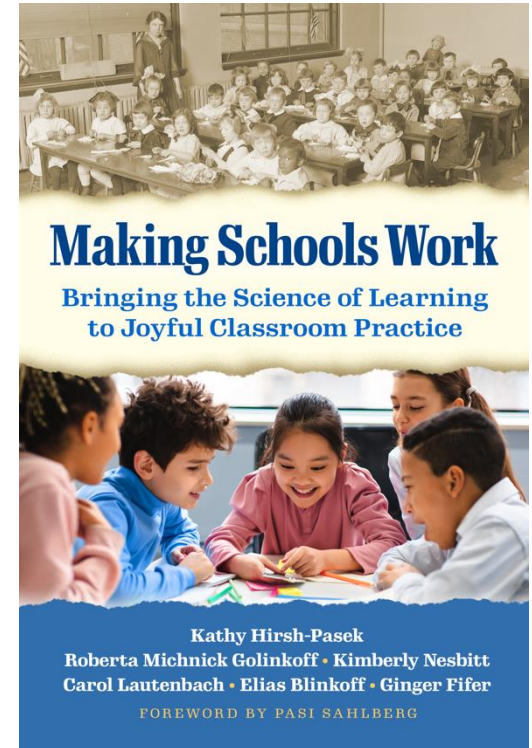
Active Playful Learning Across the Country

CT and NH legislation mandates training and implementation of play-based learning

OK and MA have led training on purposeful play

AL, NY, OR, PA, and many others' early learning guidelines highlight the importance of playful learning

NC, NH, and CO have playful learning credentials, certificates, or license requirements



TO DATE, We developed.....

OUTREACH



Activeplayfulllearning.com



Meet Eskayla!
SAUSD APL Coach

Meet Eskayla, one of our three Santa Ana Unified School District coaches dedicated to integrating Active Playful Learning in classrooms.

With 13 years of teaching experience, Eskayla supports educators in creating engaging learning environments to enhance student outcomes. She holds a B.S. in Child and Adolescent Studies and an M.S. in Special Education, bringing a wealth of knowledge to her role.

Next Steps & Goals

- Provide ongoing coaching support for APL teachers
- Collaborate with local community organizations
- Enhance community engagement in classrooms

Welcome to our APL Quarterly Bulletin!

What is Active Playful Learning (APL)?

Active Playful Learning offers professional development to educators based on the latest evidence in the science of learning. APL is a program built from a three-part equation that embraces:

- **cultural and community** beliefs
- **the how of learning** + the **what** of learning.

- Integrates playful learning strategies into existing curricula
- Currently in: Pennsylvania, Michigan, New Hampshire, Virginia, Texas, Illinois, Philadelphia and **California**
- For more information, contact: Laurah8@uci.edu
- Sponsored by the **LEGO Foundation!**

Spring HIGHLIGHTS

We are working alongside 15 amazing Santa Ana Unified School District teachers! Supported by 3 kind, hardworking and talented district coaches: Tally, Eskayla, & Damaris
Lead Researcher: Santa Ana advocate and UCI professor, Dr. Andres Bustamante
Project Coordinator: Bilingual executive function & child development researcher, Laura Hernandez

Upcoming Community Events, May-June 2024

MAY 6-10

Teacher Appreciation Week

MAY 18

Free Family Public Works Community Event

MAY 25 June 2

Down Payment Assistance Program Workshop

JUNE 7

Movies in the Park Regional

Measurements for all the constructs of interest to look for change in classrooms informed by...



Observers



Coaches



Teachers

The Teacher Name: _____ Teacher ID: _____

School ID: _____ Classroom ID: _____

Coach Name: _____ Coach ID: _____ Date: _____

SMART Goal Reflection Form

Typically, the timeframe to accomplish a S.M.A.R.T. goal should be 1 to 2 months. As such, approximately every two months (4 two-week coaching cycles), the teacher and coach will reflect on their progress toward meeting the planned S.M.A.R.T. goal. It is understood that discussion around these goals is ongoing, and goals should be revisited and revised as necessary.

Teacher: _____ Coach: _____ Date: _____

1) To what extent was the S.M.A.R.T Goal Met?

Goal was unfinished.

Goal was partially met.

Goal was met.

Initial Classroom Visit Form

The goal of the initial classroom visit(s) is to get to know the classroom, teacher(s), and children.

- Focus on identifying strengths to build on through coaching.
- Focus on the practices targeted by APL and that might be supported through coaching.
- Focus on providing specifics to support noted comments, including the language heard or behaviors seen.

Teacher Name: _____ Teacher ID: _____ Classroom ID: _____

School ID: _____ Coach Name & ID: _____

Date: _____

What's Working

APL Teacher Practices

Small & paired groupings

- Supports children working together.
- Reinforces prosocial behaviors.

Student contribution

- Facilitates multi-turn conversations.
- Responsive to

And Manuals for coaching and for study administration



ACTIVE PLAYFUL LEARNING

*Coaching
Guidebook*

November 2023



Active Playful Learning Operations Manual



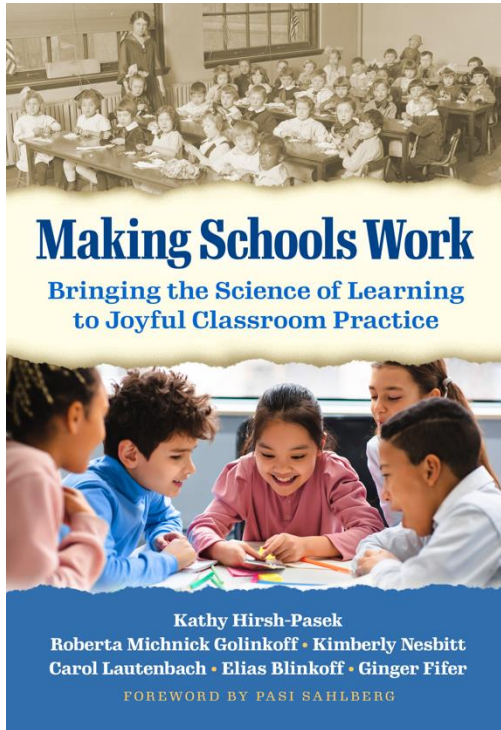
Fall 2024

And, importantly, Active Playful Learning is not just for little kids



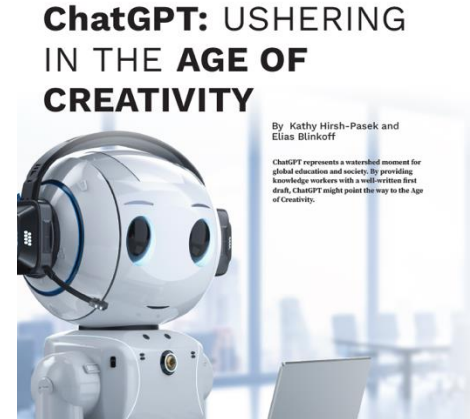
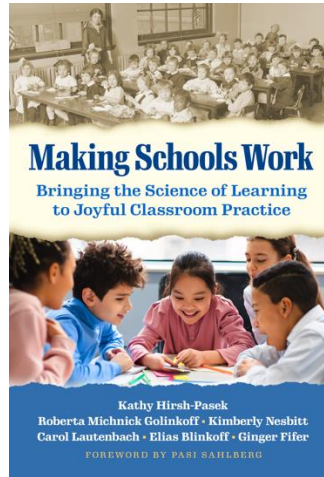
Blinkoff et al., (in preparation) show how it can even be used to teach in college classrooms!

To learn more about APL in schools...



<https://forms.office.com/r/ni6pRkkvZH>

And we are applying the same model to shape communities, schools, and digital media



All are backed by a strong research base.....

Springer Link

Playful Learning Landscapes: Convergence of Education and City Planning

Authors: Helen Shwe Madani, Rebecca Winthrop, Kathy Hirsh-Pasek

Open Access Chapter
First Online: 23 May 2021

1 236

CHILD DEVELOPMENT PERSPECTIVES

Learning Landscapes: Where the Science of Learning Meets Architectural Design

Andres S. Bustamante¹, Brenna Hassinger-Das^{2,3}, Kathy Hirsh-Pasek^{3,4} and Roberta M. Golinkoff⁵

¹University of California, Irvine, ²Pace University, ³Temple University, ⁴The Brookings Institution, and ⁵University of Delaware

MIND, BRAIN, AND EDUCATION

Questions in a Life-Sized Board Game: Comparing Caregivers' and Children's Question-Asking across STEM Museum Exhibits

Camline Gaudreau⁶, Andres S. Bustamante¹, Kathy Hirsh-Pasek^{3,4}, and Roberta Michnick Golinkoff⁵

Contents lists available at ScienceDirect

Library and Information Science Research

journal homepage: www.elsevier.com/locate/lisres

Play-and-learn spaces: Leveraging library spaces to promote caregiver and child interaction

Brenna Hassinger-Das^{6*}, Jennifer M. Zosh¹, Nicole Hansen², Meghan Talarowski³, Kate Zmich⁴, Roberta Michnick Golinkoff⁵, Kathy Hirsh-Pasek^{3,4}

¹Pace University, Psychology Department, 41 Park Row, Pt 13, New York, NY 10038, USA

²Pennsylvania State University, Schuylkill campus, Department of Human Development and Family Studies, 25 Yontley Mall Road, Milco, PA 19963, USA

³Rutgers-Delaware University, Peter Scoville School of Education, 1000 River Road, Trenton, NJ 07966, USA

⁴Stella Louis, 2113 S. 32nd Street, Uxer A, Philadelphia, PA 19146, USA

⁵Leah Memorial Playground & Playhouse, 3500 Riverside Drive, Philadelphia, PA 19122, USA

⁶University of Delaware, School of Education, Newark, DE 19716, USA

⁷Temple University, Department of Psychology, 1701 N. 13th Street, Philadelphia, PA 19122, USA

*Center for Children's Education, Brookings Institution, 1775 Massachusetts Avenue NW, Washington, DC 20036, USA



Journal of Cognition and Development

ISSN 1524-6372 (print) 1522-7647 (online) journal homepage: <https://www.lanonline.com/cogdev>

Urban Thinkscape: Infusing Public Spaces with STEM Conversation and Interaction Opportunities

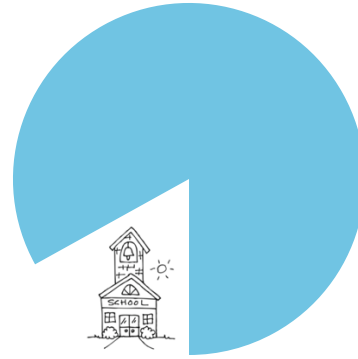
Brenna Hassinger-Das, Itai Palti, Roberta Michnick Golinkoff & Kathy Hirsh-Pasek

To cite this article: Brenna Hassinger-Das, Itai Palti, Roberta Michnick Golinkoff & Kathy Hirsh-Pasek (2020) Urban Thinkscape: Infusing Public Spaces with STEM Conversation and Interaction Opportunities, *Journal of Cognition and Development*, 21(1), 125-147, DOI: 10.5964/jcd.v21i1.1673753

To link to this article: <https://doi.org/10.1080/15246372.2019.1673753>

Did you know that.....

Children spend only **20%** of their waking time in school.



20%

What are we doing with the other 80%.....



Out-of-school learning can complement in-school learning.

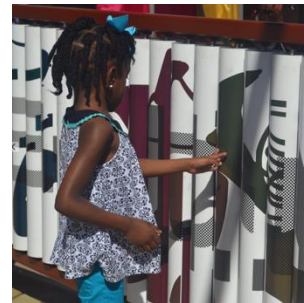
80
%



Example 1: Urban Thinkscape

- Transforming a bus stop into a playful learning space
- Over 100 community members participated in building the site
- Community members trained as “data ambassadors” to collect observational data on use and learning from the site
- Results (N=280) 28% increase in adult/child language and in targeted spatial or number language use

Hassinger-Das et al.
2019



Hassinger-Das et al., in
press



How the bus stop changes in Santa Ana



Example 2: Parkopolis



- The Human Sized Board Game designed to foster early mathematical skills and scientific reasoning. Pilot conducted in Switzerland in the summer of 2017 resulting in more math talk!

RESULTS (N= 111)

- Parent-child interaction compared to control
- Adult and child language use and question use
- Targeted spatial/numeric language and fraction language



Andres Bustemante

Bustemante et al., 2020

NEWPROFIT

Thanks to Fei Xu, Silvia Bunge and all of our mathematic colleagues!

Example 3: Playbrary

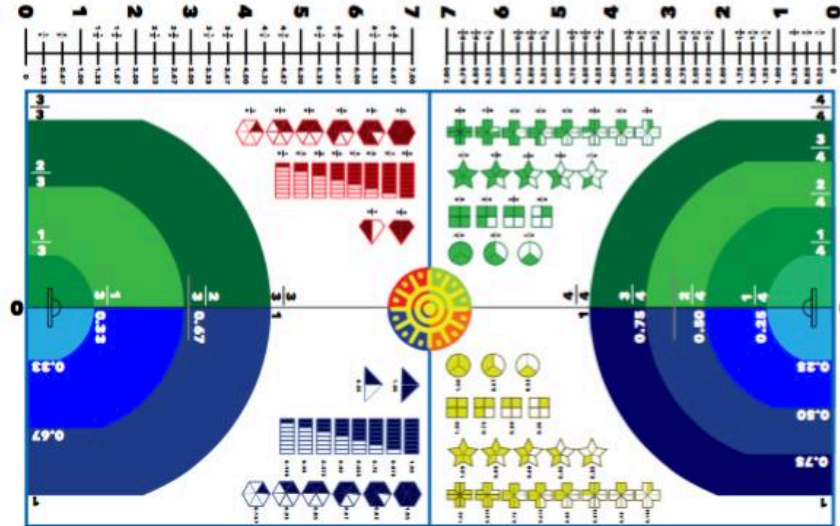
- Can we even change a library to enhance playful learning and conversation? You bet.

RESULTS:

- Number of children using number, spatial, color, or letter language increased by 44% from pre to posttest.
- Adults and children' technology use decreased by 38% from pre to posttest.



Example 4: Fractionball



Results? N=160, 4-6th graders; Increase in decimal to fraction conversions with just 4 PE sessions!

Bustemante et al., 2022

Example 5: Supermarkets

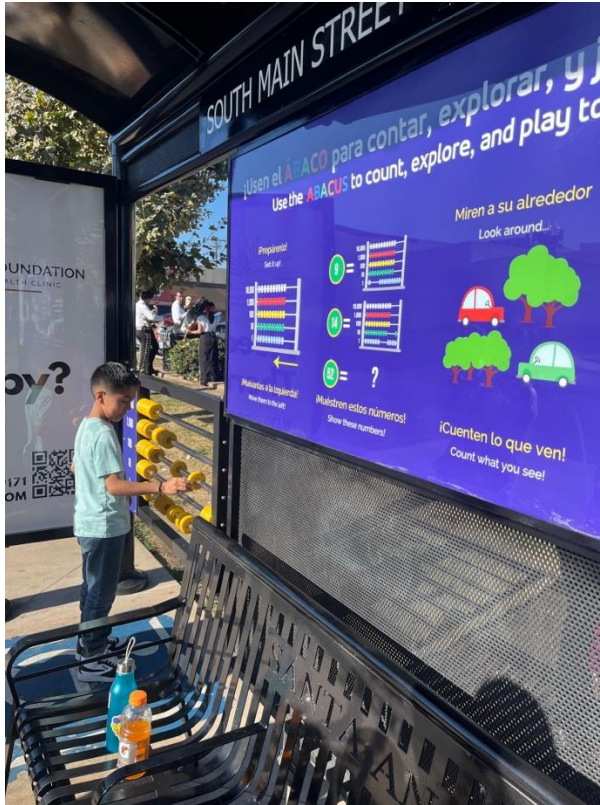
In Tulsa, OK



In South Africa

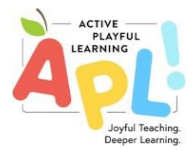


Case Study: Santa Ana, CA



You see, if we incorporate the science of learning into educational practice, we can create more equitable systems with deeper learning. Playful learning – joy – is not frivolity. It is central to how we education and how we teach whatever curricula we are teaching in and out of school!





Thanks to

The most wonderful postdocs, graduate students and undergrads.

And to the families who make the research we do possible!



Roberta Golinkoff, Ph.D.



TEMPLE
**INFANT
& CHILD**
LABORATORY



The
LEGO
Foundation

IES
Institute of Education Sciences



For more, visit us at Activeplayfullarning.com and Playfullearninglandscapes.com
hear our APA podcast: <https://www.apa.org/news/podcasts/speaking-of-psychology>



Upcoming GLR Learning Tuesdays Webinars:

GLR LEARNING TUESDAYS PARTNER WEBINAR

Building Stronger Teacher Pipelines Through University-District Partnerships

Tuesday, October 22, 3–4:30 p.m. ET/12–1:30 p.m. PT

GLR LEARNING TUESDAYS LEARNING LOSS RECOVERY CHALLENGE

An “Honesty Gap”? Shifting State Standards & Accountability for Learning Loss Recovery

Tuesday, October 29, 3–4:30 p.m. ET/12–1:30 p.m. PT

SPECIAL ELECTION DAY REBROADCAST

The ESSER Funding Cliff Approaches: What States Did & What They Learned

Tuesday November 5, 3-4:30 p.m. ET/12-1:30 p.m. PT

CRUCIBLE OF PRACTICE SALON

Words in Every Neighborhood: Citywide Efforts to Expand Literacy-Rich Environments

Tuesday November 12, 12:30-2:00 p.m. ET/9:30-11 a.m. PT

Join us!

gradelevelreading.net [@readingby3rd](https://twitter.com/readingby3rd) [#GLReading](https://twitter.com/GLReading) [#LearningTuesdays](https://twitter.com/LearningTuesdays) [#GLRKeepers](https://twitter.com/GLRKeepers)

