### Centering the other: A community engaged approach to language and literacy development

Yolanda Holt PhD CCC-SLP

Associate Professor

East Carolina University

Symposium on Research in Child Language Disorders

May 30-June 1, 2024



Production and Perception of Speech Sounds



#### Disclosures

- East Carolina University
- Bill and Melinda Gates Foundation Fund # 217540
- Engaged Outreach Scholars Academy of East Carolina University



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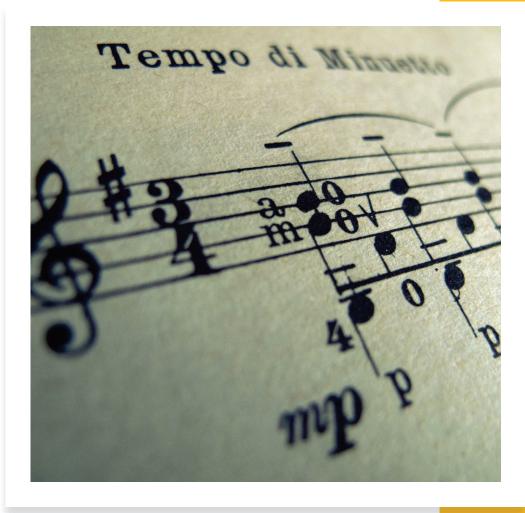


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#### Preface

"Just as I am, without one plea, but that thy blood was shed for me" (Charlotte Elliot 1835)



















Dr. Dietrich Morrison-Danner Senior Executive Director of Federal Programs and Community Engagement







#### Agenda

What is Community Engaged Research

The Community in Community Engaged Research

Community Engaged Research in the context of Child Language and Literacy

The Fifth Street Project

Audio and Tech Equity

□Who should care about engaging the community and what is the benefit to research on child language

Discussion



Ferreira, M. P., & Gendron, F. (2011).

Community Based Participatory Research Kurt Lewin, 1940's & Paulo Friere, 1970s

- recognized that for social transformation to occur a new type of research was needed
- in the new framework practitioners and community members are co-partners in research



Ferreira, M. P., & Gendron, F. (2011).

Community Based Participatory Research Kurt Lewin, 1940's & Paulo Friere, 1970s

- to achieve cultural transformation both community and researcher must develop a critical awareness of existing systems
- the partners must recognize the contradictions in social, political, and economic spheres and take action to address the oppressive nature of the systems within each sphere



Ferreira, M. P., & Gendron, F. (2011).

Kurt Lewin, 1940's & Paulo Friere, 1970s

- both partners, the observer (researcher) and the observed (subjects) co-create the shared reality and understanding of the systems
- research occurs in a 'culture circle' that is community-based, and linked to the needs of the involved communities



Ferreira, M. P., & Gendron, F. (2011).

Kurt Lewin, 1940's & Paulo Friere, 1970s

 the research questioning and methods are flexible and are derived based on shared definitions of constructs

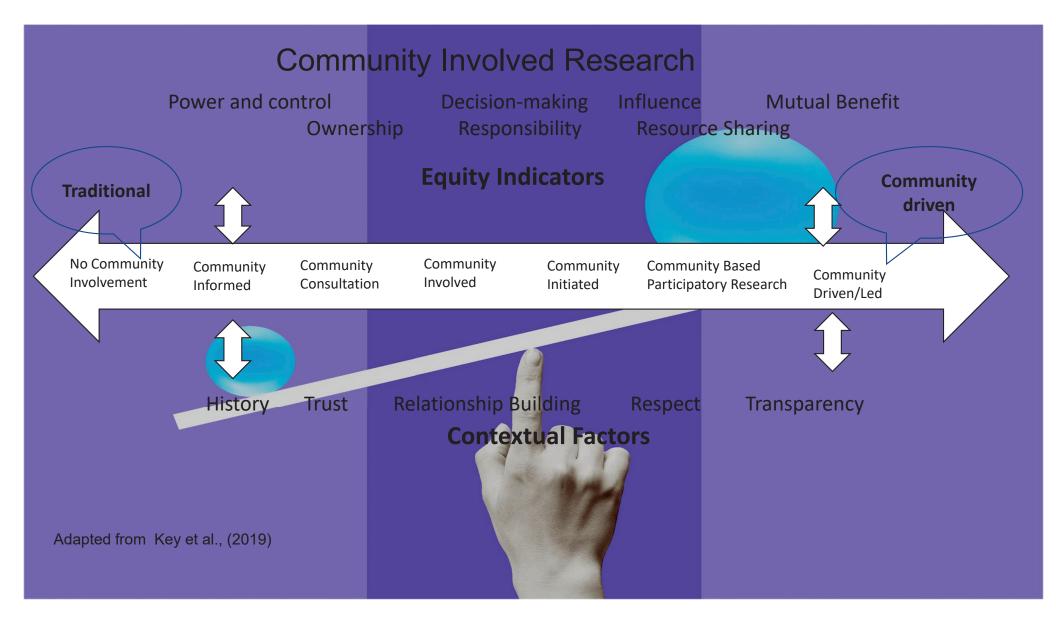
1.Acknowledging Communities as "Units of Identity": Recognizing that communities have unique identities, histories, and strengths

2.Building on Existing Community Strengths and Resources: Leveraging the assets and knowledge already present within the community

- Facilitating Equitable and Collaborative Partnerships: Ensuring that partnerships are empowering, address social inequalities, and involve all stakeholders
- Committing to Co-Learning and Capacity Building: Fostering mutual learning and skill development among partners

- Balancing Knowledge Generation and Intervention: Striving for benefits to all partners while generating knowledge and implementing interventions
- 6. Focusing on Local Issues of Public Concern: Addressing community specific issues that matter most to the people involved

- Utilizing a Cyclical and Repeatable Process: Recognizing that CBPR is an ongoing, iterative process rather than a linear one
- Delivering Results and Knowledge to All Partners: Ensuring that findings are shared with the community and contribute to positive change



Community Involver	nent/Activity					
Community is not included in any aspect of the research	Community informs the research and may or may not be informed or included (or know they're informing)	Community provides input and feedback to researchers to inform the research	Community has some active role in the research	Community initiates the research agenda/prior ities	Community Shares equally in the decision-making and ownership	Community leads and owns the research
						$\frown$
No Community involvement	Community Informed	Community Consultation	Community Participation	Community initiated	Community Based Participatory Research	Community Driven/Led
Researcher works independent of the community	Information is gleaned from the community and used by the research team "ear hustling"	Researcher consults with community and includes community in the research (front or back end)	Researcher includes community in a defined role in the research	Researcher responds to specific needs or asks from the community	Researcher shares equally in decision- making and ownership with the community	Researcher supports community identified research efforts or serves no role

Adapted from Key et al., (2019)

# Community Engaged Scholarship is not for the faint of heart



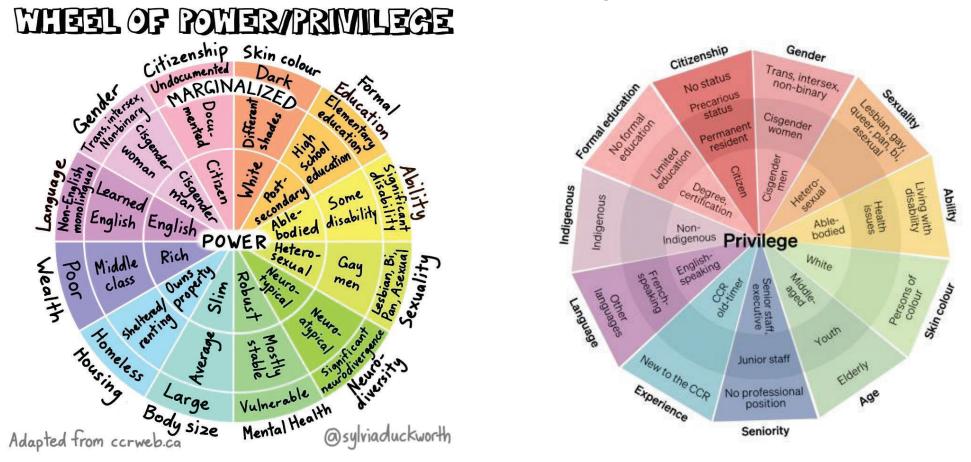
- 1. Requires time—to develop relationships with the community of interest before engaging in the research
- 2. An open mind—to recognize the community members may know more about some topics than the research team
- 3. Humility—to wait and ask
- 4. And co-ordination or training with a community engaged scholar—because you can make things worse
- 5. A memorandum of understanding [MOU] detailing who is responsible for what, is the minimum level of documentation between researcher and community in CBPR



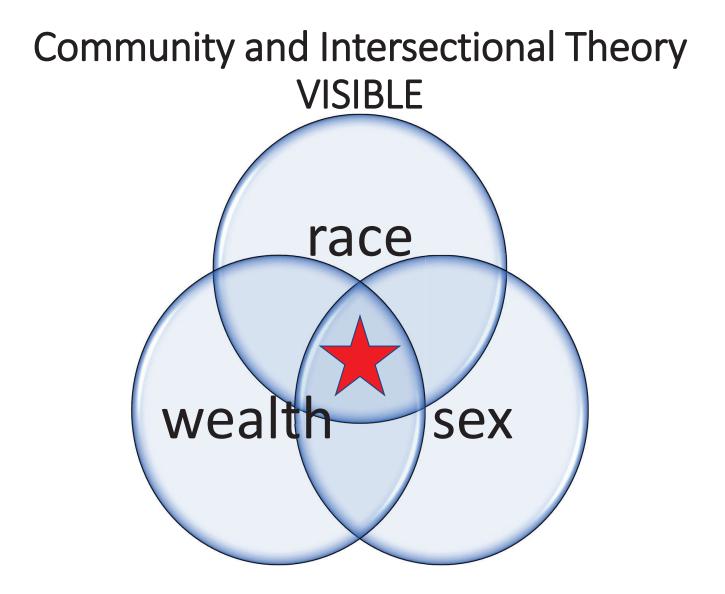
#### Me, We, Us and Them

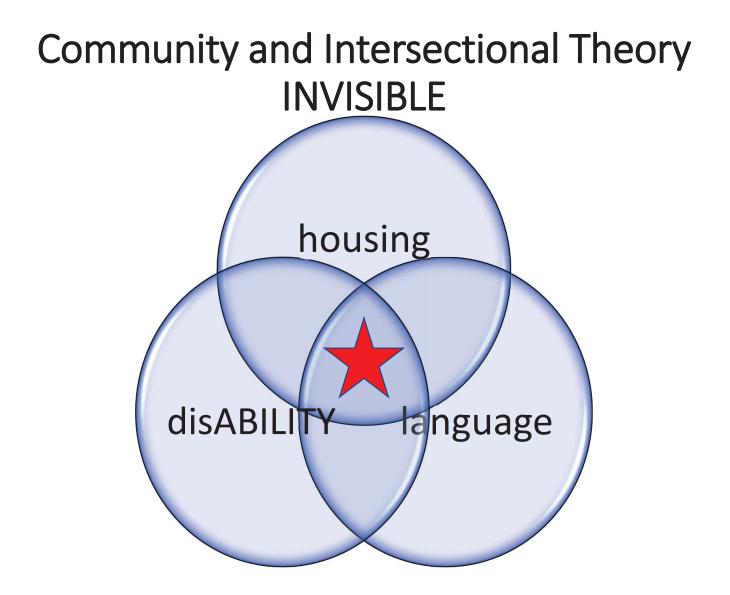
#### Power and Privilege

Canadian Council for Refugees



(Combahee River Collective 1979; Crenshaw 1989, 1991) ccrweb.ca/en/antioppression





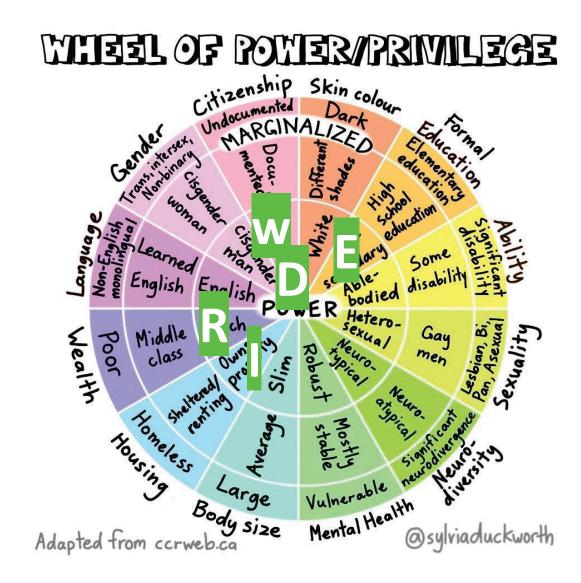
WEIRD Western **E**ducated Industrial **R**ich **D**emocracies

Henrich et al., 2010



WEIRD Western **E**ducated Industrial **R**ich **D**emocracies

Henrich et al., 2010

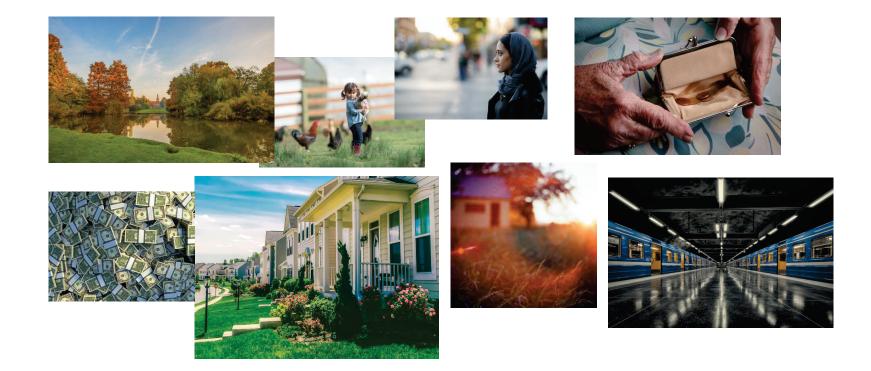




I want somebody to love me for me Happy, happy is the way that I want to be (Heavy D and the Boyz, 1989)



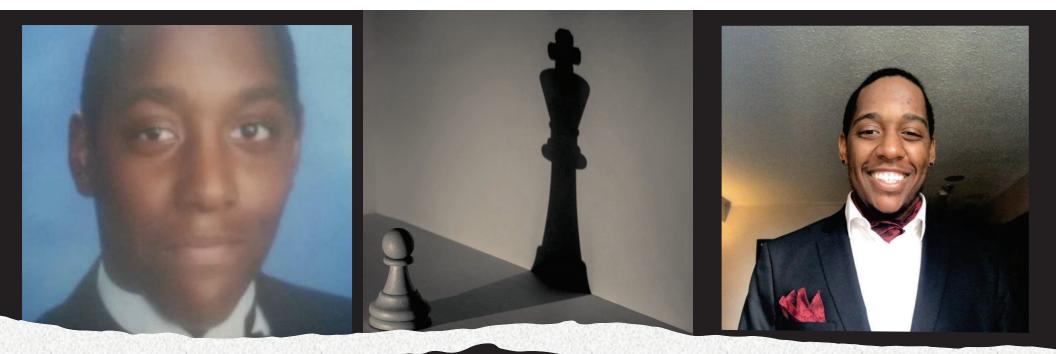




		and the second se
Don't talk too much or be too loud	Don't ask anyone for anything	
What happens in this house, stays in this house	Always get a receipt for every item you purchase, even if its just a pack of gum and keep the receipt in your hand until you leave the store	
Keep your license (ID card) in your possession at all times	Dress well for your doctor's visit	



When you get stopped by the police



When you get stopped by the police

#### When you get stopped by the police

## Language and Literacy and African American English (AAE)

#### African American English

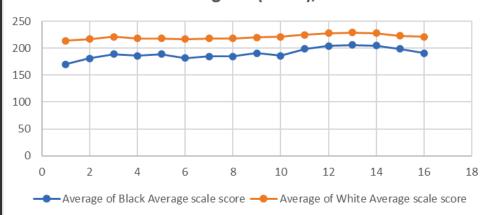
Teacher bias

Linguistic mismatch

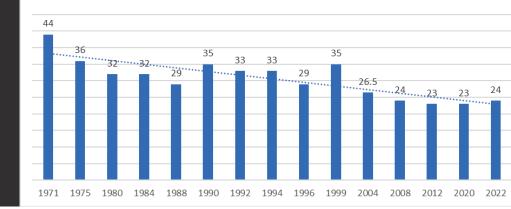
Linguistic Flexibility Theory

(Connor, 2008)

Average reading scores for 9-year-olds on the Long-Term Trend National Assessment of Educational Progress (NAEP), 1971-2022



Difference in Average reading scores for Black and White 9-year-olds on the Long-Term Trend National Assessment of Educational Progress (NAEP), 1971-2022



#### African American English

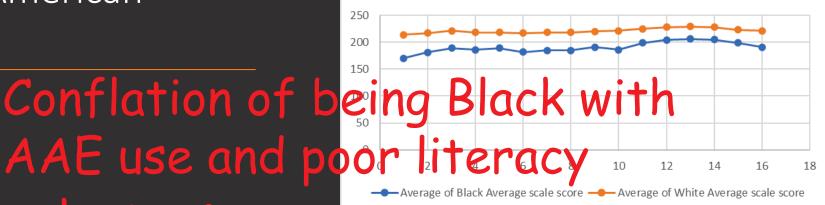
# AAE use and poor literacy

**Teacher bias** Linguistic misma

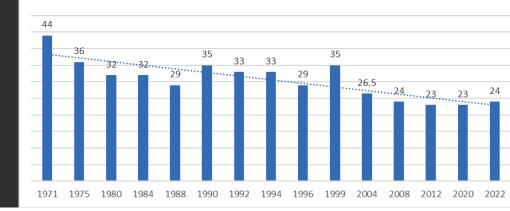
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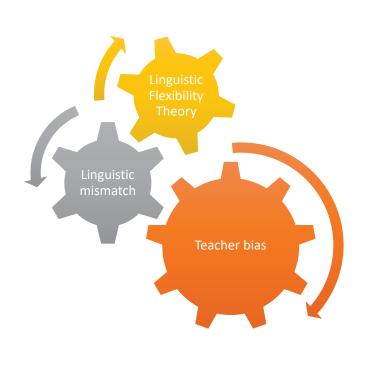
Difference in Average reading scores for Black and White 9-year-olds on the Long-Term Trend National Assessment of Educational Progress (NAEP), 1971-2022



#### African American English

#### African American English

#### Variation in Linguistic Domains



Phonology (Thomas, 2010)					
	<ol> <li>Consonant cluster reduction</li> <li>2.Medial syllable deletion</li> <li>3.I/E produced the same before nasals</li> <li>4.i/and /I/ produced the same before /I/</li> </ol>				
Morphology (Wolfram, 2004)					
	1.Variable use of plural and possessive /s/				
Semantics (Green, 2	2004)				
	1.Same word has different meaning in AAE				
Syntax (Green, 2004)					
	<ul><li>1.Subject verb agreement</li><li>2.Use of the verb to be</li><li>3.Question inversion</li></ul>				
Pragmatics (Hyter 6	et al.,2018 <b>)</b>				

#### African American English KEY FEATURES

Linguistic Domain	General American	African American
Phonology (Thomas, 2010)		
<ol> <li>Consonant cluster reduction</li> <li>Medial syllable deletion</li> <li>I/E produced the same before nasals</li> <li>/i/and /I/ produced the same before /I/</li> </ol>	1.to <b>ld</b> /fi <b>nd</b> /just 2.pro <b>ba</b> bly/family 3.pin/pen 4.still/st <b>ea</b> l	1.tol_/fin_/jus_ 2.prob'ly, pro'lly/fam'ly 3.pin/pin 4.still/still
Morphology (Wolfram, 2004)		
1.Variable use of plural and possessive /s/	1.The dog's bones	1.The dog_bone_
Semantics (Green, 2004)		
1.Same word has different meaning in AAE	1.The mail was delivered earlier today.	1.The mail BEEN delivered.
Syntax (Green, 2004)	1.The dogs were jumping and barking 2.They are not my friends	1.The dogs was jumpin' and barkin' 2.They _ not my frien's
<ol> <li>Subject verb agreement</li> <li>Use of the verb to be</li> <li>Question inversion</li> </ol>	3.What time is it?	3.What time it is?
Pragmatics (Hyter et al.,2018)		<ol> <li>Promotion of identity and cultural support through verbal affirmation of positive attributes</li> <li>Using Sound for power with variation in intonation and loudness</li> <li>Using gesture for power and non-verbal communication eye gaze, fist bump etc.,</li> </ol>



Community Engaged Research in the context of Child Language and Literacy

Centering the other: A community engaged approach to language and literacy development

The WEIRD construct aligns quite well with the inner circle of power and privilege



#### Centering the other: A community engaged approach to language and

literacy development

The goal of community engaged research is **to provide the COMMUNITY with the knowledge and the skills** to use the research findings gathered in their community to **enact POLICY changes that directly benefit that community.** 



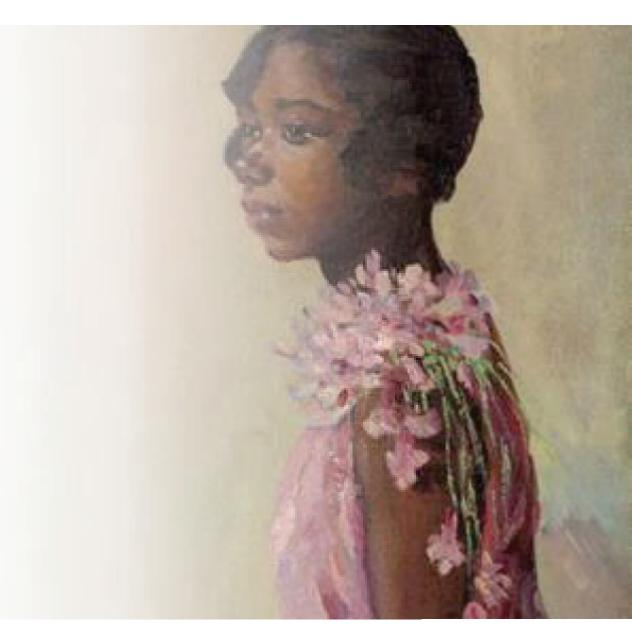
Centering the other: A community engaged approach to language and literacy development

The data derived from research completed in WEIRD societies, including from young children, does not generalize to other groups



# Community and Black people in the United States

'GIRL IN PINK DRESS,' BY LAURA WHEELER WARING



# Brown v. Board of Education of Topeka, 347 U.S. 483 (1954)

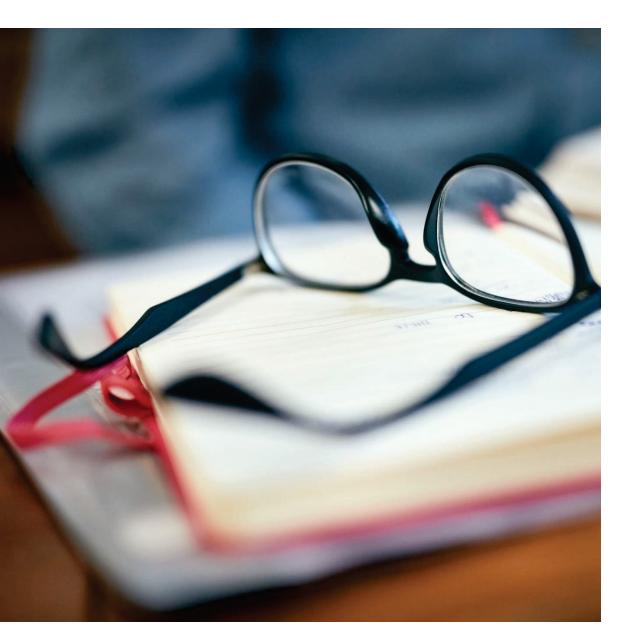


"Problem Kids," Ebony magazine, July 1947, p. 20-21.

### Brown used data Community Driven Research #DeficitPerspective

- Mamie & Kenneth Clark-Doll test
  - Black children (3-7 years) have lower selfesteem than white children due in part to school segregation
- Subsequent research found
  - Racial preference as measured by the doll test has no relationship to self-esteem
  - Self-esteem of Black children is ≥ that of white children
  - Disparities in educational attainment between Black and white children can't be attributed to disparities in self-esteem

Bergner, G. (2009).



## Moynihan Report (1965): **# Deficit Perspective 2.0**

- There is much evidence that a considerable number of Negro families have managed to break out of the tangle of pathology and to establish themselves as stable, effective units,
- living according to patterns of American society in general.
- E. Franklin Frazier has suggested that **the middle-class Negro American** family **is**, if anything,
- more patriarchal and protective of its children than the general run of such families.<sup>27</sup>
- Given equal opportunities, the children of these families will perform as well or better than their white peers.
- They need no help from anyone and ask none.



# But all that is ancient history

- Brown v Board was 1954 was 70 years ago
- The first generation of children affected by Brown are at least 80 by now

# Can I bring my whole self ?

I want somebody to love me for me Happy, happy is the way that I want to be (Heavy D and the Boyz, 1989)



# **CBPR** in Action

# Why CBPR for The Fifth Street Project? Original Plan

#### Original Research question:

What factors **negatively influence** literacy acquisition for African American (AA) children, particularly boys?

#### Impetus for asking:

>90% of the AA people I knew were highly literate from a young age.

Huge disconnect from the research literature.

Broad Research plan: Connect with a school serving AA boys in an under resourced community.

Holt, Y., & Asagbra, E. (2021)

#### The Fifth Street Project CBPR Plan

**Timeline:** Worked on small questions (traditional research) for 2 ½ years. Developed a relationship of **trust** and **mutual learning** in the school.

Parent info sessions on who and what we were doing in the school

Teacher info/training on the relationship of language to literacy

Administration info/training on how they could use the data we gathered to both inform their internal targeted support for individual students and to demonstrate growth of the student cohorts over time

**Shared question/Community need:** How can we use the many volunteers that come to the school to support the student learning without taking time from the teachers to train the volunteers?

**Shared research question:** Can volunteers be trained with fidelity to provide a dialogic reading intervention for young students? Is dialogic reading an effective method to improve language and literacy skills for young AA boys (pre- and early readers) ?

Research participants: Adult volunteers and child learners.

Holt, Y., & Asagbra, E. (2021)

# The Fifth Street Project –what we did

#### The process:

- the educator(s) provided an overview of the specific skills the volunteers would need to work with the students: the research team provided an overview of the dialogic reading protocol.
- together we defined the steps for the research enterprise
  - 1. Identify volunteers to provide interventions
  - 2. Train teachers on dialogic reading and create a video training model for volunteers
  - 3. Curate culturally texts for the children
  - 4. Complete pre- and post-intervention assessment with the children and volunteers

# Our partners

#### School Faculty

Parents



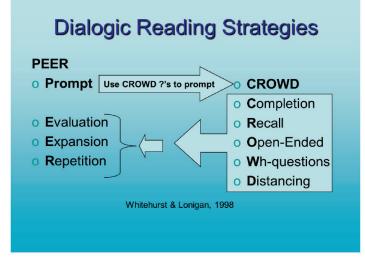


#### **PEER Sequence and CROWD Prompts**

Dialogic reading uses a scaffolded method of assessing and supporting children's vocabulary and language development. As the child becomes increasingly familiar with a book, the adult uses higher-level prompts to encourage the child to go beyond naming objects in the pictures to thinking more about what is happening in the pictures and how this relates to the child's own experiences.

The acronyms PEER and CROWD can help teachers prepare for dialogic reading and remember the sequence and types of prompts to use. First the teacher would use a prompt, by using one of the CROWD questions. Then the teacher would evaluate and expand on the responses, and then repeat the prompt to see if the children had more to add.

The PEER and CROWD sequences were developed by Grover J. (Russ) Whitehurst. A more comprehensive explanation of these acronyms is provided in "Dialogic Reading: An Effective Way to Read to Preschoolers," which can be accessed at http://www.readingrockets.org/article/400.



# Research Questions

Question 1: Can adult interventionists be effectively trained to follow the dialogic reading protocol using a training video?



# Research Questions

Question 2: What effect does dialogic reading have on the vocabulary, sentence length, and sentence structure of Pre-K and K males?



# Research Questions

Question 3: Will 12 weeks of participation in the dialogic reading program improve the children's standardized test scores in phonological awareness, expressive and receptive vocabulary, and syntax?



# Our participants

Adult volunteers Twelve interventionists 1man 11 women 2 African American 10 White American aged 20–22 years Child learners Seventeen boys All African American All used AAE Ages 4:8-6:8

# Volunteer Instructions

Instructions:

•Choose the book indicated for the week (Read the same book both days)

•Follow the teacher's request to complete an activity first

• If teacher has no activity read the book 2 times –(make sure to follow the lesson plan)

•Write the start and end time of the session

•Keep notes as indicated on the lesson plan

•Sign your name

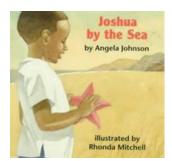
Child Name:

Child Name:

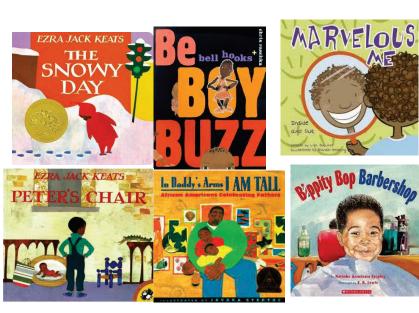
Volunteer Name:

#### Video Weeks

2\_\_\_\_ 4\_\_\_\_ 6\_\_\_\_



	Book								
Week	The Snowy Day	Be Boy Buzz	Joshua by the Sea	Peter's Chair	In Daddy's Arms I am Tall	Not Norman: A Goldfish Story	Marvelous Me Inside and Out	Bippity Bop Barbershop	NOT NORMAN
1	YES								
2		YES	12 N	eeks tot	al 8 shov	vn here			
3			YES						
4				YES					
5					YES				
6						YES			11 14
7							YES		
8								YES	Kelly Bennett Hustrated by Noah Z. Jones



Please listen to the child and the adult Please think about their interaction from your perspective as a person interested in child language development



## Cultural Affirmation & CBPR

- Deficit perspective
  - Note speech and language use as filled with errors
  - Identify variations from SAE
  - Report the child's movement and distractions in the room

- Affirming perspective
- Note use of unfamiliar vocabulary and recall of previously learned concepts
- Note consistency in language use (is that AAE)
- Note engagement with adult and movement towards control over the book and the book talk

### Fifth Street Project-results

#### **Community Benefit**

- 1. Video training protocol for volunteers
- 2. Faculty trained on dialogic reading
- 3. Culturally relevant texts and book list
- 4. Family engagement and understanding of the relationship between language and literacy
- 5. Teachers will continue to use the protocol and dialogic reading with children
- 6. Results presented in writing to school administration
- 7. Results presented at Family Night to the parents and teachers

#### **Researcher Benefit**

- 1. Video training is effective for training adults in dialogic reading
- 2. Intervention was minimally successfulphonological awareness improved

No significant changes in any other measures

- 3. Publication in academic journal
- 4. The CBPR tutorial and training protocol have been used for other projects
- 5. Reference and training protocol used for current grant submission with new collaborators

## Conclusion

- Examination of the ideologies driving the questions and the questioner
- Engage with the community
- Engage in an examination of the belief systems that are controverted by the evidence
  - Black language and literacy during Jim Crow (prior to 1954) how was that accomplished?
  - Skills of Black educators during Jim Crow and segregation how did they facilitate language and literacy development?





# Audio and Tech Equity Project Inclusive

## **Community Informed Research**

Funded by the Bill and Melinda Gates Foundation

- Automatic Speech Recognition (ASR) is constantly improving but the word error rate (WER) for many groups remains lower than the rate for mainstream American English (Garg et al., 2024 - among many)
- ASR technology is currently being used in the development of automated tutors that use speech recognition to identify common errors for children reading aloud (Lee et al.,2004)
- Please note that in **20 years** ASR technology has failed to reach parity for machine listening in United States English dialects other than MAE.

# Two Ends of the Continuum

#### **The Fifth Street Project**

- Community Based Participatory Research (CBPR) from idea to dissemination
- Research on literacy acquisition in Black children has been rigorously researched
- The community was identifiable
- Multiple identifiable smaller groups (caregivers, educators, children) were identifiable
- Community was invested in answering the research question to improve a local problem

#### Audio and Tech Equity Project

- Community Informed Research
- New frontier in human machine communication with limited research history and strong opinions for and against the technology
- Limited theoretical framework on human machine interaction
- Both communities using ASR technology and the technology itself are still developing

# Centering the Researcher

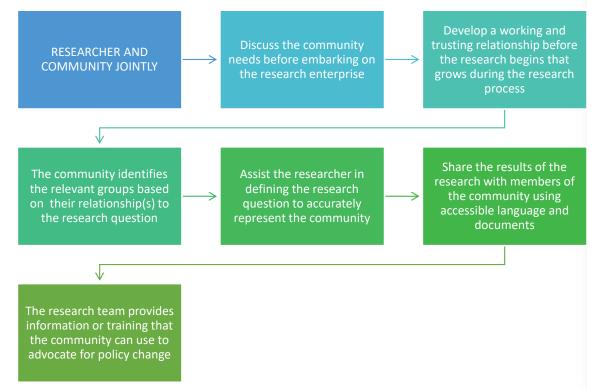
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#### • RESEARCHER

- Develops the research question(s)
- Defines the research agenda
- Defines the groups of interest
- Determines the things to be measured
- Determines the success or failure of the enterprise based on their needs and goals
- Leaves the community once the project has ended and taker the resources and information with them

# Centering the Community







# Who should care and why

- All research conducted by humans has an impact on other humans.... So, everyone
- Developing a relationship with the community is mutually beneficial for the lay community and the researchers
- Shows funders the relevance of your work
- Shows the taxpayers both the relevance and the enormity of the research process
- Demystifies the research process
- Is a form of outreach and inclusion for the communities being served

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Holt Lab

# Thank you for your time and

Production and Perception of Speech Sounds

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attention

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# DISCUSSION

Holt Lab



Production and Perception of Speech Sounds

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