

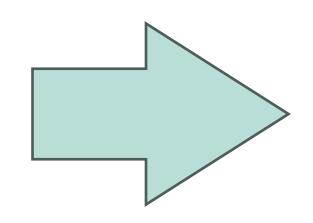


Data feedback loops to improve teacher practice: Integrating Learning Environment Evidence into HCD

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High quality ECCE leads to better child outcomes



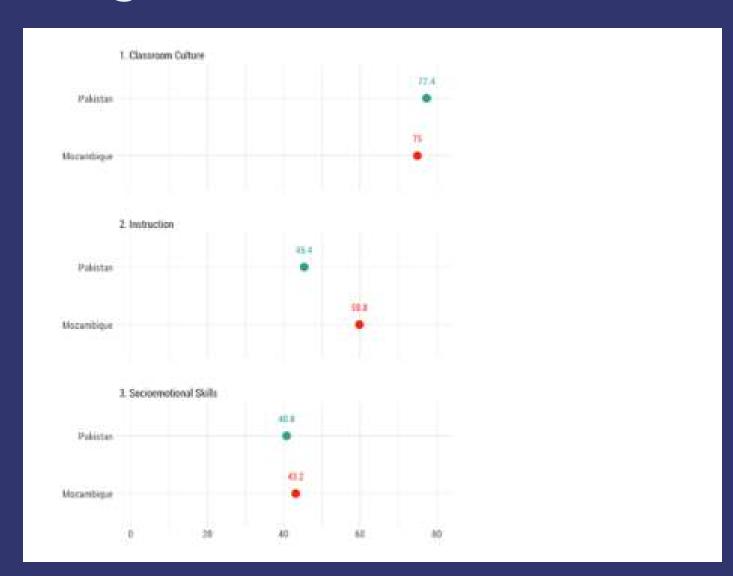




What gets measured gets done?



Evidence from traditional classroom observation measures is not always digestible for teachers

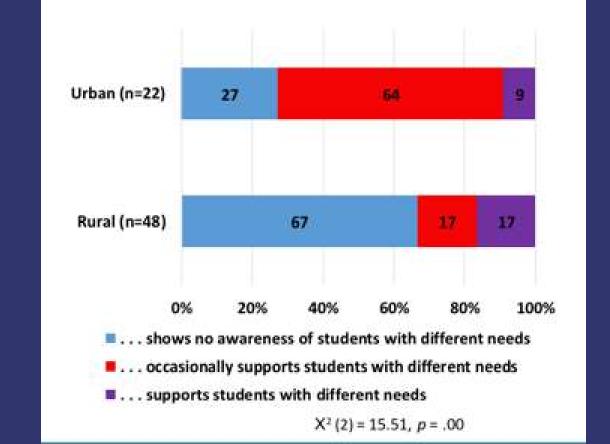


	1	2	3	4	5
Classroom Culture					
Supportive Learning Environment	2.7	9.4	25.1	49.3	13.5
2. Positive Behavioral Expectations	4.8	19.2	34.7	31.5	9.9
3. Opportunities to Learn	2.2	4.0	13.7	19.9	60.3
Instruction					
4. Lesson Facilitation	6.5	20.9	30.3	34.2	8.1
5. Check for Understanding	7.6	19.8	33.1	28.1	11.4
6. Feedback	14.7	11.5	37.7	16.5	19.6
7. Critical Thinking	32.6	22.3	23.3	13.8	8.1
Socioemotional Skills					
8. Autonomy	25.9	22.6	26.6	15.3	9.5
9. Perseverance	37.0	29.1	18.7	11.7	3.5
10. Social and Collaborative Skills	67.5	13.0	11.4	5.2	2.9

Table 2.	Descriptive Statistics	for Observational Indicators	i
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	N	M	SD
Global observations	227		
CLASS Emotional Climate		5.22	0.76
CLASS Instructional Climate		2.47	1.10
ECERS-R Teaching and Interactions		4.43	1.29
ECERS-R Provisions for Learning		3.79	0.96
Snapshot setting (proportion of time)	231		
Free choice/center activity		.35	.15
Routine activity		.20	.08
Whole group activity		.24	.12

Note: CLASS = Classroom Assessment Scoring System; ECERS-R = Early Childhood Environmental Rating Scale-Revised.



Quality may get measured.. But how is feedback shared with teachers? How can we make data on ECE quality more accessible and useful to teachers?

How can we improve data feedback loops on early childhood quality for teachers?



Brief Early Childhood Quality
Inventory

BEQI looks at evidence-based practices and classroom characteristics in key areas





PLAY-BASED LEARNING LEARNING THROUGH CONVERSATIONS



PROMOTING STRONG RELATIONSHIPS



SAFE & STIMULATING ENVIRONMENTS

BEQI Data Feedback Loops in Schools 2030

BEQI observation to gather objective data on interactions and practices



Teacher gets timely and strengthsbased feedback

Within HCD process, teachers work on innovations to improve quality and learning







Resources from BEQI toolkit help teachers reflect, understand their strengths and areas to improve







Examples from Schools 2030 BEQI Toolkit:

Individual feedback to teachers





New Test Feedback Org

BEQI Together in Practice Feedback

Educator Name: Demo Teacher Date of Observation: 2/22/24

Thank you for participating in a BEQI observation. Below, under different areas (*Play-based Learning*: Learning through Conversation Promoting Strong Relationships, Safe and Stimulating Environment), you will see a list of your strengths, which include evidence-based practices you were doing during the 90-minute observation. We recognize that in a 90-minute observation, we may not see everything, but after your strengths, you will also find a list of potential areas for goal setting, which are based on practices we did not see during the observation.

Play-based Learning Your Strengths



Children engage in pretend play.

Photomologiay is a childs way of making sense of their wond. By helping children to engage in pretand play, you are developing their language, social skills, emotional well-being, and creativity.



Children engage in gross motor activities.

By having children engage in gross mater play, you are helping to build their physical filmes, emotional health, and personal confidence.



Children engage in music activities.

By bringing music to life in your program, you are helping to accelerate children's brain development, particularly in the areas of language and math skills.



Children engage with pretend play materials.

Phetend play allows children to make sense of their world through imitating the people in their family and beyond. Set up an area with meterials that promote imitating such as: dress-up clothes, pursues and trags, dolls, suiturally reflective material and scarves.

Areas for Goalsetting



You could give children choice in how to carry out activities.

By giving children choice in how they do activities, you are helping them learn by creating their own understanding of how things work.



You could provide children with free choice/open play time

Free choice and open play time promotes development through a child's self-directed play. Carve time in your daily schedule for children to choose where, how and to develop their own play. Allow children to chive their own learning through play by.



You could engage with children during their free choice/open play

By engaging with children while they play, you are encouraging aspects of their learning and development while they are having fun. You are helping to stimulate children's problem solving, planning skills.



Children could read or look at books on their own.

By helping children read or look at books by themselves, you are helping set the foundation for early iteracy and a love for reading.



Examples from Schools 2030 BEQI Toolkit:

Easy-to-understand data summaries and classroom practice video library

PRETEND PLAY



IN 5 OUT OF 10 CLASSROOMS, CHILDREN ENGAGE IN PRETEND PLAY



Pretend play supports: language, speech, and literacy development; social skills, friendships, and emotional well-being; and creativity. The use of props and other pretend play materials help achieve a higher level of pretend play to support the intended positive effects on child development.



WHAT CAN **READING A STORYBOOK** LOOK LIKE IN PRACTICE?







Examples from Schools 2030 BEQI Toolkit:

Teacher Self-Assessment and Reflection Activities Incorporated in HCD

List of Practices Self-Assessment

(similar to card sort; but all practices are listed on 1 page)

Ask teachers to review practices and mark:

10 <u>most common practices</u> in your classroom

+ 10 practices that <u>do not</u> happen in your classroom, but you would like to happen

★ 10 practices you would like to see in a <u>high-quality classroom</u>

PLAY-BASE	D LEARNING
Children have some choice in how to carry out activity	Children engage with writing materials
Children have free choice/open play time	Children engage with art materials
Children read or look at books on their own	Children engage with pretend play materials
Children engage in pretend play	Children engage with blocks
Children engage in gross motor activities	Children engage with educational toys or math materials
Children engage in music activities	At least 15 age-appropriate books are available
Children go outside	Books are accessible to children
Children work alone/individually	Teacher leads a math activity
Children work in pairs/small groups	Teacher leads a literacy or language activity
Do children work one-on- one with teacher	Teacher leads a science activity
Teacher includes all children in activities	

LEARNING THROUGH CONVERSATION
Children enjoy answering questions without fear of "getting it wrong"
Children describe what they are doing or thinking about
Children seek clarification and support when they are struggling to grasp activity
When children are playing, the teacher adds information or build on what children are doing ("teachable moments")
Children have the opportunity to ask questions during activities and lessons
Teacher reads a storybook
Teacher talk about feelings or emotions
Teacher asks open-ended questions
Teacher engages in a back-and-forth discussion
Teacher connects a lesson to real-life or every-day experiences

PROMOTING STRONG RELATIONSHIPS
Peer interactions are mostly positive
Teacher comforts children when they are sad, injured, scared
Teacher comforts children when they are sad, injured, scared or distressed
Teacher gets on children's level
Teacher provides individualized feedback
Teacher calls children by name
Teacher is positive with children (<i>verbal praise</i> , <i>smiling</i> , <i>encouraging</i>)
Teacher does not punish any child physically
Teacher redirects when children misbehave , rather than punishing them
Teacher encourages children to resolve peer conflicts
Teacher does not have negative verbal interactions with a child
Teacher treats and attends to all children equally
Teacher integrates a respect for diversity
Teacher helps children make ethical/socially acceptable choices





Learning environment tools and data play role in Schools 2030 HCD process







STEP 1: ASSESS STEP 2:
INNOVATE
Human-Centered
Design

STEP 3: SHOWCASE

BEQI + VITAL
Classroom
Environment Tools
Help Teachers
Identify:

What do classroom practices look like?

Where do I want to improve?
How will I know my innovation is working?

How did my innovation improve teaching practices?



Our upcoming study in Kenya will generate evidence on how Schools 2030 HCD processes may improve ECE quality and teacher agency

Theory of Change:

INPUTS

If ...

 We provide direct, actionable feedback to teachers on their inclusive classroom practices

OUTPUTS

Then...

 Teachers will use data to set goals for improved classroom practices, with emphasis on equity and inclusion

OUTCOMES

Which will...

 Empower teachers to reflect and improve on their inclusive evidencebased practices

INTENDED IMAPCT

Leading to...

- Increased teacher agency
- Improved quality learning environments that respond to students' diverse learning needs



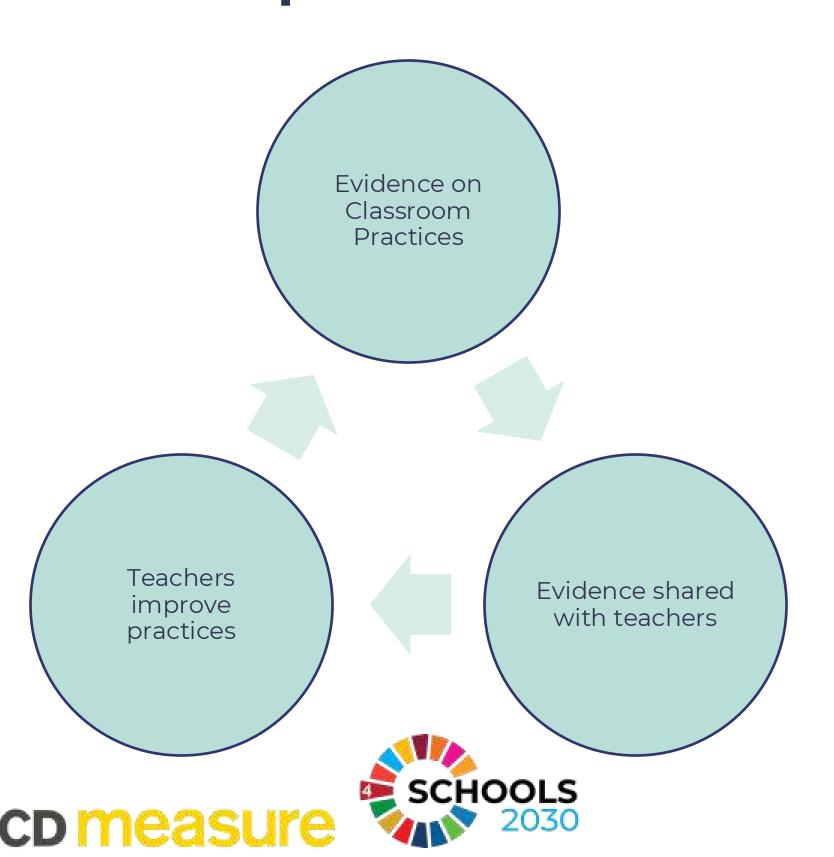
Our Research Questions

- 1. To what extent are teachers adopting their practice based on BEQI data to inform their human-centered design process?
- 2. How might we aggregate classroom level data on the learning environment so it can be used by teachers to inform their HCD process?
- 3. Does participation in Schools 2030 activate more positive teacher self perception? If so, does this lead to improved practice?





Reflection: How might we strengthen data feedback loops to improve teacher practice?



- What are key characteristics of data feedback to teachers that can lead to behavior change?
- What are the key characteristics of data feedback to teachers that lead to improved teacher agency?
- What are challenges to data feedback/evidence uptake with teachers?



Thank you