Paras and Parents Partnership (P³)

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The importance of paraeducators

- Paraeducators often live in the communities they teach.
- They often establish close ties to the families of their students.
- They can help staff include strategies and examples in math class that reflect their students' lives and cultures.

(Rader & Pennell, 2019; Ernst-Slavit & Wenger, 2018)



Project Overview

Audience:

 Boston Public School Paraeducators of preK- grade 1 and student families (many families with limited English and literacy)

Goals:

- Build paraeducators confidence and pedagogical content knowledge
- Work with paraeducators to develop bilingual videos modeling fun math activities for families to do at home.

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Parent Invitation Video (in English)



Project Activities

- Bi-weekly paraeducator professional development.
- Paraeducators create videos with a child using fun math activities we assign during the PD.
- Collaboratively with paras' feedback, we edit videos, so they model math activities and strategies.
- Paras share videos with families using social media

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Collect feedback from parents after they watch videos.



Paraeducator PD Components

- Technology training
- Learning Math Content & development of math ideas
 - Example: Trajectory for learning about subitizing
- Math activity game assignments
 - Role playing with paras
 - Providing a script with questions to ask and adaptations.
- Collaborative video reflection and feedback with peers
- Family communication & engagement





Collaborative Video Development





Mathematical Activity Example

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Subitizing

- Definition: "Instantly seeing how many." From a Latin word meaning suddenly.
- Perceptual subitizing: Just seeing it
- Conceptual subitizing: seeing parts that make a whole:





Subitizing Trajectory

Level Name	Age range	Description
Small collection Namer	2 years	Can name 1 or 2
Maker of small collections	3 years	Nonverbally can make collection of the same number.
Perceptual Subitizer to 4	4 years	Instantly recognizes and names collections up to 4.
Perceptual Subitizer to 5	5 years	Instantly recognizes and names collections up to 5.
Conceptual Subitizer to 5+	5 years	Can recognize all arrangements to 5 and name groups (3+2, 4+1)
Conceptual Subitizer to 10	5 years	Can recognize and name arrangement to 6, then up to 10.



Quick Images Activity

- 1. Place dots (pennies) on a plate (3 -5) and cover them.
- 2. Tell child you will quickly uncover the plate and then cover it again. Ask them to act like a camera and take a picture in their mind.
- 3. Uncover the plate for 2 seconds and cover it up again.
 - a) Ask children to hold up their fingers to show how many they saw
 - b) Ask, "Can you show me how you see them?" (1 row of 3, 1 of 2 etc.)
- 4. Let child see plate again to see how many there are and ask: How many do you see?
- 5. Repeat sequence. Arrange same number of dots differently. (without child seeing).

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Paraeducator Video Feedback Examples

- Simplifying and personalizing language:
 - Use words such as "your child" to make it more relevant to parents.
- Noticing statements and questions that support child learning:
 - Adult asking "How do you know?" Or "Can you show me how you know?"
- Suggesting changes in video slides and subtitles
 - Slides too quick for reading or subtitles have too much text.
- Focusing on math content
 - Limit content to 2-dimensional shapes in one video and introduce 3-dimensional shapes in a separate video. TORC Because math and science build futures

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Parent Feedback Examples

- "
 This is a great idea. [child name] loves one on one activities and this looks right up his alley. I look forward to trying this with him. Thx for sending!"
- "Hola [nombre] ⁽ⁱ⁾ se lo mostré a [nombre] & le gusto, tratare de hacer ese tipo de actividad mas a menudo con ella." (Hi [para name] ⁽ⁱ⁾ I showed this to [child name] and she liked it, I will try doing this type of activity more often with her.)
- "③ ③ ⑤ Si hoy [nombre] lo estaba haciendo con él contando con habichuela. Esta muy buena la idea." (③ ③ ③ Yes today [para name] I was doing it with him counting beans. Its a really good idea.)



THANK YOU!

Let's Stay Connected!

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