

Toys or Tools? Tablet Applications to Empower Young Students Through Open-Ended Literacy Learning

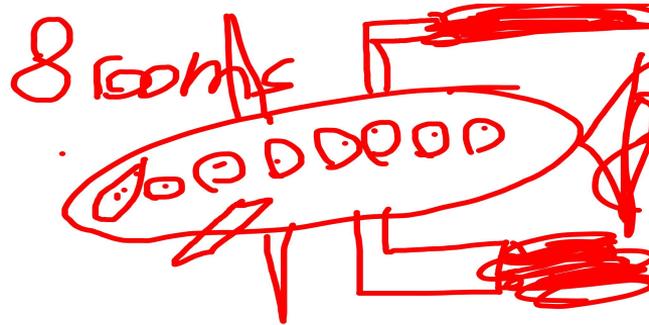


The Team

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Purpose

- To understand educators' comfort levels and experience using DT for literacy learning
- To understand how young children use DT as a means of communicating their ideas



Perspectives from the Literature

- Young children are engaged with digital media in and out of school contexts (Burke, 2013; Clement, 2010)
- Educators are being asked to teach in ways that they did not learn as children or likely in pre-service (Darling-Hammond, 2006; Kirkwood, 2009)
- Educators need to carefully reflect on how best to incorporate DT approaches to teaching (Radesky, Schumacher, & Zimmerman, 2015; Selwyn, 2011)
- Educators must find the balance between recognizing the skills students build in out-of-school digital practices, curriculum, and preparation for a globalized knowledge society (Wimmer et al., 2012)
- Educators need to be knowledgeable about the potential benefits and concerns of DT for young children's learning (NAEYC, 2012; Ernest et al., 2014)

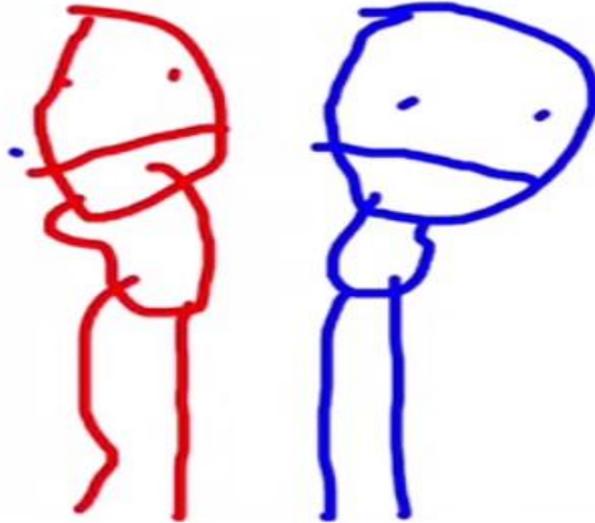
Methodology

Methods:

- Qualitative 3 year study - Sept 2015 to June 2018
- Interviews with educators, focus groups, and classroom observations were largely open ended
- Three- to six-year-old children in 14 sites are using the open-ended apps to document their experiences during play-based learning activities and their digital files are being archived and analyzed.



Findings



Empowering Children

- Access to DT
- Reluctant



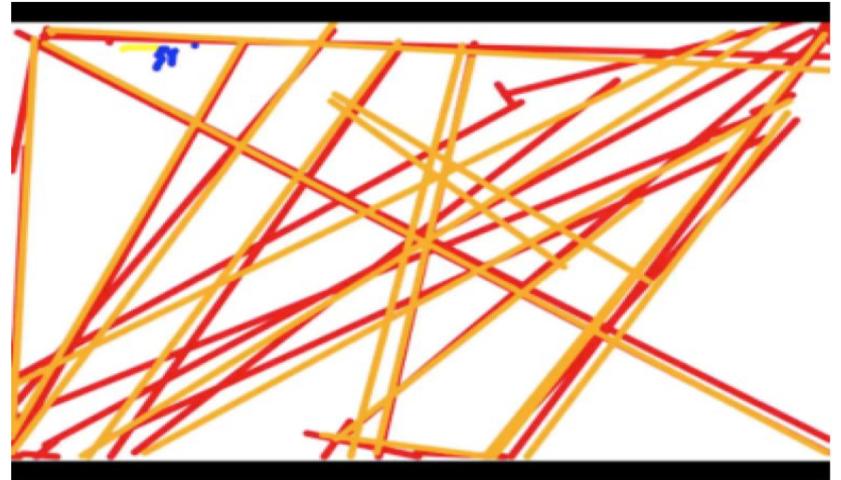
Empowering Children

- Supporting English language learners and home languages
- Children with special needs

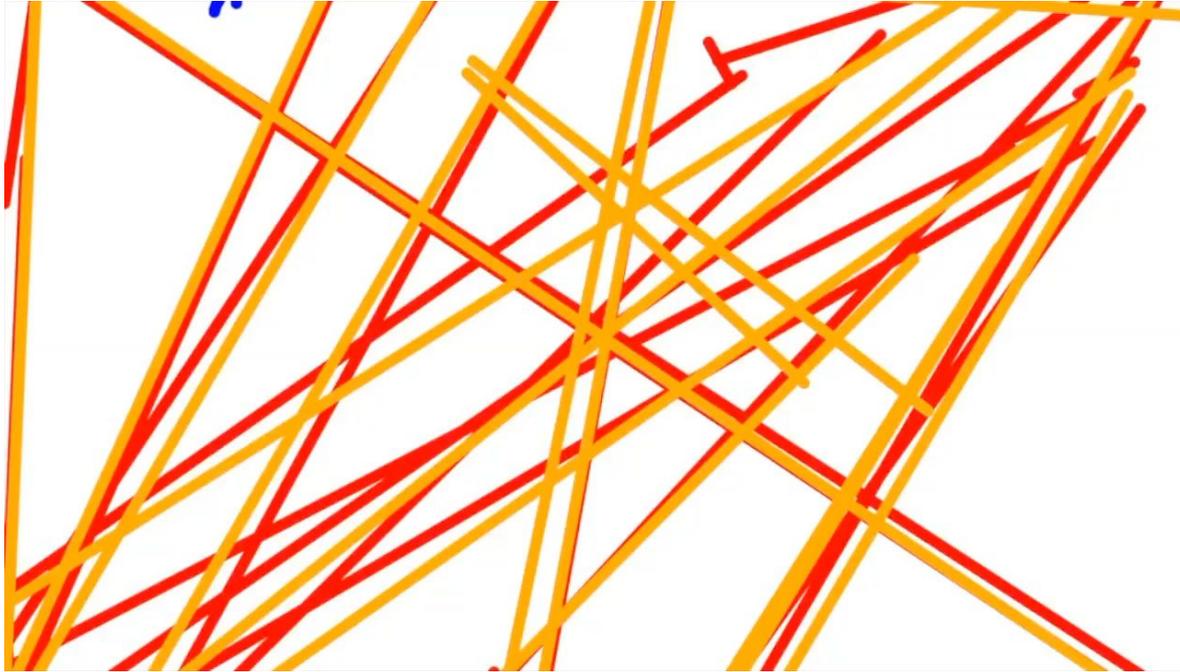


Empowering Educators

- Children documenting their own work
- Motivation to express ideas orally and visually
- Assessment and Communication



Josh and the Spider Web



The webbing is connected to each part of the tree branch. It is locked into place. Next, the spider attaches some sticky stuff.

As you see it is attached in many places. And, it can stop a bird or a bee in a middle flight. Then spider comes out and wraps it up for the next two weeks. But before it wraps it, it stops it with a venomous bite.

When it is done, it stops to eat it and then he can do it all over again because sometimes, spiders need to switch webs.

Empowering Educators

“The positive side of using [DT] is it really encouraged language, problem solving, working together as a team, and sharing their ideas.

I gave them the freedom to experiment with it – to use it differently, to find out what else they can do besides taking pictures and drawing.”

- Early Childhood Educator, end of year 1

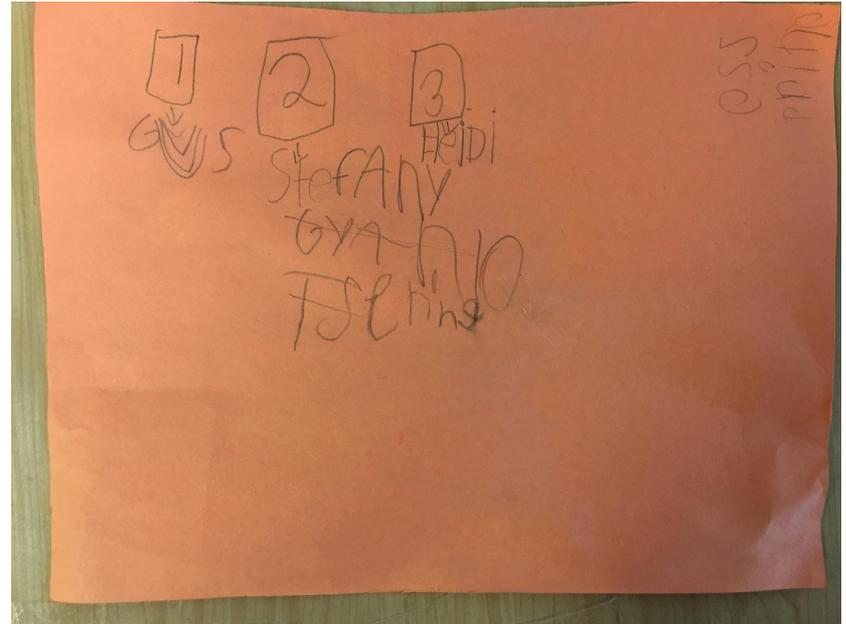
Challenges

- Structural
- Social
- Technological
- Pedagogical



Supports and Strategies

- Scaffolding
- Exploring perspectives
- Technology
- Pedagogy
- Traditional Kindergarten content



Conclusions

- DT implementation takes time, patience and support
- The degree of implementation by the teachers ranged across the kindergarten classrooms
- A range of interest, engagement, and types of use by the children
- Use of the open-ended iPad app was beneficial to the children's literacy and digital literacy development
- Teachers considered the app to be a useful tool in their pedagogy

Recommendations

- Be patient and flexible
- Have consistent routines and opportunities for inquiry
- Expect a range of interest
- Celebrate and showcase the children's creations
- Have technical and pedagogical support available