

# Nurturing Preschool Minds: Teachers' Perceptions of a Tablet-Based Literacy System



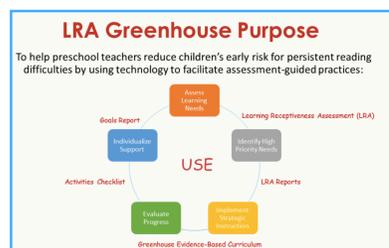
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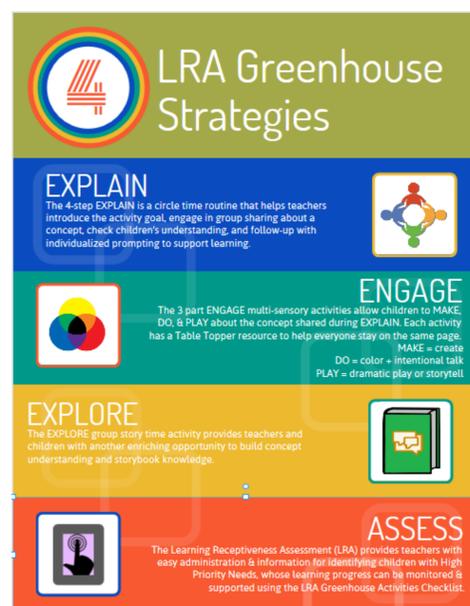
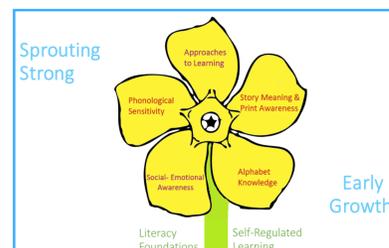
## BACKGROUND

- Foundational early literacy knowledge is critical to later reading achievement (Ehri et al., 2001), yet many children enter kindergarten without these skills (Baillet et al., 2009).
- Evidence-based literacy assessment and instructional practices can help to close the academic achievement gap (Bierman et al., 2013).
- Though an increasing number of these practices have been developed at the preschool level (Johanson et al., 2015; Goldstein & Olszewski, 2015), they are infrequently used within a majority of preschool classroom settings (Odom, 2009; Greenwood, 2012).
- Successful implementation requires more than an innovative tool, so a closer look should be taken at facilitators and barriers to implementation of evidence-based practices in the preschool setting.
- Teacher buy-in is important to implementation success (Meyers et al., 2012), and buy-in is dependent on teacher perceptions of novel evidence-based literacy practices (Lee & Min, 2017).
- Little research has been conducted on preschool teachers' perceptions of evidence-based literacy practices. This process is complicated by diverse preschool teaching philosophies, practices, and skills (Trivette et al., 2012).
- Studying preschool teachers' perceptions of their roles and skills around supporting children at risk for reading difficulties may help researchers to identify strategies to increase teacher buy-in when adopting evidence-based preschool assessment and curricular tools.

## THE LRA GREENHOUSE



Assessment-curricular system designed to support preschool teachers in reducing children's risk for reading difficulties



## METHOD

We report findings from an exploratory study examining preschool teachers' perceptions of their roles and skillset in preventing reading difficulties across a year of implementing the LRA Greenhouse assessment-curricular system. Study participants included 2 preschool teachers from a small city in the Pacific Northwest. Results draw from a compilation of teacher surveys, focus groups, and monthly interviews with researchers, collected across the 2016-2017 school year.

**Research Question 1:** What are preschool teachers' perceptions of their role in their classrooms?

**Research Question 2:** What are preschool teachers' perceptions of the role of assessment and curriculum in their classrooms?

**Research Question 3:** How do preschool teachers' perceptions of their role and the role of assessment and curriculum in their classrooms evolve over a year of LRA Greenhouse tool implementation?

## TEACHER CHARACTERISTICS

Teacher 1 (Jamie): "Friendly Community Center"	Teacher 2 (Candace): "Rainbow Preschool"
4-star QRIS preschool >10 years as a preschool teacher	4-star QRIS preschool ~35 years as a preschool teacher
<b>Current Curriculum: Creative Curriculum</b> <ul style="list-style-type: none"> <li>•Research-based</li> <li>•Play-based</li> <li>•Child-led</li> <li>•Covers 38 Early Learning Objectives, including literacy, mathematics, science &amp; technology, social studies &amp; the arts, early development, and classroom interest areas</li> </ul>	<b>Current Assessments: TS Gold</b> <ul style="list-style-type: none"> <li>•Observation-based</li> <li>•Implemented throughout the year</li> <li>•Tablet or paper administration</li> <li>•Linked to Creative Curriculum</li> <li>•Covers 38 research-based objectives, including social/interpersonal, self-regulation, pre-/early literacy, and early mathematics</li> </ul> <b>ASQ</b> <ul style="list-style-type: none"> <li>•Screening tool</li> <li>•Online or paper administration</li> <li>•Parent questionnaire</li> <li>•Tracks children's progression through developmental milestones</li> </ul>
<b>Current Curriculum: High Scope</b> <ul style="list-style-type: none"> <li>•Research-based</li> <li>•Play-based, Exploration-based</li> <li>•Child-led</li> <li>•Covers 58 Key Developmental Indicators, including approaches to learning, social &amp; emotional development, physical health &amp; development, language, literacy, &amp; communication, mathematics, creative arts, science &amp; technology, and social studies</li> </ul>	

## KEY TAKEAWAYS

**RQ 1: What are preschool teacher's perceptions of their role in their classrooms?**

**1. Preschool prepares children for kindergarten through a holistic perspective on development which focuses on a range of developmental skills, attitudes, and behaviors.**

*Jamie: "My role is to prepare 4/5 year olds for their transition to Kindergarten, through age-appropriate, play-based curriculum. My primary instructional goals are that they are learning something while they are playing. As long as they are learning a social skill or academic goal, then I'm reaching my goal."*

*Candace: "My role is to create and implement engaging, age appropriate lesson plan/activities. I primarily focus on social interaction (be nice to each other, be kind not only to people but to animals and the planet)."*

➤ **Strategy: New assessment and curriculum tools which balance teachers' philosophies with tool implementation goals are more likely to be effectively implemented.**

**2. Child-directed approaches to learning allow for free-flowing exploration that may involve relaxing intentional teacher efforts to achieve learning goals.**

*Jamie: "[In my typical curriculum] usually the only place where a teacher is needed to stay all the time is the art area, which makes it possible for the other teachers to roam the room and provide assistance."*

*Candace: "[When using the Greenhouse curriculum] I was struggling with what to do if the children didn't do an activity in the way...it was intended to be done."*

*Jamie: "This year, the group of kids I had were not really into the writing and coloring. We just took the role of as long as we were getting some sort of conversation about what was going on, we were OK with that... the students still got something out of it even if they were not following the instructions exactly."*

➤ **Strategy: Flexibly embedding evidence-based strategies within existing instructional practices and prioritizing implementation fidelity of instructional goals (rather than delivery precision) may facilitate teacher acceptance of new approaches.**

**RQ 2: What are preschool teachers' perceptions of the role of assessment and curriculum in their classrooms?**

**1. Assessments that cover many different developmental areas are viewed as valuable for examining children's development holistically, but too time-consuming.**

*Candace: I like the TS Gold in the sense that it does hit every single domain - there is nothing in there that I would not want in there. It's not just academic and social stuff. It also talks about things in their community and the world. The only thing I don't love about it is it's incredibly time consuming. It takes me about 45 minutes per student just to organize the data entry/transferring of data."*

➤ **Strategy: Preschool assessments may need to broadly sample development yet make minimal administration time demands to increase feasibility of teacher use.**

**2. Assessment results primarily serve the function of communicating with parents about children's development.**

*Jamie: "The main purpose of TS Gold is to make sure someone doesn't fall through the cracks and it's a good way to share with parents progress during the year. It doesn't really guide my instruction..."*

➤ **Strategy: Teachers' purposes for using assessment results impact their data use; explicit scaffolding may be needed to enable teachers to discover new ways of using data.**

## KEY TAKEAWAYS CONT.

**RQ 3: How do preschool teachers' perceptions of their role and the role of assessment and curriculum in their classrooms evolve over a year of LRA Greenhouse implementation?**

**1. Evidence-based teacher-led instructional strategies were increasingly valued as effective.**

*Candace: "The direct instruction part is tough for me. I think it's the most boring thing in the world, but it works! Now I can use so many strategies... [from] what I learned this year."*

*Jamie: "I definitely think the "I/We/You Say" is one of the essential elements- I'm going to do that forever, it's the greatest thing. They get it! It really works."*

➤ **Strategy: Gradually introducing teachers to explicit instructional strategies as well as providing an explicit link between instruction and student growth may increase teacher interest in using these strategies.**

**2. Through regular engagement with the system, the link between instruction and assessment (and the value of their connection for understanding children's development) became increasingly clear.**

*Jamie: "Using this curriculum has reminded me how it's all connected and seeing it all put together [curriculum and assessment results] really put it to the forefront."*

*Candace: "As a teacher of the pre-K children, it's really nice to have that information about where students are and how far they need to go by the end of the year... I'm not test-driven at all, but just seeing that number at start of the year, it made me want my kids to learn even more. It would help me, knowing the kids coming into my class, where the students were, if I needed to focus on different parts of the curriculum."*

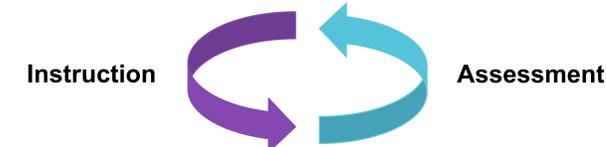
➤ **Strategy: Strategically embedding high impact evidence-based explicit strategies in a systematic and teacher-friendly curriculum, combined with periodically assessing child growth on related skills may strengthen teachers' acceptance (and proper use) of teacher-led instructional strategies.**

**3. Tracking and ensuring progress for children identified as "at-risk" helped teachers become more responsive to struggling children's needs.**

*Candace: "Abby's growth- In the fall, she couldn't even write her name. The improvement has shown me that given the right circumstances and environment, she will be okay in school. Now I know where their strengths and weaknesses are, so I can pinpoint more the things she has to work on."*

*Jamie: "What sticks out are the ones who had the big jumps (particularly (Max)- that's a huge jump for him) and gosh, they can do this (even when I thought they couldn't)... They (LRA scores) did make me take a second look at some of the kids. The working memory piece was really eye opening for me. It really made me take a look at the way kids are doing activities."*

➤ **Strategy: Providing teachers with explicit and systematic opportunities to actively engage in making instruction-assessment connections may promote deeper reflection about the needs of children at risk for reading difficulties.**



## GENERAL IMPLICATIONS

- Directly transferring evidence-based assessment and curricular practices from the elementary setting may not adequately address the implementation factor of preschool teacher buy-in.
- Assessment and curricular tools targeting preschool settings should attempt to increase buy-in by balancing preschool teachers' diverse philosophies, assessment and curricular practices, and pedagogical skills with their own academic goals.
- Directly involving preschool teachers in an iterative development process may help to increase preschool teachers' perceived utility and acceptability of assessment and curricular tools.

## CONTACT & ACKNOWLEDGEMENTS

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