Purpose of TeLCI

Designed to improve reading comprehension by developing inference making for struggling readers in Grades 1-2. TeLCI does not rely on decoding skills. It is an interactive, cloud-based software application with 24 modules, which engage students to:

• View age-appropriate videos (12 fiction, 12 nonfiction)
• Learn key academic vocabulary words
• Respond (by touch screen selections) to inferential questions
• Receive scaffolding and feedback for each question
• Receive small-group transfer lessons using book-reading

Theoretical Background

Inference making is one of the unique, significant predictors of reading comprehension, with some studies indicating a causal link from poor inference making to poor reading comprehension (Oakhill & Cain, 2012).

The ability to draw inferences is a general skill—it is not specific to reading (Kendeou et al, 2008; Kendeou, 2015).

Inference skills can be improved using questioning that includes scaffolding and specific feedback (McMaster et al., 2012).

Technology provides a cost-effective, standardized, individualized delivery of instructional tools in classroom settings that can improve various learning outcomes (McNamara et al., 2017)

Usability and Feasibility

Participants
• N = 95 students in Grades 1 and 2
  52% female, 54% White, 19% Black, 21% Hispanic
  47% reduced/free lunch, 23% ELL
• N = 8 Teachers; N = 2 Literacy Experts

Methods
• Students’ Scores (CELF, QRI, MEFS, TeLCI Assessment, TeLCI module data)
• Usability and Feasibility Observations and Questionnaires
• Focus Groups (Teachers, Literacy Experts)

Selected Results

Teachers
• varied in their opinion of who will benefit from TeLCI
• rated most TeLCI features as appropriate for children in Grades 1-2
• provided valuable input on how to improve TeLCI features (e.g., feedback and motivation)
• envisioned using TeLCI at least 2-3 times per week as part of guided independent work time

Next Steps

Field Test: Online vs. Offline Questioning (Year 2)
Pilot Test: Efficacy RCT Study (Year 3)