Lessons learned from the development of digital coaching support tools for low-resource environments

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Matt Finholt-Daniel
Email: mfinholt@rti.org
Twitter: @mfinholt @RTI_INTL_DEV
Setting the Context

Teacher Coaching

- Visit schools in geographical area
- Observe classrooms and lessons
- Assess student performance
- Reflection with the teacher
- Monitor progress

Research suggests that, within resource-constrained environments, the most cost-effective target for the use of technology to improve learning outcomes are interventions at the instructional coach-level.

(Piper, Zuilkowski, Strigel, & Kwayumba, 2016)
Challenges

- Adaptive
- Facilitate Discussion
- Cost Effective
- Scale
- Localization
- Internet Connectivity
The Foundation of Tangerine: Coach

1,500,000 assessments & surveys
60+
100+
50+

www.rti.org
Tangerine: How it works

1. Instruments are designed by project team

2. Tangerine instrument builder (online)
   - 1. Builds assessment online
   - 2. Tests & reviews assessment
   - 3. Exports file for Android

3. In the field, using a tablet (offline)
   - 1. Collects data from schools, households, etc.
   - 2. Syncs results via Internet or mobile network to Tangerine online database

4. Tangerine (online)
   - 1. Accesses account and reviews results file (CSV*)
   - Statistical/spreadsheet software (offline)
     - 2. Opens CSV to conduct analysis

*CSV: Comma Separate Values
Localization – Easy Instrument Creation and Editing

- **PL_PERVIOUS_BIRTHS**
  - Have you ever been pregnant? This includes all previous live births, stillbirths, miscarriages, or abortions. Do not include the current pregnancy.
    - Yes
    - No

- **PL_PREV_N_PREG**
  - Specify the total # of previous pregnancies
  - Enter your response to above question here

- **PL_OOT_PREG**
  - How many of these pregnancies resulted in a live birth? A live birth is defined as a baby who cried, who made movement, sound, or an effort to breathe, or who showed any other signs of life even if for a short time.
  - Enter your response to above question here
Adapting to the level of the teacher

Discussion
- Review Observations
- Tailored Feedback
- Embedded Resources
- Links to resources
Facilitating Discussion

Subject | Class | Stream | Observation Start Time
---|---|---|---
Kiswahili | 1 | 0 | May-21 06:31

Based on your classroom observations and student assessment, the following are some of the areas the teacher needs to work on. You may focus your discussion on the top 3 items.

**AP: Word Blending**

Use the pocket chart or blackboard to point under the letters as you say the sounds, and sweep your finger under the letters as you say the word. The order of this activity is “I do, We do, You do”

Watch: Word Blending with teacher Linda. If the teacher is having issues with the sounds, watch “English Sound Video with
Monitoring

SCHOOL METRICS

TEACHER PERFORMANCE

COACH ACTIVITY
References and Resources

- https://www.tangerinecentral.org
- https://github.com/Tangerine-Community/Tangerine
- https://earlygradereadingbarometer.org/
- https://shared.rti.org/
Thank You!

Matt Finholt-Daniel | Email: mfinholt@rti.org
Twitter: @mfinholt @RTI_INTL_DEV

Learn more about RTI’s work:
QR codes will allow viewers to use their phone to access the content. To create more QR codes, click here: https://www.qr-code-generator.com/

Gove, Amber, 2/9/2021

This currently leads to Shared.RTI.org, but we will replace with a link to RTI event landing page

Gove, Amber, 2/10/2021