

# 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](mailto:mfinholt@rti.org)

Twitter: [@mfinholt](https://twitter.com/mfinholt) [@RTI\\_INTL\\_DEV](https://twitter.com/RTI_INTL_DEV)



# Setting the Context

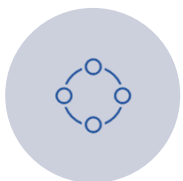
## Teacher Coaching

- 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



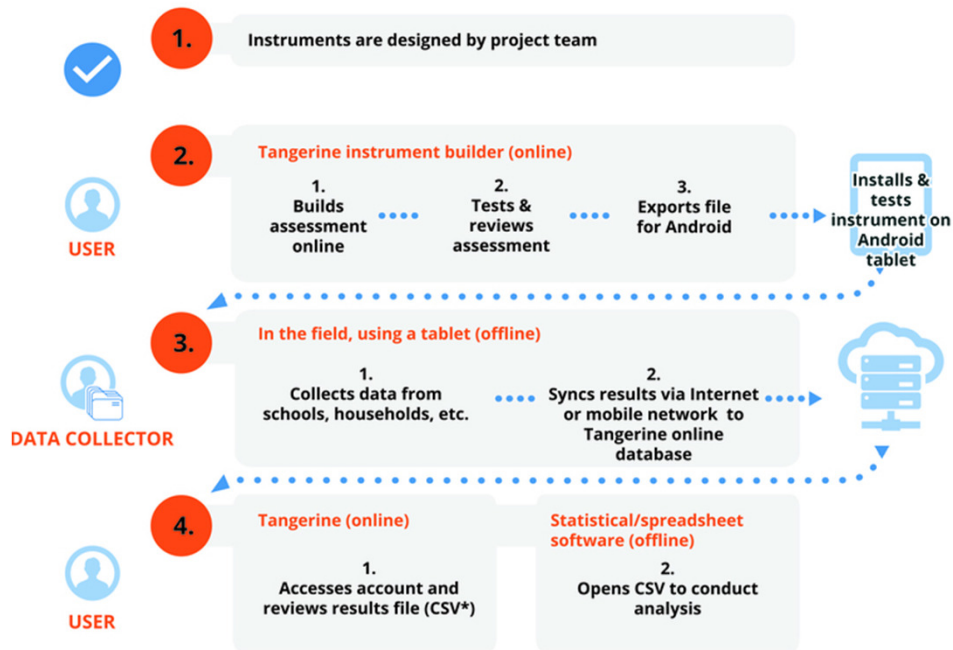
INTERNET  
CONNECTIVITY



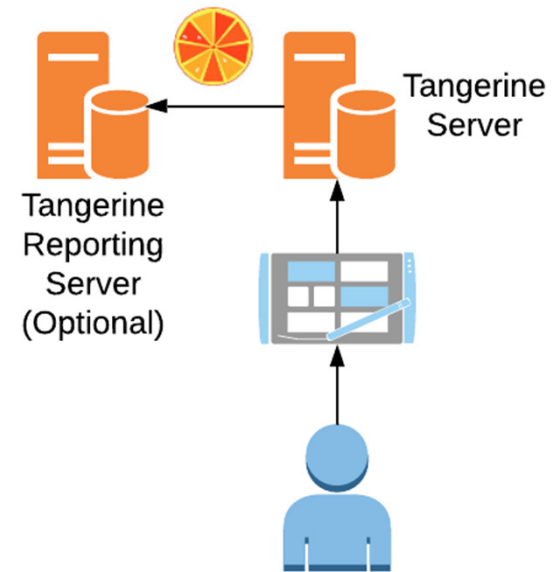
# The Foundation of Tangerine: Coach



# Tangerine: How it works



\*CSV: Comma Separate Values

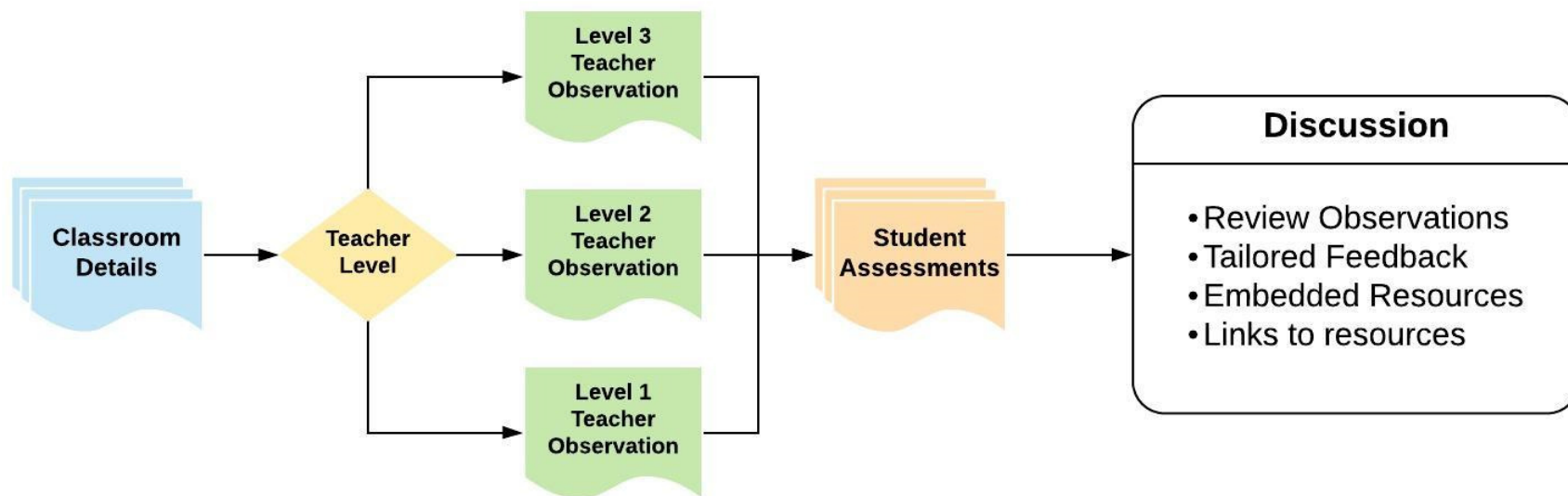


# Localization – Easy Instrument Creation and Editing

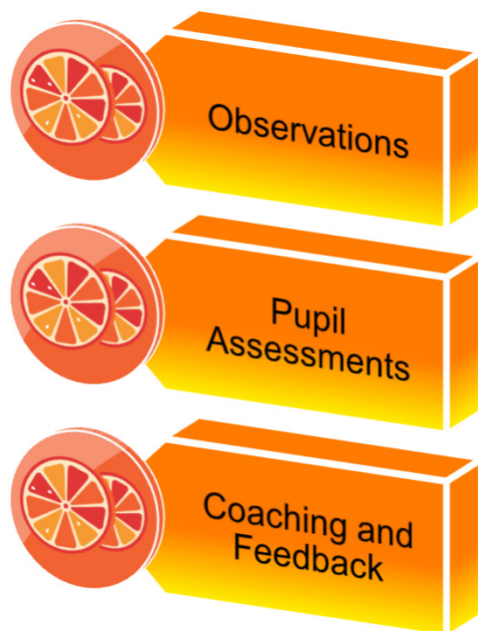
The screenshot shows the Tangerine instrument authoring interface. On the left is a navigation menu with options: Author (selected), Data, Configure, and Deploy. Below this are icons for Groups, Help, and Logout. The main workspace displays a list of questions, each with a title bar and a content area. The first question is titled 'PH\_PREV\_RPORRES' and asks 'Have you ever been pregnant? This includes all previous live births, stillbirths, miscarriages, or abortions. Do not include the current pregnancy.' with radio button options for 'Yes' and 'No'. Below it is an 'INSERT HERE' button. The second question is titled 'PH\_PREVN\_RPORRES' and asks 'Specify the total # of previous pregnancies' with a text input field. The third question is titled 'PH\_LIVE\_RPORRES' and asks '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 breath, or who showed any other signs of life even if for a short time.' with a text input field. The fourth question is titled 'PH\_OTH\_RPORRES' and is partially visible.

The screenshot shows the 'Edit Radio Buttons' configuration panel in Tangerine. The panel has a top navigation bar with 'Author', 'Data', 'Configure', and 'Deploy'. Below this is a sidebar with 'Groups', 'Help', and 'Logout'. The main area is titled 'Edit Radio Buttons' and contains a table with columns: Question, Conditional Display, Validation, and Advanced. The 'Data Variable' section includes a note about variable naming, a 'Variable name' field with 'PH\_PREV\_RPORRES', and a 'Properties' section with radio buttons for 'Required', 'Hidden', 'Disabled', and 'Is Identifier (PI/PH)'. The 'Question Details' section has fields for 'Question number', 'Label', and 'Hint text'. The 'Options' section has a note about the 'Correct' property and a 'Value' field with '1'. Below the configuration panel is an 'Add Elements' panel with a grid of widget categories: Inputs (Text, Number, Email), Date/Time (Date, Partial Date, Time), Lists (Checkbox Group, Radio Buttons, Dropdown Select), Boolean (Checkbox, Toggle Button), Location (GPS, Location), Content Display (Image, HTML Content Container, HTML Template), and Specialty (Signature, Consent, QR Code Scanner, EF Touch, ACASI, Timed Grid, Untimed Grid).

## Adapting to the level of the teacher



# Facilitating Discussion



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

Hide feedback

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



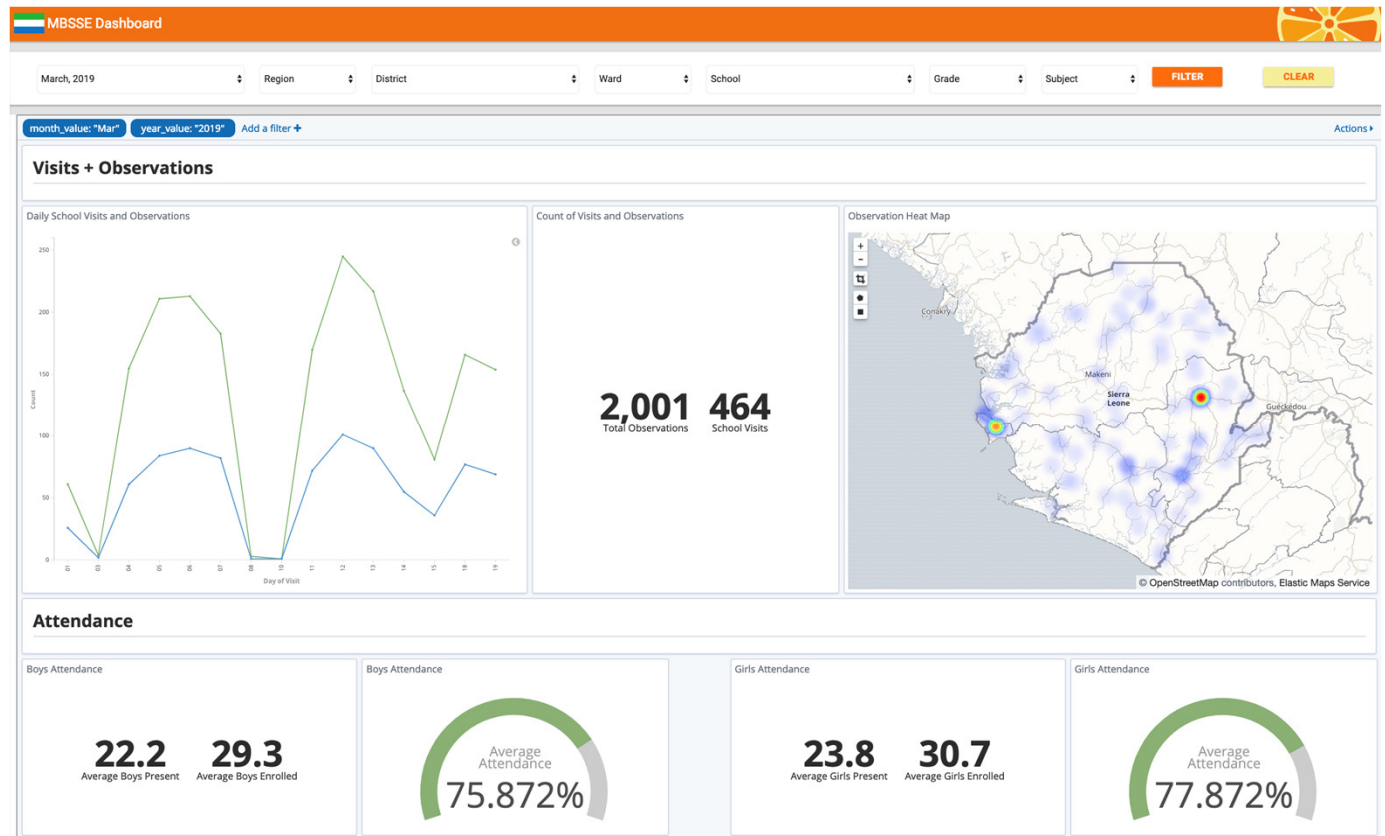
SCHOOL METRICS



TEACHER PERFORMANCE



COACH ACTIVITY



## References and Resources

- <https://www.tangerinecentral.org>
- <https://github.com/Tangerine-Community/Tangerine>
- <https://www.rti.org/practice-area/international-education>
- <https://earlygradereadingbarometer.org/>
- <https://shared.rti.org/>

GA1  
GA2

Learn more about RTI's work:



# Thank You!

Matt Finholt-Daniel | Email: [mfinholt@rti.org](mailto:mfinholt@rti.org)

Twitter: @mfinholt @RTI\_INTL\_DEV



## Slide 11

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**GA1**

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

**GA2**

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

Gove, Amber, 2/10/2021