

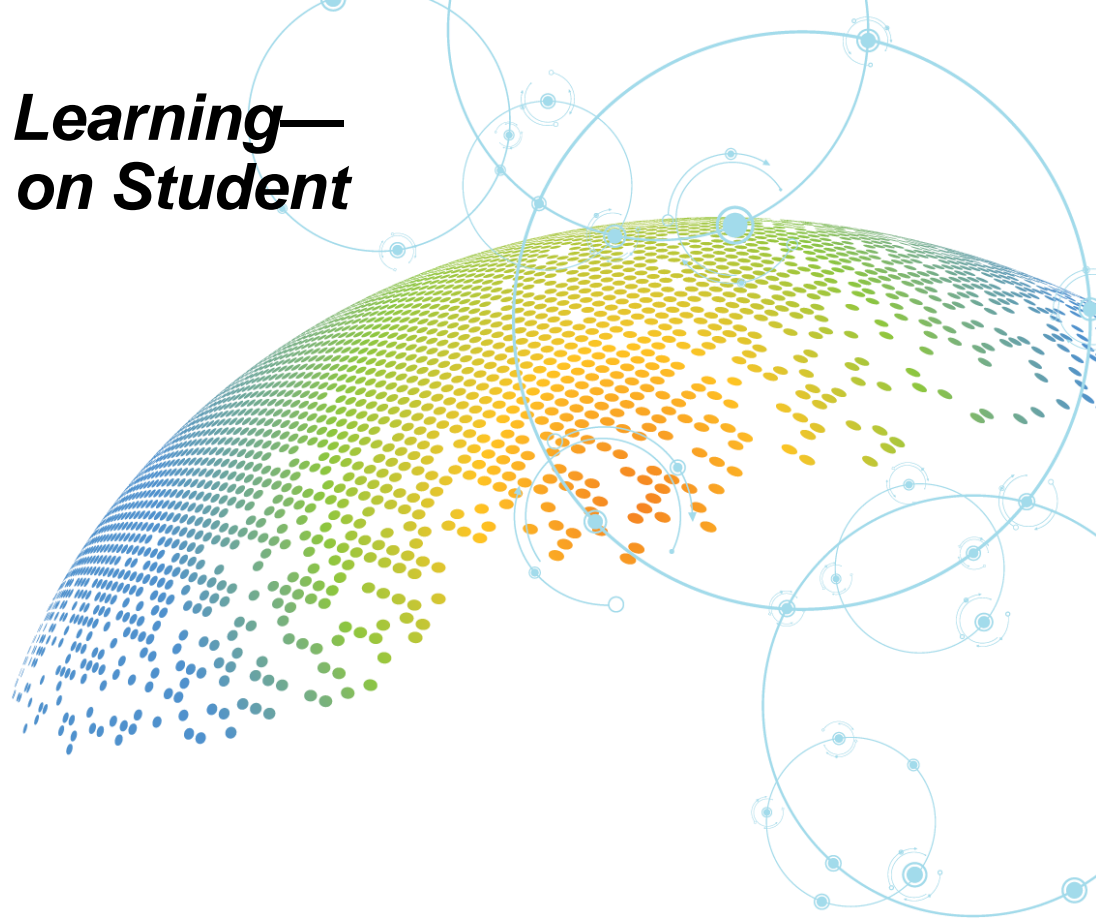
Transformational Digital Learning— Insights and Reflections on Student Assessment

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Development for a New Normal
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Innovations in Cognitive and Non-Cognitive Assessment

Sensor-Enhanced Assessment

- Approach: Obtain physiological data from students during assessments
- Premise: Physiological data provide objective indicators on learner anxiety, effort, engagement, and/or fatigue; data that can inform test quality and outcomes

Game-Based Assessment

- Approach: Develop cognitive and non-cognitive game-based assessment
- Premise: Assessment during game play indexes non-traditional constructs

Mobile Assessment

- Approach: Expand functionality of Tangerine for teacher use and early childhood
- Premise: Broader applicability to formative and summative assessment and at an expanded continuum of children's developmental progressions

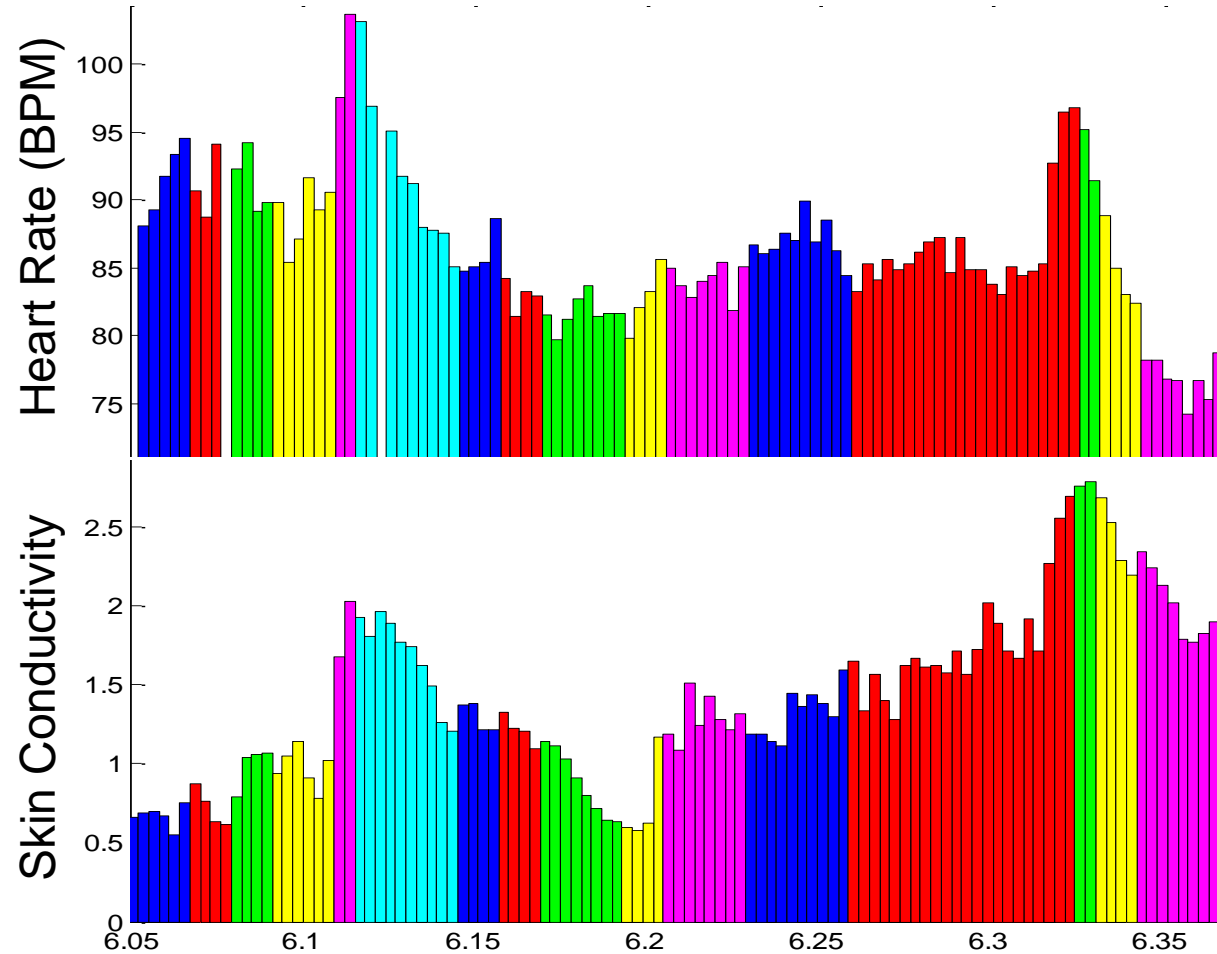
Sensor-Enhanced Assessment

NeuroLynQ – Sensory System



Sensor-Enhanced Assessment

- Sensor data complement subjective reports and task performance metrics
- Interpretational challenges (anxiety, cognitive load, distraction, fatigue)
- Differential time resolution
- Integrating time series data from multi-sensor data streams
- Interindividual vs. intraindividual differences

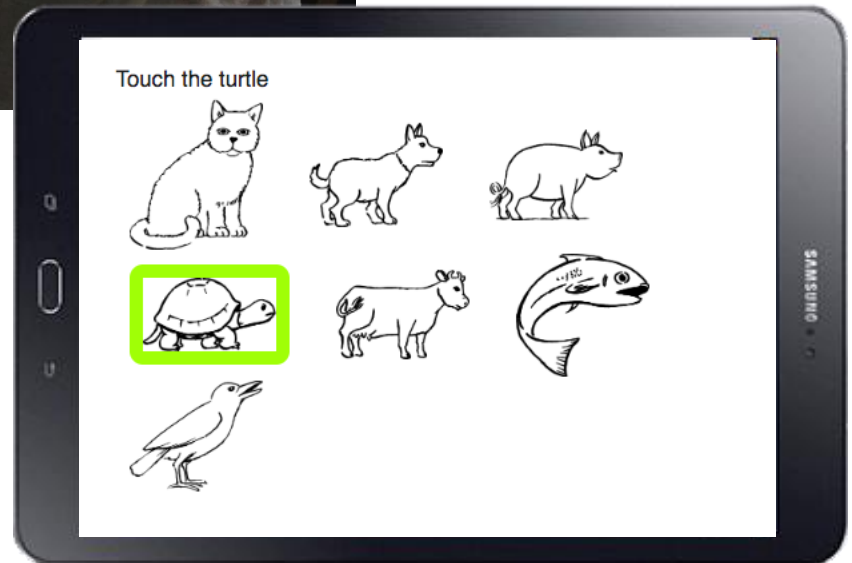
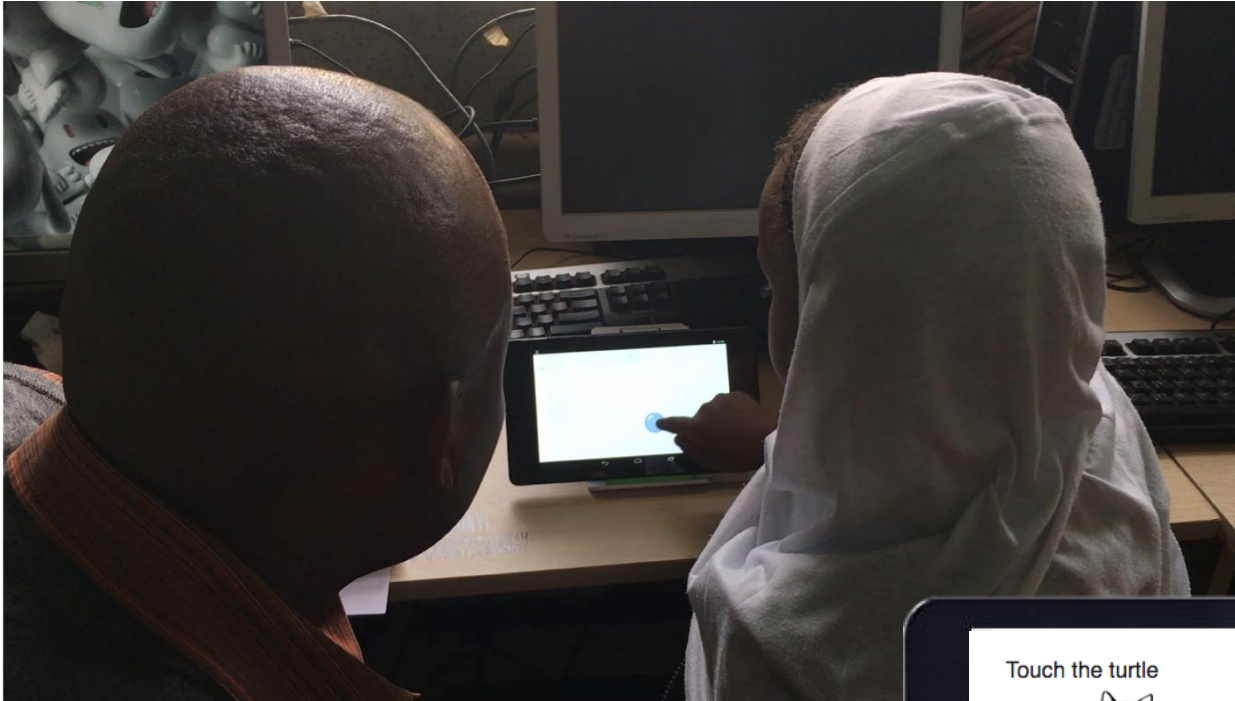


Time series sensor data for 1 participant in a cognitive interview;
Each color corresponds to a different section of the interview

Game-Based Assessment: Problem-Solving & Conscientiousness




Mobile Assessment of Executive Functions - Tangerine:EF Touch



Mobile Formative Assessment & Pedagogical Guidance

100% 8:50 AM



Add Student

Add Class

Class 1b

2

Select Report


Student Dashboard: Class 1b - Grade 1 English

Select SubTask

Letters Unit 1

Student	Completed?
Anna	<input checked="" type="checkbox"/>
Ben	<input checked="" type="checkbox"/>
Carla	<input checked="" type="checkbox"/>
Dan	<input type="checkbox"/>
Erica	<input type="checkbox"/>

99% 8:54 AM



Select Report

Student Grouping: Letters Unit 1

Students Assessed: 5 / 5

Avarage Correct: 6 / 8 (75%)

Student Grouping

Student	Score	Percentile	Status
Erica	8 / 8	100 %	Great
Dan	7 / 8	88 %	Great
Carla	6 / 8	75 %	Good
Ben	5 / 8	63 %	Good
Anna	4 / 8	50 %	Mediocre

Feedback

40% - 59% Percentile

These students are getting better. Consider framing your feedback to these student as follows:

You were able to read most letters correctly and at a good speed. However you have to be careful with your lower case letters as you made a few more mistakes there.

Is there an additional strategy or activity that you could adopt to further their letter decoding mastery? Consider giving these students some additional letter practice requiring them to differentiated between lower and upper case letters.

Thank You!

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