Validating Accountability Systems: Theory of Action

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So… Process of Validating is

- <u>Interpretive argument</u>: Build a chain of reasoning from the test construction process to the desired claims.

- <u>Validity argument</u>: Gather theoretical and empirical support for the "truthfulness" of the claims and to establish appropriate boundaries [limitations: "but not if…"]. (Kane, 2004)

Interpretive Argument

- Components of accountability system
  - Purpose
  - Design
  - Implementation
  - Theory of action "details"
    - Before and between test and accountability judgments
    - After accountability judgments & consequences and before next assessment and judgment cycle

Validity argument

- <u>Validity argument</u>: Gather theoretical and empirical support for the "truthfulness" of the claims and to establish appropriate boundaries [limitations: "but not if…"]
- Applied to components:
  - Purpose
  - Design
  - Implementation
  - Theory of action "details"

Validity argument (2)

- Does the system:
  - "generate useful information and constructive responses"
  - "without causing undue deterioration with respect to other goals"
  - **Is the system working? If so, to what degree? If not, why not and what should be done about it?**

Theory of Action

- Assessment information interpretation & use
  - State provides…
  - District/school/teachers will do…
  - Students will…

Theory of Action – 2

- **Comprehensive System Theory of Action: Student learning will increase, school capacity will increase, and achievement gaps will decrease as assessment is used to coherently *signal*, *evaluate*, and *inform* learning and teaching at each level of the system (at least state, district, school, classroom, individual)**
  - Signal: "What is important?"
  - Evaluate: "What do I know about how I did?"
  - Inform: "How can I do better?"

Comprehensive Systems

- Coherent assessment information that leads to action

Function	Level of Action			
	National/ State	District	School	Classroom /Individual
Signal				
Evaluate				
Inform				

Comprehensive Systems

- Coherent assessment information that leads to action
  - Focused on *outcomes* and *key processes* for reaching outcomes
  - Provides information for *external* quality monitoring and *internal* action

  - Example of processes: Informative feedback – violin

Some District & School Actions

Reduce achievement gap in mathematics by

- Common district curriculum and pacing guide

- Common district interim assessment (several times per year)

- Attention to course enrollment patterns, credit (successful completion), and associated supports

Common Curriculum & Pacing

Scope & Sequence of Learning Targets

$$A \quad B_{12} \quad C_{1234} \quad D_{12} \quad E \quad F_{123} \quad G \quad H_{123}$$

Sept Oct Nov Dec Jan Feb Mar Apr May

Pacing of instruction

$$C_4, D_2, F_2, G, H_{13}$$

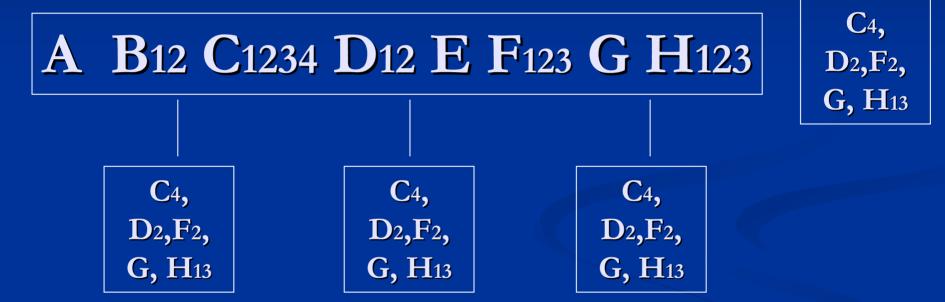*End-of-year Assessment*

Design of Interim Assessments

- Assessments designed for different purposes – provide different information to signal, evaluate, and inform
  - Practice & Prediction
  - Curriculum Sensitivity
  - Instruction & Learning Targets (robust proficiency)

Design of Interim Assessments - 2

Sequence of Learning Targets

End-of-year Assessment

$$A \quad B_{12} \quad C_{1234} \quad D_{12} \quad E \quad F_{123} \quad G \quad H_{123}$$

C_4, D_2, F_2, G, H_{13}

C_4, D_2, F_2, G, H_{13}

C_4, D_2, F_2, G, H_{13}

C_4, D_2, F_2, G, H_{13}

Predictive, Practice Interim Assessments

Design of Interim Assessments - 3

$A \quad B_{12} \quad C_{1234} \quad D_{12} \quad E \quad F_{123} \quad G \quad H_{123}$

$C_4,$
$D_2, F_2,$
G, H_{13}

A, B_{12}

$C_{1234},$
D_{12}, E

$F_{123}, G,$
H_{123}

Recent Instruction

Design of Interim Assessments - 4

$$A \quad B_{12} \quad C_{1234} \quad D_{12} \quad E \quad F_{123} \quad G \quad H_{123}$$

$C_4,$
$D_2, F_2,$
G, H_{13}

A, B_{12}

$A, B_{12},$
$C_{1234},$
D_{12}, E

$A, B_{12},$
$C_{1234},$
$D_{12}, E,$
$F_{123}, G,$
H_{123}

Cumulative Instruction

Assessment & Instruction Structure (Pacing incl. feedback)

$$A \quad B_{12} \quad C_{1234} \quad D_{12} \quad E \quad F_{123} \quad G \quad H_{123}$$

$C_4,$
$D_2, F_2,$
G, H_{13}

A, B_{12}

$C_{1234},$
D_{12}, E

$F_{123}, G,$
H_{123}

Remediate, consolidate, extend	Remediate, consolidate, extend	Remediate, consolidate, extend

How to construct this type of validity argument?

- Questions to guide validating:
    - Most important conceptually?
    - Practical priority?
    - How to do it?
- Questions about validation enterprise:
    - How detailed?
    - Who's responsible?
    - How much?
    - What about elements of "theory of action" that is under other people's control (causal assumptions)?

For more information:

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