

Measuring Implementation:



Moving from Fidelity to Integrity

Purpose

1. Discuss how a **contingency framework** can help drive how we measure the impact of a curriculum
2. Discuss the difference between **implementation fidelity and integrity**
3. Learn how **implementation integrity rubrics** support better feedback, coaching, and professional learning

Contingency Framework

Group Discussion Question 1

From a curriculum leader's perspective, how much **uncertainty** do we have about **cause and effect**?

(In other words, how **uncertain** are we that our curriculum produces direct effects on student achievement?)

Is our **uncertainty high or low**?

Group Discussion Question 2

From a curriculum leader's perspective, how much **control** do we have over **outcomes**?

(In other words, how much control do we have on a student's success in performance?)

Is our level of control **high** or **low**?

Contingency Framework

Where you sit in the ecosystem (how much uncertainty about cause and effect and how much control you have over outcomes) determines what is most important to measure.

Contingency framework

Uncertainty about cause and effect

High

Emergent Strategy

Complex causal logic
Focused interventions

What to measure: Influence (interim outcomes)

Ecosystem Strategy

Complex, complicated causal logic
Portfolio of interventions

What to measure: Individual and societal outcomes

Low

Niche Strategy

Linear causal logic
Focused interventions

What to measure: Outputs

Integrated Strategy

Linear, complicated causal logic
Portfolio of interventions

What to measure: Outputs, individual outcomes, and sometimes societal outcomes

Low

High

Control over outcomes

Discussion Question 3

How can we measure our influence / interim outcomes?

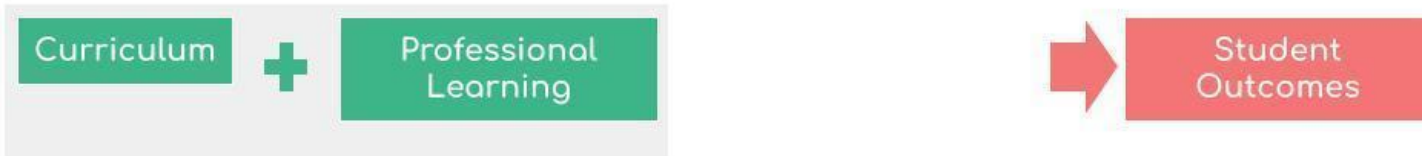
Implementation Integrity

Simple Versus Actual Theory of Change

(Arken Research, 2023)

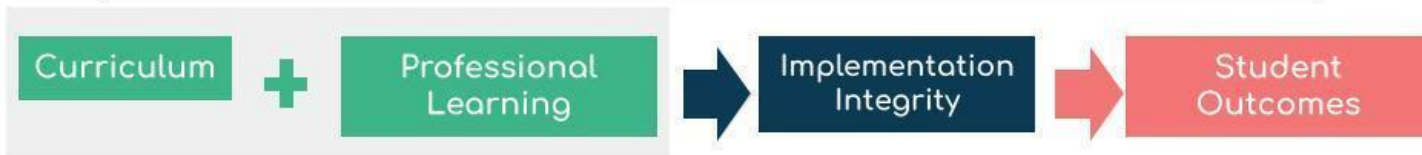
Simple Theory of Change

Research question:
What is the direct impact of curriculum + PL on student outcomes?



Actual Theory of Change

- Research questions:
- 1) What is the direct impact of curriculum + PL on implementation integrity?
 - 2) What is the relationship between implementation integrity and student outcomes?



Implementation Fidelity versus Integrity

“No math curriculum is ‘turnkey.’ Educators will always have to ‘adapt’ it.

This means that every curriculum leader is on a collision course with the reality of implementation integrity.”

-My new mantra

“What we need is less fidelity of implementation (do exactly what they say to do) and more integrity of implementation (do what matters most and works best while accommodating local needs and circumstances).”

-Mahieu (2011). Carnegie Center for the Advancement of Teaching

Let's play Guess and Check.

Sort the following statements into the T-chart:

— — —

- Making sure to “get through” all the key components of the lesson
- Natural variation understood and monitored
- Perfect adherence to a scripted lesson
- Pacing may suffer due to efforts to teach everything
- Natural variation discouraged
- Adherence to the intention of the script
- When things “aren’t working,” teachers often adjust by replacing facilitation strategies
- When things “aren’t working,” teachers often adjust by replacing materials and resources
- Teaching key components of the lesson “well” (rigor, depth, complexity)
- Pacing is monitored to creatively adapt to students’ needs

Implementation
Fidelity

Implementation
Integrity

Fidelity

- Making sure to “get through” all the key components of the lesson
- Perfect adherence to a scripted lesson
- Natural variation discouraged
- Pacing may suffer due to efforts to teach everything

Integrity

- Teaching key components of the lesson “well” (rigor, depth, complexity)
- Adherence to the intention of the script
- Natural variation understood and monitored
- Pacing is monitored to creatively adapt to students’ needs
- When things “aren’t working,” teachers often adjust by replacing facilitation strategies

NEITHER?: When things “aren’t working,” teachers often adjust by replacing materials and resources

Group Discussion Question

In your own words, what is the difference between implementation fidelity and integrity?

“It ain’t whatcha do.
It’s the way ‘atcha do it.
And that’s what gets results.”

- Sy Oliver and Trummy Young, sung by the Great Ella Fitzgerald and later by the almost as great Bananarama

Implementation Integrity Rubrics

Key Design Features

- Rubric-based **progression of practice**
- **Asset-based** descriptors
- Educative, but **non-prescriptive**
- Rigorous
- Adaptable
- Focuses on **teacher practice** and their ability to **integrate...**

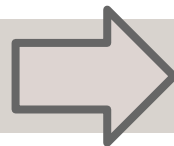
Curriculum + Good instructional practice +
Deep knowledge of students

Progression of Practice

Level 1	Level 2	Level 3	Level 4
Initiating	Installing	Implementing	Integrating
Awareness, learning, and exploration	Experimenting and responding to challenges	Focusing on quality, consistency, and lessons learned	Integrity, equity, and culturally responsive adaptation

From Danks, S., 2020. *The ARKEN Implementation Checkup*.

Move from *Fidelity*



to *Integrity*

Existing Implementation Integrity Rubrics - Math

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1. [The Illustrative Mathematics Implementation Reflection Tool](#) (Grades K-5)
 2. [The Illustrative Mathematics Implementation Reflection Tool](#) (Grades 6-12)
 3. The [Arken Implementation Checkup](#) (curriculum agnostic)
 4. [The Curriculum Implementation Change Framework](#), from The Center for Public Research and Leadership, Columbia University
 - a. Eureka Math PK-Algebra
 - b. Illustrative Mathematics K-12 Math


Indicator: Use of Instructional Routines

Implementation Fidelity:

Did you implement it?

Implementation Integrity:

How well did you implement it?



		Awareness	Experimenting	Implementing	Integrating
C1.3 Use of Instructional Routines	<i>The teacher facilitates the Instructional Routines embedded in the lesson as intended (Notice and Wonder, Math Talk, Which One Doesn't Belong?, Card Sort, Poll the Class, Take Turns).</i>	The teacher uses an alternative approach or structure than the indicated instructional routine (e.g., pre-teaches or demonstrates strategies using the same questions or task statements).	The teacher uses the instructional routines but makes modifications that impact access, reduce rigor, or are inconsistent with the goal and design. OR The teacher uses only select routines within a lesson (e.g., skips a Notice and Wonder that is embedded in an activity launch).	The teacher facilitates all embedded instructional routines consistent with the goal and design (e.g., structured discussion, built-in think time, honors all responses). The teacher may adapt the routine based on student dispositions , while maintaining student access to grade-level mathematics.	The teacher facilitates all embedded instructional routines consistent with the goal and design, adapting as is appropriate. The teacher leverages familiar elements or structures of the routines throughout the lesson to facilitate access and enhance discourse (e.g., notices when students may benefit from additional opportunities to “Notice and Wonder” about a context, or “Turn and Talk” to a partner about a question or prompt).

Indicator: Use of Authentic Assessments

The Arken Implementation Checkup™

The **Implementation Checkup™** is a groundbreaking implementation measurement tool that empowers you to provide straightforward feedback to your leadership team about the maturity of implementation of your curriculum or instructional initiative.

Implementation Fidelity:

Did you implement it? 



Implementation Integrity:

How well  did you  implement it?

Indicator	Initiation	Installation	Implementation	Integration
2.3.4. Use of Authentic Assessments to Support Deeper Learning	I use a variety of assignments in my classroom to give students an opportunity to demonstrate their learning. I encourage students to make their thinking visible.	I use authentic, performance-based assessments to ensure students make their thinking visible. I score these assessments using an analytic rubric.	I use authentic, performance-based assessments to ensure students make their thinking visible. I score these assessments using an analytic rubric. I provide feedback to students on their strengths and opportunities for improvement.	I use authentic, performance-based assessments to ensure students make their thinking visible. I score these assessments using an analytic rubric that is clearly aligned to key curricular standards. I provide feedback to students on their strengths and opportunities for improvement, and ask students to reflect upon their work. I require students to document their work and learnings in a portfolio to demonstrate improvement over time.

Group Discussion Question

What are the **strengths** and **drawbacks** to using an implementation rubric?

Strengths

- Theoretical
- Drives common understanding
- Educative for professional learning
- Orients a professional learning roadmap
- Focuses feedback in coaching
- Facilitates meaningful data collection
- VERY useful for self-reflection
- VERY useful for studying the correlation between implementation and student outcomes

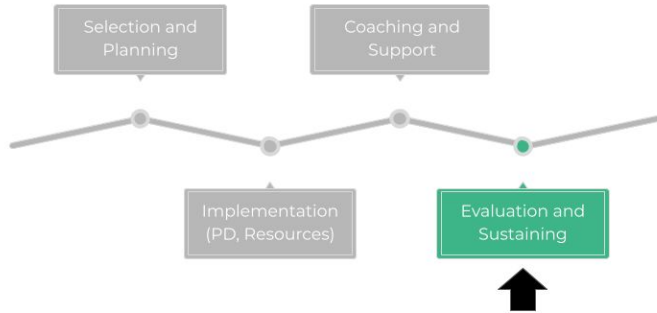
Drawbacks

- Requires calibration and training for common understanding
- Perception gap: teacher self-report versus coach perspective
- Time consuming for data collection:
 - Calibration needed for multiple observers
 - Physical presence in classrooms required
- Overwhelming when not used incrementally

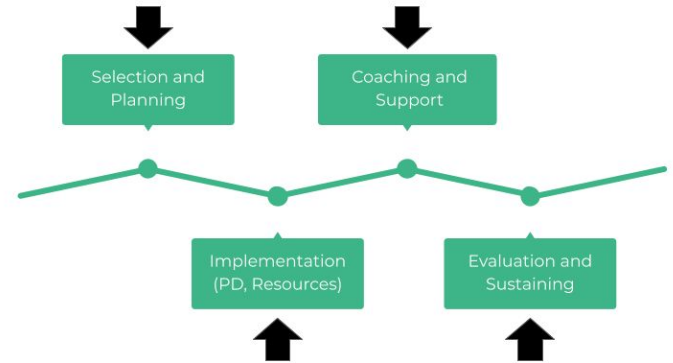
Feedback, Coaching, Professional Learning

Using Implementation Rubrics

This is when we **usually** use implementation rubrics:



This is when we **should** use implementation rubrics:



Using Implementation Rubrics

Phase	Key Uses
Selection and Planning	<ul style="list-style-type: none">● Clarify your theory of action● System-wide self-assessment to gather baseline data for monitoring progress over time● Informs planning for professional learning, implementation plan, and support resources
Adoption (PD and Resources)	<ul style="list-style-type: none">● Share the rubric with teachers and coaches during professional learning sessions● Align your coaching model to the rubric● Adapt your rubric to use as an observation protocol to support leaders' understanding
Coaching and Support	<ul style="list-style-type: none">● Collaborative assessment for teachers to complete during PLCs● Observations to guide clear feedback to teachers● Feedback for one-on-one coaching sessions
Evaluation and Sustainability	<ul style="list-style-type: none">● Survey-based system-wide self-assessment to monitor progress over time● Correlate implementation data to student outcomes

Take Action

Take-Aways

1. Use the **contingency framework** to identify where you sit in the ecosystem. This will help you define what is important to measure.
2. **Adopt** the curriculum with **implementation integrity** in mind.
3. Develop an **Implementation Integrity Rubric** to clearly define how educators should implement the desired model.
4. Use the rubric through all phases of a curricular adoption to **meaningfully support and engage** educators over time.

Additional Resources

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Check out the Arken blog for more on this topic:

<https://arkenresearch.com/blog/>

To participate in the **Center for Implementation Evidence** pilot program, please contact:

sdanks@arkenresearch.com

Thank you!



For more information, please contact:

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