

Introduction to Implementation Science

A Presentation for



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University

Outline

- Acknowledgments
- Background
- An Overview of Implementation Science (IS)
- Implementation Study Example
- Discussion of IS in HPE

ACKNOWLEDGMENTS

Kat'il'a

seeking spaces of stillness and
quietness amidst our busyness and
quest for knowledge; stop and listen
deeply



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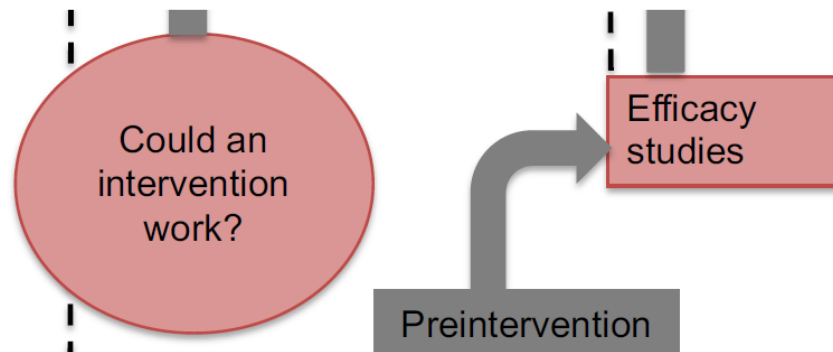
What is Implementation Science?

“Official” Definition

- The scientific study of methods to promote uptake of research findings in real-world practice settings to improve quality of care (Eccles & Mittman, 2006)

In Plain Language

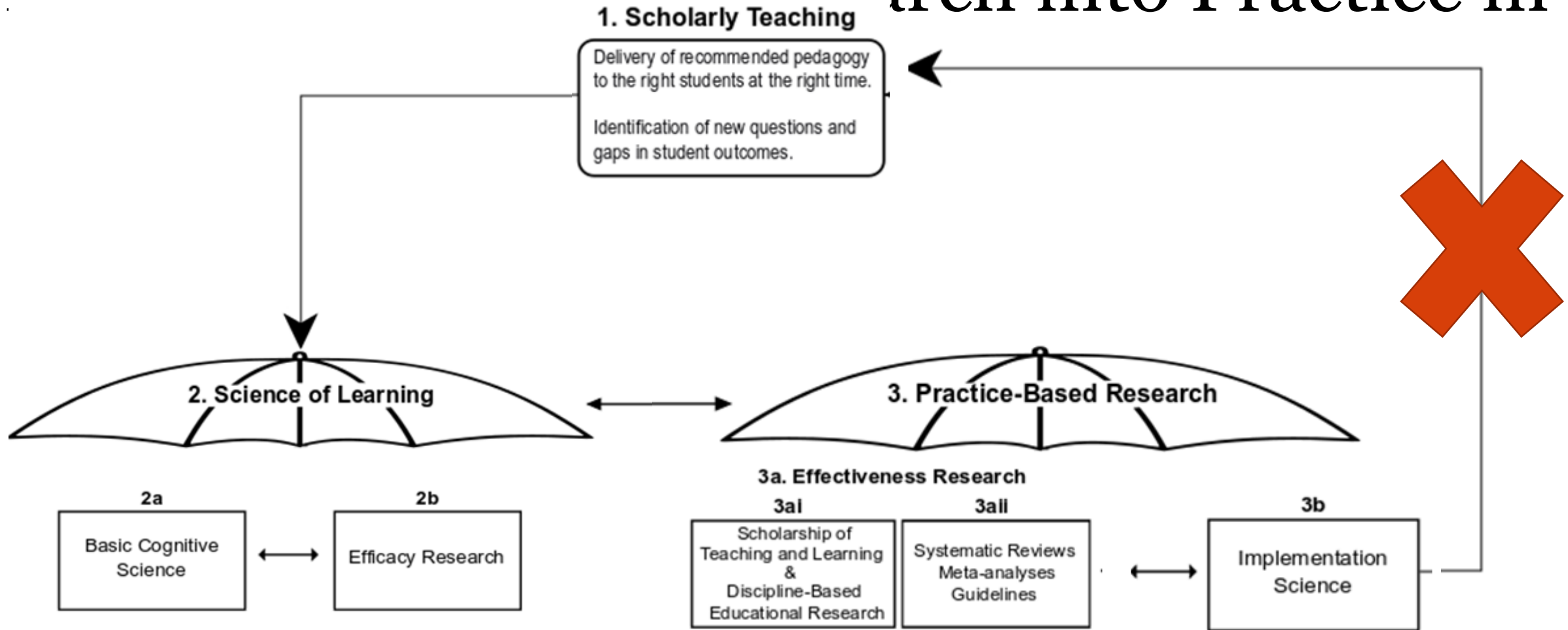
- The intervention/practice is **THE THING**
- Implementation strategies are the stuff we do to try to help people/places **DO THE THING**
- Implementation outcomes are **HOW WELL** those people/places **do the thing**.



Time

Questions/Comments?

A Model for Moving Research into Practice in

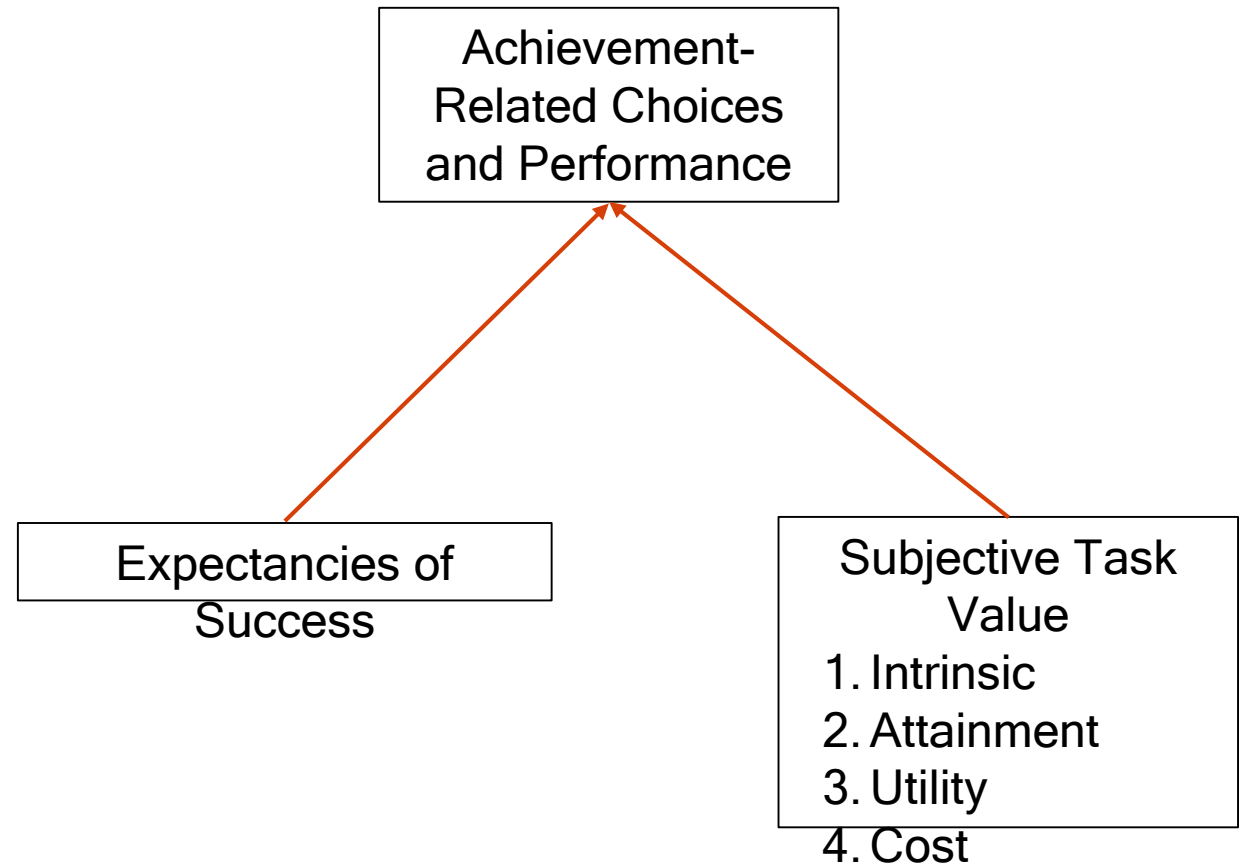


An Example

Utility Value Intervention in Introductory Psychology

The Utility Value Intervention

- Utility value intervention
 - Theoretical basis
 - Expectancy-Value Theory (Eccles, 1983; Eccles & Wigfield, 2020)
 - Evidence of effectiveness
 - Labs: $d = 0.54$ [0.43-0.66]
 - Classrooms: $d = 0.16$ [0.15-0.19]



Study Design

- Context
- Delivery of the intervention
- Participants
 - Instructors
 - 8/10 participated in semi-structured interviews
 - Students
 - Intervention
 - Implementation Outcomes
 - Consent process

Implementation Frameworks

- **Consolidated Framework for Implementation Research** (CFIR; Damschroder et al., 2009, 2011)
- **RE-AIM Framework** (Glasgow et al., 1999; Glasgow et al., 2019)

Consolidated Framework for Implementation Research

Implementation

Intervention
Characteristics

Inner Setting

Implementatio
n Process

Individual
Characteristic
s

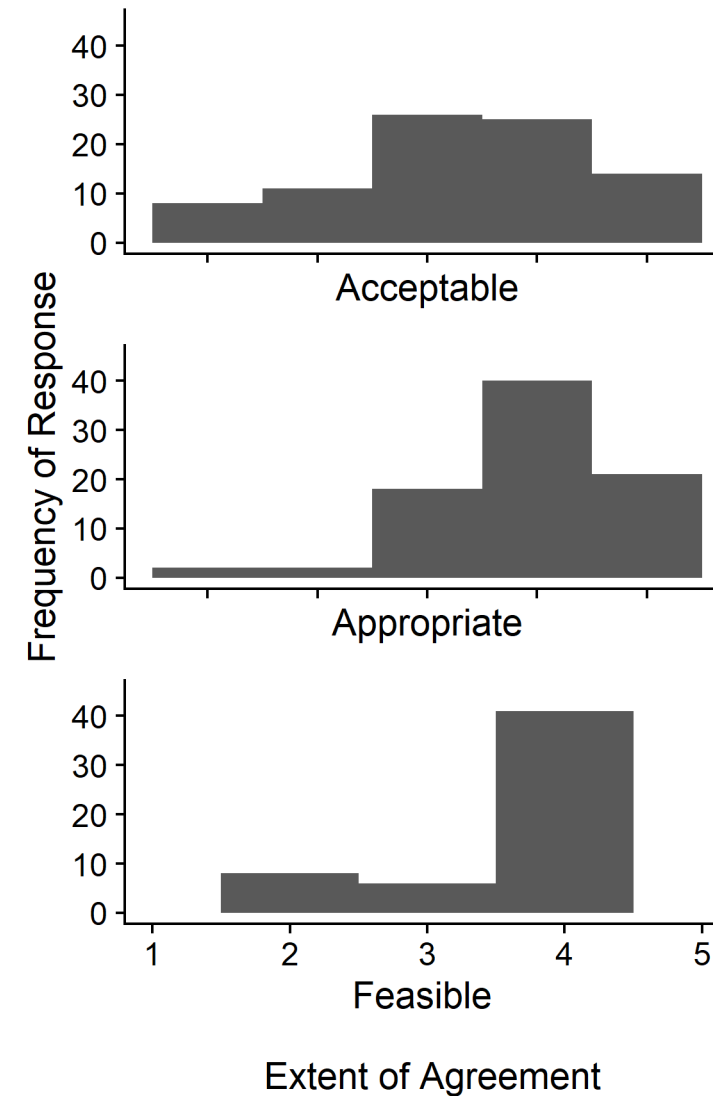
Outer Setting

Results – CFIR Evaluation

Dimension	Constructs
Individual Characteristics	3.1 Knowledge and beliefs

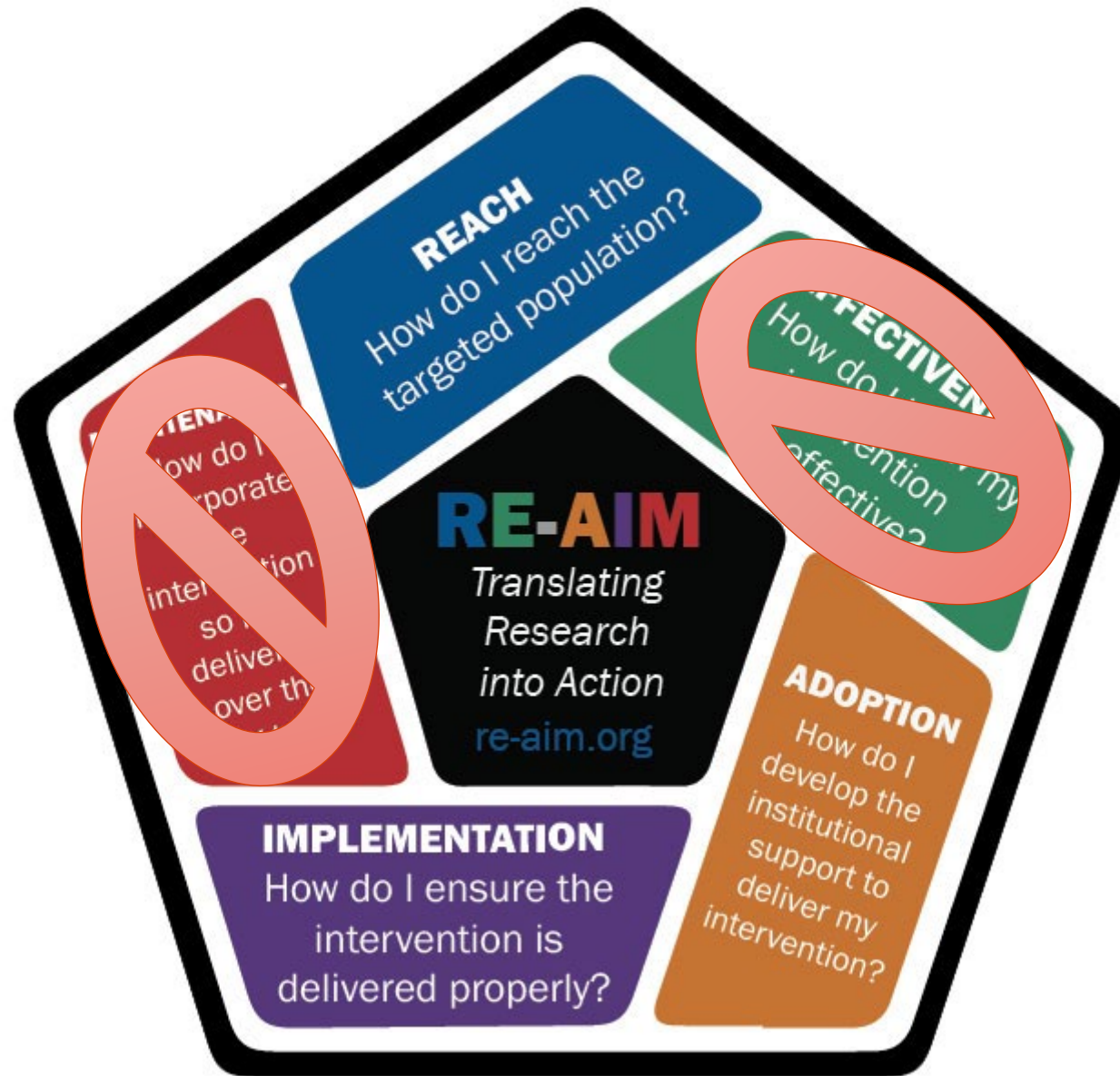
Reliability coefficients for implementation outcomes	
Implementation Outcome	Cronbach's alpha [95% CI]
Acceptability	0.88 [0.83, 0.92]
Appropriateness	0.91 [0.87, 0.94]
Feasibility	0.79 [0.72, 0.86]

Weiner et al., 2017



Results – CFIR Evaluation

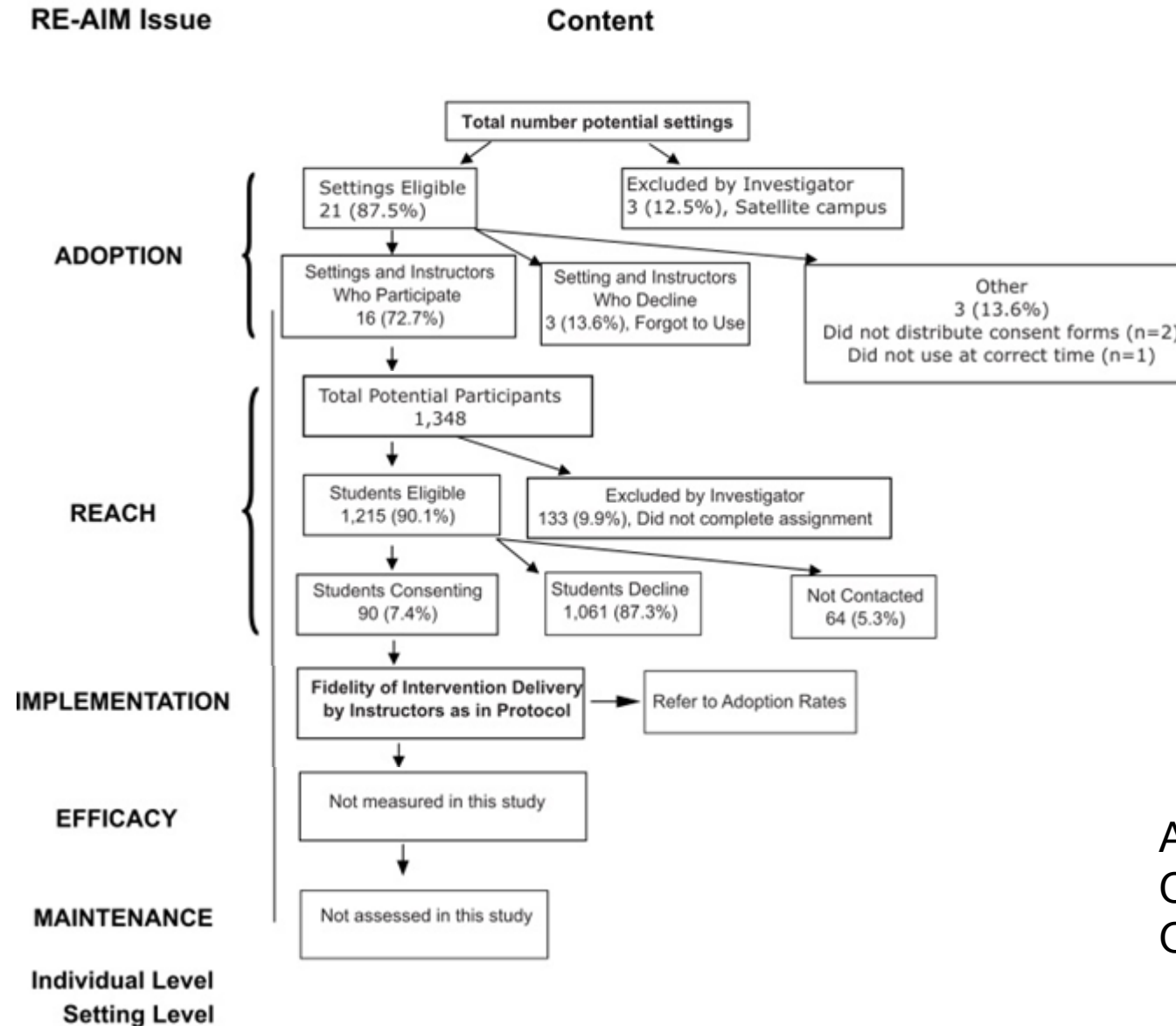
Dimension	Constructs	Facilitators	Barriers
Implementation Process	4.1 Planning		<u>Low frequency of communication</u>
	4.2 Engaging - Formally appointed implementation leaders	Director & Coordinator	
	4.3 Executing	Director, coordinator, researcher executed as planned	Non-use of the intervention No consent message Misuse of the intervention COVID-19



Glasgow et al., 1999

Image source: <https://azhin.org/cummings/re-aim>

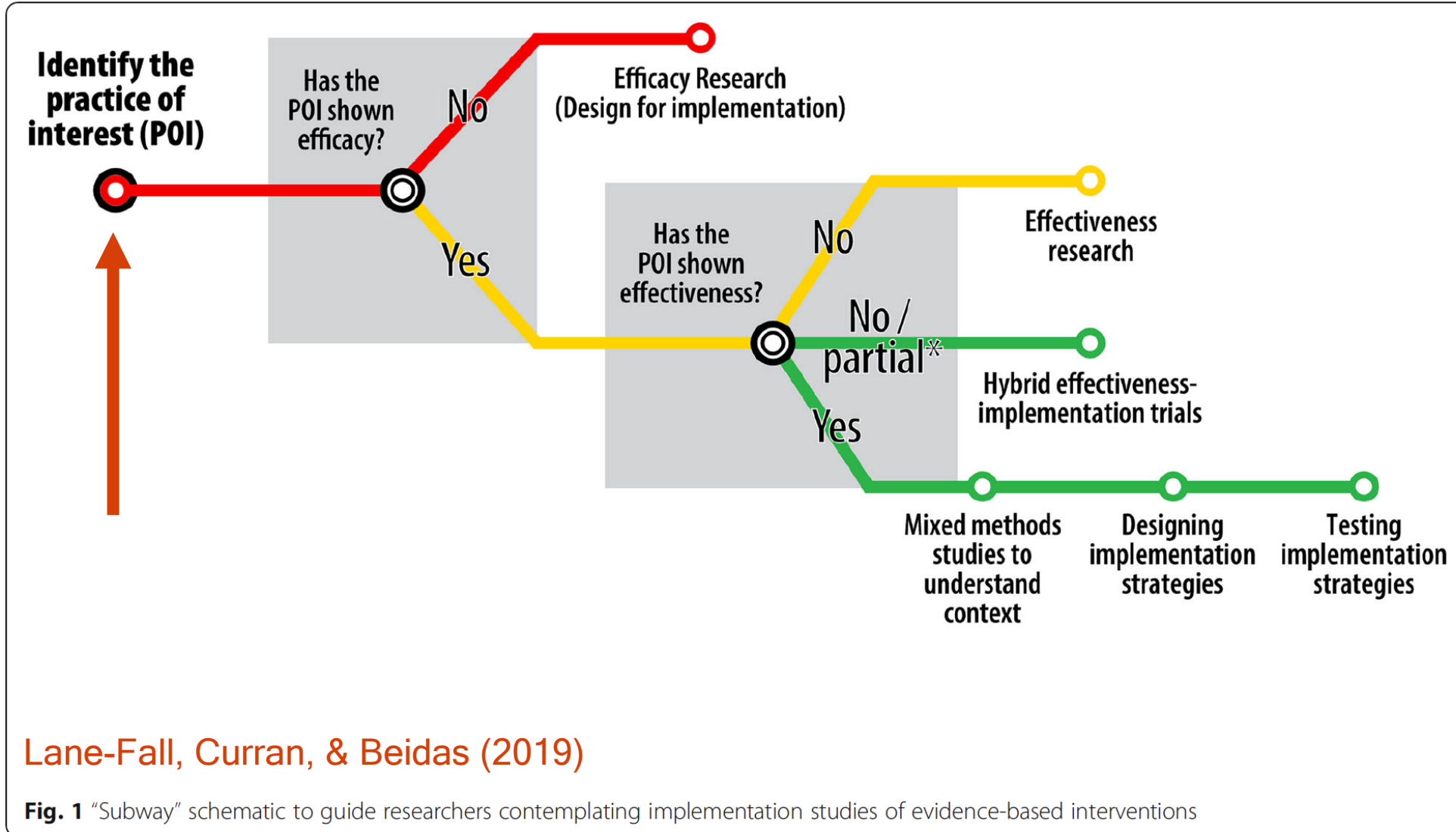
Evaluation of UV Intervention Implementation



Adapted from RE-AIM
CONSORT guidelines,
Glasgow et al., 2018)

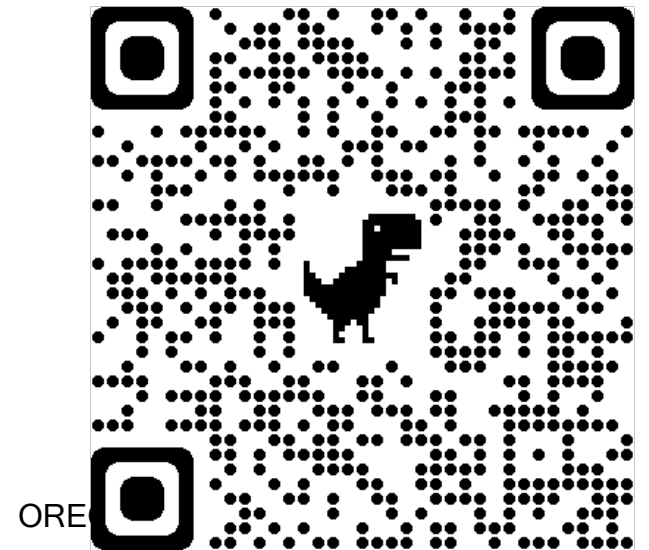
Questions/Comments?

Translating Research to Practice



Thinking About IS in HPE

- What educational methods do you use in the classroom/clinical learning environment?
- What is the evidence-base for teaching strategies in HPE – didactic and clinical?
 - Share your educational methods and evidence-based strategies



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