



Navigating the What Works Clearinghouse



Agenda

Welcome from EIR

How the What Works Clearinghouse classifies research findings

Classifying EIR findings as confirmatory or exploratory

Examples from EIR grantees and evaluators

Conversation with the panel



Today's Table Setters



Jamila Smith

Director, Innovation and Early Learning Programs
Office of Elementary and Secondary Education
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Senior Research Scientist
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What Works Clearinghouse
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Welcome from EIR



USING AND BUILDING EVIDENCE



EXPLORE new ways of addressing persistent challenges that other educators can build upon.



SUSTAIN, REPLICATE AND SCALE successful evidence-based practices in new schools, districts, and States, while addressing the barriers to scale, like cost-effectiveness and implementation fidelity.



BUILD THE EVIDENCE based on effective educational practices to improve achievement for high-needs students.



A TIERED EVIDENCE GRANT PROGRAM

	Early-Phase	Mid-Phase	Expansion
Level of Innovation/ Scale	Develops and tests innovative education practices	Refines innovative education practices at a regional or national scale	Scales innovative education practices nationally
Evidence	Demonstrates a Rationale (high quality research findings of an evaluation)	Moderate Evidence	Strong Evidence
Grant Amount	Up to \$6 Million	Up to \$10 Million	Up to \$15 million
Anticipated Award	13-23 awards	8-15 awards	4-8 awards





How the WWC classifies research findings

Betsy.Wolf@ed.gov

This presentation was adapted from:
Wolf, A., Randel, B., & McGill-Wilkinson, B. (February 2024). *Understanding How the WWC Prioritizes Findings: Implications for Designing EIR Evaluations*. Presentation at the Education Innovation and Research (EIR) Project Directors and Evaluators Meeting, Washington, DC.



Implications of Main v Supplemental Findings in WWC

	Main	Supplemental
Study can meet WWC standards	Yes	Yes (but only 'with reservations' if only supplemental findings)
Findings on WWC website	Yes	Yes
Contributes to evidence tier for the intervention for the WWC outcome domain	Yes	No
Can be cited in future grant competitions	Yes	Yes*

*Each grant program will decide if cited finding is relevant to grant competition.

Criteria for Main v Supplemental Findings in WWC (1)

Related to Measures	Main	Supplemental
Composite AND subscale	Composite	Subscale
Subscale only	Subscale	
Dichotomous AND scale	Scale	Dichotomous
Dichotomous only	Dichotomous	

Criteria for Main v Supplemental Findings in WWC (2)

Related to Measures	Main	Supplemental
Multiple time points	Outcome closest to end of intervention for K–12 outcomes, 1+ years after intervention for some workforce and college outcomes	Other time points
Single time point	Single time point	
Independence of measures*	Independent	Non-independent
Multiple findings within the same outcome domain	Average across findings within the same outcome domain	Individual findings within the same outcome domain

*Independence is only considered for math- and literacy-related outcomes (except writing).

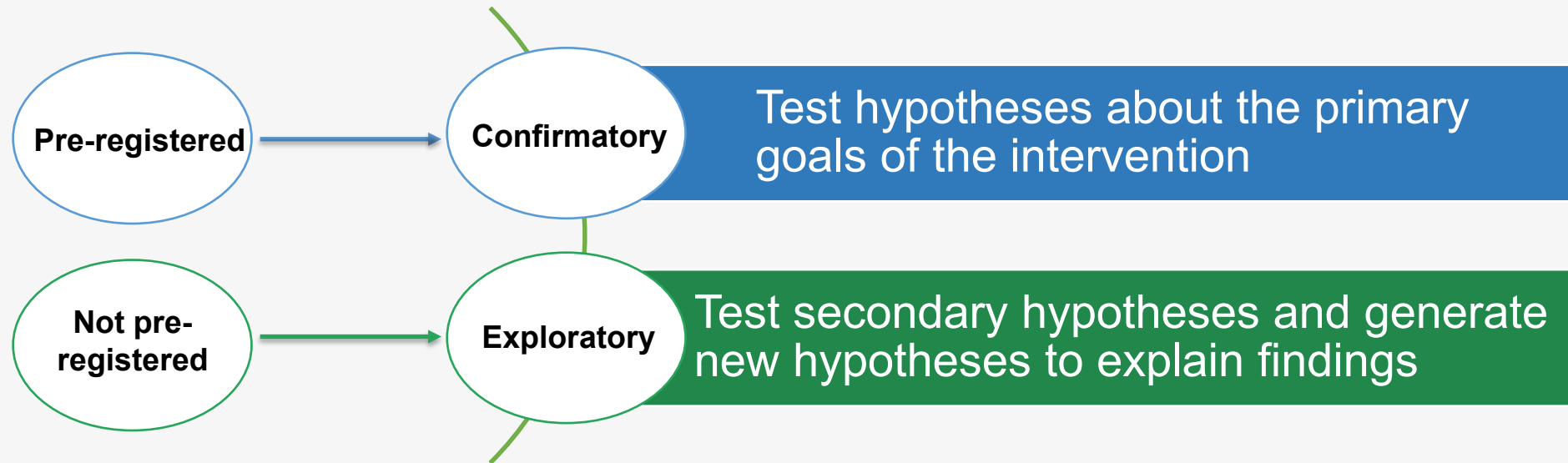
Criteria for Main v Supplemental Findings in WWC (3)

Related to Sample	Main	Supplemental
Intent-to-treat AND treatment-on-the-treated	Intent-to-treat	Treatment-on-the-treated
Treatment-on-the-treated only	Treatment on the treated	
Full sample AND subgroup	Full sample	Subgroup
Subgroup only	Subgroup	

How EIR classifies research findings as confirmatory or exploratory



Confirmatory v Exploratory Analyses in EIR (1)



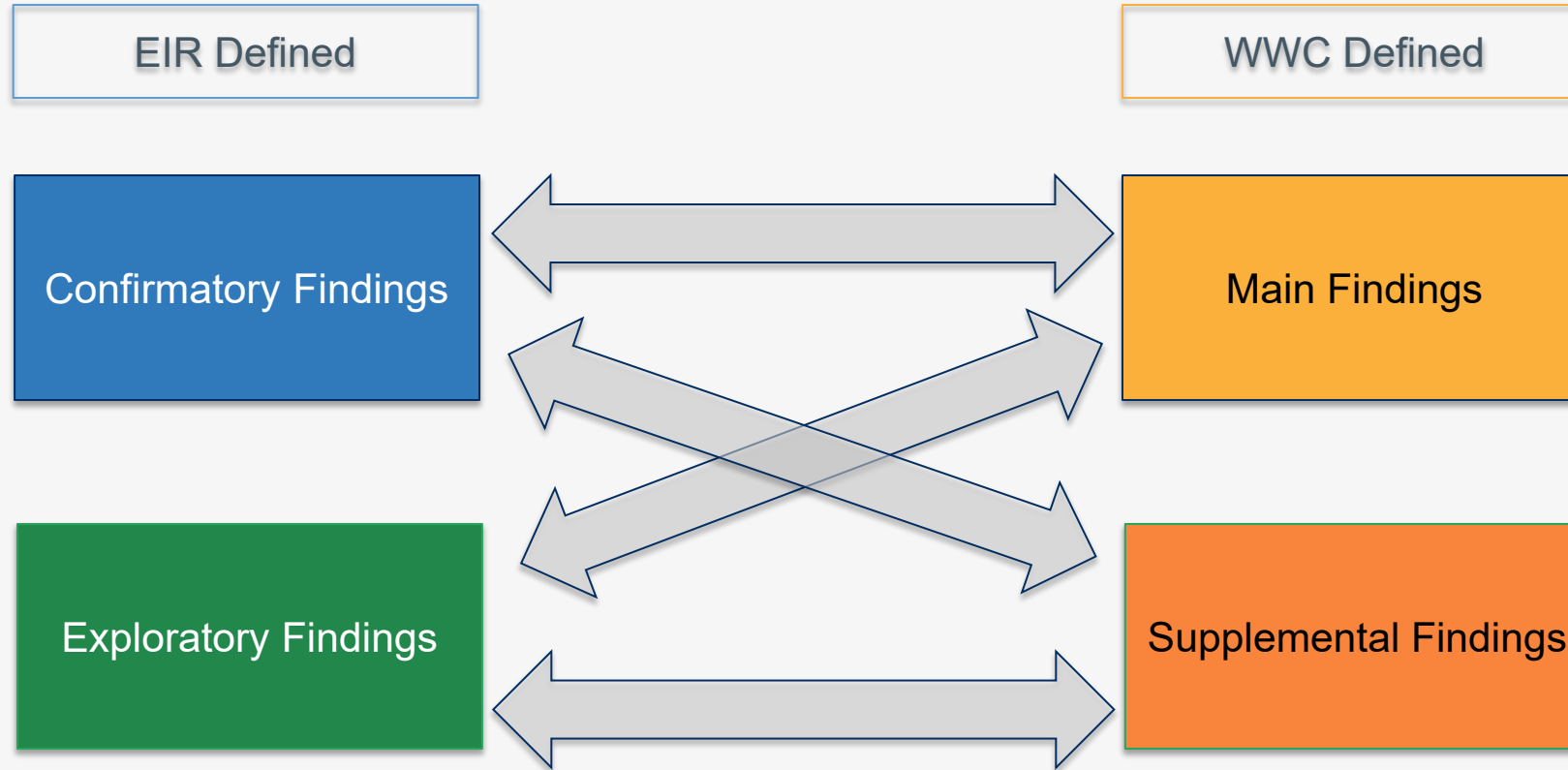
Confirmatory v Exploratory Analyses in EIR (2)

- Define at the start based on the intervention logic model and jointly with the grantee
- Confirmatory analyses – which outcome(s) do they expect to impact the most and for whom and when?
- Exploratory analyses – which outcome(s) might be impacted by the intervention and/or which outcome(s) are important for understanding the intervention's impacts on the confirmatory outcomes (e.g., mediators)?

Confirmatory v Exploratory Considerations

	Confirmatory	Exploratory
Study design	Strongest research design (RCT)	Less strong research design (QED)
Multiple treatments	Stronger treatment arm	Weaker treatment arm
Outcomes	Outcomes most likely to be impacted	Outcomes less likely to be impacted
Sample	Who is most likely to be impacted (and for which outcomes and when)	Who is less likely to be impacted
Timing	When implementation is expected to be strongest or when intervention is expected to affect most change on outcomes	When implementation is expected to be less strong or when intervention is expected to affect less change

WWC's Designations v EIR Designations





Examples from EIR Grantees and Evaluators



Today's Panel



Ali Picucci
Senior Data Fellow
Whole Child Model



Megan McMillan
Project Director
Duval Ideas

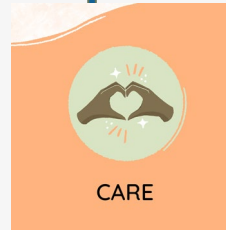


Whole Child Model

Grades K-5

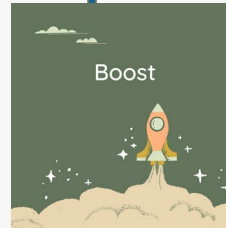
3 Part Approach to Well-Being

Together, these components create an environment in which students feel safe, welcome, and ready to learn.



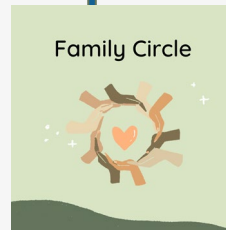
CARE

Schoolwide routines and practices that create a safe, connected environment for children and adults



Boost

Additional support for children who need it



Family Circle

Families from all backgrounds are valued and feel safe contributing to children's growth and development as equal partners in education



Study Design: Overview

QED (1:2 match)

- School-wide intervention for grades K-5
- 2 urban districts
- Cohort design
 - 30 schools in C1 (10 Treatment & ~20 Control)
 - 30 schools in C2 (10 Treatment & ~20 Control)
- 3 year intervention
- Outcomes:
 - Student: goal setting, engagement, belonging, attendance, discipline & reading/ math achievement
 - Teacher: efficacy & retention



Study Design: Analyses

- Combine outcomes across cohorts and across years to maximize sample size
- Exploratory analysis: estimate impacts on teachers and students in both cohorts at the end of the first year of implementation
- Confirmatory analysis: estimate impacts on teachers and students in both cohorts at the end of three years of implementation (grades 3 to 5)



Implications of Differences – Whole Child Model

EIR Confirmatory v Exploratory	WWC Main v Supplemental
<p>Confirmatory: For cohort 1 and 2 combined at the end of 3 years implementation each:</p> <ul style="list-style-type: none">• Teacher retention• Teacher well-being• Attendance• Discipline• Reading/math achievement• Goal setting*• Engagement*• Belonging*	<p>Main: Combining cohorts 1 and 2 at the end of 3 years of implementation aligns with full sample at the time point closest to the end of the intervention.</p> <p>*A difference is that the WWC would average goal getting, engagement, and belonging together as the “main” finding b/c the findings fall under the same outcome domain, but the individual findings would be reviewed separately as supplemental.</p>
<p>Exploratory: Same outcomes as above for cohort 1 and 2 combined at the end of 1 year of implementation each</p>	<p>Supplemental: After 1 year of implementation is supplemental b/c not time point closest to intervention.</p>



Duval Ideas (Early129)

Jacksonville, Florida; Duval County Public Schools

- K-5 general education classroom teachers teaching students with disabilities

High-Leverage Practices (HLP) for Students with Disabilities (SwD)

3-Day Professional Learning (Academy for General Education Teachers)

Job-embedded support:

- Synchronous virtual coaching (6/10-minute session per year)
- Expert, non-evaluative peer coaches

Evaluation was written with to meet WWC without reservations

- Real-world challenges necessitated edits, but WWC rigor supports a stellar product nevertheless!



Duval Ideas (Early129) (1)

Sample

- 3 cohorts
 - 240 K-5 general education teachers per cohort
 - Estimated totals:
 - 720 teachers
 - 14,440 students (1,440 SwD)
- 97 high-need elementary schools
- Voluntary participation
 - Stratified by grade-level
 - School blocks:
 - Region, school characteristics
 - Departmentalized teams assigned same condition

Assessments

- Standardized Assessments (ELA & Math)
- Teacher self-efficacy
- Student behavior
- Student discipline
- Academic disposition
- Least Restrictive Environment

Duval Ideas (Early129) (2)

Teacher-Level Outcomes (RCT)

Confirmatory (2):

- 1 year of exposure of HLP PD on perceived efficacy (teacher well-being)
- Teacher retention

Exploratory (2):

- Teacher efficacy & retention:
 - Mediate teacher knowledge & motivation
 - Moderate contextual and implementation factors

Student-Level Outcomes (QED)

Confirmatory (5):

- For SwD compared to SwD in BAU
 - ELA & Math Achievement
 - Behavior
 - Discipline
 - Academic disposition

Exploratory (4):

- Impact of above for students w/ & w/o disabilities compared to BAU
- Remaining in Least Restrictive Environment (LRE) compared to BAU
- Teacher knowledge & motivation mediate:
 - Student motivation, behavior, & achievement
- Contextual & implementation factors:
 - Motivation, behavior, & achievement

Implications of Differences – Duval Ideas

EIR Confirmatory v Exploratory	WWC Main v Supplemental
<p>Confirmatory: For all cohorts combined at the end of 1 year of implementation each:</p> <ul style="list-style-type: none">• Teacher self-efficacy*• Teacher retention• ELA/math achievement for SWD• Behavior for SWD• Discipline for SWD• Academic dispositions for SWD	<p>Main: The WWC would review these outcomes for full sample (not just SWD) for all cohorts combined at the end of 1 year of implementation.</p> <p>The WWC could also review remaining in LRE as a main finding.</p> <p>*The WWC would average teacher self-efficacy and teacher motivation as the “main” finding b/c these fall in the same outcome domain.</p>
<p>Exploratory: For all cohorts combined at the end of 1 year of implementation each:</p> <ul style="list-style-type: none">• Teacher knowledge• Teacher motivation*• Remaining in LRE for SWD• ELA/math achievement, behavior, discipline, and academic dispositions for all students (not just SWD)	<p>Supplemental:</p> <ul style="list-style-type: none">• Findings for SWDs only• Findings for teacher self-efficacy and teacher motivation separately• Cohort-specific findings <p>The WWC does not review teacher knowledge.</p>



Conversation with the Panel

Recommendations



Focus on the intervention logic model and theory of change:

- Define confirmatory analyses as those that reflect the strongest hypotheses about intervention effects
- Reconsider exploratory analyses that are not well aligned with the theory of change



Be mindful of how the WWC will classify your analyses as main v supplemental:

- Justify which analyses are the most relevant for the study in the final report
- Know which analyses the WWC will consider to be within the same outcome domain and average together

Resources

The WWC defines its outcome domains in the study review protocol:

<https://ies.ed.gov/ncee/wwc/Document/1297>

Other eligibility criteria and information on main v supplemental findings can be found in the WWC Handbook:

<https://ies.ed.gov/ncee/wwc/handbooks>





Thank You!