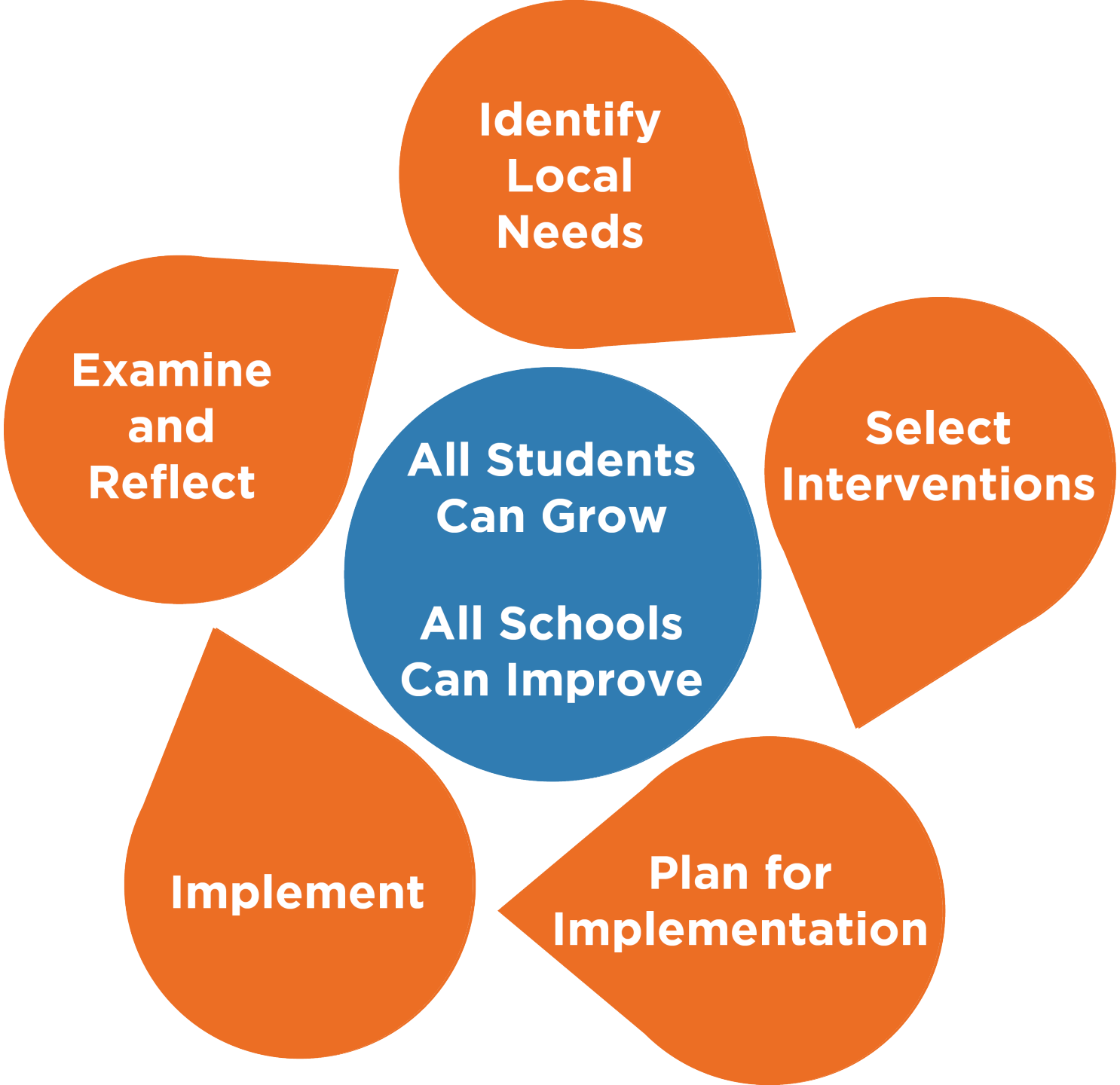
Evidence-Based Interventions and Practices: New Requirements Under ESSA

engageok

Objectives

- Identify the **requirements for selecting** evidence-based interventions and practices.
- Gain understanding of the **key terms and concepts** of the Every Student Succeeds Act (ESSA) tiers of evidence
- Learn to **navigate** the What Works Clearinghouse and Evidence for ESSA websites.

http://bit.ly/EvidenceEngage


Identify Local Needs
Select Interventions
Plan for Implementation
Implement
Examine and Reflect
All Students Can Grow
All Schools Can Improve

Why is it Important to Focus on Evidence?

- **No Child Left Behind.** This law required programs and practices be research based in their design. There was no focus on the outcomes of the program or practice.

- **ESSA.** This law requires evidence of the outcomes
  - What is the extent to which outcomes improved?
  - What are the odds of achieving the desired outcome?
  - Is it proven with students similar to your population and setting?

Additional Considerations: Local Capacity

- What **resources** are required to **implement** this intervention? Are **funds** available? Do staff members have the needed **skills**? Is there **buy-in** for the intervention?

- Will the potential impact of this intervention justify the **costs**, or would **more cost-effective** interventions accomplish the same outcomes?

Local Capacity, cont.

- How does the intervention fit into **larger strategic goals** and other **existing efforts**?

- How will this intervention be **sustained over time**?

ESSA Tiers of Evidence

Tier 1: Strong evidence

Tier 2: Moderate evidence

Tier 3: Promising evidence

Tier 4: Demonstrates a rationale

All federal programs require the use of evidence.

Evidence Requirements Across Federal Programs

- **Title I, Part A: Schoolwide/Targeted Assistance.** External providers must have expertise in using Tiers 1-4 practices.
- **Title I, Section 1003: School Improvement.** At least one intervention must be tier 1, 2, or 3.
- **Title II, Part A: Effective Instruction**. Some requirements for Tier 1, 2, 3, or 4, where evidence is reasonably available (e.g., professional development, induction, and mentoring).
- **Title IV, Part A: Student Support Grant**. Some requirements for Tier 1, 2, 3, or 4, where evidence is reasonably available.

Evidence Requirements, cont.

- **Title IV, Part B: 21st Century Community Learning Centers.** Tier 1, 2, 3, or 4 evidence when deemed appropriate.
- **Title IV, Part D. Magnet School Assistance.** Competitive preference is given for proposals with evidence-based activities (Tier 1, 2, 3, or 4).
- **Title IV, Part F: Education Innovation.** Proposed innovations must meet evidence Tiers 1, 2, 3, or 4.
- **Title IV, Part F: National Community Support**.
  - Promise Neighborhoods: Some requirements and competitive preference for tiers 1-3.
  - Full-Service Community Schools: Competitive preference for tiers 1-3.

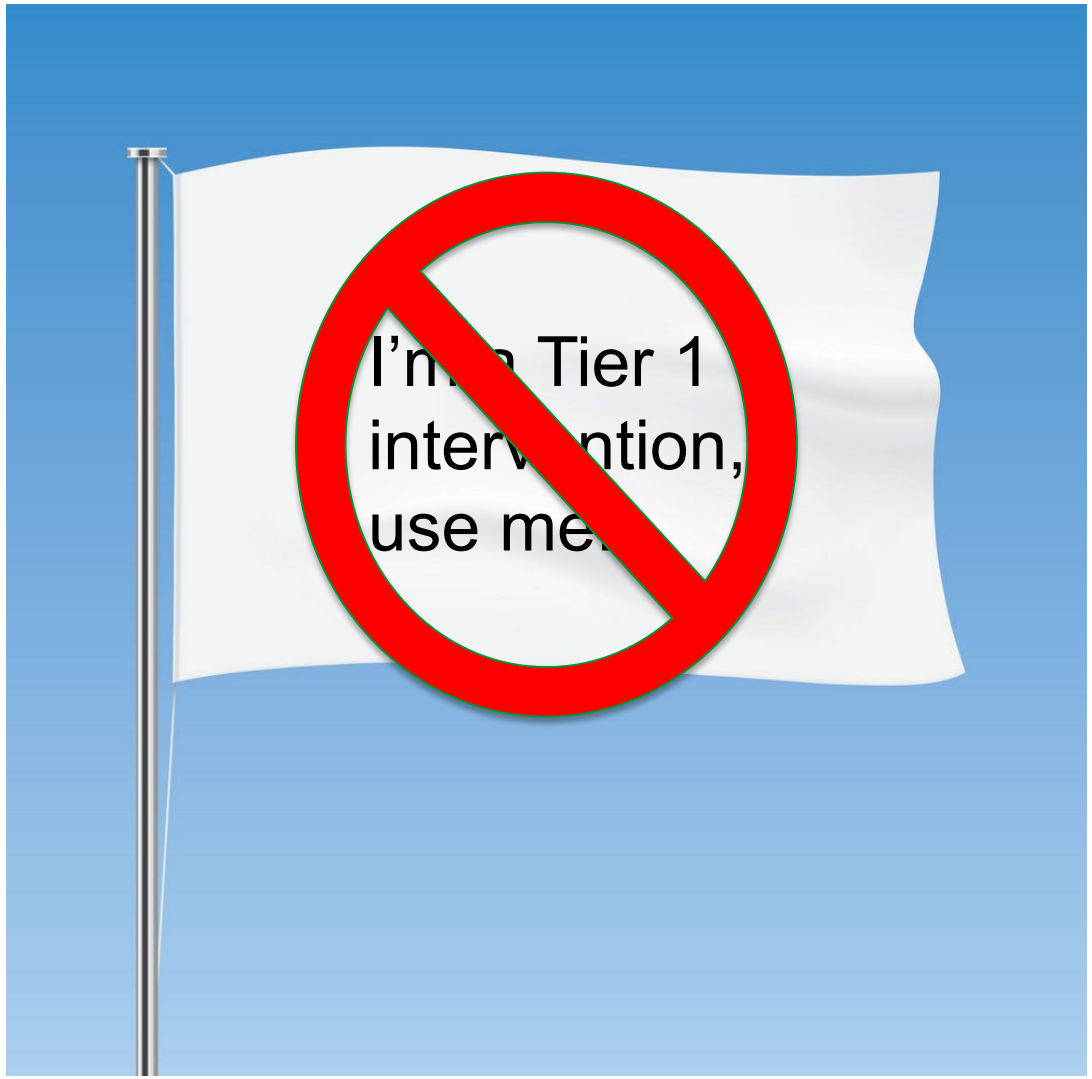
Evidence Requirements, cont.

- **Title V, Perkins Act.**
  - Professional development for career and technical education (CTE) must be EBPs.
  - Title I innovation for CTE proposal must include EBPs.

What is an outcome?

An outcome can be directly **tested** and **measured quantitatively** (for example, attendance, test scores) or **qualitatively** (such as measures of school climate).

The outcome is the **effect of the intervention** being studied.


Tier 1
use me!

How Do I Know Which Tier?

Deciding whether a study is well **designed** and well **implemented** requires a review against What Works Clearinghouse (WWC) standards..

Key terms

Treatment group

also known as intervention group; receives the intervention, practice, strategy, or program

Control group

does not receive the intervention, practice, strategy, or program

Statistically significant effect

a high probability that there is a difference between the groups

Random assignment

- a method of assigning people (or schools) to treatment and control groups
- must be present in experimental studies
- must take place before groups are formed and before the intervention begins

Key terms

Statistically significant effect

Example: Third-grade students who participated in a new mathematics program had significantly higher standardized test scores ($M = 361$) than students who did not participate ($M = 352$; $p < 0.05$).

A 95% (or higher) chance that there is a difference between the two groups

—OR—

A 5% (or lower) chance that there is no difference

Tier 1: Strong evidence

Well-executed **experimental** study

Statistically **significant favorable** effect on a **relevant** outcome

No overriding **negative effects** from experimental or quasi-experimental studies

Large, multisite sample (250 subjects, 2 or more sites)

Both **population and setting** in the study are similar to your population and setting.

Tier 2: Moderate evidence

Well-executed **experimental or quasi-experimental** study

Statistically **significant favorable** effect on a **relevant** outcome

No overriding **negative effects** from experimental or quasi-experimental studies

Large, multisite sample

Either **population or setting** in the study are similar to your population and setting.

Tier 3: Promising evidence

Well-designed, well-implemented **correlational** study

Statistically **significant favorable** effect on a **relevant** outcome

No overriding **negative effects** from experimental or quasi-experimental studies

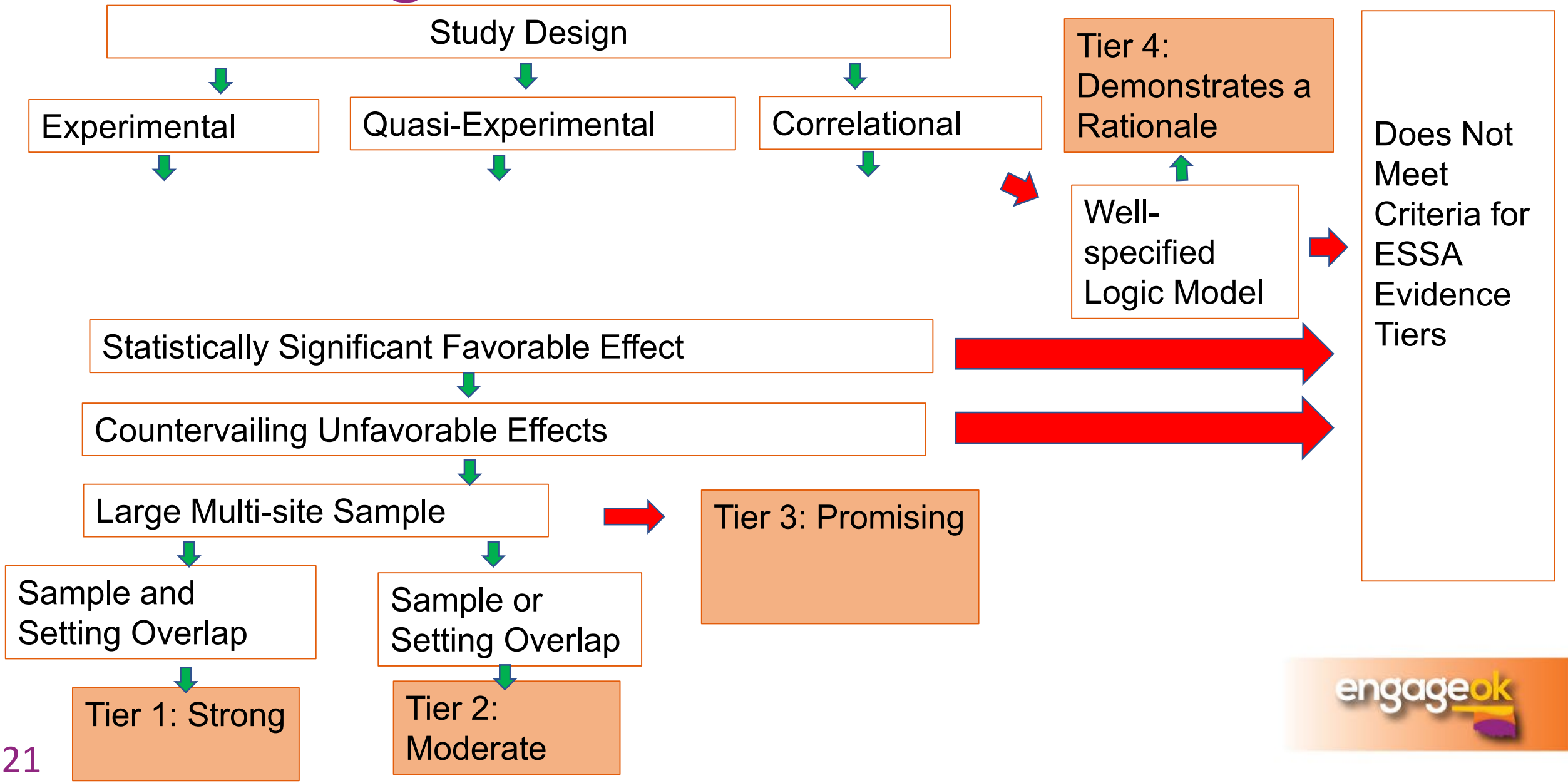
Tier 3: Promising evidence

A study that would otherwise meet Tier 1 or Tier 2 but does not meet the **large, multisite sample** requirement or the **population/setting** overlap requirement.

Tier 4: Demonstrates a rationale

- A well-specified **logic model** explains how the intervention is **likely to improve** outcomes.
- It is supported by rigorous **research in the field**.
- A study that would otherwise meet Tier 1, 2, or 3 but does **not** meet the **significant favorable** effect requirement for those tiers.
- An effort to study the effects is **currently or will be underway.**

Determining Tier of Evidence



QuEST-Experimental Study

Criteria	Outcome-specific information
Outcome	Improved general reading achievement
Design standards	Meets standards without reservations
Outcomes	Significant + positive
Countervailing outcomes	None
Sample and Population	Population match only
Sample size	562
Setting	Multisite

Tier rating: 2 (Moderate)

Teacher peer coaching support-Experimental Study

Criteria	Outcome-specific information
Outcome	Increased instructional effectiveness
Design standards	Meets standards without reservations
Outcomes	Significant + positive
Countervailing outcomes	None
Sample and Population	Setting match only
Sample size	81
Setting	Multisite

Tier rating: 3 (Promising)

Mailings home-Experimental Study

Criteria	Outcome-specific information
Outcome	Decreased absenteeism
Design standards	Meets standards without reservations
Outcomes	Significant + positive
Countervailing outcomes	None
Sample and Population	Population and Setting match
Sample size	1,054
Setting	Multisite

Tier rating: 1 (Strong)

Texting with parents-Logic Model

Criteria	Outcome-specific information
Outcome	Increased scores on mathematics standardized assessments
Design standards	Meets standards with reservations
Outcomes	Not significant
Countervailing outcomes	None
Sample size	925
Setting	Multisite

Tier rating: Does Not Meet

Evidence clearinghouses

- What Works Clearinghouse
- Evidence for ESSA
- Top Tier Evidence: Social Programs That Work
- Blueprints Programs
- Crime Solutions
- ArtsEdSearch
- ERIC (research database, not a clearinghouse)

Currently, What Works Clearinghouse and Evidence for ESSA are aligned with ESSA requirements.

Using What Works Clearinghouse To Find Evidence-based Interventions

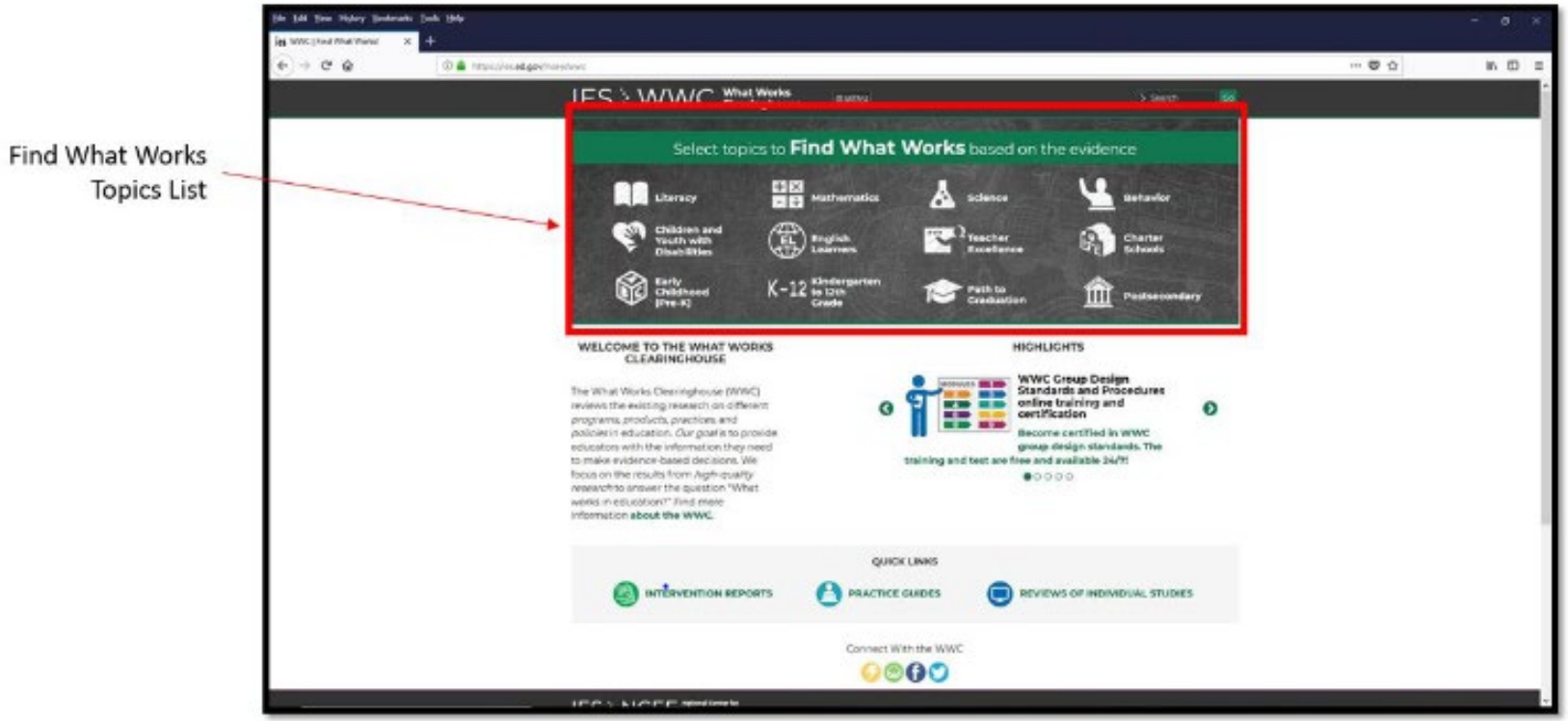
Adapted from KY Department of Education EBI User Guide

Step One
Identifying Interventions

Step One: Access the What Works Clearinghouse website.

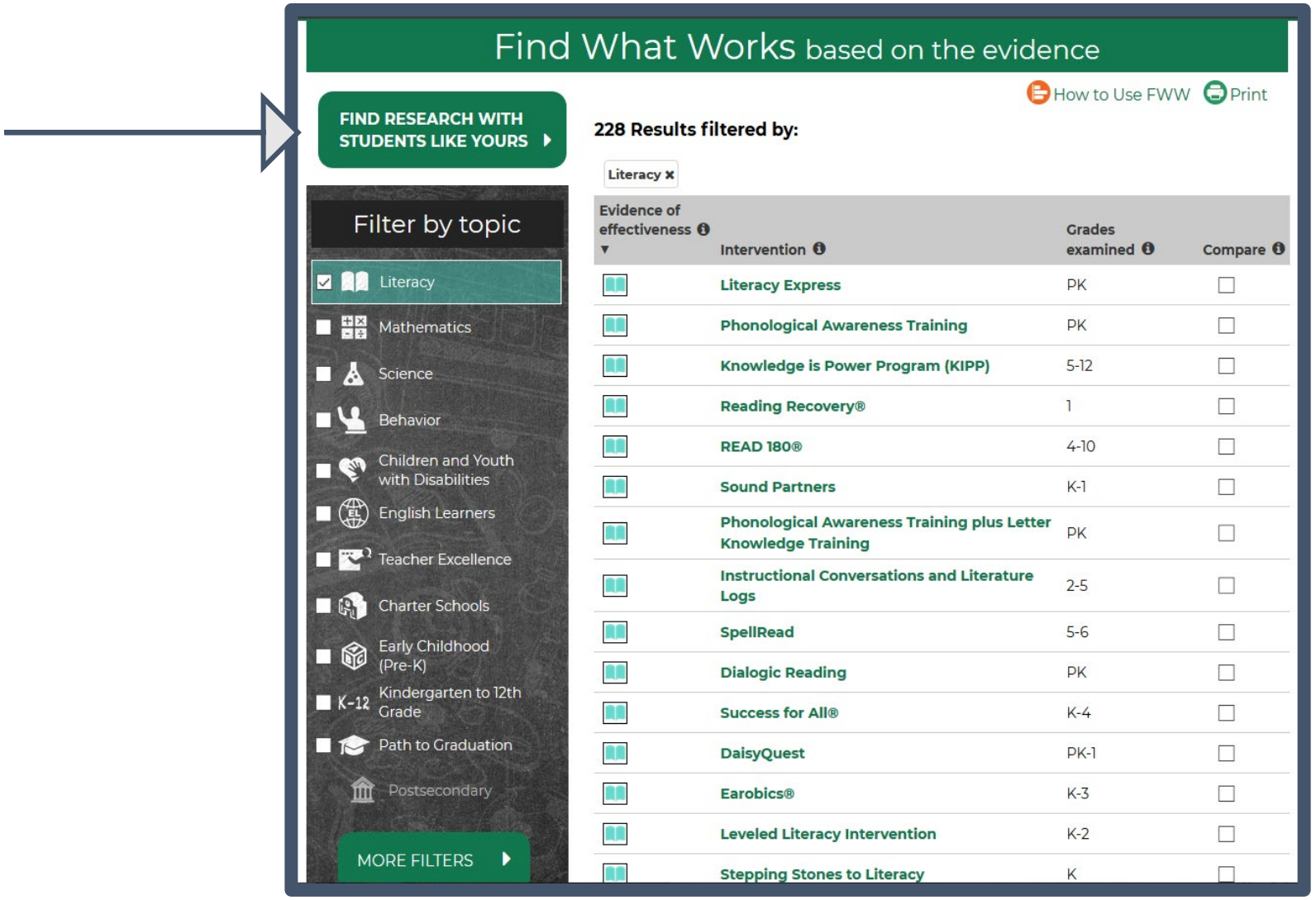
https://ies.ed.gov/ncee/wwc/

Step 2: Select a topic from the “Find What Works” topic list.

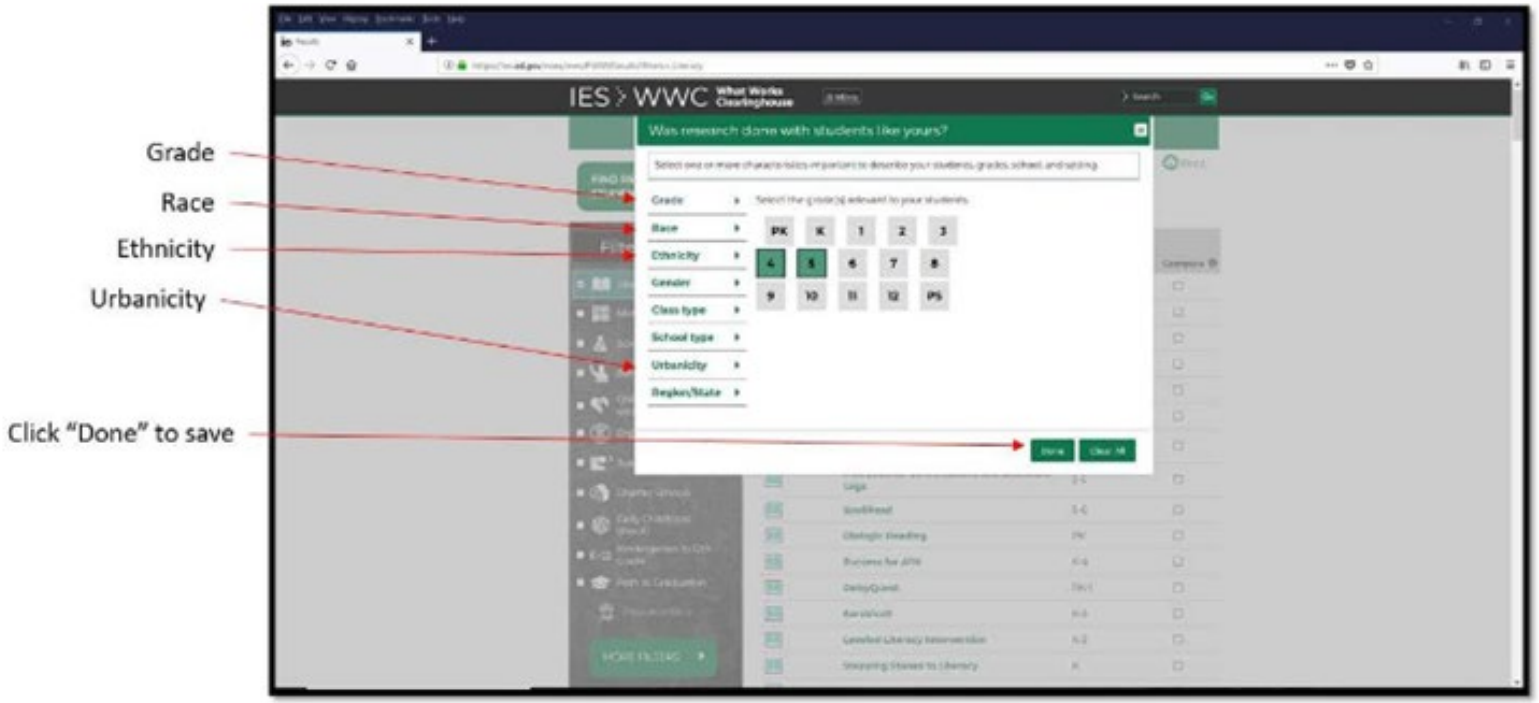


Source: https://ies.ed.gov/ncee/wwc/

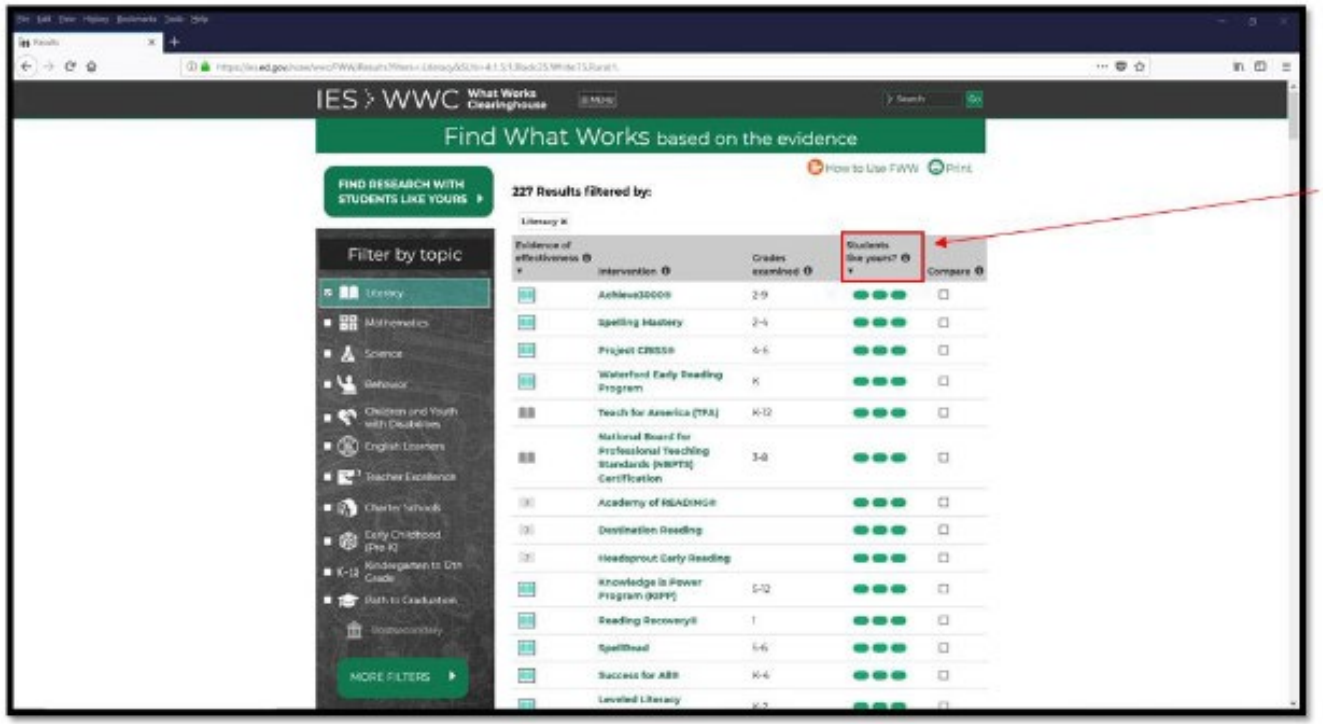
Step 3: Select the “Find Research with Students Like Yours” button.



Step 4: Build a profile of your school. Be sure to include at least grade levels, race, ethnicity and urbanicity. Click “Done” to save.

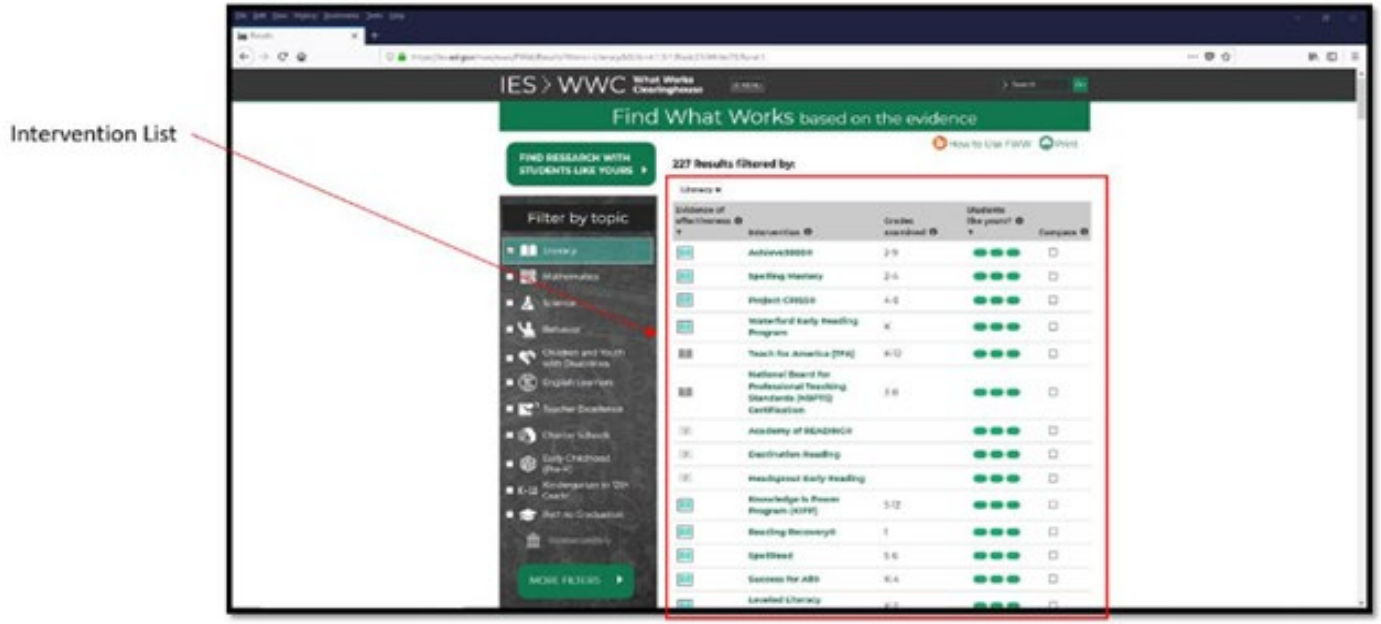


Step 5: Sort the students by clicking the “Students Like Yours” label in the header row.



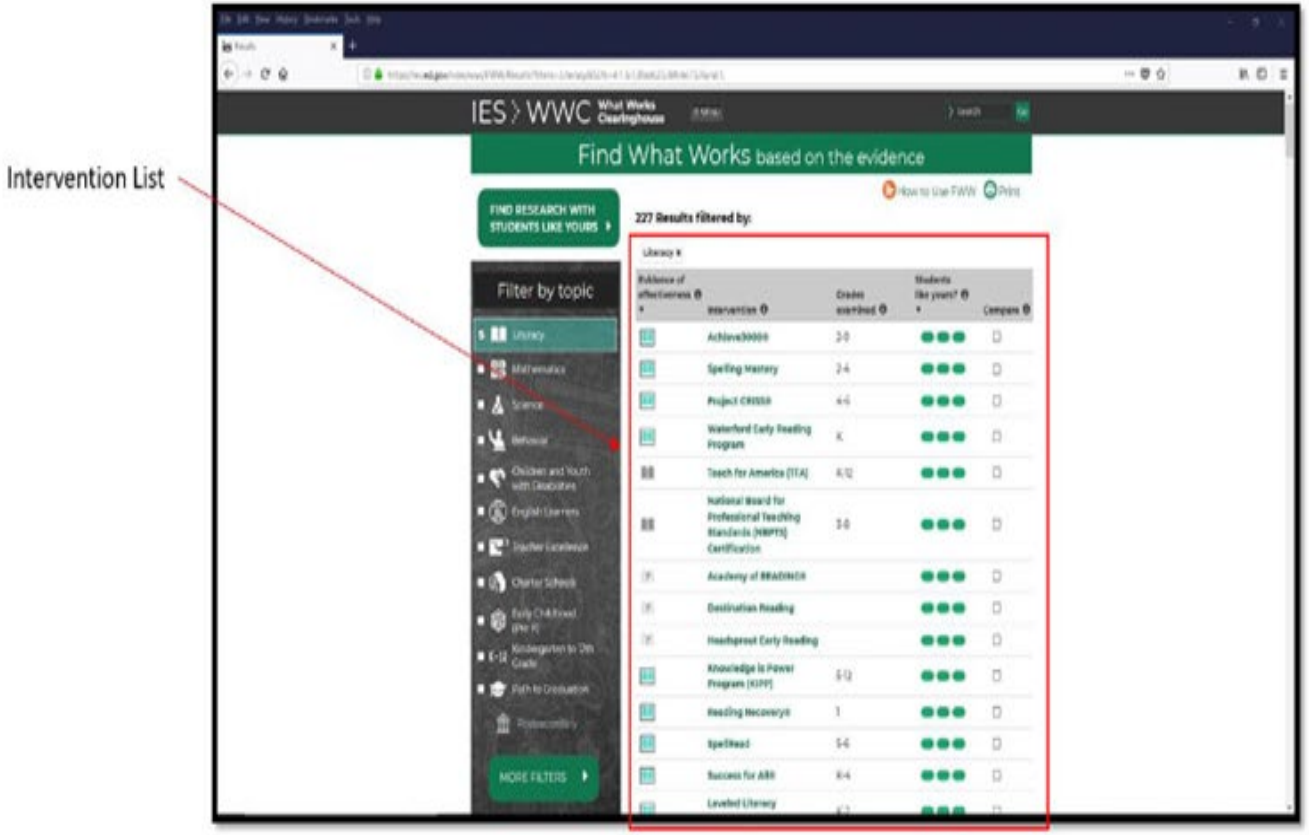
Step 6: Review the results to select an intervention. Use the guidelines below to determine if the intervention meets ESSA Evidence Criteria for Level I, II, or IV. You will not find Level

ESSA Evidence Level I	ESSA Evidence Level II	ESSA Evidence Level IV
Interventions with a colored icon and **three colored ovals** are likely to be based on Level I evidence.	Interventions with a colored icon and **two colored ovals** are likely to be based on Level II evidence.	Interventions with a colored icon and only **one colored oval** are likely to be based on Level IV evidence.

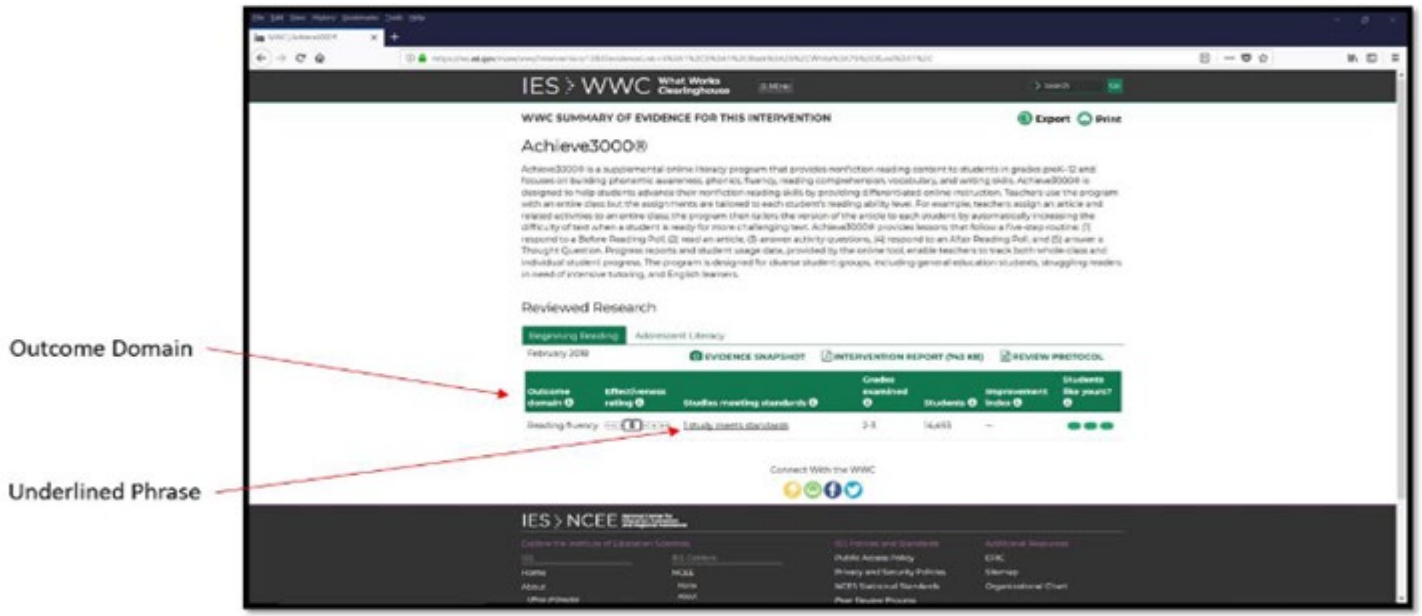


Step 2
Verify the Evidence Level

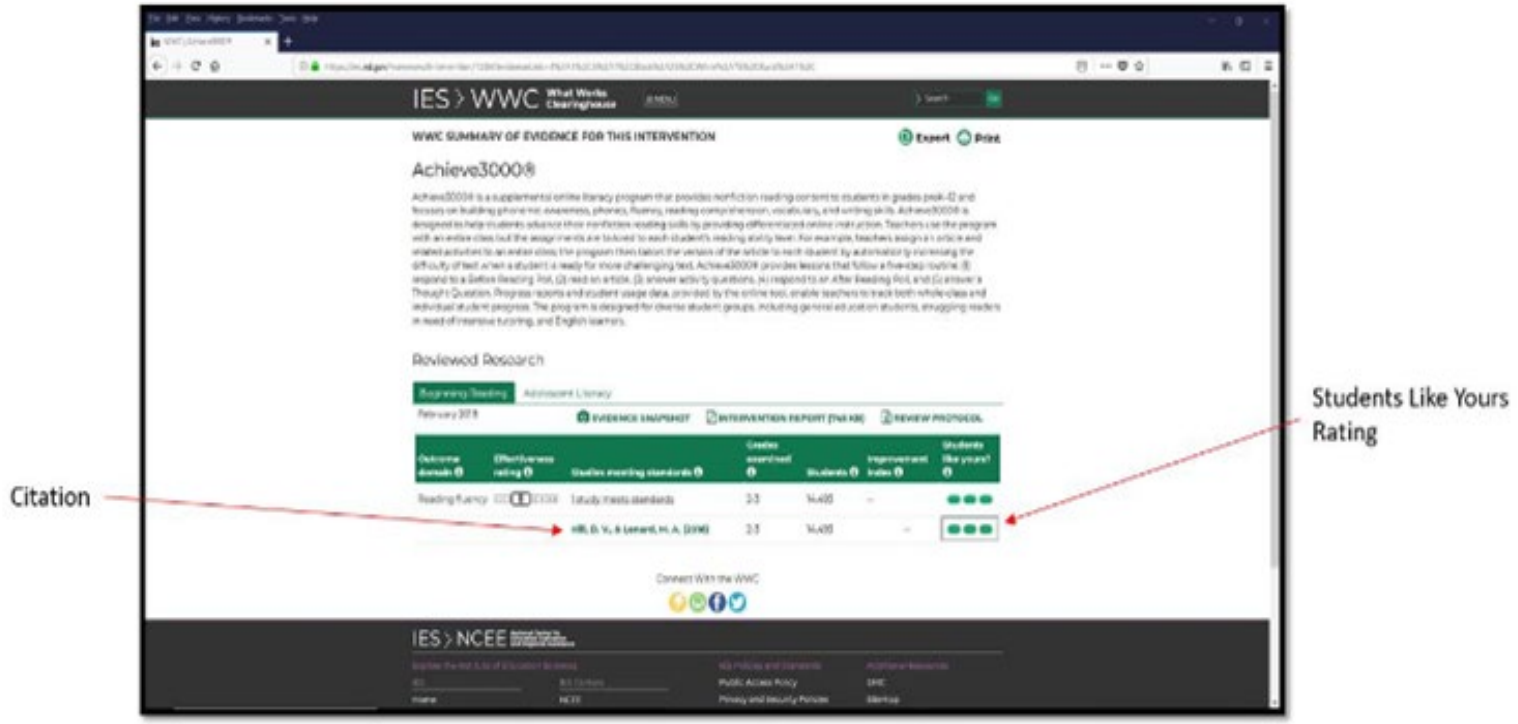
Step 1: Select the intervention from the list.



Step 2: Identify the desired outcome domain and select the underlined phrase "__ studies meet standards". Please note: If the intervention you selected does not have a list of studies, that means the intervention in not supported by evidence. Go back to the list and select a different intervention.

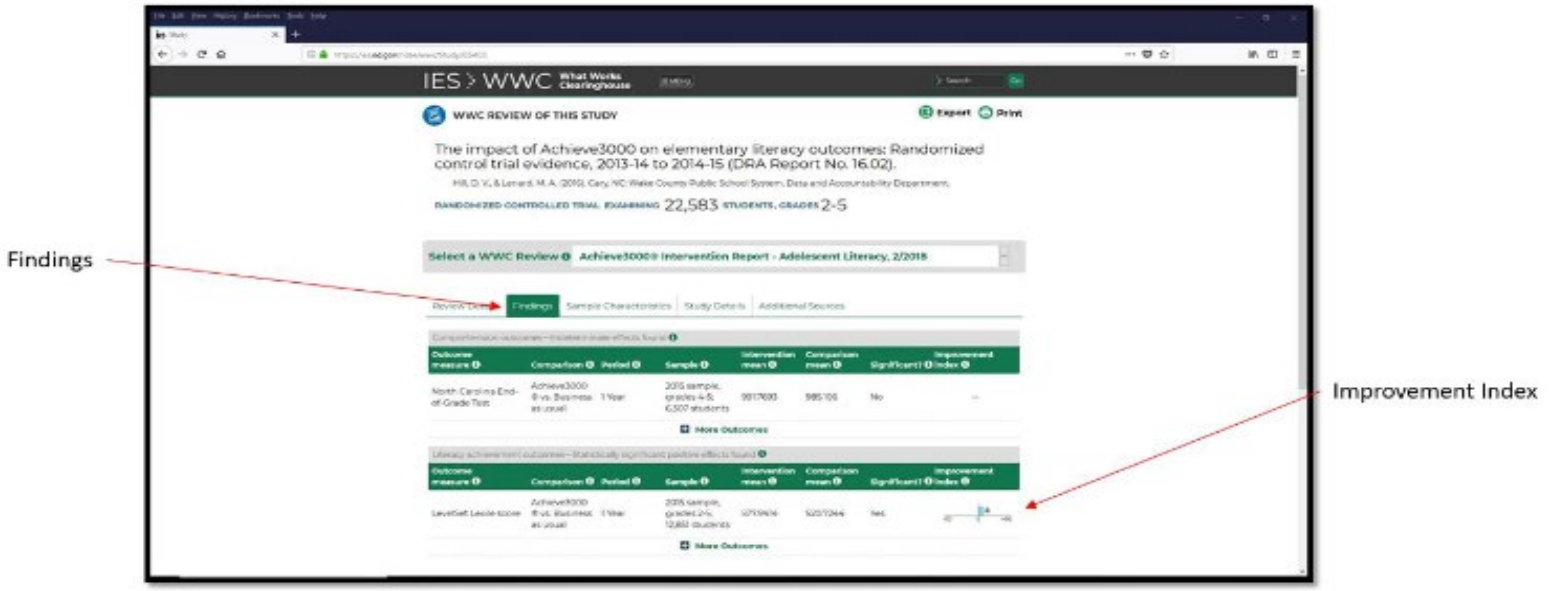


Step 3: Select the citation with the highest “Students Like Yours” rating indicated by green ovals.



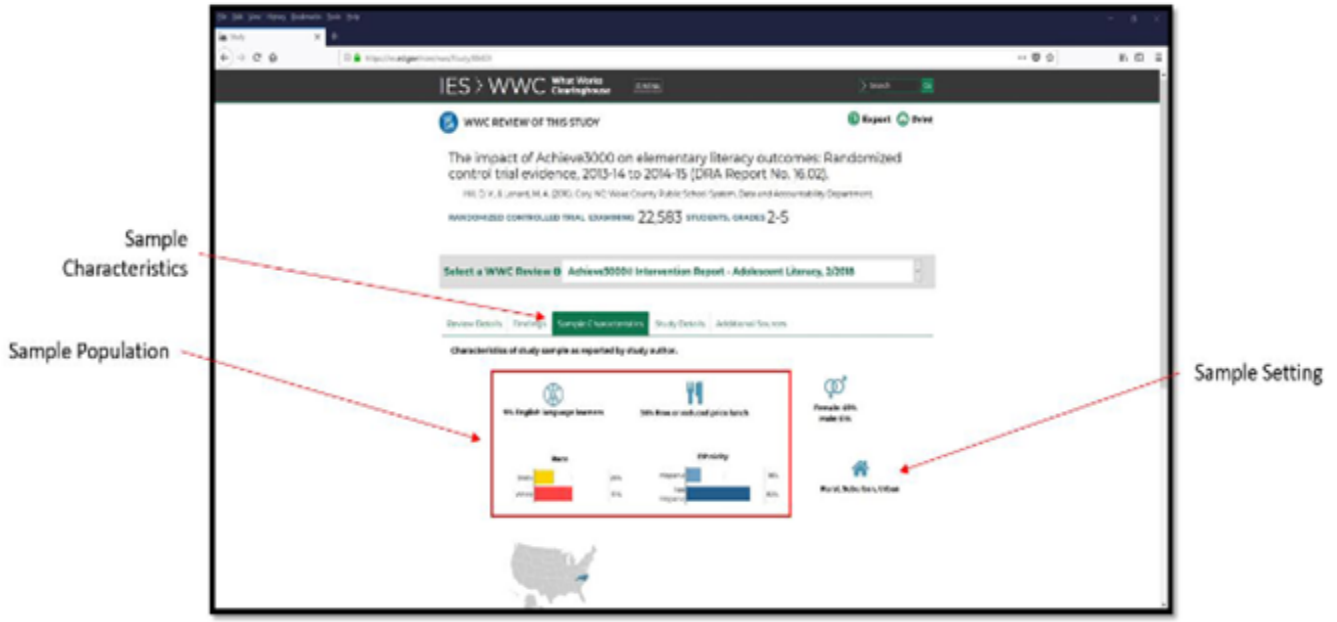
Step 3
Review the Study

Step 1: Select the “Findings” from the menu bar and view the improvement index to ensure that the intervention has demonstrated improvement in student outcomes. If it does not demonstrate positive effects on student outcomes, it does not meet the evidence criteria.

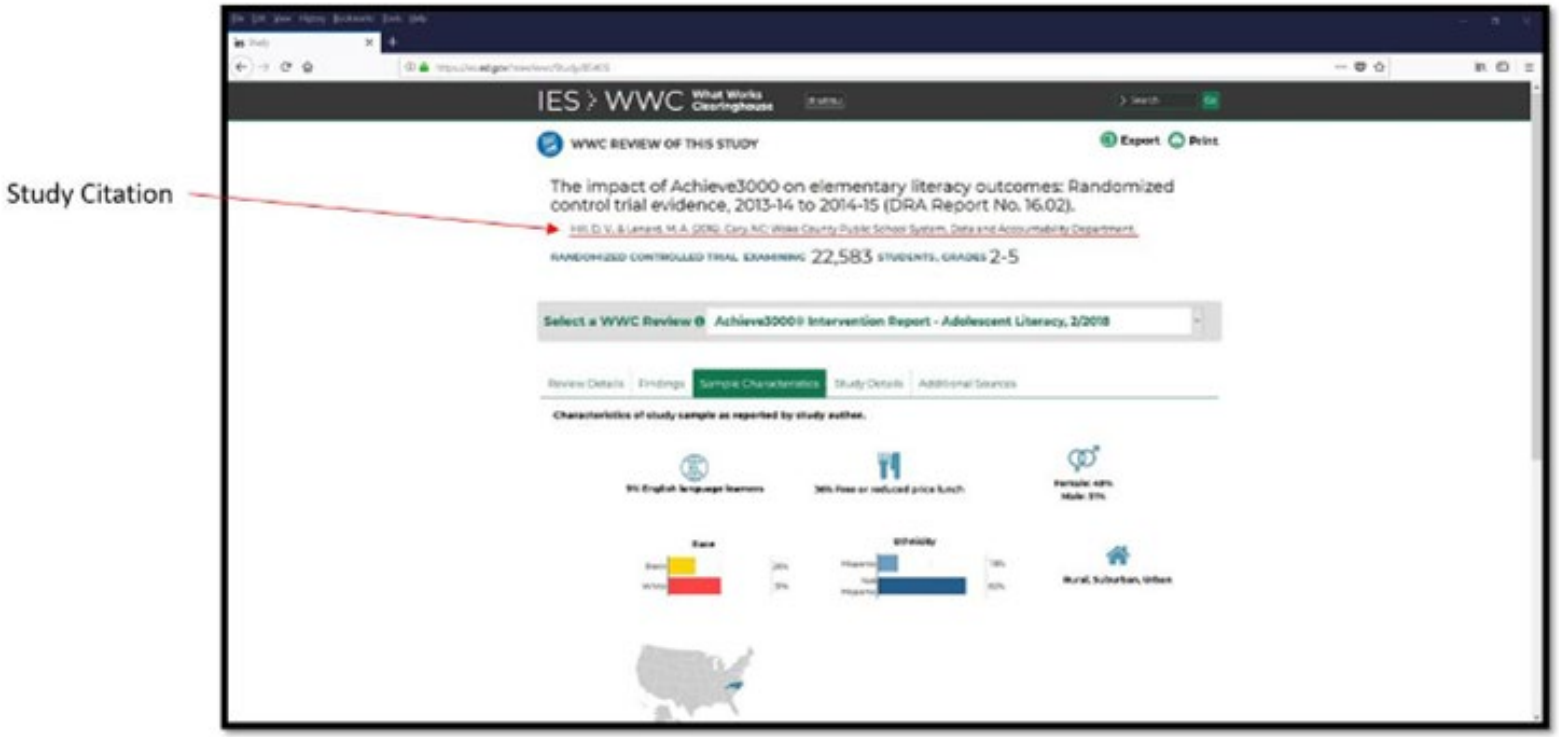


Step 2: Select “Sample Characteristics” from the menu bar to ensure that the study reflects your student population and setting.

ESSA Evidence Level I	ESSA Evidence Level II	ESSA Evidence Level IV
The “Sample Characteristics” align with both the student population **AND** the setting of your school.	The “Sample Characteristics” align with either the student population **OR** the setting of your school.	The “Sample Characteristics” does **NOT** align with either the student population or the setting of your school.



Step 3: If the study meets the desired evidence level, document the source of the study and citation to support the selection of the intervention.



Evidence-Based Practices

Ratings of evidence imply that the recommended strategies, programs, or practices improve student outcomes for a wide population of students. In other words, there is strong causal and generalizable evidence.

What Works Clearinghouse

WWC Evidence-based

IES WWC What Works Clearinghouse ☰ MENU Search Go

PRACTICE GUIDES

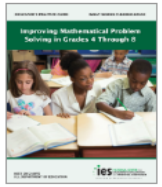
A practice guide is a publication that presents recommendations for educators to address challenges in their classrooms and schools. They are based on reviews of research, the experiences of practitioners, and the expert opinions of a panel of nationally recognized experts.

To search by Topic or Keyword, use the **Practice Guide Search**.

Instructional Tips for Teaching Elementary School Students to Be Effective Writers

Evidence-based tips based on recommendations from the WWC practice guide.

All of the WWC Practice Guides are listed below in chronological order, by date of release.



Improving Mathematical Problem Solving in Grades 4 Through 8

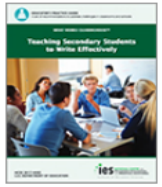
Released: October 2018 * Revised

Preventing Dropout in Secondary Schools

Released: September 2017

Strategies for Postsecondary Students in Developmental Education–A Practice Guide for College and University Administrators, Advisors, and Faculty

Released: November 2016



Teaching Secondary Students to Write Effectively

Released: November 2016

Foundational Skills to Support Reading for Understanding in Kindergarten Through 3rd Grade

Released: July 2016* Revised

Teaching Strategies for Improving Algebra Knowledge in Middle and High School Students

Released: April 2015

(see WWC Practice Guides)

WWC Evidence-based Practice Guides

PRACTICE GUIDE

Preventing Dropout in Secondary Schools

Released: September 2017

PDF (4.4 MB)

Recommendations | Details | Panel

This practice guide provides school educators and administrators with four evidence-based recommendations for reducing dropout rates in middle and high schools and improving high school graduation rates. Each recommendation provides specific, actionable strategies; examples of how to implement the recommended practices in schools; advice on how to overcome potential obstacles; and a description of the supporting evidence.

1	2	3	4
Monitor the progress of all students, and proactively intervene when students show early signs of attendance, behavior, or academic problems.	Provide intensive, individualized support to students who have fallen off track and face significant challenges to success.	Engage students by offering curricula and programs that connect schoolwork with college and career success and that improve students' capacity to manage challenges in and out of school.	For schools with many at-risk students, create small, personalized communities to facilitate monitoring and support.
MINIMAL EVIDENCE	MODERATE EVIDENCE	STRONG EVIDENCE	MODERATE EVIDENCE
▾ Show More	▾ Show More	▾ Show More	▾ Show More

Evidence Based Practices

bit.ly/EBPractices

- **Foundational Skills** to Support Reading for Understanding in K through 3rd Grade (July 2016)

Recommendations	Strong Evidence	Moderate Evidence	Minimal Evidence	Minimal Evidence
Teach students academic language skills, including the use of inferential and narrative language, and vocabulary knowledge.			X	X
Develop awareness of the segments of sounds in speech and how they link to letters.	X			
Teach students to decode words, analyze word parts, and write and recognize words.	X			
Ensure that each student reads connected text every day to support reading accuracy, fluency, and comprehension.		X		

Evidence Based Practices

Preventing Dropout in Secondary Schools

Recommendation:	Levels of Evidence		
	Strong Evidence	Moderate Evidence	Minimal Evidence
1. Monitor the progress of all students, and proactive early sig academi			
2. Provid to stude face sigr			
3. Engage students by offering curricula and programs that connect schoolwork with college and career success and that improve students' capacity to manage challenges in and out of school.	❖		
4. For schools with many at-risk students, create small, personalized communities to facilitate monitoring and support.		❖	

3. Engage students by offering curricula and programs that connect schoolwork with college and career success and that improve students' capacity to manage challenges in and out of school.

Alignment between clearinghouses and evidence tiers

- Currently, few of the clearinghouses **identify the alignment** with the ESSA tiers of evidence.
- Just because a **practice is reviewed** on a clearinghouse does not mean that the practice **meets** evidence requirements.
- Just because a **practice is not revi**ewed on a clearinghouse does **not** mean that the practice meets evidence requirements.
- Some analysis is required when you use the clearinghouse to determine if tiers are met.

Evidence clearinghouses

- What Works Clearinghouse
- Evidence for ESSA
- Top Tier Evidence: Social Programs That Work
- Blueprints Programs
- Crime Solutions
- ArtsEdSearch
- ERIC (research database, not a clearinghouse)

External Providers
and
Tiers of Evidence:
A Rigorous Review Process

Recommendations adapted from **Guide to Working with External Providers** from the American Institutes for Research (AIR)

Critical Characteristics of High-Quality Provider Services

- **Customized** approach as defined by the comprehensive needs assessment, SMART goals and action plan
- **Aligned** activities that support goals and action plans
- **Long term** strategies for school improvement
- **Evidence based** services that meet Tier 1,2, or 3 criteria
- **Capacity building** with leaders, teachers, and school personnel to carry out and continue the scope of work in the future
- **Professional development** must match and support SMART goals and action steps
- **Stakeholder engagement** proposal to involve students, parents, teachers, and community members

EXTERNAL PROVIDER RUBRIC

Scoring	4	2	0
Delivery of Services (Meets site needs, cost, timeline, delivery methods)	Provider submits a proposal that meets the identified needs of the school, including cost, timeline of services, and delivery methods.	Provider submits a proposal that has some, but not all, of the delivery of services components.	Provider submits a proposal that has none of the delivery of services components.
Alignment	Provider submits a proposal that fully aligns to the SMART goals set by the school as identified in the Comprehensive Needs Assessment, and services fully align to district goals.	Provider submits a proposal that partially aligns to the SMART goals set by the school as identified in the Comprehensive Needs Assessment and partially aligns with the district goals.	Provider submits a proposal NOT aligned to any of the SMART goals set by the district or school as identified in the Comprehensive Needs Assessment.
Long Term	Provider submits a proposal that provides a plan for long-term sustainability of improvement.	Provider submits a proposal that provides a plan for a 2-3-year term of sustainability.	Provider submits a proposal that does not include a plan for long-term sustainability of improvement.
***Customized**	Provider submits a proposal that is customized to the SMART goals set by the school as identified in the Comprehensive Needs ment.	Provider submits a proposal partially customized to SMART goals as identified in the Comprehensive Needs A t.	Provider does not submit a proposal customized to the SMART goals set by the school as identified in the Comprehens ds Assessment.
Stakeholder Engagement	Provider submits sal that offers a viable plan for en t and buy-in from key stakeholders g strategies and methods th takeholder coll on.	Provider submit sal that offers a partial plan for s er engagement with minimal or gies or methods for stake boration.	Provider sub posal that does not offer stakeholder ent
***Evidence Based**	Provider submits a proposal with services that are evidence based and meet either Tier 1 (strong) or Tier 2 (moderate) criteria, and are aligned with the top priorities and goals for the school.	Provider submits a proposal with services that are evidenced based and meet Tier 3 (promising) criteria, and are aligned with the top priorities and goals for school.	Provider submits a proposal with services that are NOT evidence based and do NOT meet either Tier 1 (strong), Tier 2 (moderate), or Tier 3 (promising) criteria.

EXTERNAL PROVIDER RUBRIC

Capacity Building	Provider submits a proposal that will build the leadership, teacher, and school's capacity to carry out similar work in the future.	Provider submits a proposal that has limited potential to build the school's capacity to carry out similar work in the future.	Provider submits a proposal that does not address building the school's capacity to carry out similar work in the future, nor does the provider have the capacity to successfully deliver on the scope of work.
Provider Capacity	Provider has the capacity to successfully deliver the scope of work; to implement a variety of effective, student-centered, culturally responsive strategies; and can provide demonstrated positive results with work from other districts and schools with similar demographics.	Provider has limited capacity for delivering the scope of the work and does not offer a variety of strategies. The demonstrated results from other districts do not match the demographics of our school.	The provider submits a proposal that does not meet the scope of work for our school and does not have effective, student-centered, culturally responsive strategies. The provider cannot demonstrate positive results from other districts or schools.
Professional Development	Provider submits a proposal that outlines how the PD provided will enhance teachers' skills in the classroom and will increase student achievement.	Provider submits a proposal that outlines EITHER how the PD provided will enhance teachers' skills in the classroom OR will increase student achievement.	Provider submits a proposal that does not outline how the PD provided will enhance teachers' skills in the classroom and is not correlated to an increase in student achievement.
Evaluation and Monitoring Tool	Provider has a comprehensive, ongoing system to measure and monitor the performance of services and provides documentation to the school.	Provider has a system to measure the performance of services provided.	Provider has no system in place to evaluate the performance of services.

***Must score a 2 or 4 in these performance descriptors**

EXTERNAL PROVIDER RUBRIC

Scoring Rubric For Rating Provider Services		
34- 40	Provider meets most of the high-performing criteria on rubric.	
28- 32	Provider meets some performance criteria on rubric and needs to revise to be considered.	
28 - 0	Provider does not meet most criteria on rubric and cannot be considered.	

External Providers must be reviewed each year.

School Support Resources

https://sde.ok.gov/school-support

https://sde.ok.gov/continuous-improvement

http://bit.ly/EvidenceEngage

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