Process to Select Relevant, Evidence-Based Interventions

<u>Prerequisite:</u> Complete Comprehensive-Literacy Gap Analysis

After you have completed the Comprehensive-Literacy Gap Analysis and have identified needed interventions for improving comprehensive literacy instruction, use the steps below as the Process to Select Relevant, Evidence-Based Interventions. The steps will help you choose an intervention that aligns with your Local Literacy Plan, supported by moderate evidence or strong evidence that is differentiated and appropriate for your children and students, and is relevant to your local project and identified needs.

<u>Step 1:</u> Research and identify interventions that are supported by strong or moderate evidence.

Refer to research necessary to identify relevant interventions that are supported by moderate or strong evidence. The Office of Public Instruction recommends What Works Clearinghouse or the practice guides from the Institute on Education Sciences. These two sources provide an easy way to justify moderate or strong evidence in your MCLP Subgrantee Grant Application. If subgrantees choose to use other sources to select relevant, evidence-based interventions, additional validation demonstrating moderate or strong evidence will be required (i.e., attaching the study as an appendix).

- What Works Clearinghouse (WWC) https://ies.ed.gov/ncee/wwc/
- Institute on Education Sciences Resources such as their Practice Guides https://ies.ed.gov
- Or other reputable source for interventions. Be sure the research study from these sources demonstrates moderate evidence or strong evidence.
  - ERIC: https://eric.ed.gov/
  - JSTOR: http://www.jstor.org/action/showAdvancedSearch
  - Google Scholar: www.google.com/scholar
  - Blueprints for Healthy Youth Development Database: www.blueprintsprograms.com/
  - Results First Clearinghouse http://www.pewtrusts.org/en/research-and-analysis/issue-briefs/2014/09/results-first-clearinghouse-database

Definitions of Evidence
- Is there at least one well-designed and well-implemented experimental study and a summary of the research included? [Strong evidence–meets MCLP Grant priority]
- Is there moderate evidence from at least one well-designed and well-implemented quasi-experimental study? [Moderate evidence—meets MCLP Grant priority]
- Was there promising evidence from at least one well-designed and well-implemented correlational study with statistical controls for selection bias? [Promising evidence–does not meet MCLP Grant priority]

Step 2: Determine if an intervention that is supported by moderate or strong evidence is differentiated, appropriate, and relevant to your proposed project and identified needs.

After determining that an intervention is supported by moderate or strong evidence, determine if the intervention is differentiated and appropriate for the grade-level and relevant to the proposed local project and identified needs. Use the following questions to help guide your selection.

Differentiated and Appropriate
- Is the intervention appropriate for children birth through age 5?
  - Is the intervention differentiated for the disadvantaged subgroup(s) (e.g., children living in poverty, English Learners, and children with disabilities)?
  - Does the study support the need for differentiated instruction with additional time to ensure effectiveness of the intervention?
  - Does the study support the need for differentiated instruction with more teacher support leading with a gradual release of responsibility to ensure effectiveness of the intervention?
  - Does the study support the need for differentiated instruction with more opportunities to respond to ensure effectiveness of the intervention?
  - Does the study support the need for differentiated instruction with immediate feedback to ensure effectiveness of the intervention?
- Is the intervention appropriate for students in kindergarten through fifth grade?
  - Is the intervention differentiated for the disadvantaged subgroup(s) (e.g., children living in poverty, English Learners, and children with disabilities)?
  - Does the study support the need for differentiated instruction with additional time to ensure effectiveness of the intervention?
  - Does the study support the need for differentiated instruction with more teacher support leading with a gradual release of responsibility to ensure effectiveness of the intervention?
  - Does the study support the need for differentiated instruction with more opportunities to respond to ensure effectiveness of the intervention?
  - Does the study support the need for differentiated instruction with immediate feedback to ensure effectiveness of the intervention?
- Is the intervention appropriate for middle school students?
  - Is the intervention differentiated for the disadvantaged subgroup(s) (e.g., children living in poverty, English Learners, and children with disabilities)?
  - Does the study support the need for differentiated instruction with additional time to ensure effectiveness of the intervention?
  - Does the study support the need for differentiated instruction with more teacher support leading with a gradual release of responsibility to ensure effectiveness of the intervention?
  - Does the study support the need for differentiated instruction with more opportunities to respond to ensure effectiveness of the intervention?

- o Does the study support the need for differentiated instruction with immediate feedback to ensure effectiveness of the intervention?
- Is the intervention appropriate for high school students?
    - o Is the intervention differentiated for the disadvantaged subgroup(s) (e.g., children living in poverty, English Learners, and children with disabilities)?
    - o Does the study support the need for differentiated instruction with additional time to ensure effectiveness of the intervention?
    - o Does the study support the need for differentiated instruction with more teacher support leading with a gradual release of responsibility to ensure effectiveness of the intervention?
    - o Does the study support the need for differentiated instruction with more opportunities to respond to ensure effectiveness of the intervention?
    - o Does the study support the need for differentiated instruction with immediate feedback to ensure effectiveness of the intervention?

Relevancy
- Does the study address the additional gaps identified from the Comprehensive-Literacy Gap Analysis such as:
    - o Did the study include similar disadvantaged subgroup(s) (e.g., children living in poverty, English Learners, and children with disabilities) as yours?
    - o Did the study include similar populations as yours with strong or moderate evidence that the intervention will be effective (i.e., high EL population)?
    - o Did the study include a similar sized school as yours with strong or moderate evidence that the intervention will be effective (i.e., one room schoolhouse, multiple classrooms per grade level)?
    - o Did the study include similar geographical areas as yours with strong or moderate evidence that the intervention will be effective (i.e., rural, urban)?
    - o Did the study include similar schedule designs as yours with strong or moderate evidence that the intervention will be effective (i.e., four-day or five-day/week or 20 minute intervention time three times/week or 30 minutes. every day of the week)?

Step 3: Determine capacity to implement possible intervention.

Once you have identified interventions that are supported by strong or moderate evidence, differentiated and appropriate for age or grade level, and relevant for your school population, determine the local capacity for implementing the intervention.
- Is there enough funding?
- Is there enough staff to implement the intervention?
- Do current staff have the skills necessary to implement the intervention with fidelity?
- Is there buy-in and support from stakeholders (i.e., teachers, parents, school board, administration, and support staff) for implementing the intervention?

- Is the criteria of the intervention (technology, space, materials, etc.) feasible to implement with fidelity?
- What professional development will be necessary to implement the intervention with fidelity?

Step 4: Choose whether or not to select the intervention.

In reviewing all of the questions from steps 1-3, decide if the intervention will work for the needs identified in your Comprehensive-Literacy Gap Analysis.

- Yes, write it into your MCLP Subgrantee Grant Application.
- If not, begin the Process to Select Relevant, Evidence-Based Interventions.

How to Use What Works Clearinghouse (WWC)

The following is an example of how to identify the effectiveness of a current intervention for a disadvantaged subgroup(s) or to determine which intervention best meets the needs of a disadvantaged subgroup(s) using the WWC:

a) Go to the WWC website: https://ies.ed.gov/ncee/wwc/.
b) Select topics to find what works based on strong or moderate evidence, i.e., *Literacy*.
c) Review the list of interventions and ensure the grade is in the range of grades for the students examined in the studies that met WWC design standards.
d) Check the icon to ensure the evidence of effectiveness in the topics selected have a colored icon with a box indicating a positive (strong evidence) or potentially positive (moderate evidence) effect on outcome for that topic. A grey icon with no box indicates a lack of positive effects. The interventions are listed in order based on the amount of evidence.
e) Select the intervention being considered to best meet the needs of the students requiring the intervention, i.e., *Fast ForWord.*
f) Reflect on the Reviewed Research tabs to determine if the skills you are intending to provide has been studied. The table below indicates the outcome domains reviewed in the subcategories for identified:

Beginning Reading	Adolescent Literacy	English Language Learners
Alphabetics	Alphabetics	English language development
Comprehension	Comprehension	Reading achievement
Reading fluency	Literacy achievement	
	Reading fluency	

g) Identify what outcome domain you are reviewing for a particular group of students and review the effectiveness of the outcome domain which is a group of closely related outcomes, i.e., *English Learners* for English language development.
h) Review the effectiveness rating for the outcome domain based on the quality of research, the statistical significance of findings, the magnitude of findings, and the consistency of findings across studies. The Effectiveness Rating Key includes:
   - *Positive* (++) indicating strong evidence that intervention had a positive effect on outcomes.

- *Potentially positive* (+) indicating evidence that intervention had a positive effect on outcomes with no overriding contrary evidence.
- *Mixed* (+ -) indicating the intervention's effect on outcomes is inconsistent.
- *No Discernible* (0) indicating no evidence the intervention had an effect on outcomes.
- *Potentially negative* (-) indicating evidence the intervention had a negative effect on outcomes with no overriding contrary evidence.
- *Negative* (- -) indicating strong evidence that intervention had a negative effect on outcomes. Positive and potentially positive correlate to strong or moderate evidence in this proposal, i.e., *Potentially Positive* (+)

i) Review the studies meeting standards. This is the number of studies that met WWC design standards and provide evidence of effectiveness which then can be reviewed, i.e., studies of *Fast ForWord* for English language development K-5 indicate there was one study that met standards done by Scientific Learning Corporation.

j) To find the details of the findings, click on the study, i.e., Scientific Learning Corporation. (2004) To find the details of the review, the findings, the sample characteristics, the study details and additional resources are all available in one snapshot, click the camera icon, i.e., *Fast ForWord intervention Report–Beginning Reading.*

Review the snapshot of the study to ensure it is relevant to your group of disadvantaged subgroup(s), i.e., in 2006, Scientific Learning Corporation did a randomized controlled trial examining 426 students in Grades K-5. The details of the review indicated that *Fast ForWord Language* was found to have potentially positive effects on English language development and no discernible effects on the reading achievement of elementary school English language learners. The data shows that it was based on 100 percent Hispanic students, 53 percent male and 47 percent female, and all English Learners. It was individually delivered since it is a computer-based reading program. The improvement index was +31, which is an indicator of the size of the effect from using the intervention. It is the expected change in percentile rank for an average comparison group student if the student had received the intervention, ranging from -50 to +50. At the domain level, the improvement index is only shown if the effectiveness rating is positive, potentially positive, potentially negative, or negative; dashes are displayed for mixed or no discernible effects. At the study level, the improvement index is only shown if the findings are characterized as statistically significant or substantively important (greater than +10 or less than -10); dashes are displayed for an indeterminate effect.