



## **REL Appalachia Summary of Verified Research Findings**

Principals, Educator Effectiveness

November 2018

### **Question:**

What evidence-based interventions support the development of leadership skills in school and district administrators?

### **Response:**

Thank you for your request to our REL Reference Desk regarding evidence-based information about interventions that support the development of administrator leadership skills. To answer this question with rigorous research studies with results that were verified by independent sources, the REL Appalachia research team reviewed information from the What Works Clearinghouse (WWC) and Evidence for ESSA websites. No information about this research question was available from the Evidence for ESSA website. More details about our search process are in the databases and resources section at the end of this memo.

The summary includes hyperlinks to the WWC intervention reports and single study reviews that provide more details of the results and the research studies that support these results (exhibits 1 and 2). It also displays the criteria WWC uses to determine ratings of effectiveness of an intervention and the extent of evidence for an intervention (exhibits 3, 4, and 5).

All studies the WWC reviews must meet WWC group design standards with or without reservations. Group design standards without reservations are those that provide strong evidence for an intervention's effectiveness, such as a well-implemented randomized controlled trial. Studies meeting group design standards with reservations provide weaker evidence for an intervention's effectiveness, such as a quasi-experimental design or a randomized controlled trial with high attrition that has established equivalence of the analytic samples.

The references presented here are not necessarily comprehensive, and other relevant references and resources may exist. Interventions and references appear in alphabetical order, not necessarily in order of relevance.

**Exhibit 1. Summary of verified research findings from What Works Clearinghouse intervention reports**

Intervention	Outcome domain	Effectiveness rating	Evidence of effectiveness	Citation
<b>Green Dot Public Schools</b>	Mathematics achievement	Potentially positive effects	Small	<a href="#">U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2018, January).</a>
	Student progression	Potentially positive effects	Small	
	School attendance	Potentially positive effects	Small	
	English language arts achievement	Potentially positive effects	Small	

**Intervention descriptions from What Works Clearinghouse intervention reports**

*From the Green Dot Public Schools intervention report: “Green Dot Public Schools is a nonprofit organization that operates more than 20 public charter middle and high schools in California, Tennessee, and Washington. The Green Dot Public Schools are regulated and monitored by the local school district, but operate outside of the district’s direct control. The Green Dot Public Schools model emphasizes high quality teaching, strong school leadership, a curriculum that prepares students for college, and partnerships with the community. Any student may enroll in a Green Dot Public School if there is space available. Many Green Dot Public Schools operate with unionized teachers and staff. Several of the Green Dot Public Schools were chartered in existing public schools which were performing below district or community expectations. Funding for Green Dot Public Schools operations comes through public federal, state, and local finances, while some transformations of existing district-run schools into charter schools have been funded partly by private foundations.”*

**Exhibit 2. Summary of verified research findings from What Works Clearinghouse individual study reviews**

Intervention	Outcome domain	Characterization of findings	Citation
<b>McREL Balanced Leadership Program</b>	--*	--*	<a href="#">U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2016, February).</a>
<b>New Leaders Program</b>	Literacy achievement	Statistically significant positive effects	<a href="#">U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2018, February).</a>
	Mathematics achievement	Indeterminate effects	
<b>NISL Executive Development Program</b>	English language arts achievement	Statistically significant positive effects	<a href="#">U.S. Department of Education, Institute of Education Sciences, What Works Clearinghouse. (2014, February).</a>
	Mathematics achievement	Statistically significant positive effects	

\* The WWC review of this study did not include a summary of findings, but the study met WWC standards without reservations.

**Individual studies reviewed by What Works Clearinghouse**

Jacob, R., Goddard, R., Kim, M., Miller, R., & Goddard, Y. (2015). Exploring the causal impact of the McREL Balanced Leadership Program on leadership, principal efficacy, instructional climate, educator turnover, and student achievement. *Educational Evaluation and Policy Analysis*, 37(3), 314–332. Abstract retrieved from <https://eric.ed.gov/?id=EJ1072764>

*From the abstract:* “This study uses a randomized design to assess the impact of the Balanced Leadership program on principal leadership, instructional climate, principal efficacy, staff turnover, and student achievement in a sample of rural northern Michigan schools. Participating principals report feeling more efficacious, using more effective leadership practices, and having a better instructional climate than control group principals. However, teacher reports indicate that the instructional climate of the schools did not change. Furthermore, we find no impact of the program on student achievement. There was an impact of the program on staff turnover, with principals and teachers in treatment schools significantly more likely to remain in the same school over the 3 years of the study than staff in control schools.”

Gates, S. M., Hamilton, L. S., Martorell, P., Burkhauser, S., Heaton, P. Pierson, A.,...Gu, K. (2014). *Preparing principals to raise student achievement: Implementation and effects of the New Leaders program in ten districts*. Santa Monica, CA: RAND Corporation. Abstract retrieved from <https://eric.ed.gov/?id=ED561152>

*From the abstract:* “New Leaders is a nonprofit organization with a mission to ensure high academic achievement for all students by developing outstanding school leaders to serve in

urban schools. Its premise is that a combination of preparation and improved working conditions for principals, especially greater autonomy, would lead to improved student outcomes. Its approach involves both preparing principals and partnering with school districts and charter management organizations (CMOs) to improve the conditions in which its highly trained principals work. As part of the partnerships, New Leaders agrees to provide carefully selected and trained principals who can be placed in schools that need principals and to provide coaching and other support after those principals are placed. The districts and CMOs agree to establish working conditions that support, rather than hinder, the principals' efforts to improve student outcomes. This report describes how the New Leaders program was implemented in partner districts, and it provides evidence of the effect that New Leaders has on student achievement.”

Nunnery, J. A., Ross, S. M., Chappell, S., Pribesh, S., & Hoag-Carhart, E. (2011). *The impact of the NISL Executive Development Program on school performance in Massachusetts: Cohort 2 results*. Norfolk, VA: The Center for Educational Partnerships, Darden College of Education, Old Dominion University. Retrieved from <https://eric.ed.gov/?id=ED531042>

*From the abstract:* “School leaders are increasingly being asked, whether by rhetoric or policy, to measurably improve student achievement. The resultant need to assist school leaders in their ability to improve teaching and learning for all students in their schools led to the establishment of the National Institute of School Leadership's (NISL's) Executive Development Program. The NISL program emphasizes the role of principals as strategic thinkers, instructional leaders, and creators of a just, fair, and caring culture in which all students meet high standards. The current national focus on the importance of effective, instructional leadership has, in turn, led to calls for principal evaluation to be tied directly to student achievement (Davis, Kearney, Sanders, Thomas, and Leon, 2011). Within this milieu, effective and proven principal leadership development programs are crucial.”

**Exhibit 3. Criteria used to determine the rating of effectiveness for an intervention (intervention report)**

Rating of effectiveness	Criteria
<b>Positive effects</b>	Two or more studies show statistically significant positive effects, at least one of which met WWC group design standards for a strong design, AND no studies show statistically significant or substantively important negative effects.
<b>Potentially positive effects</b>	At least one study shows a statistically significant or substantively important positive effect, AND no studies show a statistically significant or substantively important negative effect AND fewer or the same number of studies show indeterminate effects than show statistically significant or substantively important positive effects.
<b>Mixed effects</b>	At least one study shows a statistically significant or substantively important positive effect AND at least one study shows a statistically significant or substantively important negative effect, but no more such studies than the number showing a statistically significant or substantively important positive effect, OR at least one study shows a statistically significant or substantively important effect AND more studies show an indeterminate effect than show a statistically significant or substantively important effect.
<b>Potentially negative effects</b>	One study shows a statistically significant or substantively important negative effect and no studies show a statistically significant or substantively important positive effect, OR two or more studies show statistically significant or substantively important negative effects, at least one study shows a statistically significant or substantively important positive effect, and more studies show statistically significant or substantively important negative effects than show statistically significant or substantively important positive effects.
<b>Negative effects</b>	Two or more studies show statistically significant negative effects, at least one of which met WWC group design standards for a strong design, AND no studies show statistically significant or substantively important positive effects.
<b>No discernible effects</b>	None of the studies shows a statistically significant or substantively important effect, either positive or negative.

**Exhibit 4. Criteria used to determine the extent of evidence for an intervention (intervention report)**

Extent of evidence	Criteria
<b>Medium to large</b>	The domain includes more than one study, AND the domain includes more than one school, AND the domain findings are based on a total sample size of at least 350 students, OR, assuming 25 students in a class, a total of at least 14 classrooms across studies.
<b>Small</b>	The domain includes only one study, OR the domain includes only one school, OR the domain findings are based on a total sample size of fewer than 350 students, AND, assuming 25 students in a class, a total of fewer than 14 classrooms across studies.

**Exhibit 5. Criteria used to determine the characterization of findings for an intervention (individual study review)**

Characterization of findings	Criteria
<b>Statistically significant positive effect</b>	The estimated effect is positive and statistically significant (correcting for clustering when not properly aligned).
<b>Substantively important positive effect</b>	The estimated effect is positive and not statistically significant but is substantively important.
<b>Indeterminate effect</b>	The estimated effect is neither statistically significant nor substantively important.
<b>Substantively important negative effect</b>	The estimated effect is negative and not statistically significant but is substantively important.
<b>Statistically significant negative effect</b>	The estimated effect is negative and statistically significant (correcting for clustering when not properly aligned).

**Additional What Works Clearinghouse references**

Herman, R., Dawson, P., Dee, T., Greene, J., Maynard, R., Redding, S., and Darwin, M. (2008). *Turning around chronically low-performing schools: A practice guide* (NCEE #2008-4020). Washington, DC: National Center for Education Evaluation and Regional Assistance, Institute of Education Sciences, U.S. Department of Education. Retrieved from <https://ies.ed.gov/ncee/wwc/PracticeGuide/7>

## **Databases and resources**

We searched the What Works Clearinghouse (WWC), an IES-sponsored resource that reviews existing research on education programs, products, practices, and policies to provide educators with information to make evidence-based decisions. REL AP staff identified WWC-reviewed interventions that emphasized strong leadership skills or leadership development.

We also searched the Evidence for ESSA website, a resource provided by the Center for Research and Reform in Education at Johns Hopkins University School of Education, in collaboration with a distinguished Technical Working Group and a Stakeholder Advisory Group.

Resources included in this document were last accessed on November 6, 2018. URLs, descriptions, and content included here were current at that time.

This memorandum is one in a series of quick-turnaround responses to specific questions posed by education stakeholders in the Appalachia region (Kentucky, Tennessee, Virginia, and West Virginia), which is served by the Regional Educational Laboratory Appalachia (REL AP) at SRI International. This memo was prepared by REL AP under Contract ED-IES-17-C-0004 from the U.S. Department of Education, Institute of Education Sciences, administered by SRI International. The content does not necessarily reflect the views or policies of IES or the U.S. Department of Education, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. government.