REL Appalachia Ask A REL Response

Educator Effectiveness, Teacher Workforce
April 2019

Question:

What research is available on state-level teacher leader or master teacher programs, including impacts of these programs on teacher retention and student outcomes?

Response:

Thank you for your request to our REL Reference Desk regarding evidence-based information about state-level teacher leader and master teacher programs. Ask A REL is a collaborative reference desk service provided by the 10 Regional Educational Laboratories (RELs) that, by design, functions much in the same way as a technical reference library. Ask A REL provides references, referrals, and brief responses in the form of citations in response to questions about available education research.

Following an established REL Appalachia research protocol, we searched for peer-reviewed articles and other research reports on state-run or state-legislated teacher leader and master teacher programs. We focused on identifying resources that specifically addressed the effects of state-level teacher leader and master teacher programs on teacher retention and student outcomes. The sources included ERIC and other federally funded databases and organizations, research institutions, academic research databases, and general Internet search engines. For more details, please see the methods section at the end of this document.

The research team did not evaluate the quality of the resources provided in this response; we offer them only for your reference. Also, the search included the most commonly used research databases and search engines to produce the references presented here, but the references are not necessarily comprehensive, and other relevant references and resources may exist. References are listed in alphabetical order, not necessarily in order of relevance.

References

Borek, M. (2019). Supporting teacher leadership in Nevada. *Policy Issues in Nevada Education*, *3*, 1–10. Retrieved from https://digitalscholarship.unlv.edu/co_educ_policy/21/

From the abstract: "Teacher leadership strategies are increasingly being deployed in multiple jurisdictions across the country, with mixed results. While informal teacher leader roles have existed for decades and are a not new idea, the expectations and responsibilities of these roles vary significantly from district to district or even from school to school. Ultimately, such an inconsistent approach to teacher leadership fails to capitalize on the potential of a comprehensive approach to human capital reform, including a modernized career ladder with advanced teacher leader roles. This would allow excellent teachers to stay in the classroom while also extending their reach by tapping into their expertise to increase the overall systemic capacity for instructional leadership. When designed and implemented purposefully, a teacher leadership approach that identifies the best teachers and provides them with responsibilities that extend beyond typical classroom responsibilities can show positive effects on student learning and may encourage excellent teachers to remain in the profession. A strategic approach to teacher leadership can also be used to strengthen numerous aspects of the career continuum, by improving the quality and effectiveness of induction programs, providing peer review of instruction, or delivering on-site professional development to those who need it most. Approaches to teacher leadership being used elsewhere have tended to adopt one of two possible definitions of a teacher leader: the first recognizes that all teachers have leadership potential and devises a system of supports to allow individual, classroom-focused leadership; and the second seeks to identify highly effective teachers and provide specialized support to a smaller number of elite teachers, placing them into a modern career ladder and building roles with responsibilities that focus on systemic improvement. If Nevada considers developing a formal teacher leadership framework, given the state's recent history of teacher shortages, high level of teacher attrition, and the inequitable distribution of effective teachers, the latter definition would provide the state with a framework that allows for a scalable solution to some of the state's most persistent human capital challenges."

Doyle, D. (2013). *Leadership and lattices: New pathways across the teaching profession. Ask the team*. Washington, DC: Center on Great Teachers and Leaders, American Institutes for Research. Retrieved from https://eric.ed.gov/?id=ED555662

From the abstract: "Teachers need career pathways that provide new challenges and sustained opportunities for leadership without leaving the classroom. Better opportunities for leadership and innovative pathways help to increase the retention of strong teachers. Although few such programs existed several years ago, a growing number of states, districts, charter schools, and other organizations have recently introduced some kind of teacher-leader program. The author's research aimed to identify successful teacher-leader programs. To do so, she first examined cross-sector research (e.g., business and medicine) that identified strategies for leadership programs that aim to increase the retention of high-performing employees. She then scanned dozens of teacher-leader programs and identified programs with some evidence of a positive impact. Because so many of these models are new, however, little research or documentation exists to demonstrate their effectiveness. Her search identified only five programs with some evidence of success, such as increasing student achievement or teacher retention. Although these programs are not exemplars, they offer valuable lessons learned for developing teacher-leader systems. In this brief,

Doyle overviews the cross-sector research related to leadership programs, outlines four best practices from existing teacher-leader programs, and provides next steps for state leaders interested in implementing a teacher-leader system. Throughout, she highlights different programs and strategies that have had some success in the field."

Jacques, C., Weber, G., Bosso, D., Olson, D., & Bassett, K. (2016). *Great to influential: Teacher leaders' roles in supporting instruction*. Washington, DC: Center on Great Teachers and Leaders, American Institutes for Research. Retrieved from https://eric.ed.gov/?id=ED577279

From the abstract: "This report is the second in a series from a collaboration of nine leading organizations working to advance teaching and elevate the profession. For years, education leaders have sought to pinpoint how teachers become effective in order to better leverage teachers' impact on student learning and improve student outcomes. Teacher leadership is receiving increased attention as a potential lever for improved instruction, recruitment and retention of effective teachers, and student outcomes. A growing body of research on teacher leadership models and its potential impact on the field suggests that teacher leaders may play a critical role in creating high-functioning schools that can create sustainable improvements in teaching and learning. This report offers insights from teacher leaders themselves on this topic, exploring the specific ways in which teacher leaders can contribute to instructional improvement. This report includes three main sections: (1) the characteristics of teacher leaders; (2) the roles teacher leaders take in improving teacher practice; and (3) the supports and barriers to teacher leadership. The report concludes with specific policy recommendations for supporting teacher leadership in state and local contexts."

Matlach, L. (2015). *Increasing teacher leadership. Policy snapshot.* Washington, DC: Center on Great Teachers and Leaders, American Institutes for Research. Retrieved from https://eric.ed.gov/?id=ED592851

From the abstract: "Teachers are our most valuable resource in education, and teacher leaders can maximize their impact on student learning by extending their impact beyond their own classrooms. Effective teacher leaders share their expertise, support the growth of other teachers, and increase the quality of instruction. This policy snapshot summarizes the literature regarding teacher leadership, including associated benefits and challenges, while also highlighting policy levers that can be used to improve teacher leadership opportunities. We also highlight examples of teacher leadership efforts, including the following programs: (1) The Baltimore City Public Schools Career Pathway Initiative; (2) Iowa's Teacher Leader Compensation System; (3) Tennessee's Teacher Leader Council and Governor's Teacher Cabinet; and (4) Kentucky's Teacher Fellowship Program."

Mihaly, K., Master, B., & Yoon, C. (2015). *Examining the early impacts of the Leading Educators Fellowship on student achievement and teacher retention*. Santa Monica, CA: RAND Corporation. Abstract retrieved from https://eric.ed.gov/?id=ED558999; full text available at https://www.rand.org/pubs/research_reports/RR1225.html

From the abstract: "The Leading Educators Fellowship program selects promising mid-career teachers through a competitive application process and develops their skills as leaders of school improvement efforts. The specific objectives of the program are to (1) increase the leadership skills and capacity of teacher leaders in order to improve student achievement in high-need schools and (2) retain highly effective teachers in high-need schools by encouraging commitment to the schools and improving the school leadership pipeline. This report presents findings from preliminary analyses of the program's impacts on student achievement and teacher retention in both Louisiana and Missouri in the 2011–2012 through 2013–2014 school years for teachers who are program fellows and for the teachers mentored by fellows. The findings from this early analysis of the program impacts of fellows are promising but mixed, and overall do not conclusively demonstrate that the program has affected student achievement. For mentees, the findings show some positive effects on student achievement among mentees who teach math and social studies in Louisiana. The findings do not point to a consistent pattern of retention impacts across cohorts or states. Future analyses with larger samples of both fellows and mentees will provide greater statistical power for more reliably detecting any true program effects. A technical appendix contains propensity score matching and power analyses."

Rowland, C., Brown-Simms, M., Cushing, E., Hinojosa, T., Manzeske, D., & Swanlund, A. (2010). *Iowa's pay-for-performance and career-ladder pilot program: External evaluation final report*. Naperville, IL: Learning Point Associates. Retrieved from https://educateiowa.gov/sites/files/ed/documents/Iowa%27s Pay-for-Performance and Career-Ladder Pilot Program External Evaluation Final Report %282010%29.pdf

From the introduction: "Like many school districts and states around the country, Iowa recently decided to experiment with educator compensation reform to see what might work in the context of their state and its school districts. In 2007, the 82nd Iowa General Assembly passed Senate File (S.F.) 277 (2007). The law called for a 'process by which select Iowa school districts research, develop, and implement projects designed to identify promising practices related to enhanced teacher compensation career ladders and performance pay models' (S.F. 277, 2007). The legislation also required an external evaluation of the implementation of these career-ladder and pay-for-performance projects. Learning Point Associates, an Illinois-based nonprofit educational research and professional services organization, was contracted to do this evaluation work.... The report has four sections: (1) an introduction, which includes a policy history and a synopsis of the three pilot programs; (2) a discussion of the evaluation plan, including an overview of the methods used to collect and analyze data; (3) a presentation of findings across research questions; and (4) a summary."

Wixom, M. A. (2016). *Mitigating teacher shortages: Teacher leadership.* Denver, CO: Education Commission of the States. Retrieved from https://www.ecs.org/wp-content/uploads/Mitigating-Teacher-Shortages-Teacher-leaders.pdf

From the article: "This brief is the first in a series of reports examining the teacher shortage dilemma. It considers what the research says about teacher shortages and highlights recent

state task force findings. Designed to guide state leaders in policy decisions, the briefs that follow examine five strategies states are using to address shortages: (1) Alternative Certification; (2) Financial Incentives; (3) Induction and Mentorship; (4) Evaluation and Feedback; and (5) Teacher Leadership.… Providing leadership opportunities to teachers can be an effective strategy to recruit and retain them. A definition of teacher leadership is provided, followed by a summary of supporting research on this strategy, state policy examples and considerations for policymakers."

Additional Ask A REL Responses to Consult

Ask A REL Mid-Atlantic at Mathematica Policy Research. (2019). *What has been effective at the state or local level to improve the rates of teacher retention?* Retrieved from https://ies.ed.gov/ncee/edlabs/regions/midatlantic/askarel_86.asp

Ask A REL Midwest at American Institutes for Research. (2017). *What research is available on factors associated with teacher retention, particularly teacher retention in high-poverty or high-minority schools?* Retrieved from https://ies.ed.gov/ncee/edlabs/regions/midwest/askarel/2017/teacher-retention-high-poverty-minority-schools.aspx

Ask A REL Southeast at Florida State University. (2017). *What research has been conducted on effective practices of teacher leaders?* Retrieved from https://ies.ed.gov/ncee/edlabs/regions/southeast/aar/u_10-2017.asp

Additional Organizations to Consult

Center on Great Teachers and Leaders at American Institutes for Research: http://www.gtlcenter.org/

From the website: "The Center on Great Teachers and Leaders (GTL Center) is dedicated to supporting state education leaders in their efforts to grow, respect, and retain great teachers and leaders for all students. The GTL Center continues the work of the National Comprehensive Center for Teacher Quality (TQ Center) and expands its focus to provide technical assistance and online resources designed to build systems that:

- Support the implementation of college and career standards.
- Ensure the equitable access of effective teachers and leaders.
- Recruit, retain, reward, and support effective educators.
- Develop coherent human capital management systems.
- Create safe academic environments that increase student learning through positive behavior management and appropriate discipline.
- Use data to guide professional development and improve instruction."

Center for Teaching Quality: http://www.teachingquality.org/

From the website: "CTQ is a national nonprofit based in Carrboro, North Carolina. We focus on teachers transforming teaching—an idea (and reality!) we've been advancing since 1998. Our virtual home, the CTQ Collaboratory, is open to all who support teachers as leaders."

- Redesigning Education Systems: https://www.teachingquality.org/our-services/improve-systems/

National Council on Teacher Quality: https://www.nctq.org/

From the website: "NCTQ researches, evaluates, and provides information and guidance. We propose new changes to restore the teaching profession to strong health so we can provide every child with the education needed to ensure a bright and successful future and to offer all teachers—from aspiring to veteran—the conditions needed to thrive and succeed."

- Retention and Tenure: https://www.nctq.org/policy-area/Retention-and-Tenure

Methods

Keywords and Search Strings

The following keywords and search strings were used to search the reference databases and other sources:

- ("teacher leader" OR "master teacher" OR "mentor teacher" OR coach OR "career ladder") AND (state OR "state-run" OR "state-legislated") AND ("teacher retention" OR "teacher quality")
- ("teacher leader" OR "master teacher" OR "mentor teacher" OR coach OR "career ladder") AND (state OR "state-run" OR "state-legislated") AND student AND (outcome* OR impact)

Databases and Resources

We searched ERIC, a free online library of more than 1.6 million citations of education research sponsored by the Institute of Education Sciences (IES), for relevant resources. Additionally, we searched the academic database Proquest, Google Scholar, and the commercial search engine Google.

Reference Search and Selection Criteria

In reviewing resources, Reference Desk researchers consider—among other things—these four factors.

- Date of the publication: Searches cover information available within the last ten years, except in the case of nationally known seminal resources.
- Reference sources: IES, nationally funded, and certain other vetted sources known for strict attention to research protocols receive highest priority. Applicable resources must be publicly available online and in English.

- Methodology: The following methodological priorities/considerations guide the review and selection of the references: (a) study types—randomized controlled trials, quasi experiments, surveys, descriptive data analyses, literature reviews, policy briefs, etc., generally in this order; (b) target population, samples (representativeness of the target population, sample size, volunteered or randomly selected), study duration, etc.; (c) limitations, generalizability of the findings and conclusions, etc.
- Existing knowledge base: Vetted resources (e.g., peer-reviewed research journals) are the primary focus, but the research base is occasionally slim or nonexistent. In those cases, the best resources available may include, for example, reports, white papers, guides, reviews in non-peer-reviewed journals, newspaper articles, interviews with content specialists, and organization websites.

Resources included in this document were last accessed on April 13, 2019. URLs, descriptions, and content included here were current at that time.