



Making the Case for High Quality Principal Training in Illinois October 2015

Illinois has been working at the forefront of innovation and improvement in principal quality for quite some time. Recognized for bold policy initiatives involving principal preparation and development, the State of Illinois has received national awards and recognitions. For example, Illinois was selected by the Education Commission of the States as the recipient of the *2014 Frank Newman Award for State Innovation*. Nominated by the National Conference of State Legislators (NCSL), Illinois was recognized with this award for the collaborative efforts of the Illinois State Board of Education (ISBE), the Illinois Board of Higher Education (IBHE), and the Center for the Study of Education Policy at Illinois State University (CSEP) to engage a broad group of stakeholders in the development of rigorous program requirements for principal preparation. These efforts led to the creation of a new P-12 Principal Endorsement enacted in 2010 through Illinois Public Act 96-0903 that mandated that all preparation programs throughout the state apply for program approval under the new requirements. Illinois' work has been covered by several national organizations¹.

The key elements of Public Act 96-0903 intentionally correlate with the evidenced-based practices for effective leadership development found in Darling-Hammond, LaPointe, Meyerson, Orr, & Cohen (2007), including: 1) rigorous and targeted recruitment and selection; 2) cohesive program aligned with leadership standards that emphasize instructional leadership; 3) faculty who are knowledgeable in their subject areas – both university professors and practitioners; and 4) well-designed and supervised administrative internships that allow candidates to engage in leadership responsibilities for substantial periods of time under the supervision of expert mentors. These statewide criteria were also drawn from evidence-based practices in three demonstration sites in Illinois - University of Illinois at Chicago Urban Education Leadership Program and New Leaders, both for their demonstrated impact on teaching and learning in Chicago Public Schools (Davis and Darling-Hammond, 2012; Burkhauser, Gates, Hamilton, and Ikemoto, 2012); and Illinois State University and Springfield District #186 for their intentional collaborative model (Orr, King, and LaPointe, 2010). See Appendix A for more details on demonstration sites.

The statute represents a substantial overhaul of leadership preparation requirements in Illinois and includes the following key elements:

¹ Illinois' principal preparation redesign has been featured in National Conference of State Legislators (NCSL) *Preparing a Pipeline of Effective Principals: A Legislative Approach* (2013) and a 2012 webinar hosted by the National Governors Association, NCSL, and Council of Chief State School Officers (CCSSO). Several organizations have also identified Illinois as the only state that has included early childhood content specifically in their licensure and accreditation processes (Center for Enhancing Early Learning Outcomes (CEELO), 2013, *What Do We Know about Principal Preparation, Licensure Requirements, and Professional Development for School Leaders?*); National Governors Association (NGA) *Leading for Early Success: Building School Principals' Capacity to Lead High-Quality Early Education*, 2013; and Institute of Medicine, *Transforming the Workforce for Children Birth Through Age 8: A Unifying Foundation*, 2014.

- 1) **Termination of programs leading to a General Administrative Certificate** that had prepared a wide variety of administrative positions, but had proven insufficient to meet the increasing demands of the principalship;
- 2) **Creation of a Principal Endorsement** designed specifically to prepare principals capable of addressing the challenges faced by today's schools;
- 3) **Formal university/district partnerships** that require faculty to collaborate with school district officials in the design, delivery, and continuous improvement of the principal preparation programs;
- 4) **Selective admissions criteria** requiring aspiring candidates to submit a portfolio that includes evidence of positive impact on student growth, previous leadership experiences, and exemplary inter-personal skills which will also be evidenced through participation in face-to-face interviews;
- 5) **PK-12 licensure structure** that requires coursework and internship experiences be aligned to local and national performance standards and provides development across the PK-12 grade span and with specific student subgroups (special education, English Language Learners, gifted students, and early childhood);
- 6) **Year-long, performance-based internship** designed to provide the candidates with authentic leadership experiences intended to increase their proficiency in areas shown to improve student learning;
- 7) **Competency-based assessment** system aligned to both the Interstate School Leadership Licensure Consortium (ISLLC) Standards and the Southern Regional Education Board (SREB) 13 critical success factors;
- 8) **Collaborative supervision and support** of candidates by a faculty supervisor and a mentor principal, requiring both supervisors to have a minimum of 2 years of success as school principals demonstrated by evidence of positive student growth; and
- 9) An 8-hour **Principal as Instructional Leader Exam** administered by the state.

These key elements represent a paradigm shift for preparation programs from “candidate as consumer” to “district as consumer.” Moving beyond the simple outcome of program graduates securing administrative positions, the new requirements focus much needed attention on the impact principal preparation ultimately has on school improvement and student outcomes.

SLP Grantee: Illinois Partnerships Advancing Rigorous Training (IL-PART)

In 2013, the U.S. Department of Education awarded CSEP a School Leadership Program grant of \$4.6M over 5 years. The grant is currently being used to support the Illinois Partnerships Advancing Rigorous Training (IL-PART) project, which represents a collaborative aimed at improving the way in which principals are prepared and developed according to P.A. 096-0903. IL-PART convenes three qualifying high-need districts, four universities, and one Catholic school network² around three clear goals:

- **Goal 1:** To prepare highly effective school principals that positively impact student learning in high-need districts
- **Goal 2:** To develop effective partnerships between university principal preparation programs and high-need districts that build leadership capacity within partner district in an effort to improve student outcomes

² Grant partners include: Aurora (East) District 131 and North Central College; Bloomington District 87 and Illinois State University; and Quincy District 172 and Western Illinois University. The grant also partners with the Center for Catholic School Effectiveness (CCSE) at Loyola University-Chicago. The CCSE coordinates the efforts between our university partners and our Catholic school partners located in East Aurora, Bloomington, and Quincy.

- **Goal 3:** To disseminate IL-PART evaluation findings and emerging best practices in principal preparation and partnership development

To that end, the project is assisting partnering high-need districts with establishing a pool of highly skilled school leaders that are able to respond to their district needs and fill projected principal and assistance principal vacancies. In order to meet that goal, partnerships between universities and districts are providing intensive, authentic, school-based learning opportunities for aspiring principals and ongoing support for school principals in partner districts. The partnerships also provide mentor principals and faculty supervisors with training so that they can offer rich learning experiences for principal interns that are focused on school improvement efforts that increase student achievement.

IL-PART funds have also supported the exploration of two internship models: an intensive internship and a traditional internship (full time versus part time). An evaluation conducted by the American Institutes for Research (AIR)³ will identify the extent of similarities and/or differences in outcomes between the two internship models. The evaluation will also include an exploration of outcomes during the pre-service phase and once graduates are hired into principal positions. The pre-service phase of the evaluation will study program satisfaction and fidelity of implementation. The in-service phase of the evaluation will study impact on student growth and other metrics involved in the principal performance evaluation. To further examine the impact of these internship models, IL-PART also funds the Center for Catholic School Effectiveness at Loyola University-Chicago in partnership with the Catholic Diocese serving Bloomington, East Aurora and Quincy to provide similar principal preparation and development supports to Catholic school leaders in the high need areas served by the grant. Internship sites include suburban and rural areas and public and private school settings

IL-PART Outcomes to Date:

Progress toward meeting Government Performance and Results Act (GPRA) measures has been substantial as the project nears the end of year 2 of the 5-year grant. IL-PART originally set a target to recruit and train a total of 80 **principal preparation candidates** throughout the life of the grant.

- Through PY2, the partners have recruited and begun training a total of 93 aspiring principals in preparation programs.
- 20 candidates that have enrolled in the IL-PART preparation programs are currently employed in partnering high need districts⁴.
- At over 116% of our target for the life of the grant, PY2 results represent substantial progress toward our goals and reflect a commitment by the university/district partners in successfully implementing high quality programs that are valued by the candidates.

Further demonstrating the success of the program, IL-PART originally set a target of training 60 **principals and assistant principals** as part of the project’s in-service efforts to build leadership capacity in partnering high need districts.

³ The lead AIR evaluator, Matthew Clifford, has vast experience with research on school leadership and is currently an evaluator on numerous federally funded projects, including an IES-funded random control trial on principal professional development, investigations of the AREL principal preparation program and NISL’s professional development for principals. Clifford consults with the USDOE on educator evaluation policies and has assisted four states in developing principal performance evaluation systems.

⁴ 14 from East Aurora Public Schools, 4 from Quincy Public Schools, and 2 from partnering Catholic schools in Bloomington

- Through PY2, more than 70 principals and assistant principals have participated in IL-PART trainings aimed at increasing leader effectiveness in high need schools.
- Nearly 87% of principals and assistant principals that were trained in PY1 and continued with on-going training in PY2, were rated effective or highly effective on a performance evaluation system that incorporates student growth metrics as a significant factor.
- More than 76% of principals and assistant principals that were trained in PY1 and continued with on-going training in PY2 demonstrated positive student growth in PY2.
- 100% of principals and assistant principals trained in PY1 have remained in their positions in PY2.

Impact on School Improvement and Student Learning

As universities are just now graduating new candidates from redesigned P-12 Principal Preparation programs, the full-scale impact on school and student outcomes are yet to be seen. However, state officials, preparation programs and districts are all collecting data and exploring the impact of these changes to both short- and long-term outcomes. The goal of the principal preparation redesign requirements is to spread the positive teaching and learning trends evidenced by the demonstration sites⁵ to schools throughout the state. Yet, the implementation of the new legislation cannot be left to chance.

In fall 2014, with funding from The Wallace Foundation and the McCormick Foundation, ISBE and IBHE convened a new Illinois School Leadership Advisory Council (ISLAC) that has served as a strategic planning group, focused on continuing to strengthen principal preparation and development throughout the state. The final product of ISLAC, expected in October 2015, is a statewide, five-year action plan focused on creating the conditions to ensure that each school is lead by a highly trained, effective principal.

In addition to ISLAC, the McCormick and Wallace Foundations are funding a research study exploring the implementation of the new principal preparation program regulations. The study is being conducted by the Illinois Education Research Council (IERC) and the University of Chicago Consortium on Chicago School Research (CCSR). The collaborative study, *Illinois Principal Preparation Implementation Review Project (I-PREP)*, began fall 2014 and will continue through the spring 2016. I-PREP researchers will collect information from stakeholders (e.g. representatives from higher education, public districts and schools, and others that have a vested interest in the newly redesigned principal preparation programs); explore policies regarding the implementation of Illinois' new principal preparation program requirements; and identify potential strengths and challenges of the new guidelines and regulations. Findings from I-PREP will help principal preparation programs and their partners improve implementation of the new regulations, as well as inform and strengthen education policymaking in Illinois.

Need for Funding for Statewide Evaluation of Impact

What is still missing in Illinois is a multi-year, statewide evaluation of the impact of the new principal preparation programs on school and student outcomes. The IL-PART evaluation will provide insight into potential outcome differences between full-time and part-time principal internships, but the study involves candidates from only three preparation programs and the sample size will be relatively small. The I-PREP study will identify the extent of challenges and opportunities in implementation and will include programs across the state. But the duration of the I-PREP study is too short to explore the impact of graduates from new programs once they are placed as principals in Illinois schools. The IL-PART and I-PREP research

⁵ Demonstration sites include partnerships between ISU and Springfield Dist. #186, New Leaders and CPS, and UIC and CPS.

studies will yield findings that can inform the continuous improvement process at both the program and state level. However, they are both too short in duration to yield strong evidence of program impact. The new principal preparation regulations require candidates to spend roughly two years to complete the program. Most programs were only approved by the state in 2013 and 2014. Therefore, the number of candidates included in the IL-PART and I-PREP studies will be small and they will only be representative of the first cohorts completing newly redesigned programs. The true impact of these changes will take time to determine.

Two areas of funding for evaluation are currently needed:

1. Extend the research currently being conducted by AIR on the IL-PART project.
2. Provide a multi-year, statewide evaluation of program impact that tracks principal performance post-program completion for up to 5 years.

The IL-PART project has evaluation funding during the 5 years of the program grant. IL-PART partners currently project that by the end of the grant, they will have enrolled over 200 principal preparation candidates. Due to the length of the program, only approximately 100-125 will have completed the program by the end of the grant. Of those, we anticipate 80% will have secured positions as principals or assistant principals. But only a fraction of those hired will have two years of student growth data by the conclusion of the grant. School Leadership Program funding for multi-year projects involving principal preparation should provide two years of evaluation funding beyond the life of the program grant in order to adequately assess impact.

Given the national attention that Illinois has received for its innovative and rigorous approach to principal preparation, it is important at this time to explore the extent of impact the state policy will have on K-12 outcomes. Illinois is fertile ground for a large scale multi-year evaluation, but federal funding is needed to do so and few grant opportunities exist that would provide funding for a project that does not currently meet the What Works Clearinghouse (WWC) evidence standards. WWC evidence standards are a barrier to innovative approaches to principal preparation and development in two respects: first, many of the grant competitions require programs to provide evidence of positive impact on student achievement in order to be eligible to apply. However, there are almost no studies of principal preparation or development that have been approved by WWC and those that have are proprietary approaches that must be purchased. Further, the narrow focus on both the design (random control trials and quasi-experimental) and outcome (student achievement and teacher retention) make a large-scale study on the impact of an innovative state policy on principal preparation ineligible to apply. Second, the way in which federal programs lump principals in with teachers, or the broader classification of educational leaders, has the unintended consequence of assigning a disproportionate amount of attention to roles other than the principal. A current search of WorldCAT returned 23,410 publications for “teacher effectiveness” and only 2,553 on “principal effectiveness.” While no one disputes the importance of the teacher in improving student outcomes, it is the job of the principal to create the overall conditions for those improvements to occur throughout the school, rather than in isolated pockets of excellence. Therefore it is vital to our schools that adequate funding be provided to demonstrate effective models for principal preparation and development.

Appendix A: Programs That Demonstrate Innovation

Program requirements outlined in P.A. 096-0903 were modeled from principal preparation programs in Illinois that demonstrated innovation, including Chicago Public Schools' partnerships with the University of Illinois at Chicago and New Leaders, along with efforts involving Springfield School District #186 (as a Wallace Foundation LEAD district) in collaboration with Illinois State University.

Partnering with principal preparation programs is particularly essential for the Chicago Public Schools (CPS). Unlike any other school district in the country, CPS officials do not have the authority to hire principals for their more than 660 schools. As part of the Chicago School Reform Act, passed by the Illinois General Assembly in 1985, the authority to hire the school principal and approve the school budget is placed in the hands of the elected Local School Council (LSC). Every one of the CPS schools has an LSC. For that reason, the district has invested tremendous resources into principal preparation programs that had formal partnerships to ensure that their leadership pipeline is adequately filled with well-prepared and highly-skilled leaders.

Two programs with the longest formal partnerships for preparing principals for CPS – UIC and New Leaders – can demonstrate positive impact on teaching and learning in Chicago schools. Though UIC and New Leaders both offer 'small-batch' principal preparation programs in Chicago, each producing no more than 30 candidates annually – collectively over the years they have supplied the district with over 270 of Chicago's principals, directly impacting over 130,000 students. Indirectly, the New Leaders/UIC leadership footprint in CPS is larger still as a number of principals from both programs have been promoted to district leadership positions, including several Network Chief Positions directly responsible for supervising principals. Dr. Janice Jackson, Chicago Public School's Chief Education Officer, is a graduate of UIC's Policy Studies and Educational Leadership program. Both programs are demonstrating measurable impact on school improvement in Chicago, as evidenced below.

UIC Urban Leadership Program/Chicago Public Schools

Program Description: The EdD Program in Urban Education Leadership is nationally recognized for its innovation and quality, received the inaugural University Council for Education Administration Exemplary Educational Leadership Preparation Program Award and was identified as a "model" program by the Illinois Board of Higher Education Commission on School Leader Preparation.

- **Aspiring Principal Demographics:** UIC principal candidates reflect the diversity of students in Chicago Public Schools.
- **Outcomes:**
 - At the elementary level, UIC-led schools significantly outperform district and Illinois averages in attendance increases and ISAT gains, with particularly strong impact on schools with high poverty, high African American student enrollments.
 - At the high school level, UIC led schools outperform CPS comparison schools in "freshmen on-track" indicators, annual dropout rates, and graduation rates, recently posting 3 of the top 12 ACT gains in CPS, including the highest gaining school, Kennedy High School.
- **Completers:** Of 148 completers, over 100 serve as principals in urban schools. The majority of the remaining graduates serve as assistant principals and 20 serve as system-level leaders both at neighborhood and charter schools in Chicago.
- **Placement:** Over the past decade, UIC has a 99 percent placement rate of candidates into administrative positions, 67 percent of these as principals, with a number of assistant principals now in line for the principalship.

- **Retention:** UIC has about an 85 percent retention rate, though many UIC principals that leave do so to move onto system-level leadership positions.

New Leaders, Chicago/Chicago Public Schools

Program Description: Founded in 2000 by a team of social entrepreneurs, New Leaders is a national nonprofit that develops transformational school leaders and designs effective leadership policies and practices for school systems across the country.

- **Aspiring Principal Demographics:** New Leaders serves students and families in CPS’s highest need schools; 86 percent of students served in schools led by New Leaders qualify for free or reduced lunch. New Leaders reflect the diversity of the students in Chicago Public Schools. 57 percent are African-American, 24 percent are Caucasian, and 17 percent are Latino.
- **Outcomes:** The RAND Corporation conducted a comprehensive, multi-year evaluation of New Leaders that found students attending New Leaders’ schools outperform their peers by a statistically significant margin.
 - 20 percent of the CPS open enrollment schools deemed “transformational” by CPS in 2013 are led by New Leaders.
 - On average, according to state data, New Leaders principals increase average proficiency gains by 39 percent during their first five years in the role.
 - New Leaders-led high schools consistently outperform the district with Freshmen on Track rates and rate of student growth that historically exceed the CPS averages (not including selective enrollment high schools) and high school drop-out rates below CPS averages.
 - Nine of the 31 Gates Millennium Scholars chosen in Illinois in 2011 were students at New Leader schools representing nearly one-third of the total Chicago awardees.
- **Placement:** 99 percent of New Leaders graduates have served in school leadership positions with nearly 75 percent of New Leaders still serving as principals within four years of finishing the program, a percentage far higher than national averages for principal training programs.
- **Retention:** On average, New Leader principals were more likely to stay in their school for three or more years as compared to other newly placed principals.
- **District Benefits:** The RAND evaluation also found that the benefits of partnering with New Leaders can extend beyond the schools led by a New Leader, improving others schools and the district as a whole. District partners reported that New Leaders provided valuable information to the district on effective management of principals and influenced their leadership standards, principal selection criteria, principal evaluation, and principal support. The same is likely true for UIC principals.

Illinois State University/Springfield School District #186

Program Description: In 2002, with The Wallace Foundation funding, District #186 partnered with Illinois State University (ISU) to prepare a pool of principals and assistant principals. Since 2002, they have graduated three cohorts of candidates with ISU. The preparation program was a six-semester program that combined an embedded internship (45 hours per semester) with weekly courses taught on-site at Springfield School District and team-taught by district administrators. A report by Education Development Center (EDC) recognizes the strong *mutually beneficial*⁶ partnership work between Illinois State University and Springfield School District to prepare a pipeline of principals.

⁶ Orr, King, and LaPointe (2010) *Districts Developing Leaders: Lessons on Consumer Actions and Program Approaches from Eight Urban Districts* can be found at:
<http://www.wallacefoundation.org/knowledge-center/school-leadership/key-research/Documents/districts-developing-leaders-executive-summary.pdf>

- **Placement:** Since its inception, the ISU/Springfield program graduated 53 candidates, of whom 20 (38 percent) became school leaders, including 11 who became school principals by 2009 when Wallace Foundation funding ended.
- **Retention:** 89% of the leaders trained through the LEAD cohorts are still employed in the district.
- **District Benefits:** In addition to the traditional principal preparation, the district created 4-5 full-time internship opportunities for candidates on a competitive basis that provided real job-embedded opportunities. When principal or assistant principal job openings were not available, the district created school improvement coach positions that laid the foundation for teacher leadership work in the district.

Appendix B - Evidence that Indicates a Lack of Attention Paid to Principals

Currently there exists a rather stark deficiency of empirical research on the school principal in peer-reviewed journals. Despite growing awareness of the pivotal role played by the principal in school improvement, research on teacher preparation, induction, support and development is disproportionately represented in the literature. There are several reasons for this, not the least of which is that teachers are ubiquitous in school and therefore allow for greater access. However, that is not the sole reason that researchers largely overlook the principalship as a unit of study. Current structures evident in professional associations, publications, policies and practices perpetuate the lack of attention paid to principals by researchers.

The American Education Research Association (AERA) is the largest professional association dedicated to educational research in the U.S. With more than 25,000 members, representing more than 85 countries around the world, AERA is organized around various research areas, represented by 12 Divisions and over 150 Special Interest Groups (SIG).⁷ Divisions within AERA are purposefully broad, while corresponding SIGs allow members to focus on more specific research topics within each Division. Research involving school principals is currently located in AERA Division A, which encompasses a wide variety of district and school leadership positions, structures, programs, policies, processes, and practices. It involves explorations of a variety of roles, from school board members, superintendents, district administrators, principals, assistant principals, deans, department chairs, curriculum specialists, coaches, teachers, paraprofessionals, ancillary staff, etc. Unlike Division K, which focuses exclusively on the role of teacher, there currently exists no Division exclusively dedicated to the pivotal role of principal.

In addition to the omission of an exclusive area of focus on principals in the AERA Division structure, no SIG exists that is dedicated to research on principals or even the more general area of school leadership. There is a “Teaching and Learning in School Leadership” SIG that focuses on preparation of teacher leaders and principals, and also the higher education organizational structure and practices of programs that prepare candidates for those roles. There also exists a “Leadership for Social Justice” SIG group. However, in that case the term “leadership” is not used to signify a role, but rather the broad base of advocacy positions and actions that can be taken to support a social justice focused approach to education. Despite the mention of principal and leadership in the title of those two SIG groups and other SIG topic areas that might touch on the role of the principals, there currently exists no SIG group specifically focused on the role of the principal, or explicitly on best practices in supporting the development of principals throughout their career.

The absence of an explicit focus on the principalship is also evident nationally in terms of state policies. In a soon to be released report by Paul Manna (2015), he argues that despite growing recognition of principal impact on school and student outcomes, policy makers also tend to overlook the needs of the specific role. “The principal’s role has received consistently less attention relative to other topics on state education policy agendas. State policymakers give much more attention to teachers and teacher-related issues than principals” (p. 3).

Exacerbating the problem is the tendency of policy makers to either combine strategies aimed at teachers and principals, or included principals in strategies aimed at a multitude of roles that constitute the broader term *leader*. “The impulse to broaden the scope of ‘school leadership,’ although done for understandable reasons, has had the unintended consequence of obscuring the unique and specific roles that principals play” (Manna, 2015, p. 3). By combining teacher and principals or school leaders into a single

⁷ <http://www.aera.net/AboutAERA/WhoWeAre/tabid/10089/Default.aspx> accessed on 9/9/15.

focus area, policy makers minimize the unique role of the principal and confound outcomes involving effort to support their development. In other words, because of the disproportionate number of teachers to principals targeted by this kind of policy or program, only those that produce positive outcomes for teachers are likely to be deemed successful and/or that produce positive outcomes for principals may be unrecognizable. Disproportionality also occurs when funding for programs or research are targeted at both teachers and principals, rather than as separate focus areas.

The absence of a specific research agenda aimed at supporting the role of the school principal is also mirrored in federal policy and programs. The Institute of Education Science has a research area for *Effective Teachers and Effective Teaching*, but the area that includes research on principals falls into the more broadly conceptualized topic of *Improving Education Systems: Policies, Organizations, Management, and Leadership*. Thus research on strategies to improve principal effectiveness must compete within a single funding category with studies on: federal, state, local and building level policies; state education agencies, local education agencies, teachers unions, professional associations, and other education organizations; state, school or other management structures; and a whole host of roles that could fall under the broad category of leadership (e.g. school boards, superintendents, district administrators, school leadership teams, teacher leaders, etc.). The U.S. Department of Education (2015) has one discretionary grant program dedicated specifically to principals: the *School Leadership Program* in the Office of Innovation and Improvement. However, that program does not accept grant applications on an annual basis and is subject to federal legislative appropriation. More typically, the department allocates program and research funds aimed at supporting principals under a broader topic area of *Teacher and Leader Effectiveness* (e.g. IES grants, Title 1, Supporting Effective Educators Development program, etc.)⁸

The current AERA focus areas, along with state and federal policies and programs, reflect the shortage of research on principals. Basic keyword searches of educational research databases reflect the lack of attention paid to principals. The table below outlines keyword searchers, using Boolean language, performed in three large databases: WorldCAT, Academic Search, and ERIC.

Table #1: Keyword Search Comparison of Research on Teachers vs. Principals

Database	Teacher	Principal	Teacher Effectiveness	Principal Effectiveness	Principal Effectiveness & Exclude Teacher
WorldCAT	870,739	55,710	23,410	2,553	348
Academic Search	357,569	44,795	12,210	228	151
ERIC	439,311	36,533	23,246	525	166

The initial search was designed to compare all publications available that focus on school principals vs. teachers. Keywords searches involving principals were further pared down by excluding the keyword teacher. This removed studies that explored teacher and principal effectiveness together. Data indicate the disproportional attention being paid to the role of teacher and demonstrate a lack of research on principals.

⁸ <http://www2.ed.gov/admins/tchrqual/learn/tpr/index.html> accessed on 9/8/15.