



INSTRUCTIONAL LEADERSHIP LITERATURE SUPPORT SUMMARY

I. Definition, Description, and Example of Element

Effective early childhood leadership is essential to achieving high-quality care and education that improves outcomes for children and families (NAEYC, 2019b). According to the Division for Early Childhood (DEC) Recommended Practices Glossary (2015), “Early childhood leadership is the ability to both create and run excellent programs for young children; and the ability to be effective and powerful in decisions that affect children and families” (p. 11).

One key type of early childhood leadership is instructional leadership (IL). Instructional leadership refers to leadership that is specifically focused on teaching and learning practices that promote high-quality instruction and optimize child development and learning (Abel, Talan, & Masterson, 2017). An instructional leader is anyone with responsibilities for supervising educators, guiding their practice, or facilitating job-embedded professional learning (Bruns et al., 2017; Goffin & Daga, 2017). In early childhood, this can include individuals with formal positions such as education managers and program directors, as well as other individuals such as early childhood coordinators, coaches, and mentor teachers who provide training and support to educators (Bromer et al., 2009; Porter et al., 2016).

Instructional leaders play a critical role in improving outcomes for children by creating work environments where educators can implement research-based curricula and teaching practices and grow their knowledge and skills (Early Childhood Leadership Development Consortium, 2016). Most states have established Quality Rating and Improvement Systems (QRIS) as a strategy for improving the quality of early childhood programs. These QRIS standards help instructional leaders prioritize program and growth opportunities for their sites. An essential component of QRIS is the provision of professional development support for educators (Hestenes et al., 2015). By developing QRIS, states can ensure a comprehensive and coordinated delivery system for professional development and implementation of staff and instructional leadership practices (Institute of Medicine and National Research Council, 2015).

Instructional leadership practices cover multiple administrative, communication, and educational tasks (NAEYC, 2019b). Instructional leaders provide a vision and ensure fidelity to a program’s curricular philosophy and work to meet standards that optimize learning environments (Abel, Talan, & Masterson, 2017). They support educators in implementing curriculum, allocate professional development resources, and collect data that inform program quality, training and resources, and program planning (Pacchiano et al., 2018; Ross & Berger, 2009).

With regard to leadership knowledge and skills, effective instructional leaders are lifelong learners, responsive to the needs of their staff, and engage in shared decision-making (Bruns et al., 2017). Effective leaders create a supportive and collaborative professional work environment. They nurture trust, shared understanding, and decision-making among staff and families, and they promote strong family engagement practices (Division for Early Childhood, 2014; Porter et al., 2015). They provide guidance on developmentally, culturally, and



linguistically responsive curriculum, assessment, and high-quality teaching, and model data-informed decisions and equitable practice (Pacchiano et al., 2018; Ross & Berger, 2009).

The IL Element focuses on infrastructure indicators. Equitable Infrastructure Indicators focus on state systems, policies, and practices that support high-quality pre-K. The infrastructure indicators are labeled as policy (e.g., established in policy and statewide standards), supports (e.g., dedicated resources), and data (e.g., data collection standards and protocols and data use). We have conceptualized the findings in the literature into the following IL indicators focused on infrastructure:

IL1. Instructional Leadership Policy

State has early childhood program standards that address the following eight instructional leadership practices:

- Leading data-informed continuous quality improvement (CQI) processes
- Organizing and facilitating job-embedded professional learning
- Ensuring coherent instructional guidance and systems to support teacher practice
- Creating systems that support family engagement practices
- Ensuring effective management of operations and resources
- Including teachers and families in decision-making
- Addressing and ensuring equity for students and early childhood educators
- Building a trusting and supportive environment among all in the program community

IL2. Instructional Leadership Competencies and Credentials

Professional development is established and aligned with research-based core knowledge and competencies which align with all other applicable professional standards for early childhood instructional leaders, including credentials and degrees.

IL3. Instructional Leadership Regulations

State has requirements related to instructional leadership (e.g., coaching, training) in grants, contracts, regulations, or legislation for providers (e.g., program directors, site leaders) with clear guidance or incentives (e.g., points in a grant system, tiered reimbursement) on how requirements are to be implemented.

IL 4. Instructional Leadership Data

State requires local programs that implement instructional leadership practices to collect meaningful data (e.g., classroom observations, program evaluations, early childhood educators and family surveys), and requires the use of data collected to track progress, and to guide technical assistance and resource allocation to local programs to support improvement purposes.



IL5. Instructional Leadership Supports

State provides specific and ongoing resources (e.g., funding for training or initiatives for pilots or innovations, technical assistance, or coaching) to support implementation of instructional leadership practices and roles. Funding and trainings are equitable (e.g., offered in diverse modes to meet the needs of the field: online, in person, accessible for early childhood educators with disabilities, Section 508 compliant)

IL6. Instructional Leadership Resource Topics

The state provides written guidance and resource materials to support or deliver training to support the implementation of instructional leadership practices addressing a range of topics including the following eight:

- Leading data-informed CQI processes
- Organizing and facilitating JEPL
- Ensuring coherent instructional guidance and systems to support teacher practice
- Creating systems that support family engagement practices
- Ensuring effective management of operations and resources
- Including teachers and families in decision-making
- Addressing and ensuring equity for students and early childhood educators
- Building a trusting and supportive environment among all in the program community

IL7. Instructional Leadership Data Collection for Equity Goals

State ensures that instructional leadership policies and practices promote access to high quality instructional support for all individuals. The state's efforts to understand and address inequity regarding instructional leadership include ongoing data collection, disaggregation of data, active discussions, data-driven decision-making, action planning, implementing, assessing implementation, and refining as needed. The state specifically collects data to understand and address the following three factors:

- The barriers to accessing affordable, culturally responsive, and equity-centered instructional leadership opportunities. Access includes location of available instructional leadership, language, Section 508 compliance, and diversity of trainers.
- Instructional leadership trainings address issues of equity, are reflective of teacher diversity, and include voices and experiences of diverse teachers and providers.
- Instructional leadership content is comprehensive and meets the needs of all teachers (e.g., content is varied and supports teachers to engage with children and parents from all backgrounds)



II. Instructional Leadership Literature Process Overview and Summary

To understand the existing literature support and identify the literature gaps and limitations for each of the IDM indicators, we conducted a systematic literature search and checked with experts for relevant sources to support the various indicators of IL. More details of the general review process conducted across all elements can be found in the [IDM Evidence Review Document](#). For the IL Element, 14 key phrases were identified and explored. Out of these initial phrases, five key phrases retrieved relevant results. The list of all sources that yielded relevant results based on the five key phrases and expert recommendations, along with nine key phrases that did not yield relevant results, can be found in Appendix A.

Once the literature search for the IL Element was completed, we reviewed the quantity and rigor of the literature supporting each indicator and computed what we termed the *Literature Support Index* (LSI). The LSI tracks seven criteria:

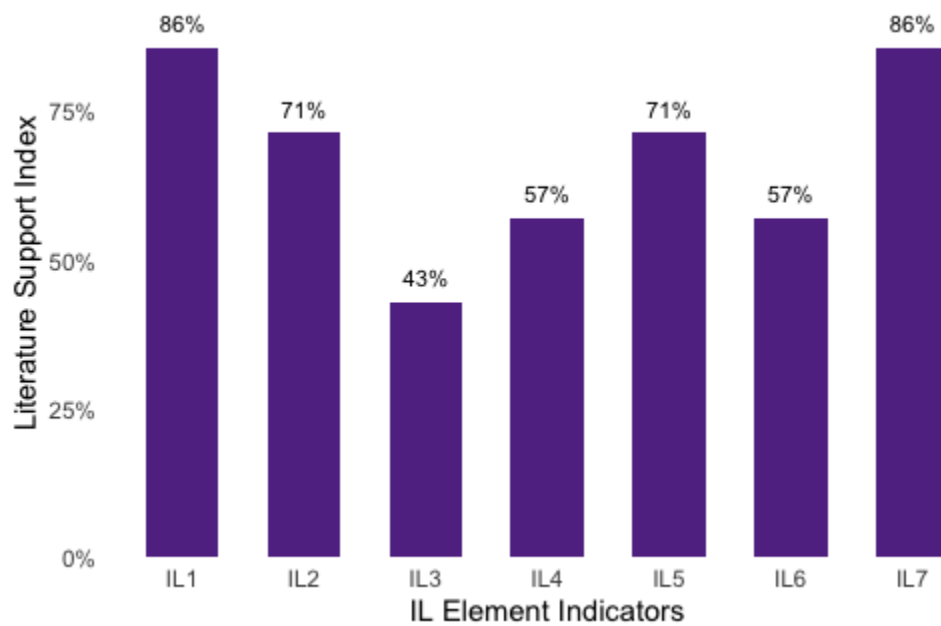
1. at least three peer-reviewed articles;
2. at least one study with no more than two limitations;
3. at least one study at national or state level;
4. at least one study that uses experimental or quasi-experimental design;
5. at least two studies that use representative sampling;
6. support from at least one national research organization; and
7. support from at least one national policy organization.

The LSI is expressed as a percentage of the above seven criteria that are satisfied for a particular indicator. More information about the rationale for the LSI and how it is calculated can be found here in the IDM Evidence Review Document. Figure 1 summarizes the LSI for the IL Element indicators.



Figure 1

Overall Summary of IL Literature Support Index

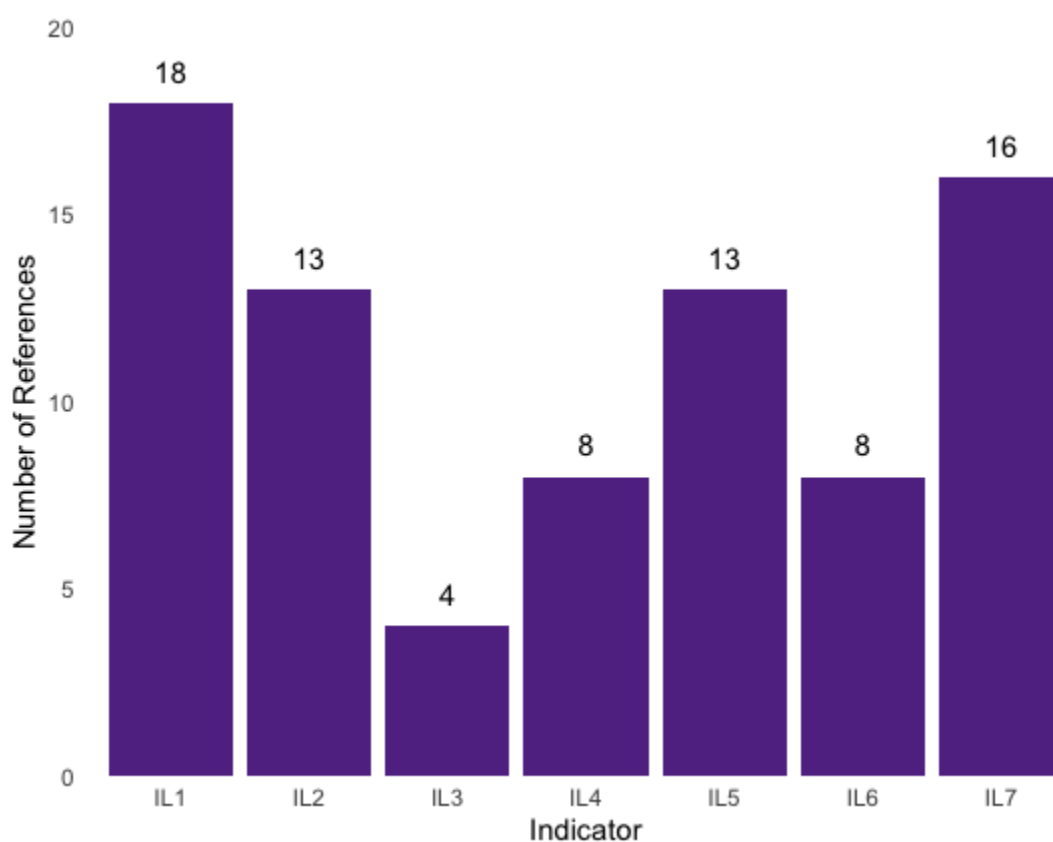




While Figure 1 combines aspects of both rigor of the literature as well as quantity supporting each indicator, Figure 2 represents solely the quantity of evidence for each indicator. Figure 2 shows that IL indicators 1, 7, 2, and 5 are supported by a larger number of sources than the rest of the indicators. We hope that this type of analysis can help state teams understand where there are gaps in research, and potential directions for future studies (for example, IL3 is an under-researched topic and, hence, ripe for a state team's own data collection efforts).

Figure 2

IL Quantity of Evidence by Indicator

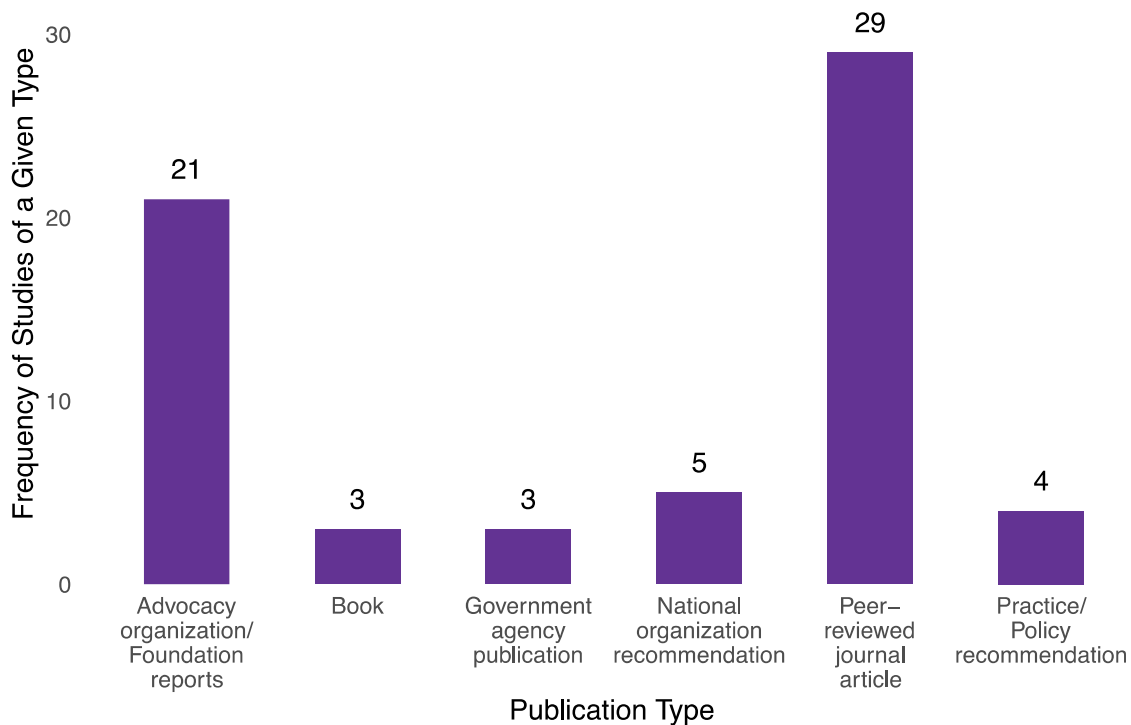




To understand more about the nature of the literature that supports the Element, Figure 3 lists the types of publications used as evidence for it—the majority of the sources are articles from peer-reviewed journals (29).

Figure 3

IL Evidence by Publication Type





In addition to types of publications, Figure 4 summarizes the research design used in the sources supporting the IL Element. The most common type of research designs represented in the IL literature scan (32) involved a literature review conducted by academic researchers. While reviewing the primary sources would have been preferable, the sheer volume of publications made this a more feasible choice. Mixed methods studies were the second most common design (9). Studying instructional leadership effectively would most likely require pooling data from multiple states, presenting logistical challenges; hence the relative lack of quantitative studies on this topic. A promising way that organizations have tried to measure instructional leadership is by developing data-use and improvement tools and surveys, such as the Early Education Essentials measurement system (Pacchiano et al., 2018).

Figure 4

IL Summary of Research Design

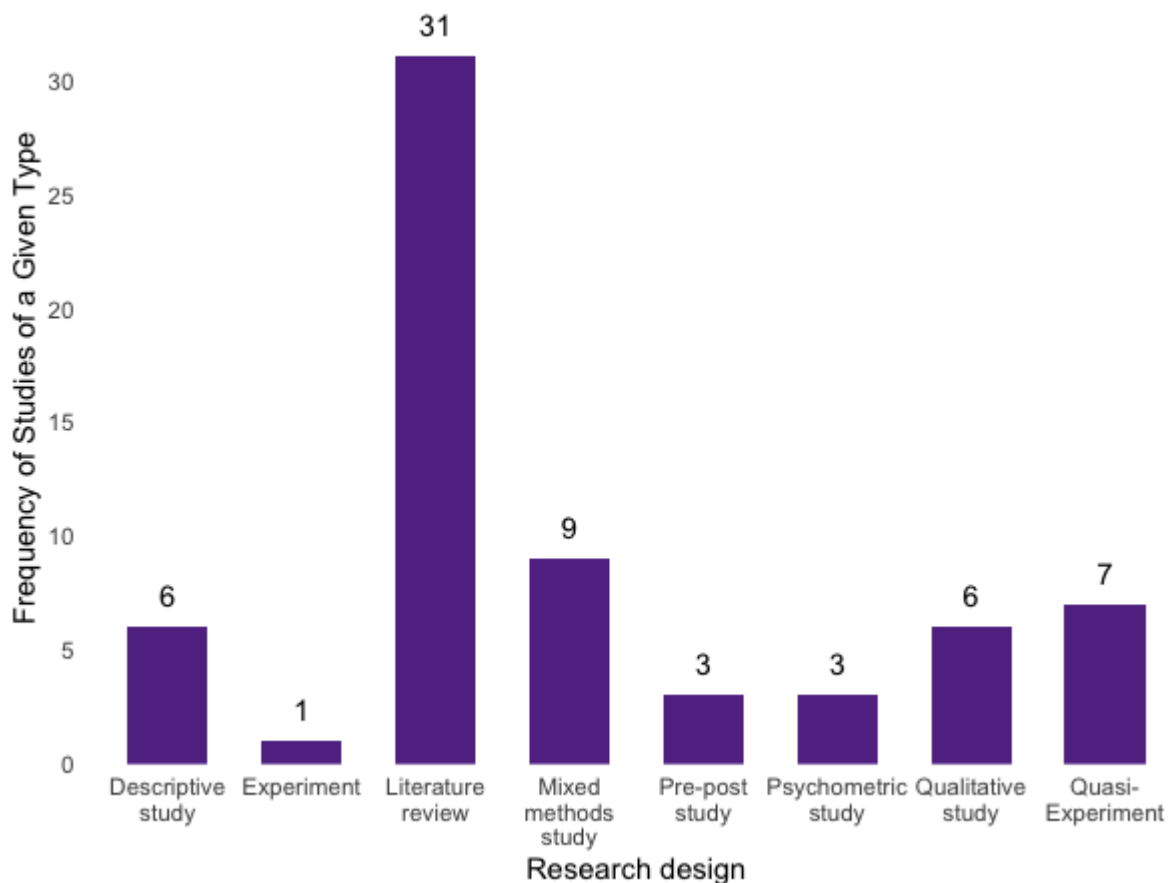




Figure 5

IL Child Outcomes Studies Examined

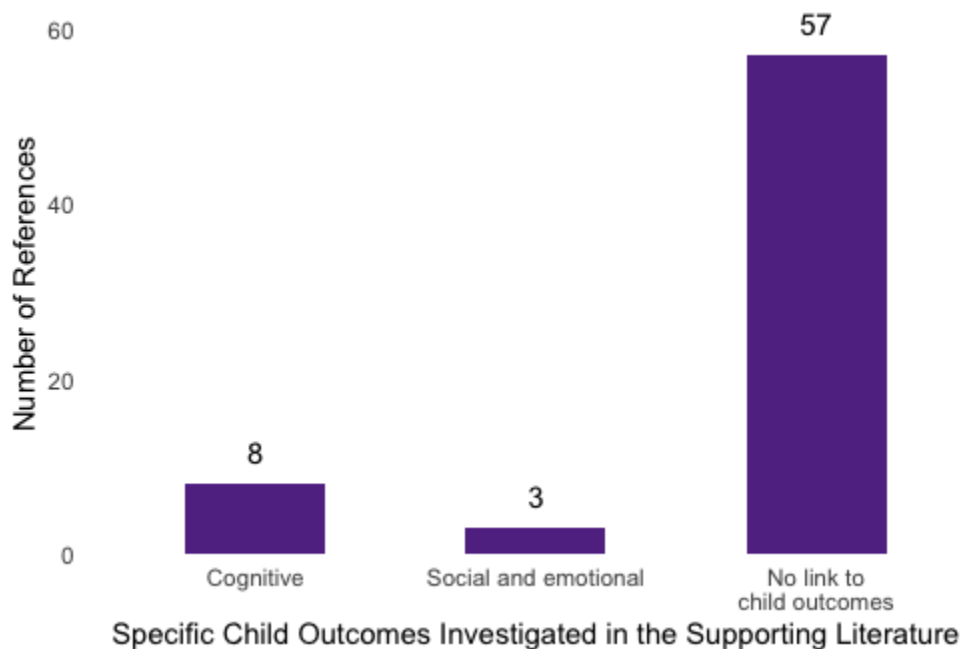


Figure 5 shows that very few studies in the IL element were connected to child outcomes. As we mentioned above, this element is not easy to study; hence, few high-quality academic rigorous peer-reviewed studies connect instructional leadership to child outcomes. To the extent that such studies exist, most focus on cognitive outcomes (8), and the rest on social-emotional outcomes (3).





Figure 6

IL Inequities of Focus in the Literature

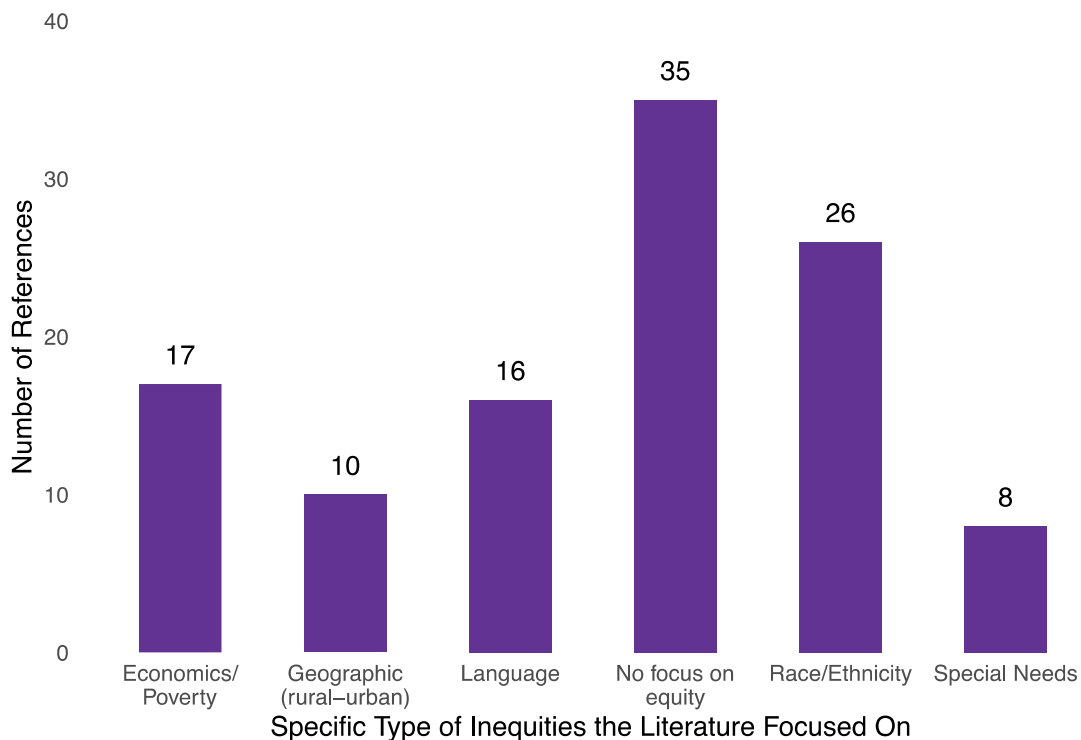


Figure 6 shows that many studies included in the scan focused on equity and, in fact, multiple types of equity. Some studies did not contain direct links to child outcomes with an equity focus (36). Of those that did, most focused on racial equity (26), followed by economic (17) and language (16) equity. Special needs was the category focused on by fewest studies (8). Again, this provides state teams a good understanding of which equity categories the literature focused on, and if this does not align with a state's own equity focus, putting such issues on the equity RPP agenda of the state's team would be warranted.



III. Summary of IL Literature Supporting Indicators: Current Practices and Challenges

This section provides a summary of the literature supporting each indicator (or set of indicators), current leadership practices, and challenges to strengthening instructional leadership systemically.

Instructional Leadership: infrastructure indicators (state level) State Instructional Leadership Policies and Regulations

IL1. Instructional Leadership Policy

State has early childhood program standards that address the following eight instructional leadership practices:

- Leading data-informed CQI processes
- Organizing and facilitating job-embedded professional learning
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IL2. Instructional Leadership Competencies and Credentials

Professional development is established and aligned with research-based core knowledge and competencies which align with all other applicable professional standards for early childhood instructional leaders, including credentials and degrees.

IL3. Instructional Leadership Regulations

State has requirements related to instructional leadership (e.g., coaching, training) in grants, contracts, regulations, or legislation for providers (e.g., program directors, site leaders) with clear guidance or incentives (e.g., points in a grant system, tiered reimbursement) on how requirements are to be implemented.

Contrary to K-12 educational programs guided by standards set at both the national and state levels and implemented at the local level, ECE is highly fragmented and lacks consistency in program standards and funding (Whitebook et al., 2018). Instructional leadership practices are key to high-quality programs and positive child outcomes (Abel, Talan, & Masterson, 2017). To ensure educators get the consistent support they need to engage in quality instruction, statewide policies and standards need to require implementation of instructional leadership practices, developed, for example, through QRIS (Institute of Medicine & National Research Council [IOM & NRC], 2015). Policies and standards should be comprehensive and address all features related to quality teaching, including instructional supports for educators, appropriate levels of paid planning time, sufficient staffing, and paid non-child contact time for professional responsibilities and reflection with colleagues (Reid et al., 2019; Whitebook et al., 2018).



In terms of competencies, it is generally recognized that early childhood leaders need deep knowledge of child development, early childhood curricula, and assessment practices, as well as the communication and organizational skills to apply this knowledge through professional development and training for educators (Abel, Talan, & Newkirk, 2017; IOM & NRC, 2015). There is, however, limited empirical evidence on specific research-based competencies, credentials, and degrees needed for effective early childhood instructional leadership. Bruns et al. (2017) surveyed professionals engaged at any level in the early intervention and early childhood special education (EI/ECSE) service delivery system to identify knowledge and competencies needed for effective leadership. A factor analysis yielded six knowledge areas and five competency areas. The six knowledge areas comprised child development, evidence-based practices, state laws and regulations, family-centered approaches, federal laws and regulations, and group processes. The five competency areas comprised professional learning, effective relationships, shared responsibility, data use, and effective communication. Most studies on early childhood leadership qualities and competencies focus only on program directors in formal positions of authority. A survey of ECE professionals in formal leadership roles conducted in California found that many program directors bring administrative, management, and communication skills but lack professional and educational grounding in early childhood education (Whitebook et al., 2010). This shows that there is more work to be done in standardizing instructional leadership competencies and setting statewide policies for implementation of instructional leadership that is consistent and effective. Most recently, the Early Care and Education Leadership Study (ExCELS) is an ongoing study funded by the Department of Health and Human Services to learn more about key leadership constructs and developing a short-form measure to assess ECE leadership in center based settings (Early Care and Education Leadership Study (ExCELS, n.d.)

Current education and certification requirements and expectations for directors in early childhood settings vary greatly by state, ranging from no set requirements to a bachelor's degree. In a nationwide survey of 55 leadership development programs, Goffin & Daga (2017) found only 15 leadership development programs tied to an academic degree or credential. Of these leadership development programs, four were associated with NAEYC accreditation and five were bolstered by their states' licensing agencies or QRIS. In a recent 2020 survey among ECE leadership stakeholders conducted by The McCormick Center for Early Childhood Leadership, there was broad consensus about the need for a unified framework for the professional preparation and compensation of program and site leaders. There was a clear consensus that program and site leaders need a degree, with most of the participants agreeing that center directors should have at least a bachelor's degree. In addition, specialized professional development focused on leadership competencies has been associated with positive program outcomes such as achievement of national program accreditation and QRIS status (Talan et al., 2014). Taking Charge of Change (TCC), for example, is an early childhood leadership development program that focuses on a broad systems theory view of a leader in clarifying and affirming values, setting goals, articulating a vision, as well as managing tasks to achieve that vision. Participants in the TCC program reported learning useful instructional and administrative skills on how to support staff, manage change, foster shared decision-making, and lead staff development. They also need personal skills, such as engaging in self-reflection and perspective taking (Talan et al., 2014).

Little attention has been paid to policies and standards regarding requirements, guidelines, and incentives for preschool program leaders despite the significant contribution of effective instructional leadership practices to program quality and children's long-term growth and success (IOM & NRC, 2015; Reid et al., 2019; Rohacek et al., 2010) and improved child outcomes (Bryk et al., 2010; Leithwood et al., 2004; Louis et al., 2010; MacNeil et al., 2009). The quality of administrative practices and the quality of the organizational climate created by leaders have been found to be significantly positively related to quality of children's learning environments (Dennis &



O'Connor, 2013; Lower & Cassidy, 2007). Strong leadership in school- and center-based early childhood programs is associated with higher quality teacher–child interactions and instruction (Ehrlich et al., 2018) and influences the effectiveness of coaching or other professional development interventions (Ackerman, 2008; Mattera et al., 2013). In studies of Head Start programs, committed and competent leadership (Ramey et al., 2000) and strong leadership teams (LiBetti & Mead, 2019) were associated with successful, high-quality programs that achieved significant positive outcomes for children.

States have an opportunity to recognize and strengthen the value of early childhood instructional leadership practices by developing and enforcing comprehensive policies and regulations through their QRIS, and by establishing professional development pathways that allow instructional leaders to effectively acquire the competencies and skills that lead to high-quality early childhood care and education programs (CSCCE, 2020; Early Childhood Leadership Development Consortium, 2016; Whitebook et al., 2018). By establishing and enforcing requirements, guidelines, and incentives for instructional leaders, states can provide some assurance that leaders have the support and resources they require to do their jobs successfully (Reid et al., 2019). Requirements and guidelines should address teaching supports, adult well-being, and learning opportunities, as well as compensation policies and should be supported through the allocation of sufficient funding for implementation (CSCCE, 2020). Rohacek et al. (2010), for example, found that program directors generally appreciated and used systems of standards to shape programmatic practice, make decisions, and explain decisions to families and staff. Some directors found standards to be a motivating factor in encouraging further education. They also found that directors who looked to higher standards and accreditation to guide program practices had classrooms of higher quality as measured by ECERS-R and CLASS scores.

State requirements regarding instructional leadership can bring greater consistency and funding across all sectors of ECE and ensure a more equitable system. It is important that states monitor implementation of instructional leadership practices and distribute funding and other supports as needed to reduce inequities among programs (CSCCE, 2020; Reid et al., 2019).



Instructional Leadership: infrastructure indicators (state level)

IL 4. Instructional Leadership Data

State requires local programs that implement instructional leadership practices to collect meaningful data (e.g., classroom observations, program evaluations, early childhood educators and family surveys), and requires the use of data collected to track progress, and to guide technical assistance and resource allocation to local programs to support improvement purposes.

States require early childhood programs to collect and use data as a basis for individualizing services and program improvement (Stein et al., 2013). Data about instructional leadership practices involves collecting information at multiple levels of a program's organization and practices well beyond the classroom level (Ansari & Pianta, 2018; Reid et al., 2019). Programs can focus data collection efforts on key practices that have been associated with effective instructional leadership (Pacchiano et al., 2018). These practices include creating positive and supportive environments, building staff capacity for effective teaching, and support for family engagement.

Instructional leaders play an influential role in promoting frequent warm interactions and conversations among staff and between staff and families, and using these relationships and discussions to build a sense of collective responsibility, innovation, and efficacy among all staff for achieving the program's vision (Ehrlich et al., 2018; Rochester et al., 2019). Local-level data show that programs with positive and supportive environments, like the ones instructional leaders set a tone for, are more likely to exhibit higher instructional quality (Dennis & O'Connor, 2013; Rohacek et al., 2010).

Existing tools that support instructional leadership development and gather data include Supportive Environmental Quality Underlying Adult Learning (SEQUAL, n.d.), Program Administrator Scale (PAS; Talan & Bloom, 2011) and Early Education Essentials Organizational Supports measurement system (Early Ed Essentials). For instance, Early Ed Essentials measures organizational elements of preschool programs that are most likely to support improvements in child outcomes (Pacchiano et al., 2018). The tool uses staff and parent surveys to get feedback on program organizational conditions that support educators' daily practices beyond the classroom level. Data from the surveys are meant to help identify specific organizational and instructional leadership supports to intentionally plan for improvement efforts (Ehrlich et al., 2018).

States can ensure that measures of instructional leadership are included in system reform efforts such as quality rating and improvement systems (McCormick Center for Early Childhood Leadership, 2014). Data on instructional leadership practices can help states develop policies that strengthen the organizational conditions for ongoing professional development and quality teaching practice supports for both educators and instructional leaders (Ehrlich et al., 2018). In many programs, educators lack sufficient time to prepare lessons and engage in professional development activities (Reid et al., 2019). States can use data on instructional leadership practices to allocate funding to ensure working conditions for program staff to engage in preparation, reflection, and continuous improvement activities as well as provide resources for instructional leaders to support educators in their daily teaching and assessment practices (Derrick-Mills, 2015; Reid et al., 2019).



Instructional Leadership: infrastructure indicators (state level) State Supports and Resources

IL 5 Instructional Leadership Supports

State provides specific and ongoing resources (e.g., funding for training or initiatives for pilots or innovations, technical assistance, or coaching) to support implementation of instructional leadership practices and roles. Funding and trainings are equitable (e.g., offered in diverse modes to meet the needs of the field: online, in person, accessible for early childhood educators with disabilities, Section 508 compliant).

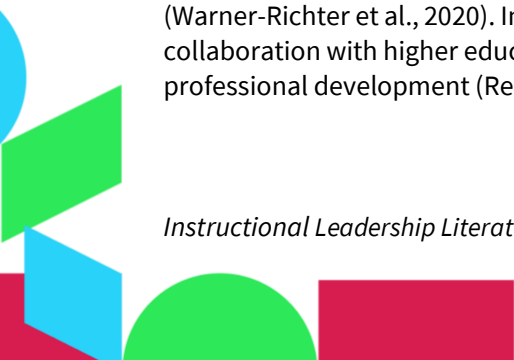
IL 6. Instructional Leadership Resource Topics

The state provides written guidance and resource materials to support or deliver training to support the implementation of instructional leadership practices addressing a range of topics including the following eight:

- Leading data-informed CQI processes
- Organizing and facilitating JEPL
- Ensuring coherent instructional guidance and systems to support teacher practice
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- Ensuring effective management of operations and resources
- Including teachers and families in decision-making
- Addressing and ensuring equity for students and early childhood educators
- Building a trusting and supportive environment among all in the program community

Instructional leaders support educators through various practices that include providing professional development to support educators' high-fidelity implementation of a program's curriculum, using data to monitor the effectiveness of teaching practices, and creating equitable and inclusive environments that build trust and collaborative decision-making among teachers and families (Goffin & Daga, 2017; Pacchiano et al., 2018). However, studies have shown that early childhood educators routinely lack sufficient instructional support to ensure implementation of quality teaching practices (Center for the Study of Child Care Employment et al., 2020).

A strong body of evidence links educators' professional development, including coaching, mentoring, and other training opportunities, with enhanced classroom quality and child outcomes (Yoshikawa et al., 2013). Instructional leaders put in place organizational structures that provide adequate resources for professional development, establishing peer learning teams or communities of practice and providing constructive feedback to educators on their implementation of teaching practices (Dennis & O'Connor, 2013). As policies at the state and federal levels call for higher educational requirements for early childhood professionals and instructional leaders, it is important to examine issues of access to training and higher education, particularly for linguistically and culturally diverse educators who are currently underrepresented among program directors (Warner-Richter et al., 2020). Individualized job-embedded training and alternative career pathways in collaboration with higher education institutions offer accessible approaches to instructional leadership professional development (Reid et al., 2019). Also, an increase in qualification requirements needs to be





accompanied by improvements in working conditions, compensation, and an increase in public funding in order to incentivize and motivate early childhood professionals to further their education.

There is a growing expectation that federal, state, and local systems provide adequate resources and funding for improvement of early childhood quality despite often constrained resources (Warner-Richter et al., 2020). Different levels of resources are necessary to implement instructional leadership practices for program quality improvement and enhance child outcomes (Reid et al., 2019). The resources that instructional leaders have available influence their ability to support the implementation of quality practices. Early childhood program directors reported that financial stress constrained not only instructional materials but also limited their vision of program quality to mainly meeting children's basic needs (Rohacek et al., 2010). An area where resources continue to be a barrier to program quality is in expectations and support for staff (Rohacek et al., 2010). Compared to non-publicly funded center-based classrooms, teachers in publicly funded classrooms tend to have lower workforce characteristics, such as hourly pay and retirement plans, and were less likely to receive coaching, which is regarded as a key element to promoting classroom quality and child development (Johnson et al., 2020). This suggests that continuing to work on increasing the funding generally available to early childhood education is important, especially when it comes to improving staff working conditions and providing support for ongoing professional development.

Resources are also needed for leadership professional development (Warner-Richter et al., 2020). Policymakers and practitioners agree about the importance of strong leadership in early childhood education, but many center directors and school principals assume their leadership positions without prior professional backgrounds or training in early education and/or administration (LeMoine, 2008; Szekely, 2013; Talan et al., 2014). Different resources and levels of support are needed to improve implementation of instructional leadership practices, not only for formal leadership positions, but also for in-formal leaders who are practitioners whose daily work involves various forms of leadership activities (Goffin & Daga, 2018). States can provide an assortment of professional development options focusing on a variety of administrative and early childhood topics to match the needs of individual leaders (Ryan et al., 2011; Whitebook et al., 2010). Individualized coaching, for example, is an effective approach to supporting educators in improving teaching practices (LiBetti & Mead, 2019; Yoshikawa et al., 2013). Some ongoing professional development or coaching programs, such as MyTeachingPartner, which target early childhood educators that provide instructional guidance and support for improving teacher-child relationships, were found to have benefits not only for early childhood educators, but also for children (Ansari & Pianta, 2018).

Additional areas of critical importance for effective leadership are diversity and inclusion to provide equal access for young children (Harris, 2015). States can provide guidance and resources for instructional leaders to address practices that promote social justice and equity (Goffin & Daga, 2017). States can provide resources for instructional leaders to support culturally responsive teaching and anti-bias approaches through high-quality trainings paired with coaching, and invest in data collection systems that incorporate equity indicators, such as inclusion of children with disabilities, dual language opportunities for dual language learners (DLLs), positive discipline strategies, and racial, gender, and language disparity, into early childhood and education monitoring systems (The Children's Equity Project and the Bipartisan Policy Center, 2020).





Instructional Leadership: infrastructure indicators (state level)

Equity Focus

IL7. Instructional Leadership Data Collection for Equity Goals

State ensures that instructional leadership policies and practices promote access to high quality instructional support for all individuals. The state's efforts to understand and address inequity regarding instructional leadership include ongoing data collection, disaggregation of data, active discussions, data-driven decision-making, action planning, implementing, assessing implementation, and refining as needed. The state specifically collects data to understand and address the following three factors:

- The barriers to accessing affordable, culturally responsive, and equity-centered instructional leadership opportunities. Access includes location of available instructional leadership, language, Section 508 compliance, and diversity of trainers.
- Instructional leadership trainings address issues of equity, are reflective of teacher diversity, and include voices and experiences of diverse teachers and providers.
- Instructional leadership content is comprehensive and meets the needs of all teachers (e.g., content is varied and supports teachers to engage with children and parents from all backgrounds)

In line with the framework of targeted universalism (Powell et al., 2019) used to guide the development of the IDM, equity indicators in each Element highlight the importance of ongoing data collection, the disaggregation of data, and the use of data for decision-making, action planning, and assessing implementation. This supports the five steps of targeted universalism (Powell et al., 2019), where once a universal goal is established (Step 1), and there is information about the performance of the general population relative to the universal goal (Step 2), the performance of different groups can be identified (Step 3), further analysis can be done to understand the structures that support or impede each group for achieving the universal goal (Step 4), and targeted strategies for each group can be developed and implemented to reach the universal goal (Step 5).

National educational leadership standards call out equity and cultural responsiveness as core leadership responsibilities (National Policy Board for Educational Administration, 2015). There is some consensus around core equitable leadership responsibilities, but specific guidance on practices is limited, with little empirical evidence on actual implementation. Instructional leaders can support staff by providing individualized feedback on instructional practices for equity during classroom observations, facilitate ongoing opportunities for educator collaboration to engage in collective learning and improvement, and hold staff accountable for providing equitable access to content and meeting the learning needs of each child (Galloway & Ishimaru, 2017). Instructional leaders also promote collaboration among staff and families by supporting practices that encourage families to be included and influential in the decisions related to their children's early education (Ehrlich et al., 2018). They promote practices that honor different family structures, cultures, and values; involve parents in decisions about their children; and regularly solicit families' feedback about the quality of their children's experiences (Bloom & Abel, 2015). Effective instructional leadership that promotes equity and cultural responsiveness requires a broader set of skills and a vision of leadership as a shared collective process where people at all levels collaborate in bringing about innovation and change (Bryk et al., 2010; Ishimaru & Gallimore, 2020). Many leaders feel they lack the skills and expertise to enact the kinds of changes needed to ensure more equitable policies, practices, and outcomes (Gallimore & Ishimaru, 2017). In addition to supporting



educators in implementing culturally and linguistically responsive teaching and assessment practices, instructional leaders need to be able to engage staff and family members in critical reflection and practices aimed at promoting equitable outcomes for all children across racial, ethnic, linguistic, socioeconomic, and ability groups (Galloway & Ishimaru, 2017; Ross & Berger, 2009). To develop such leadership skills will require significant shifts in leadership preparation programs to focus more specifically on collaborative processes, systems thinking, innovation, and advancing equity and social justice (Goffin & Daga, 2017; IOM & NRC, 2015).

States can support instructional leaders in promoting equitable access to high-quality early education programs by developing QRIS standards that include indicators around cultural competency, family engagement, curriculum and learning materials, and other areas that can support or discourage equitable participation by families and children of diverse backgrounds (Johnson-Staub, 2017). The quality of early childhood programs varies greatly across states, counties, and even neighborhoods, with children from nondominant low-income groups more likely to be in low-quality programs than children from high-income families (Bassok & Galdo, 2016). High-quality early education programs can improve outcomes, narrow achievement gaps, and convey long-term benefits for children, especially for children from disadvantaged backgrounds (Bauer & Schanzenbach, 2016; Libetti & Mead, 2019; Magnuson et al., 2004). States can also provide instructional leaders with training and resources to ensure that educators are able to deliver responsive care and education to children and families from diverse cultural and linguistic backgrounds, and that assessment tools used to monitor child outcomes are culturally and linguistically appropriate (NAEYC, 2019a). Leaders can build on the quality, cultural, and linguistic standards and practices of ECE programs such as Head Start that have a well-documented history of success in reducing inequitable outcomes among groups of children (Bauer & Schanzenbach, 2016; Libetti & Mead, 2019). Resources such as the Multicultural Principles for Early Childhood Leaders (Head Start, n.d.-b) and the Dual Language Learners Program Assessment (Head Start, n.d.-a) offer examples of standards for cultural and linguistic competence leaders might incorporate into their programs (Johnson-Staub, 2017).

Regular reviews of equity data and research by state agencies can help identify priority areas for instructional leaders in providing equity and cultural competence training for staff (Johnson-Staub, 2017). The Children's Equity Project and the Bipartisan Policy Center (2020), for example, identified three areas in early childhood education that showed disproportionate disadvantages particularly against children of color and children with disabilities. These areas are harsh discipline and its disproportionate application, the segregation of children with disabilities in learning settings, and the inequitable access to bilingual learning opportunities for dual language and English learners. Instructional leaders also need to provide opportunities for staff to reflect on their core values and beliefs about teaching and identify changes in teaching practices that bring more equitable outcomes for children (Derman-Sparks et al., 2015; Lalvani & Bacon, 2019; Madison, 2018). Approaches such as anti-bias education (Derman-Sparks & Olsen Edwards, 2010) and culturally responsive teaching practices (Gay, 2010) offer frameworks for critical reflection that support educators in recognizing implicit biases in order to interact with children and families in linguistically and culturally responsive ways and provide more meaningful instruction that draws on children's cultures and experiences (Muniz, 2020).

IV. Future Directions and Limitations

High-quality early education programs can improve outcomes, narrow achievement gaps, and convey long-term benefits for children, especially for children from disadvantaged backgrounds (Bauer & Schanzenbach, 2016; Libetti & Mead, 2019; Magnuson et al., 2004). An essential element of a high-quality ECE program is



instructional leadership (Pacchiano et al., 2018). Instructional leadership practices such as coaching, mentoring, and other ongoing professional development supports for educators have been associated with improved classroom quality and child outcomes (Yoshikawa et al., 2013). However, limited research is available on what constitutes effective instructional leadership in ECE. Much of the literature on leadership in early childhood education is based on surveys or consists of broad recommendations by professional organizations. Part of the reason for this lack of research may be due to the complexity of the field of ECE, characterized by a great diversity of organizations and institutions (IOM & NRC, 2015; Whitebook et al., 2018). Also, in contrast to K-12 settings, broad differences in policies, regulations, and funding among programs cause leaders in ECE to play multiple and varying roles ranging from staff support and supervision to coordination, management, communication, and advocacy (Ehrlich et al., 2018). In terms of future research, it seems important to explore the different roles of ECE leaders and identify effective practices specific to instructional leadership.

The field of ECE lacks a common definition and framework for foundational knowledge and skills necessary for leaders to support high-quality practices for child development and early learning (Abel, Talan, & Newkirk, 2017; McCormick Center for Early Childhood Leadership, 2020). In addition to possessing expertise in early childhood development and learning, leaders in ECE must understand a complex array of issues, develop skills to work collaboratively with staff and families, and understand the early childhood system itself and how policy shapes the quality of services available to children and families (Bloom & Abel, 2015; Early Childhood Leadership Development Consortium, 2016). More empirical evidence is needed in understanding the specialized knowledge and competencies necessary to be effective leaders. This information can serve as a basis for rethinking requirements for leaders related to education, credentials, coursework, and professional experiences, including formal early childhood leadership development and more targeted job-embedded intervention efforts tailored to meet the individual needs of professionals in current leadership roles and positions (IOM & NRC, 2015).

The quality of early childhood programs varies greatly across states, counties, and even neighborhoods, with children from nondominant low-income groups more likely to be in low-quality programs than children from high-income families (Bassok & Galdo, 2016). Federal, state, and local systems can use program data disaggregated by race and ethnicity, income, disability, and home language to guide more equitable allocation of resources and ensure consistent quality across programs (Derrick-Mills, 2015; Johnson-Staub, 2017; Warner-Richter et al., 2020). The resources that instructional leaders have available influence their ability to support the implementation of quality practices (Rohacek et al., 2010). Different resources and levels of support are needed to support implementation of instructional leadership practices, not only for formal leadership positions, but also for informal leaders who are early childhood educators that demonstrate instructional leadership in a variety of roles (Goffin & Daga, 2018). Allocating sufficient resources in supporting the implementation of instructional leadership practices, such as ongoing professional development for early childhood educators, is critical but remains a challenge for many states with limited funding (Ansari & Pianta, 2018; Warner-Richter et al., 2020).

Instructional leaders can play an important role in making programs more equitable by supporting educators in implementing practices that advance equity and celebrate diversity (Early Childhood Leadership Development Consortium, 2016). Few professional development resources address equity in learning, and there is little empirical data on their effectiveness. States can support instructional leaders in strengthening educator professional development on equity, culture, and language and work together to incorporate data on equity indicators into early childhood and education monitoring systems (The Children's Equity Project and the Bipartisan Policy Center, 2020).



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Appendix

Table 1. Instructional Leadership Literature Review Summary

Key word or phrase	# Articles for initial abstract review based on inclusion criteria	# Articles for 2nd abstract review with exclusion criteria	# Articles passed full article review	Article citation
Leadership model/skills	30	1	1	Harris, 2015 (IL2)
Instructional leadership	6	3	1	Stein et al., 2013 (IL4)



Key word or phrase	# Articles for initial abstract review based on inclusion criteria	# Articles for 2nd abstract review with exclusion criteria	# Articles passed full article review	Article citation
QRIS directors	40	2	1	Ansari & Gershoff, 2016 (IL1, 6)
Effective leaders	5	1	1	Bruns et al., 2017 (IL2, 3)
School climate	30	5	4	Ansari & Pianta, 2018 (IL5); Johnson et al., 2020 (IL2, 4); Reid et al., 2019 (IL5, 6); Rochester et al., 2019 (IL3, 4)
Expert recommendation	2	2	58	Head Start ECLKC, n.d. (IL3); Ackerman, 2008 (IL1); Abel, Talan, & Masterson, 2017 (IL2); Bassok & Galdo, 2016 (IL7); Bauer & Schanzenbach, 2016 (IL7); Bloom & Abel, 2015 (IL7); Bloom et al., 2013 (IL5, 6); Brown et al., 2014 (IL2, 5); Bryk et al., 2010 (IL1); Center for the Study of Child Care Employment, 2020 (IL1); CEP, 2020 (IL7); Curran, 2015 (IL1); Dennis & O'Connor, 2013 (IL5); Derman-Sparks et al., 2015 (IL7); Derrick-Mills, 2015 (IL4); Early Childhood Leadership Consensus Statement, 2016 (IL2); Ehrlich et al., 2019 (IL4); Ehrlich et al., 2018 (IL1); Fantuzzo et al., 2004 (IL1); Galloway & Ishimaru, 2017 (IL7); Gay, 2018 (IL7); Goffin & Daga, 2017 (IL5); Gomez, 2015 (IL1); Ingersoll, 2007 (IL1); Institute of Medicine and National Research Council, 2015 (IL2); Ishimaru & Galloway, 2020 (IL7); Johnson-Staub, 2017 (IL7); Karch, 2010 (IL1); Lalvani &



Key word or phrase	# Articles for initial abstract review based on inclusion criteria	# Articles for 2nd abstract review with exclusion criteria	# Articles passed full article review	Article citation
				Bacon, 2019 (IL7); Leithwood et al., 2004 (IL1); LiBetti & Mead, 2019 (IL1); Louis et al., 2010 (IL1); Lower & Cassidy, 2007 (IL1); Ma et al., 2016 (IL1); MacNeil et al., 2009 (IL4); Madison, 2018 (IL7); Magnuson et al., 2004 (IL7); Mattera et al., 2013 (IL1); McCormick Center, 2014 (IL4, 5); McCormick Center, 2020 (IL2); Mendez, 2010 (IL1, 6); Abel, Talan, & Newkirk, 2017 (IL4); Muniz, 2020 (IL7); NPBEA, 2015 (IL2, 7); OHS, n.d.-a (IL7); OHS, n.d.-b (IL7); Pacchiano et al., 2018 (IL6); Ramey et al., 2000 (IL1); Rohacek et al., 2010 (IL3, 5); Ross & Berger, 2009 (IL5); Ryan et al., 2011 (IL5, 6); Szekely, 2013 (IL5, 6); Talan et al., 2014 (IL2); Warner-Richter, 2020 (IL5); Whitebook et al., 2018 (IL2); Whitebook et al., 2014 (IL2); Whitebook et al., 2010 (IL2, 6); Yoshikawa, 2013 (IL5)
Total	113	14	66	



Instructional Leadership Literature Review Summary (excluded articles)

Key word or phrase	# Articles for initial abstract review based on inclusion criteria	# Articles for 2nd abstract review with exclusion criteria	# Articles passed full article review
Leadership qualifications	6	0	0
Leadership competencies	25	1	0
Equitable outcomes	5	0	0
Quality teaching support	30	1	0
Evidence-based leadership	13	0	0
Leading by example	9	4	0
Applied early childhood research	5	3	0
Policy leadership	6	3	0
Principal preparation	15	2	0
Total	114	14	0





Acknowledgement

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