

Principal Leadership: Moving Toward Inclusive and High-Achieving Schools for Students With Disabilities



Bonnie S. Billingsley
Virginia Tech

James McLeskey
Jean B. Crockett
University of Florida

August 2014
CEEDAR Document No. IC-8



Office of Special Education Programs
U.S. Department of Education

Disclaimer:

This content was produced under U.S. Department of Education, Office of Special Education Programs, Award No. H325A120003. Bonnie Jones and David Guardino serve as the project officers. The views expressed herein do not necessarily represent the positions or policies of the U.S. Department of Education. No official endorsement by the U.S. Department of Education of any product, commodity, service, or enterprise mentioned in this website is intended or should be inferred.

Recommended Citation:

Billingsley, B., McLeskey, J., & Crockett, J. B. (2014). *Principal leadership: Moving toward inclusive and high-achieving schools for students with disabilities* (Document No. IC-8). Retrieved from University of Florida, Collaboration for Effective Educator, Development, Accountability, and Reform Center website: <http://cedar.education.ufl.edu/tools/innovation-configurations/>

Note: There are no copyright restrictions on this document; however, please use the proper citation above.



The CEDAR Center

University of Florida
360 Norman Hall
PO Box 117050
Gainesville, FL 32611

www.cedar.org
cedar@coe.ufl.edu
352.273.4259



Table of Contents

Innovation Configuration for Principal Leadership for Students With Disabilities 4

Principal Leadership and Students With Disabilities..... 6

 The Need for Instructional Leadership..... 7

 The Need for Inclusive Leaders 8

Overview and Development of the Innovation Configuration 10

Improving School Leadership for Students With Disabilities 11

 Instructional Leadership for All Students..... 12

 Principal Leadership for Inclusive Schools 25

 Parent Leadership and Support..... 33

 Importance of District and State Leadership..... 38

Conclusion 40

References..... 42

Appendix A: Innovation Configuration for Principal Leadership for Students With
Disabilities 61

Appendix B: Sources of Evidence-Based Practice in Special Education 67



Innovation Configuration for Principal Leadership for Students With Disabilities

This paper features an innovation configuration (IC) matrix that can guide principal leadership professionals toward inclusive and high-achieving schools for students with disabilities. This matrix appears in Appendix A.

An IC is a tool that identifies and describes the major components of a practice or innovation. With the implementation of any innovation comes a continuum of configurations of implementation from non-use to the ideal. ICs are organized around two dimensions: essential components and degree of implementation (Hall & Hord, 1987; Roy & Hord, 2004). Essential components of the IC—along with descriptors and examples to guide application of the criteria to course work, standards, and classroom practices—are listed in the rows of the far left column of the matrix. Several levels of implementation are defined in the top row of the matrix. For example, no mention of the essential component is the lowest level of implementation and would receive a score of zero. Increasing levels of implementation receive progressively higher scores.

ICs have been used in the development and implementation of educational innovations for at least 30 years (Hall & Hord, 2001; Hall, Loucks, Rutherford, & Newton, 1975; Hord, Rutherford, Huling-Austin, & Hall, 1987; Roy & Hord, 2004). Experts studying educational change in a national research center originally developed these tools, which are used for professional development (PD) in the Concerns-Based Adoption Model (CBAM). The tools have also been used for program evaluation (Hall & Hord, 2001; Roy & Hord, 2004).

Use of this tool to evaluate course syllabi can help teacher preparation leaders ensure that they emphasize proactive, preventative approaches instead of exclusive reliance on behavior reduction strategies. The IC included in Appendix A of this paper is designed for teacher preparation programs, although it can be modified as an observation tool for PD purposes.

The Collaboration for Effective Educator, Development, Accountability, and Reform (CEEDAR) Center ICs are extensions of the seven ICs originally created by the National Comprehensive Center for Teacher Quality (NCCTQ). NCCTQ professionals wrote the above description.



Reflective of our democratic values, all children living in the United States are eligible to receive a public school education. Some children have widely divergent cultural backgrounds and atypical levels of development that make learning a challenge for them, but to inclusive school leaders, each student has promise. Some students have cognitive or physical disabilities that range from mild to severe, with some students needing only minor physical accommodations in classrooms to ensure their equal access to learning and other students, who may be eligible for special education and highly intensive interventions, requiring specially designed instruction that addresses their individual educational needs. With appropriately intensive and effective instruction, many more students with disabilities than previously thought can achieve to high academic standards (McLaughlin, 2009; McLaughlin, Smith, & Wilkinson, 2012), defined by the vast majority of the states as the Common Core State Standards (CCSS, www.corestandards.org).

This research synthesis, supported by the Collaboration for Effective Educator, Development, Accountability, and Reform (CEEDAR) Center at the University of Florida, is consistent with the CEEDAR Center's responsibility to restructure and improve both teacher and leadership preparation programs while encouraging the use of evidence-based practices (EBPs) in inclusive classrooms and schools. The CEEDAR Center's major knowledge development activity is to identify practices that will help state education agencies (SEAs) coordinate with institutions of higher education (IHEs), local education agencies (LEAs), and non-profits to integrate EBPs into their preparation and practice. Therefore, in this review, we have synthesized what we know about principal leadership as it relates to improving the educational outcomes of students with disabilities in inclusive schools.



Principal Leadership and Students With Disabilities

Over the past several decades, substantial changes have occurred in the education of students with disabilities. One of the most important changes relates to the increasing number of students with disabilities who are included in general education classrooms for much of the school day and the federal expectation that these students will make adequate progress in the general education curriculum (Individuals With Disabilities Education Act [IDEA], 2004; No Child Left Behind [NCLB], 2001). Recent research indicates that although the proportion of students with disabilities who spend 80% or more of the school day in general education classrooms has substantially increased from 34% in 1990 to 61% in 2011 (McLeskey, Landers, Williamson, & Hoppey, 2012; U.S. Department of Education, 2013), achievement outcomes and postschool success for these students remain far below desirable levels (Feng & Sass, 2012; National Center for Education Statistics [NCES], 2012; National Council on Disability, 2011; U.S. Department of Education, 2013).

Policy changes in recent years have also shifted from an emphasis on compliance and procedures to accountability for student outcomes, which creates challenges for principals and teachers (Burdette, 2010). Low levels of academic achievement and poor postschool outcomes have led to calls for principals to support teachers in developing more effective inclusive schools by increasing the use of EBPs that have been proved effective in raising student achievement levels (IDEA, 2004; McLeskey & Waldron, 2011; McLeskey, Waldron, Spooner, & Algozzine, in press; NCLB, 2001; Pazey & Cole, 2013). The principal's role in improving outcomes for students with disabilities and other struggling learners is important given research evidence revealing that substantial changes must occur to develop inclusive schools that support the use of practices related to improved student outcomes (Billingsley, 2012; McLeskey, Waldron, & Redd, 2014). Principals are key participants in ensuring that changes occur as schools become more



effective and inclusive for all students (Crockett, 2002; Dyson, Farrell, Polat, Hutcheson, & Gallannaugh, 2004; McLeskey et al., 2014).

The Need for Instructional Leadership

Unfortunately, the majority of evidence suggests that principals are not well prepared to address the needs of students with disabilities and others who struggle in school (Billingsley & McLeskey, in press; DiPaola & Walther-Thomas, 2003; Pazey & Cole, 2013). The primary factor that leads to this lack of knowledge and ownership is the absence of content related to disability and special education in principal preparation programs. In one study, 53% of principals indicated that they had not taken any courses related to special education (Angelle & Bilton, 2009). In a review of the literature on the curriculum of educational leadership programs, Osterman and Hafner (2009) concluded that disability and special education topics received little attention, and when these topics were addressed, content usually focused on the legal facets of special education. A review of research by DiPaola and Walther-Thomas (2003) revealed that “most principals lack the course work and field experience needed to lead local efforts to create learning environments that emphasize academic success for students with disabilities” (p. 11). More recently, a review by Pazey and Cole (2013) concluded that special education has long been a neglected area in leadership preparation and is often “absent in conversations relevant to the creation of administrator preparation programs that embrace a social justice model of leadership” (p. 243).

There is little evidence to suggest improvement in principals’ readiness to lead inclusive schools and address the instructional needs of students with disabilities. For example, although there has been an increase in curriculum content in leadership preparation programs over the past two decades, leadership about special education is not adequately addressed (Angelle & Bilton, 2009; Cusson, 2010; Pazey & Cole, 2013; Powell, 2010). This lack of attention has occurred



despite clear emphasis on the importance of preparing school leaders to meet the needs of every student through standards that guide the development and approval of most leadership preparation programs (Council of Chief State School Officers [CCSSO], 2008). Moreover, the challenge extends beyond initial preparation programs, as noted by an expert panel citing “lack of ongoing professional development (pre- and in-service), including internship, mentoring, networking opportunities, leadership academies, and other strategies to improve a principal’s ability to serve diverse populations” (Burdette, 2010, p. 4).

Although principals are expected to provide inclusive leadership, there is minimal research on how principals approach leadership as they work to improve educational opportunities for students with disabilities. In a study of principal instructional leadership for special education, Bays and Crockett (2007) found that competing demands and lack of knowledge about how to enact instructional leadership were barriers for principals, who were reportedly dispersing rather than distributing special education leadership in their schools. Bays and Crockett stated that “distribution connotes an intentional arrangement,” (p. 158) and “we found that supervisory duties were most often dispersed informally to others and handed off in ways that diminished the importance of instructional leadership for special education and that risked its potential benefits” (p. 158). Although this dispersion finding is concerning, it is not surprising given the lack of principal preparation regarding leading the development of effective instruction for students with disabilities.

The Need for Inclusive Leaders

There is a lack of agreement regarding how to define and enact inclusive schools (Ainscow, Booth, & Dyson, 2006; Ryndak, Jackson, & Billingsley, 2000). However, there is an emerging consensus that inclusive schools should both value students with disabilities as active participants in school communities and provide these students with supports that result in



improved outcomes in school and postschool life (McLeskey et al., in press). For the purpose of this review, we considered inclusive schools to be “places where students with disabilities are valued and active participants and where they are provided supports needed to succeed in the academic, social, and extra-curricular activities of the school” (McLeskey et al., in press).

Some research suggests that principals are wary of inclusive programs (Billingsley & McLeskey, in press; Garrison-Wade, Sobel, & Fulmer, 2007; Praisner, 2003; Salisbury, 2006), and they often feel they are not responsible for educating students with disabilities (Lashley, 2007). However, a growing body of literature addresses how principals committed to including students with disabilities work within their schools to create the conditions necessary to implement inclusion (e.g., Burstein, Sears, Wilcoxon, Cabello, & Spagna, 2004; Hoppey & McLeskey, 2013; Mayrowetz & Weinstein, 1999; Salisbury & McGregor, 2002). Much of the leadership described in the literature about inclusive schools is consistent with that of transformational leadership. In these school-reform studies, principals directed their efforts toward fostering an inclusive vision in the school, building capacity to meet the needs of students through PD, and creating work contexts that facilitated collaboration and a reculturing of schools (e.g., Billingsley, 2012; Burstein et al., 2004; Hoppey & McLeskey, 2013; Mayrowetz & Weinstein, 1999). Some studies addressed the importance of distributed and shared leadership among principals, teachers, and parents in developing and sustaining inclusive schools (e.g., Billingsley, 2012; Hoppey & McLeskey, 2013; Mayrowetz & Weinstein, 1999).

Principals are critical in creating inclusive schools that are responsive to meeting the needs of diverse learners. Currently, however, there is a lack of emphasis about special education in the majority of leadership preparation programs (Pazey & Cole, 2013), a lack of research about principals as they lead programs for all students, and only implicit coverage of



these topics in professional leadership standards (CCSSO, 2008). Therefore, it is necessary to be more explicit regarding the knowledge and skills that should be included in leadership programs to prepare principals to address the needs of students with disabilities in inclusive settings.

Overview and Development of the Innovation Configuration

The following sections feature our review of the literature on principal leadership for students with disabilities and situate the findings on their effectiveness in the broader educational leadership literature. This IC configuration (see Appendix A) identifies the critical knowledge and skills—(a) instructional leadership, (b) leadership for inclusive schools, and (c) the support of parent-family engagement in their children’s learning—that are needed to strengthen principal leadership for educating students with disabilities in effective inclusive schools. In the final section, we have emphasized the importance of district and state leadership to support the work of school leaders. This review follows the IC and synthesizes the research relating to each dimension.

We based this paper on key research syntheses about the impact of leadership on student outcomes (e.g., Leithwood, Harris, & Hopkins, 2008; Louis, Leithwood, Wahlstrom, & Anderson, 2010; Robinson, Hohepa, & Lloyd, 2009; Robinson, Lloyd, & Rowe, 2008; Waters, Marzano, & McNulty, 2004) and effective leadership for inclusive schools (e.g., Burstein et al., 2004; Causton-Theoharis, Theoharis, Bull, Cosier, & Dempf-Aldrich, 2011; Fisher, Sax, & Grove, 2000; Guzman, 1997; Hoppey & McLeskey, 2013; Lieber et al., 2000; Mayrowetz & Weinstein, 1999; McLeskey et al., 2014; Ryndak, Reardon, Benner, & Ward, 2007; Sindelar, Shearer, Yendol-Hoppey, & Libert, 2006). Throughout the four sections of this paper, we have incorporated additional literature relevant to special education leadership (e.g., Boscardin, Weir, & Kusek, 2010; Cook & Smith, 2012; Crockett, 2002, 2011; Crockett, Billingsley, & Boscardin, 2012; Deshler & Cornett, 2012; McLaughlin, 2009). The literature evidence that supports the IC



(see Appendix A) is either low or emerging for most of the dimensions because the majority of available evidence does not specifically address the impact of leadership dimensions on the achievement of students with disabilities.

Improving School Leadership for Students With Disabilities

Although principals have multifaceted roles in leading and managing schools, we have primarily focused on their role as instructional leaders and the knowledge and skills they need to support the learning of all students in inclusive settings. As instructional leaders, principals are expected to be goal oriented and engaged in strategic action to “align the school’s academic mission with strategy and action” (Hallinger, 2009, p. 5). Although leading for learning has received a great deal of emphasis in the leadership literature, instructional leadership is not always a priority for principals (Elmore, 2004; Hallinger, 2009). Furthermore, there is limited research regarding how principals engage in instructional leadership in ways that benefit students with disabilities.

To provide leadership for effective inclusive schools, principals must have an understanding of the needs of students with disabilities and must recognize that these needs “vary greatly even within the same disability population and at different stages of their development” (Hehir, 2005, p. 56); this suggests that instructional leadership for students with disabilities requires that the unique needs of these students be understood and addressed, providing them with opportunities to achieve within the general education curriculum. Furthermore, given the diverse range of needs of students with disabilities, principals must engage in distributed (e.g., Smylie, Mayrowetz, Murphy, & Louis, 2007; Spillane, 2006) and collaborative (Hallinger & Heck, 2010) forms of leadership to ensure that the necessary expertise is available to meet the needs of the full range of students with disabilities.



Instructional Leadership for All Students

Instructional leadership emerged out of the effective-schools literature in the 1980s and focused on “classroom practice as the key to improving student achievement” (Louis et al., 2010, p. 51). As Elmore (2004) stated, “the skills and knowledge that matter in leadership . . . are those that can be connected to, or lead directly to, the improvement of instruction and student performance” (p. 58). Under this definition, principals’ core work is instructional improvement, and everything else is instrumental to it (Elmore, 2004).

For this section, we reviewed evidence on the work of principals who shared leadership to improve student learning through six core leadership dimensions: (a) academic press, (b) disciplinary climate, (c) high-quality instruction, (d) progress monitoring, (e) working conditions, and (f) professional learning opportunities. We selected these six leadership dimensions from key research syntheses, selecting those that are critical for improving instruction for students with disabilities. Although these dimensions are likely familiar to school leaders, we have emphasized components of each dimension relevant to students with disabilities.

Ensures academic press. Academic press is defined as “the extent to which school members, including teachers and students, experience a normative emphasis on academic success and conformity to specific standards of achievement” (Lee, Smith, Perry, & Smylie, 1999). Lee and colleagues (1999) posited that students will be more successful when the goals and standards for achievement are high and clear to all and when there is accountability for results. Leithwood, Patten, and Jantzi (2010) noted that in more than 20 published empirical studies, most studies reported “positive, and at least moderate relationships between academic press and student achievement” (p. 674), especially in reading and mathematics but in other subjects as well.



Leader behaviors associated with academic press include setting high goals for academic performance, protecting teachers from interruptions, monitoring student performance toward academic goals, facilitating PD, and providing feedback on teaching and learning (Lee et al., 1999; Leithwood et al., 2010; Robinson et al., 2008). Robinson and colleagues (2008) pointed out that in high-achieving schools, “academic goal focus is both a property of leadership” (p. 659) as principals set student achievement as the primary school goal and “a quality of school organization” (p. 659); this suggests that teachers share academic press through the expectations they set for students (e.g., challenging assignments, homework) and the effective use of instructional time (Lee et al., 1999; Leithwood et al., 2010). Moreover, Lee and colleagues (1999) showed that students achieve more when they experience strong academic press in school as well as strong social support (e.g., subjects related to students’ personal interests, teachers listen to and know students, students receive help with homework).

It is critical that principals communicate and reinforce high expectations for students with disabilities. Research on effective inclusive schools has revealed that an important quality of these schools is ensuring high expectations for all students, including those with disabilities (Dyson et al., 2004; Farrell, Dyson, Polat, Hutcheson, & Hallannaugh, 2007; Furney, Hasazi, Clark-Keefe, & Hartnett, 2003; Waldron, McLeskey, & Redd, 2011). For example, Dyson and colleagues (2004) conducted case studies in 12 high-performing inclusive schools in England in an effort to identify the distinctive factors that supported the success of these schools. One of the factors that emerged was academic press or “strong achievement orientation” (p. 72) as staff had high expectations for all students in these settings, including those with disabilities, and enacted these expectations by providing a range of strategies to improve achievement. These strategies were directed toward improving the overall quality of teaching and providing supports to remedy



“perceived weaknesses in pupils’ skills and capacities” (p. 77). A case study of an effective inclusive United States school resulted in similar findings (McLeskey et al., 2014) as the principal took on a leadership role in ensuring high achievement expectations for all students and worked with teachers to provide the necessary resources and improve teacher practice to ensure that this occurred.

As school leaders work to establish high achievement standards for all students, they may find that improving achievement expectations for students with disabilities (and other students) requires challenging the status quo. Many educators do not believe that students with disabilities should be held to the same academic standards as other students, even though some students with disabilities clearly achieve these high standards (Olson, 2004). Unfortunately, the education of students with disabilities “has been plagued by low expectations” (Hehir, 2005, p. 112), which may lead to exclusion from general education classrooms, reduced academic expectations because general curriculum standards are viewed to be too advanced, and fewer postsecondary choices (Jorgensen, 2005).

To avoid the pernicious problems associated with low expectations, principals and other leaders (e.g., special education teachers, district leaders) must engage teachers in conversations about expectations for students with disabilities and help leaders acquire the knowledge and skills needed to work toward helping students reach grade-level standards. These standards (i.e., CCSS in most states) apply to all students, and the vast majority of students with disabilities take the same state assessments that are required for all students. A very small percentage of students from low-incidence populations (e.g., those with significant cognitive disabilities) may have alternative achievement standards outlined in their individualized education programs (IEPs); however, these students are still assessed on the same grade-level standards but at



different levels of breadth, depth, and complexity (National Center on Educational Outcomes, 2013).

Develops a positive disciplinary climate. Principals can have a positive impact on schools by creating orderly, safe, and productive learning environments (Robinson et al., 2008). They must also work to eliminate disruptions that can have a negative effect on student learning (Hattie, 2009). In a discussion of the effects of disciplinary climate on student learning, Leithwood and colleagues (2010) pointed out that researchers using large-scale data sets and sophisticated research methods have established the importance of a positive disciplinary climate to student outcomes. Referring to one of their own studies, they reported that disciplinary climate had a significant positive effect on student achievement, similar to the magnitude of academic press. Variables included in this study addressed items such as “students do not start working for a long time after my lesson begins” (p. 685), and “students in my class rarely disrupt the learning of other students” (p. 685). In a synthesis of research, Hattie (2009) also emphasized that decreasing disruptive behavior had a moderate effect size on student learning and that “targeting classroom disruptions via a behavioral approach is the most efficacious” (p. 104).

To improve student achievement, leaders must create school environments that encourage desirable and productive student behavior, and they must support teachers as they work to improve disciplinary environments in their classrooms. It is clear that some students, including those with disabilities, pose significant behavioral challenges to school staff members who try to create safe and productive school and classroom environments. Students with chronic behavioral problems, such as emotional and behavioral disorders, pose significant challenges to teachers in inclusive settings and are among teachers’ most pressing concerns (Dyson et al., 2004).



A broad range of evidence-based strategies are available for teachers to address problem behavior in the classroom (Lane, Cook, & Tankersley, 2013). Leaders should consider evidence-based, school-wide approaches while creating environments that provide clear and consistent social and behavioral expectations for all students (Sugai, O’Keeffe, Horner, & Lewis, 2012). Researchers have developed the School-Wide Positive Behavior Support (SWPBS), a data-driven, evidence-based approach designed to teach and encourage desirable behavior from all students. This approach is “based on a prevention perspective in which desired social behavior expectations and routines are taught directly and formally, actively supervised, and positively reinforced” (Sugai et al., 2012, p. 304). Research evidence suggests that successful implementation of SWPBS has been experimentally linked to a range of benefits, including improved achievement and reductions in discipline referrals and suspensions (Horner et al., 2009). In addition, principals using SWPBS received significantly higher ratings in behavior management effectiveness than principals in non-SWPBS schools. Teachers in SWPBS schools also had higher job satisfaction than their peers in non-SWPBS schools (Richter, Lewis, & Hagar, 2012). Finally, it is important to note that SWPBS can result in a substantial reduction in the time that must be spent addressing discipline problems (e.g., reductions in office discipline referrals; Sugai et al., 2012), thus providing principals with additional time to address other pressing school improvement issues.

Although the aim of SWPBS is to prevent problematic behavior, it is also used to identify areas in which problems are likely to occur (e.g., fighting on the bus, high noise levels during lunch) and to establish priorities for group intervention in schools and classrooms. Interventions are designed on a continuum so that more intensive supports are provided when students do not



respond to school-wide and classroom efforts to improve behavior. Some students with disabilities, as well as other students, will need specialized, individualized systems of support.

Ensures high-quality instruction. Principals in high-performing schools provide leadership in overseeing and coordinating instruction. They work to coordinate curriculum across grades and progressions of teaching objectives across levels (Robinson et al., 2008). School leaders also work to protect teachers' instructional time (Elmore, 2004; Robinson et al., 2008) and set clear performance standards for high-quality instruction. Promoting high-quality instruction means ensuring that teachers learn and effectively use the instructional practices that research shows are most powerful in promoting student learning (Deshler & Cornett, 2012). To address the needs of students with disabilities, principals must be aware of and promote the use of EBPs that have been shown to be effective in improving student learning and ensure that these instructional practices are implemented with fidelity (Cook & Smith, 2012; see Appendix B). As Robinson and colleagues (2008) emphasized, the "source of our leadership indicators should be our knowledge of how teachers make a difference to students" (p. 699).

As research on child development indicates, children mature at varying rates and respond differently to instruction based on biology, environment, and social learning history (Ervin, Schaughency, Goodman, McGlinchey, & Matthews, 2006). At the same time, student needs vary considerably (e.g., background knowledge, current skill levels, interests, learning rate, nature of disability), and not all students respond to high-quality instruction. In response, approaches such as differentiated instruction (Tomlinson, 2008) and Universal Design for Learning (UDL) are promoted in schools with the idea that instruction must be adjusted to help students who are not making adequate progress in standards-based curriculum. In particular, tiered school-wide instructional models, such as the Multi-Tiered System of Support (MTSS;



e.g., Response to Intervention or Instruction [RtI]), are gaining attention because they demonstrate success in improving student outcomes (Algozzine et al., 2012).

Multitiered systems are designed to improve the performance of all students in a school and include components such as “universal screening, intervention, progress monitoring, use of data to make decisions and at least three increasingly intense tiers of support” (Deshler & Cornett, 2012, p. 240). Although a detailed description of MTSS is beyond the scope of this paper, such systems show promise in improving student achievement (Algozzine et al., 2012; Batsche, in press; Brownell, Sindelar, Kiely, & Danielson, 2010). Conceptually, MTSS provides flexibility in the level of instruction across varied dimensions (e.g., focus of instruction, size of group, frequency of progress monitoring), allowing instruction to be tailored to the needs of students (Batsche, in press). For example, some students who struggle in Tier 1 need small-group focused intervention support at Tier 2 to improve their achievement. Other students whose content knowledge is substantially below grade level often need highly intensive interventions in small groups (e.g., one to three students) at the Tier 3 level to address significant learning problems; these students often require greater fiscal resources and specialized expertise to ensure specially designed and individually appropriate instruction (Ervin et al., 2006; Hoover, Eppolito, Klingner, & Baca, 2012; What Works Clearinghouse [WWC], 2009).

Develops a system for progress monitoring. Although statewide accountability measures are currently used to evaluate student outcomes and determine the effectiveness of schools, these external measures provide summative or outcome data related to student performance that is often not useful for making changes in student placements, instructional practices, and other important educational decisions. As Fullan (2007) noted, “external accountability does not work unless it is accompanied by development of internal accountability”



(p. 60). In effective schools, principals ensure that internal accountability systems are in place for monitoring student progress and that these data are meaningful to teachers and useful for improving instruction (Robinson et al., 2008). These internal accountability systems provide a tool for improving practice because they link student performance data to changes in instruction that are needed to increase achievement (Fullan, 2007).

One approach to internal accountability increasingly used in schools is the ongoing monitoring of progress that is done as part of MTSS. In MTSS, principals work with teachers and other school staff to establish a common language about progress monitoring as well as to develop the capacity to collect, analyze, and use progress-monitoring data to inform instructional decisions. MTSS also requires that teachers be knowledgeable and skillful in using data to identify the extent to which instruction or intervention was effective and modify instructional plans to improve their performance (Batsche, in press).

In case studies of high-performing inclusive schools, clear systems for tracking student progress were in place, and teachers used these data to determine how students responded to instruction and what changes in instructional practices were needed to improve student outcomes (Dyson et al., 2004; Hehir & Katzman, 2012; Waldron et al., 2011). For example, in case studies of three effective inclusive schools, Hehir and Katzman (2012) stated that “ongoing assessment is part of the school culture. They [teachers and administrators] do not wait for state testing to act” (pp. 94-95). Teachers in these settings were characterized as data wise, and they spent much time “analyzing and acting on student data concerning academic progress” (p. 94). Across the schools, the data were used to make a range of major instructional decisions on topics such as changes in the approach used for instruction in core content areas (e.g., literacy, mathematics) and determining which students were not making adequate progress and needed more intensive



instruction.

In a case study of a highly effective inclusive elementary school, Waldron and colleagues (2011) described how data systems were designed to be meaningful and relevant to teachers, were related to the content taught, and were useful in planning instruction. The results of data monitoring in this school were used to drive decision making, which informed decisions about the allocation of resources (e.g., distribution of technology, use of paraeducators and co-teachers within the school) and areas for PD. The principal in this setting pointedly noted why she needed these data when she said, “How can I have conversations with teachers about their students, how they’re progressing, how well they’re teaching without individual data about students?” (pp. 57-58). The teachers and principal agreed that “having a system for monitoring student progress was indispensable,” (p. 57) and “school improvement was simply impossible without such a data system” (p. 57).

Organizes working conditions for instructional effectiveness. Effective teachers are not enough to ensure learning because their working conditions mediate their effectiveness, their opportunities to teach, and their retention (Billingsley, 2011; Brownell, Billingsley, McLeskey, & Sindelar, 2012; Hirsch, Emerick, Church, & Fuller, 2007). Good working conditions may be conceptualized as attributes that make “effective teaching possible” (Johnson, Kraft, & Papay, 2012, p. 29), and recent research suggests that working conditions are predictive of students’ achievement growth as well as teacher satisfaction and retention (Johnson et al., 2012).

To ensure that teachers have opportunities to effectively teach, principals must address a range of school conditions relevant to educating students with disabilities. Special educators, general educators, and related services personnel require opportunities to collaborate in aligning curriculum with state standards (Furney et al., 2003); planning relevant instruction; and using



ongoing progress monitoring to determine the extent to which students with disabilities are moving toward achievement standards. This means that leaders must create collaborative climates and ensure that staff members have the time, schedules, and preparation to plan for the needs of students with disabilities and engage in collaborative instruction (e.g., co-teaching; Brownell et al., 2012; Burstein et al., 2004; Causton-Theoharis et al., 2011; McLeskey et al., 2014). In some schools with professional learning communities (PLCs), special education teachers learn, plan, and teach together on grade-level teams with general educators, English as Second Language (ESL) teachers, reading specialists, and speech therapists, (Fisher et al, 2000; Pugach, Blanton, Correa, McLeskey, & Langley, 2009).

Both general and special education teachers have expressed concern about workloads, heavy caseloads, lack of time to teach, and inadequate opportunities to collaborate with their peers (Billingsley, 2004; Loeb, Elfers, Knapp, Plecki, & Boatright, 2004). Instructional time is clearly important for students' achievement and is associated with improved student outcomes across a number of subjects and grade levels (Deshler & Cornett, 2012; Harn, Linan-Thompson, & Roberts, 2008; Hattie, 2009). In particular, principals must buffer teachers from non-instructional responsibilities to ensure that they have adequate time to teach because special educators' roles may become fragmented by numerous non-instructional activities, including paperwork, meetings, and other compliance activities that are not focused on instruction (Vannest & Hagan-Burke, 2010).

Principals also need to work with other district leaders to ensure that students with disabilities have basic access to buses, buildings, classrooms (Janney, Snell, Beers, & Raynes, 1995), and extracurricular activities. Funds must be designated for the hiring of paraeducators (Mayrowetz & Weinstein, 1999) and the purchase of specialized teaching materials (Janney et



al., 1995; Mayrowetz & Weinstein, 1999; Ryndak et al., 2007) and assistive technology (AT). Periodic needs assessments may be used to identify areas for improvement, and both principals and district leaders must coordinate budgets to ensure that key needs are met. In addition, teachers must understand the processes for securing classroom resources that are needed to instruct students with disabilities. If principals do not understand special educators' needs for varied types of support, they may "unintentionally thwart teacher efforts to provide quality support services for students with disabilities" (DiPaola & Walther-Thomas, 2003, p. 11) and increase the likelihood that teachers will leave (Billingsley, 2004).

Provides opportunities for professional learning and teacher evaluation. Principals in high-performing schools actively participate in efforts to promote teacher learning. The leadership dimension most closely linked to student achievement is leader involvement in teacher learning (Robinson et al., 2008). "Instructional improvement requires continuous learning" (Elmore, 2004, p. 67), and principals must "create the conditions that value learning as both an individual and collective good," (p. 67) and they must "model the learning they expect of others" (p. 67). When school leaders actively participate in teacher learning and are seen as knowledgeable about instruction and as a source of advice, student outcomes are higher, even after controlling for student background (Robinson et al., 2008).

School leaders must also have an understanding of the nature of professional learning that has been shown to increase teachers' knowledge and skills, including the use of instructional coaching (Deshler & Cornett, 2012). Today, embedded forms of professional learning are receiving increased attention as school leaders help set the stage for PD about problems of practice through the analysis of student performance data, group lesson study, mentoring, coaching, teacher study groups, and peer coaching about effective instructional practices



(Brownell et al., 2012; Deshler & Cornett, 2012; Desimone, 2009; Elmore, 2004; Neumerski, 2013). These embedded forms of professional learning involve collective efforts to improve instruction with critique and professional learning as part of the school culture (Elmore, 2004).

School leaders must have an understanding of the characteristics of professional learning that have been shown to improve teachers' knowledge and skills as they work to improve teachers' capacity to provide high-quality instruction. Desimone (2009) identified five key factors that are important for increasing teachers' knowledge and skills: (a) a content focus, which concerns knowledge about the subject being taught and how students learn the content; (b) active learning, which involves observing experts teach, interactive feedback, reviewing student work, and leading discussions; (c) coherence, or the extent to which learning material is consistent with teachers' knowledge and beliefs; (d) duration that is sufficient over both the span of time and the hours devoted to learning; and (e) collective participation, which involves teachers from school learning teams as they interact with one another about what they learn and refine their practices.

Research syntheses about special education teachers suggest that they learn effective practices when (a) they understand the conceptual foundations of an instructional strategy; (b) the PD content is aligned with the demands of instruction; (c) they have active opportunities to learn with observations and feedback from coaches and mentors; (d) they receive opportunities to discuss the instructional strategy and evaluate its effectiveness on what students learn; and (e) the context, including the provision of necessary materials and administrative support, is supportive (Brownell et al., 2012; Klingner, 2004; Pugach et al., 2009). Moreover Brownell and colleagues (2012), in a review of recent research, reported that general and special education teachers will implement strategies from PD when they have



(a) a fair amount of knowledge for teaching content and/or knowledge for providing direct, explicit instruction to students with disabilities is strong, (b) beliefs about instruction that align with strategies they are learning, (c) motivation to learn new strategies, and (d) ability to analyze the quality of their instruction and its impact on groups of students as well as individual students.” (p. 268)

Brownell and colleagues emphasized that when these individual qualities are not present, teachers will need extra support in the learning process.

High-quality instructional practices must be at the core of formative teacher evaluation systems, and those who observe and provide feedback to teachers (e.g., principals, central office personnel, mentors, peer evaluators) should encourage and reinforce the use of effective practices (Deshler & Cornett, 2012; Johnson et al., 2012). As Robinson and colleagues (2008) reported, greater leader involvement in classroom observation and feedback was more likely to occur in high-performing schools than low-performing schools, and teachers were more likely to describe these evaluations as useful. Unfortunately, there is little to guide principals in evaluating special educators (Holdheide, Goe, Croft, & Reschly, 2010), and packaged systems that become the basis for district teacher evaluation (e.g., Danielson, 2007; Pianta & Hamre, 2009) may not be appropriate for teachers of students with disabilities (Brownell et al., 2012). Providing helpful formative evaluations of special education teachers may be challenging if principals know little about special educators’ work and the nature of the instruction they provide (Blanton, Sindelar, & Correa, 2006; Holdheide et al, 2010; Steinbrecher, Mahal, & Serna, 2013). In some situations, a distributed approach to evaluation (e.g., special education coaches, central office personnel) may be needed to augment the work of principals in helping special educators improve their practices. For example, principals and local directors of special education may



observe special education teachers independently and then collaboratively develop a final report (Holdheide et al., 2010).

Principal Leadership for Inclusive Schools

As principals work toward developing inclusive schools, establishing a vision is critical in setting the direction for the schools, providing a moral purpose, and serving as a catalyst for motivating teachers who support the vision and value this work (Fullan, 2007; Ingram, 1996; Leithwood et al., 2008). An important component of setting direction related to inclusive schools is “crafting and revising the school’s direction, so that ownership of the direction becomes widespread, deeply held and relatively resistant to the vagaries of future leadership succession” (Leithwood et al., 2008, p. 31). Therefore, we have addressed critical components of principal leadership related to inclusive schools, including (a) building a shared vision and commitment, (b) developing a professional community that shares responsibility for the learning of all students, (2) redesigning the school, and (c) sharing responsibility for inclusive education.

Builds a shared vision for inclusive schools. To support the development of effective inclusive schools, principals engage others so that everyone understands the importance of inclusion for students with disabilities. Setting the direction for inclusion often means working to foster a school-wide commitment to including students with disabilities and providing opportunities for them to achieve. Principals who are effective at developing and sustaining inclusive schools accomplish this in a culture of open communication, respect, and trust as they facilitate communities in which everyone in the school develops a sense of collective responsibility for improving the learning of all students (Billingsley, 2012; McLeskey et al., 2014).

A common theme across all studies that addressed inclusive schools was the need to place an emphasis on students with disabilities and inclusion as part of a shared vision for these



schools. Several investigations emphasized the important role the principal plays in recognizing the need for a shared vision that addresses students with disabilities and inclusion and working to promote inclusion as a core value in the school (Burstein et al., 2004; Fisher et al., 2000; Guzman, 1997; Hoppey & McLeskey, 2013; Janney et al., 1995; Keyes, Hanley-Maxwell, & Capper, 1999; Lieber et al., 2000; Mayrowetz & Weinstein, 1999; Salisbury, 2006; Salisbury & McGregor, 2002; Waldron et al., 2011). For example, in a case study investigation of six inclusive schools, Guzman (1997) found that principals across these settings worked with school staff to develop a shared vision for the school that “included a belief in the right of all students to learn, a belief that inclusive classrooms are beneficial for all students, and a commitment to ensuring optimal academic success for all students” (p. 446).

Builds a school-wide commitment to inclusive schools. Research on inclusive schools highlights the important role principals play in ensuring school-wide commitment to developing effective inclusive schools. This aspect of leadership focuses on moving beyond the development of a shared vision that is collectively supported within a school to enacting this vision. Evidence related to leadership in inclusive schools indicates that principals work with teachers, students, and parents to build a school-wide commitment that is needed to enact this vision (Billingsley & McLeskey, in press; Ingram, 1996; Printy, 2008; Salisbury & McGregor, 2002; Waldron et al., 2011).

The foundation for building a school-wide commitment to inclusion and supporting school staff through the school change process required to enact practices that support inclusive schooling is ensuring that principals have good teacher relationships that are built on open communication and mutual trust. Research shows that “trust is pivotal in efforts to improve education” (Tschannen-Moran & Hoy, 2000, p. 550). Trust is conceived “as the extent to which



people are willing to rely upon others and make themselves vulnerable to others” (p. 551).

Evidence reveals that principals who have good relationships and develop trust with teachers and parents are more likely to successfully develop effective inclusive schools (Hoppey & McLeskey, 2013; Mayrowetz & Weinstein, 1999). For example, in one effective inclusive school, the principal viewed his most important role as building positive relationships with teachers by “(a) displaying trust in teachers; (b) listening to their ideas, concerns, and problems; and (c) treating staff fairly” (Hoppey & McLeskey, 2013, pp. 248-249). In this setting and other similar settings, relationships characterized by trust and respect were identified as important for keeping teachers involved as leaders established open communication systems that allowed for rich dialogue; time to listen to concerns and ideas; active involvement in supporting inclusive practices (e.g., involvement in PD activities or IEP meetings); and treatment of faculty in a fair manner (Garrison-Wade et al., 2007; Hoppey & McLeskey, 2013; Keyes et al., 1999; Mayrowetz & Weinstein, 1999; McLeskey et al., 2014; Waldron et al., 2011). This was exemplified in one setting by a principal who was optimistic; shared decisions; and remained “flexible, open-minded, and ready to learn from others” (Waldron et al., 2011, p. 54).

Builds a professional community that shares responsibility for improving the learning of all students. Perhaps the most critical component of leadership linked to building a commitment to inclusion relates to the work principals must do with teachers to ensure that they support inclusion and are motivated to develop successful inclusive programs. This commitment is especially important because substantial evidence reveals that general and special education teachers may be resistant to the development of inclusive programs and may feel that they are not adequately prepared to meet the needs of students with disabilities (Avrimidis & Norwich, 2002; Idol, 2006; Scruggs & Mastropieri, 1996; Turnbull, Turnbull, Wehmeyer, & Shogren,



2013; Waldron, 2007). In particular, teachers have expressed concerns related to the nature and severity of students' disabilities; the availability of support in the classroom (e.g., personnel such as paraeducators and consultants, curriculum materials); the need for PD to ensure they have the skills to support student needs; and principal involvement to ensure that supports such as planning time are available (Avrimidis & Norwich, 2002; Scruggs & Mastropieri, 1996; Waldron, 2007). If inclusive schools are to be successfully developed and sustained over time, principals must address the concerns faced by teachers and ensure that teachers have the needed support to develop knowledge and skills so that they are prepared to successfully address the needs of all students in their classrooms and are motivated to carry out this work.

In most of the inclusive settings, principals and others provided leadership for ensuring that teachers were well prepared to address the needs of students in their classrooms. This occurred through the extensive use of planning time and opportunities for PD before beginning the inclusive program (e.g., Burstein et al., 2004; Hoppey & McLeskey, 2013; Mayrowetz & Weinstein, 1999). Teachers in these settings indicated that these learning experiences were important preparation for new models of teaching (Burstein et al., 2004; Janney et al., 1995).

As teachers continued to identify areas in which they needed to refine skills or develop new practices, principals in effective inclusive schools also ensured that high-quality PD was provided once the inclusive program was implemented; they did this by regularly meeting to discuss and problem solve the inclusive program (Causton-Theoharis et al., 2011; Mayrowetz & Weinstein, 1999); embedding learning opportunities within the daily work of teachers (Causton-Theoharis et al., 2011; Hoppey & McLeskey, 2013); and participating in content-area and grade-level teams (Burstein et al., 2004, McLeskey et al., in press).

In several inclusive schools, principals also worked with teachers to develop a PLC to



support teacher learning and problem solving (Hoppey & McLeskey, 2013; McLeskey et al., 2014). For example, in one school, the principal was committed to embedding high-quality PD into the daily work of teachers and worked with teachers to develop a PLC to support this work (Hoppey & McLeskey, 2013). As Waldron and McLeskey (2011) have noted, PLCs in inclusive schools “result in added value by generating multiple solutions to complex problems and by providing opportunities to learn from others as school professionals express and share expertise” (p. 59). Research indicates that PLCs can lead to greater trust and respect among professional colleagues, improved teacher satisfaction, improved instruction, better outcomes for students, and school change that is sustained over time (Waldron & McLeskey, 2011).

Redesigns schools for inclusive education. This component of leadership is critically important for the development of inclusive schools because substantial evidence reveals that most schools require extensive redesign or systemic change to successfully develop an effective inclusive school, and the principal is often the most important school leader as change occurs (Guzman, 1997; Idol, 2006; Ingram, 1996; Keyes et al., 1999; McLeskey & Waldron, 2006; Waldron et al., 2011). Changes often require addressing beliefs of school staff and other stakeholders regarding students with disabilities, changing curriculum and instructional practices, and altering teacher roles (Fullan, 2007; McLeskey et al., 2014). These changes necessitate substantial redesign of a school that requires changes in the school culture (Ingram, 1996; McLeskey & Waldron, 2002, 2006) and places demands on principals to provide leadership related to school change, which results in supportive working conditions that “allow teachers to make the most of their motivations, commitments and capacities” (Leithwood et al., 2008).



Research reveals that principals assume many critical leadership roles as they participate in school change to develop a plan and implement an inclusive program. These leadership roles include (a) forming inclusion planning teams; (b) evaluating current school practices related to students with disabilities and other struggling students; (c) developing plans for inclusion; (d) reviewing and revising inclusion plans with school staff and other stakeholders; (e) arranging for PD; (f) implementing substantial changes in school organization, teacher roles, and teaching and learning programs; and (g) evaluating and adjusting inclusive programs as needed (e.g., Billingsley & McLeskey, in press; Burstein et al., 2004; Causton-Theoharis et al., 2011; Hoppey & McLeskey, 2013; McLeskey & Waldron, 2006; Ryndak et al., 2007).

Research further suggests that the deep, systemic changes in schools and school culture that are needed as inclusive schools are developed will not occur or be sustained over time without the active support and leadership of the principal (Ingram, 1996; Sindelar et al., 2006; Waldron et al., 2011). Ingram (1996) stated that

without real change in culture, there is likely to be little real or sustained change in behaviour. Attempts at inclusion may be short lived or result in mere surface efforts, with students physically included, but not challenged to reach their full potential or become active members of the (inclusive) class. (p. 423)

Shares responsibility for leadership. All of the investigations we reviewed addressing leadership roles in inclusive schools revealed that although principals took an active leadership role in developing and maintaining inclusive programs, they also shared leadership responsibility for some critical tasks (e.g., Burstein et al., 2004; Devecchi & Nevin, 2010; Hoppey & McLeskey, 2013; Mayrowetz & Weinstein, 1999; Salisbury & McGregor, 2002; Waldron et al., 2011). In a review of this research, Billingsley and McLeskey (in press) found that although



principals took an active role in developing and supporting inclusive schools and actively engaged in certain aspects of school improvement, they also shared leadership responsibility with teachers and other professionals. In a more general review of critical drivers for school change, Fixen, Blasé, Naoom, and Duda (2013) provided further support for shared leadership; they found that “‘leadership’ is not a person but different people engaging in different kinds of leadership behavior as needed to establish effective programs and sustain them as circumstances change over time” (p. 23).

Although principals in all of the inclusive schools shared leadership roles, this distribution of responsibility was strategically approached as principals maintained leadership for certain key areas. Across investigations, principals tended to maintain leadership for several of the following areas: (a) setting a positive tone for inclusion, (b) developing and sharing the school vision, (c) promoting learning communities and high-quality PD for teachers and other staff, (d) communicating with parents, (e) providing recognition and encouragement to teachers, and (f) acquiring needed resources (Billingsley, 2012; Burstein et al., 2004; Hoppey & McLeskey, 2013; Janney et al., 1995; Mayrowetz & Weinstein, 1999; McLeskey et al., 2014; McLeskey, Waldron, Redd, & Jones, 2012; Ryndak et al., 2007; Salisbury & McGregor, 2002; Waldron et al., 2011).

Principals in effective inclusive schools seemed to share leadership responsibilities because they realized it was unrealistic for them to attempt to assume leadership for the broad range of activities that must be addressed as inclusive schools are developed and sustained over time (Hoppey & McLeskey, 2013). This strategic distribution of leadership responsibilities was a pragmatic response by principals to ensure that leadership roles were assigned to individuals or groups with adequate time and expertise to address these activities (Mayrowetz & Weinstein,



1999; Waldron et al., 2011). The distribution of leadership responsibilities in these inclusive settings also served to develop teacher leaders to support the inclusive program (Causton-Theoharis et al., 2011; Hoppey & McLeskey, 2013); increase overall teacher ownership and support for the inclusive initiative; and enhance the likelihood that the inclusive program would be sustained over time (Mayrowetz & Weinstein, 1999; Ryndak et al., 2007).

Across most of the investigations, the principals were actively involved in the team that planned, implemented, and monitored the inclusive program, although they often shared leadership for this task with teachers (Billingsley & McLeskey, in press). For example, in several investigations, teachers who were part of inclusion planning teams had primary responsibilities for developing the service delivery model used to support the inclusive program and determining changes that were made in curriculum, instruction, and teacher roles (Billingsley, 2012; Fisher et al., 2000; Kilgore, Griffin, Sindelar, & Webb, 2001; Lieber et al., 2000; Sindelar et al., 2006). Principals distributed a range of other leadership responsibilities to teachers across the investigations, which seemed to be primarily based on the expertise of the professionals involved. For example, teachers were involved in leadership roles as they provided PD for others, developed a school-based system for monitoring student progress, scheduled paraeducators in general education classrooms, and consulted with teachers on specialized issues related to content areas or specific disabilities (Billingsley, 2012; Hoppey & McLeskey, 2013; Janney et al., 1995; McLeskey, Waldron, & Redd, 2014; Rice, 2006; Waldron et al., 2011).

Although the research on inclusive reform and leadership has grown over the past decades, much remains to be learned. The research base about school leadership and special education is meager, and studies related to the effects of school leadership on the educational outcomes of students with disabilities are rare. Although some inclusive leadership studies did



monitor student outcome measures on mandated tests (Causton-Theoharis et al., 2011; Fisher et al., 2000; Ryndak et al., 2007), these studies were not designed to consider causal links between leadership and the achievement. However, it is important to note that achievement data gathered in these studies suggest that students tended to maintain or improve their performance on achievement measures.

Parent Leadership and Support

Most reviews have suggested that examining parent influence on student achievement has not been a primary focus of research related to principal leadership. Nonetheless, reviews of research have provided some support related to the engagement of parents in substantive activities, including leadership roles to support schools, and reveal that this engagement may improve student achievement (Leithwood et al., 2008; Leithwood et al., 2010; Louis et al., 2010; Robinson et al., 2009; Waters et al., 2004).

In the most comprehensive review of parent engagement in schools, Robinson and colleagues (2009) reported a moderate effect for parent involvement in their children's learning. The strongest overall effect was found for interventions designed to support parents or others in the community in working with children outside of the school (e.g., at home). These interventions were most effective when closely coordinated with teacher PD that was aligned with parent contributions and community funds of knowledge. Robinson and colleagues noted that findings clearly supported some types of parent involvement over others as activities such as volunteering, participating in school activities and functions, and supporting their children's learning tended to be most closely linked to improved student outcomes.

Research from several sources points to the importance of building strong, trusting relationships and engaging parents in shared decision making regarding important aspects of school improvement (Leithwood et al., 2008; Leithwood et al., 2010; Louis et al., 2010;



Robinson et al., 2009). Leithwood and colleagues (2010) summarized this research and concluded that “engaging the school productively with parents, if this has not been a focus, may well produce larger effects on student learning in the short run than marginal improvements to already at least satisfactory levels of instruction” (p. 698); this occurs when parents have a greater sense of involvement in their child’s education and higher expectations for their child’s success in school (Leithwood et al., 2010). Louis and colleagues (2010) further contended that the value of meaningfully involving parents in their child’s education lies in the “potential for increasing family and community members’ sense of engagement in children’s education” (p. 108), and this could serve to reinforce parenting behaviors that improve student outcomes. Meaningful involvement in school ranges from engaging parents as active participants on school teams to enforcing rules at home regarding homework (Leithwood et al., 2010; Louis et al., 2010).

Although parent involvement at school and home is important for improving student outcomes in general, this involvement may well be even more important as effective inclusive schools are developed. Mayrowetz and Weinstein (1999) provided three reasons why this may be the case, including (a) the long history in special education of organized parent advocacy and federal and state special education laws that mandate parent involvement in their child’s education, (b) the emotionally charged and controversial nature of school reform related to inclusion coupled with the high stakes attached to potential outcomes, and (c) the knowledge that is demanded if inclusion is to be successful for students with a wide range of disabilities that provide challenges when these students are educated in general education classrooms. Thus, active leadership for developing and supporting effective inclusive schools should not only come from those inside the school, but should also come from those such as parents who know their



students with disabilities the best (Mayrowetz & Weinstein, 1999). Engagement of parents in these activities should help principals and other school professionals develop trusting relationships and use the expertise of parents (e.g., knowledge regarding their child's disability) to develop and support inclusive programs.

Available evidence indicates that engaging parents is an important consideration while developing effective inclusive schools (Mayrowetz & Weinstein, 1999; Ryndak et al., 2007). Two components of leadership for parent engagement were supported by research as important for developing effective inclusive schools and supporting students with disabilities within these settings (see Appendix A). These factors addressed (a) involving parents in supporting their children's education and (b) engaging parents in shared decision making as inclusive schools are developed and sustained. We have reviewed research related to each of these leadership components.

Engages parents to enhance students' opportunities for learning. Evidence from several investigations reveals that parents brought expertise to the development of inclusive schools that allowed them to support their students' education. In these settings, parents were involved in activities such as ensuring that students were placed in appropriate classrooms (Fisher et al., 2000; Mayrowetz & Weinstein, 1999); supporting teachers in monitoring the progress of students to determine program effectiveness (Mayrowetz & Weinstein, 1999; Ryndak et al., 2007); providing information and support to teachers based on their parental knowledge of inclusion, instructional adaptations, and specific disabilities (Janney et al., 1995; Mayrowetz & Weinstein, 1999); and advocating to support the school in achieving improved student outcomes (Furney et al., 2003; Ryndak et al., 2007).



Research demonstrates that in settings where principals and other school professionals have built successful partnerships with parents, these relationships are characterized by “collaborative, trusting, empowering relationships between families and educators that support effective service delivery” (Blue-Banning, Summers, Frankland, Nelson, & Beegle, 2004, p. 169). A central quality of these relationships is the development of trust between principals and other school personnel and parents. Blue-Banning and colleagues (2004) investigated successful partnerships and determined that trust was developed through effective communication, which revealed that school personnel were dependable (i.e., could be relied upon to follow through on promises); through providing a safe setting for children (i.e., parents felt that their children could be left in school without fear of emotional or physical harm); and through demonstrated discretion (i.e., professionals could be trusted with private or confidential information about the family). This trusting relationship provides a supportive context for parents to be involved as they work to enhance learning opportunities for their children and participate in shared decision making as inclusive schools are developed and sustained.

Engages parents in shared decision making as inclusive schools are developed and sustained. Many parents engage in advocating for their children before inclusive programs are developed (Burstein et al., 2004; Lieber et al., 2000; Ryndak et al., 2007). For example, Ryndak and colleagues (2007) found that some students with severe disabilities had access to general education classrooms through their parents’ advocacy rather than through school-wide change or local policy initiatives. Similarly, Burstein and colleagues (2004) found that prior to school-wide or district initiatives related to inclusion, some changes were already occurring in classrooms based on teacher-parent interest in inclusive models. This grassroots advocacy



provides early support for the development of a school-wide vision related to effective inclusive schooling and facilitates the development of inclusive practices in classrooms.

In several settings, principals engaged parents as part of a group that developed and shared a vision for inclusive schooling with stakeholders both inside (e.g., teachers, paraeducators, administrators) and outside (e.g., other parents) of the school (Burstein et al., 2004; Lieber et al., 2000; Mayrowetz & Weinstein, 1999; Ryndak et al., 2007). In some of these settings, parents provided the initial impetus for developing this vision (Burstein et al., 2004; Leiber et al., 2000). Engaging parents in these activities provided principals in these settings an opportunity to build support for inclusion among parents as well as to develop trusting relationships and share decision making with parents as inclusive programs were subsequently developed.

Principals often shared leadership for decision making related to inclusive schools with a range of stakeholders, including parents (Billingsley & McLeskey, in press). For example, research by Ryndak and colleagues (2007) related to a district-wide initiative to support the development of inclusive schools found that parents were actively involved on leadership teams at the district and school levels. These leadership teams included district and school administrators, instructional staff, support personnel, and parents. The teams frequently met to identify and address barriers to effective inclusive practices, provide support for the school-wide development of inclusive programs, and engage teachers in PD related to inclusive practices. Similarly, research in several other settings reveals that parents played an important leadership role in school-based inclusion planning teams (Furney et al., 2003; Mayrowetz & Weinstein, 1999; Salisbury, 2006; Salisbury & McGregor, 2002) as they shared their expertise related to



inclusion and students with disabilities and also advocated for the development of inclusive programs.

Importance of District and State Leadership

Principals are critical to the success of students with disabilities, and forming productive partnerships with parents and special education professionals is considered an essential component of inclusive leadership (Crockett, 2002; Harry, 2012; McLaughlin, 2009). As principals' responsibilities have expanded to ensuring the use of EBPs and evaluating the performance of special education teachers, the importance of district- and state-level leadership has also grown (Boscardin, 2005; Boscardin & Lashley, 2012; Boscardin et al., 2010; Lynch, 2012). Emerging evidence suggests that students' academic achievement improves when district and state policies align with school-wide commitments to high-quality instruction for all learners (Barr, 2012; Deshler & Cornett, 2012; Marzano & Waters, 2009; Stonemeier et al., 2014; Zavadsky, 2009).

Federal and state education policies shape the work of school systems, which in turn shape the work of principals within the local context of their schools (Kozleski & Huber, 2012). In a well-aligned system, "the delivery of special education is conceptualized as a seamless system of supports and services delivered within the context of an equitable and culturally responsive general education system" (Kozleski & Huber, 2012, p. 167). Changes for any group of students, including those with disabilities, are considered systemic changes rather than changes that occur within separate bureaucratic silos. In schools where students have wide-ranging capabilities, there is some evidence for using flexible MTSS to allocate resources toward promoting positive outcomes in reading, mathematics, and social-emotional competence, especially in elementary schools (Hoover et al., 2012; WWC, 2009). In states and districts where principals have adopted school-wide academic and behavioral systems, the traditional



boundaries between general and special education have become blurred as students move across a continuum of increasingly intensive interventions to receive the support they need (Fuchs, Fuchs, & Stecker, 2010). Collaboration with state and district leaders can (a) strengthen alignment, (b) strengthen decision making, (c) strengthen instruction, and (d) strengthen relationships in helping principals recognize and effectively respond to significant learning differences and secure resources and support for equitable instructional decisions.

Strengthens alignment. At the state level, leaders establish rules and regulations for approving special education programs in local school districts, serving as resources to legislators, and providing leadership for statewide plans to ensure equal educational opportunities. There is evidence to suggest that the alignment of systems for resolving disputes, coordinating services with families, providing PD, and overseeing compliance with state and federal rules influences practices at the district level (Kozleski & Huber, 2012). Locally, all school systems have one or more district leader with expertise in special services and effective practices for students with disabilities, and these local special education administrators (LSEAs) are well positioned to support principal leadership in a variety of ways.

Strengthens decision making. LSEAs can help principals make ethically sound and legally correct educational decisions. Policies govern the administration of special education, and although principals must be knowledgeable, LSEAs are primarily responsible for compliance. To help inform effective shared leadership, there is an extensive body of literature addressing complex moral dilemmas and legal and fiscal facets of special education (Baker, Green, & Ramsey, 2012; Boscardin et al., 2010; Gooden, Eckes, Mead, McNeil, & Torres, 2013; Shapiro & Stepkavich, 2011; Yell, Thomas, & Katsiyannis, 2012)



Strengthens instruction. LSEAs can support the development of principals as instructional leaders for all learners. Research guides the delivery of special education, and LSEAs have primary responsibility for supporting the appropriate education of students with disabilities (Council of Administrators of Special Education [CASE], 2010), serving as advocates, and fostering achievement in district schools. LSEAs are expected to be knowledgeable about effective instructional practices, PD, and flexible service delivery designed to support the success of students with disabilities, and there is emerging evidence to support these district-wide practices (Brownell et al., 2012; Deshler & Cornet, 2012; Duchnowski, Kutash, & Oliveira, 2004; Honig, 2012; Marsh et al., 2005).

Strengthens relationships. LSEAs can provide additional support by collaborating with principals in building trust, negotiating conflict, and strengthening relationships with families and agencies to improve outcomes for students with disabilities (Harry, 2012; Lake & Stewart, 2012; Test, Mazzotti, & Mustian, 2012). LSEAs are expected to share their expertise with school leaders as well as with district colleagues so that information about educating students with disabilities is efficiently transmitted throughout the school system (Crockett, 2011; Goor, 1995; Lashley & Boscardin, 2003; Pazey & Yates, 2012). As a result, their traditional roles as compliance monitors are changing in learning-focused school districts as they increasingly assume the role of consultants in helping principals create effective inclusive learning environments in their schools (Honig, Copland, Rainey, Lorton, & Newton, 2010).

Conclusion

Principals are charged with leading schools so that all students, including those with disabilities, achieve college- and career-readiness curriculum standards. In inclusive schools, principals work to ensure that all members of the school community welcome and value students



with disabilities, and they encourage everyone in the school, as well as parents and those from other agencies, to collaborate and share their expertise so that students with disabilities have opportunities to achieve improved outcomes in school and postschool life. In this paper, we have synthesized research from both the general and special education leadership literature to identify critical research findings about effective practices and their implications for practice (see Appendix A). We have acknowledged the formidable challenges these implications have for principals, especially those who have minimal preparation for the inclusion and instruction of students with disabilities. As we have emphasized, district and state educational agencies play important roles in supporting principals' work; improving their preparation through pre-service preparation and PD (see Bellamy, Crockett, & Nordengren, 2013); and aligning resources and PD in ways that benefit students with disabilities.



References

- Algozzine, B., Wang, C., White, R., Cooke, N., Marr, M. B., Algozzine, K., . . . Duran, G. Z. (2012). Effects of multi-tier academic and behavior instruction on difficult to teach students. *Exceptional Children, 79*(1), 45-64.
- Angelle, P., & Bilton, L. (2009). Confronting the unknown: Principal preparation training in issues related to special education. *AASA Journal of Scholarship & Practice, 5*(4), 5-9.
- Avrimidis, E., & Norwich, B. (2002). Teachers' attitudes towards integration/inclusion: A review of the literature. *European Journal of Special Needs Education, 17*(2), 129-147.
- Baker, B. D., Green, P. C., & Ramsey, M. J. (2012). Financing education for children with special needs. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin (Eds.), *Handbook of leadership and administration for special education* (pp. 97-114). New York, NY: Taylor & Francis.
- Barr, S. (2012). *State education agencies: The critical role of SEAs in facilitating school district capacity to improve learning and achievement for students with disabilities*. Minneapolis: University of Minnesota, National Center on Educational Outcomes.
- Batsche, G. (in press). Multi-tiered system of supports for inclusive schools. In J. McLeskey, N. L. Waldron, F. Spooner, & B. Algozzine (Eds.), *Handbook of research and practice for inclusive schools*. New York, NY: Routledge
- Bays, D. A., & Crockett, J. B. (2007). Investigating instructional leadership for special education. *Exceptionality, 15*(3), 143-161. doi:10.1080/09362830701503495



-
- Bellamy, J., Crocket, J. C., & Nordengren, C. (2013). *Preparing school leaders for every student's learning* (Document No. LS-3). Retrieved from University of Florida, Collaboration for Effective Educator, Development, Accountability, and Reform Center website: <http://cedar.education.ufl.edu/tools/literature-syntheses/>
- Billingsley, B. (2004). Special education teacher retention and attrition: A critical analysis of the research literature. *The Journal of Special Education, 38*(1), 39-55.
doi:10.1177/00224669040380010401
- Billingsley, B. (2011). Factors influencing special education teacher quality and effectiveness. In J. M. Kauffman & D. P. Hallahan (Eds.), *Handbook of special education*, (pp. 391-405). New York, NY: Taylor & Francis.
- Billingsley, B. S. (2012). Inclusive school reform: Distributed leadership through the phases of change. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin (Eds.), *Handbook of leadership and administration for special education* (pp. 170-190). New York, NY: Taylor & Francis.
- Billingsley, B., & McLeskey, J. (in press). Principal leadership for effective inclusive schools. In J. McLeskey, N. L. Waldron, F. Spooner, & B. Algozzine (Eds.), *Handbook of research and practice for effective inclusive schools*. New York, NY: Routledge.
- Blanton, L. P., Sindelar, P. T., & Correa, V. I. (2006). Models and measures of beginning teacher quality. *The Journal of Special Education, 40*(2), 115-127.
doi:10.1177/00224669060400020201
- Blue-Banning, M., Summers, J. A., Frankland, H. C., Nelson, L. L., & Beegle, G. (2004). Dimensions of family and professional partnerships: Constructive guidelines for collaboration. *Exceptional Children, 70*(2), 167-184.



-
- Boscardin, M. L. (2005). The administrative role in transforming secondary schools to support inclusive, evidence-based practices. *American Secondary Education Journal*, 33(3), 21-32.
- Boscardin, M. L., & Lashley, C. (2012). Expanding the leadership framework: An alternate view of professional standards. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin (Eds.), *Handbook of leadership and administration for special education* (pp. 37-51). New York, NY: Routledge.
- Boscardin, M. L., Weir, L., & Kusek, C. (2010). A national study of state credentialing requirements for administrators of special education. *Journal of Special Education Leadership*, 23(2), 61-75.
- Brownell, M. T., Billingsley, B. S., McLeskey, J., & Sindelar, P. T. (2012). Teacher quality and effectiveness in an era of accountability: Challenges and solutions in special education. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin (Eds.), *Handbook of leadership and administration for special education* (pp. 260-280). New York, NY: Taylor & Francis.
- Brownell, M. T., Sindelar, P. T., Kiely, M. T., & Danielson, L. C. (2010). Special education teacher quality and preparation: Exposing foundations, constructing a new model. *Exceptional Children*, 76, 357-377.
- Burdette, P. (2010). *Principal preparedness to support students with disabilities and other diverse learners*. Alexandria, VA: National Association of State Directors of Special Education.
- Burstein, N., Sears, S., Wilcoxon, A., Cabello, B., & Spagna, M. (2004). Moving toward inclusive practices. *Remedial & Special Education*, 25(2), 104-116.
- doi:10.1177/07419325040250020501



-
- Causton-Theoharis, J., Theoharis, G., Bull, T., Cosier, M., & Dempf-Aldrich, K. (2011). Schools of promise: A school district-university partnership centered on inclusive school reform. *Remedial and Special Education, 32*(3), 190-205. doi:10.1177/0741932510366163
- Cook, B. G., & Smith, G. J. (2012). Leadership and instruction: Evidence-based practices in special education. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin (Eds.), *Handbook of leadership and administration for special education* (pp. 281-296). New York, NY: Taylor & Francis.
- Council of Administrators of Special Education. (2010). About us. Retrieved from <http://www.casecec.org/about/>
- Council of Chief State School Officers. (2008). Educational leadership policy standards: Interstate School Leadership Licensure Consortium (ISLLC 2008). Retrieved from National Policy Board for Education Administration website: <http://www.npbea.org/projects.php>
- Crockett, J. B. (2002). Special education's role in preparing responsive leaders for inclusive schools. *Remedial and Special Education, 23*(3), 157-168.
- Crockett, J. B. (2011). Conceptual models for leading and administrating special education. In J. M. Kauffman & D. P. Hallahan (Eds.), *Handbook of special education* (pp. 351-362). New York, NY: Taylor & Francis.
- Crockett, J. B., Billingsley, B., & Boscardin, M. L. (2012). *Handbook of leadership and administration for special education*. London: Routledge.
- Cusson, M. (2010). *Empirically based components related to student with disabilities in Tier 1 research institution's educational administration preparation programs* (Unpublished doctoral dissertation). University of Texas at Austin, Texas.



-
- Danielson, C. (2007). *Enhancing professional practice: A framework for teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Deshler, D. D., & Cornett, J. (2012). Leading to improve teacher effectiveness: Implications for practice, reform, research, and policy. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin (Eds.), *Handbook of leadership and administration for special education* (pp. 239-259). New York, NY: Taylor & Francis.
- Desimone, L. (2009). Improving impact studies of teachers' professional development: Toward better conceptualizations and measures. *Educational Researcher*, 38, 181-199.
doi:10.3102/0013189X08331140.
- Devecchi, C., & Nevin, A. (2010). Leadership for inclusive schools and inclusive school leadership. In A. H. Normore (Ed.), *Global perspectives on educational leadership reform: The development and preparation of leaders of learning and learners of leadership* (Vol. 11, pp. 211-241), United Kingdom: Emerald Group.
- DiPaola, M. F., & Walther-Thomas, C. (2003). *Principals and special education: The critical role of school leaders* (COPSSE Document No. IB-7). Retrieved from University of Florida Center on Personnel Studies in Special Education website:
<http://copsse.education.ufl.edu/copsse/library/executive-summaries.php>
- Duchnowski A. J., Kutash, K., & Oliveira, B. (2004). A systematic examination of school improvement activities that include special education. *Remedial and Special Education*, 25, 117-129. doi:10.1177/07419325040250020601



-
- Dyson, A., Farrell, P., Polat, F., Hutcheson, G., & Gallannaugh, F. (2004). *Inclusion and pupil achievement* (Research Report No. 578). Retrieved from National Archives website:
<http://webarchive.nationalarchives.gov.uk/20130401151715/https://www.education.gov.uk/publications/eOrderingDownload/RR578.pdf>
- Elmore, R. F. (2004). *School reform from the inside out: Policy, practice, and performance*. Cambridge, MA: Harvard Education Press.
- Ervin, R. A., Schaughency, E., Goodman, S. D., McGlinchey, M. T., & Matthews, A. (2006). Moving research and practice agendas to address reading and behavior schoolwide. *School Psychology Review*, 35, 198-223.
- Farrell, P., Dyson, A., Polat, F., Hutcheson, G., & Gallannaugh, F. (2007). Inclusion and achievement in mainstream schools. *European Journal of Special Needs Education*, 22(2), 131-145. doi:10.1080/08856250701267808
- Feng, L., & Sass, T. (2012). *Competing risks analysis of dropout and educational attainment of students with disabilities* (Working Paper No. 12-09). Retrieved from Georgia State University website:
<http://aysps.gsu.edu/sites/default/files/documents/uwrg/workingpapers/2012/12-09%20SassFeng-dropoutandedattainmentforspecialstudents.pdf>
- Fisher, D., Sax, C., & Grove, K. (2000). The resilience of changes promoting inclusiveness in an urban elementary school. *The Elementary School Journal*, 100(3), 213-227.
doi:10.1086/499640



-
- Fixen, D., Blasé, K., Naoom, S., & Duda, M. (2013). *Implementation drivers: Assessing best practices*. Chapel Hill, NC: National Implementation Research Network. Retrieved from <http://implementation.fpg.unc.edu/sites/implementation.fpg.unc.edu/files/resources/NIRN-Education-ImplementationDriversAssessingBestPractices.pdf>
- Fuchs, D., Fuchs, L. S., & Stecker, P. M. (2010). The “blurring” of special education in a new continuum of general education placements and services. *Exceptional Children, 76*, 301-323.
- Fullan, M. (2007). *The new meaning of education change* (4th Ed.). New York, NY: Teachers College.
- Furney, K. S., Hasazi, S. B., Clark-Keefe, K., & Hartnett, J. (2003). A longitudinal analysis of shifting policy landscapes in special and general education reform. *Exceptional Children, 70*(1), 81-94.
- Garrison-Wade, D., Sobel, D., & Fulmer, C. L. (2007). Inclusive leadership: Preparing principals for the role that awaits them. *Educational Leadership and Administration, 19*, 117-132.
- Gooden, M. A., Eckes, S., Mead, J. F., McNeil, L. R., & Torres, M. S. (Eds.). (2013). *The principal's legal handbook* (5th ed). Dayton, OH: Education Law Association.
- Goor, M. B. (1995). *Leadership for special education administration: A case-based approach*. Fort Worth, TX: Harcourt Brace.
- Guzman, N. (1997). Leadership for successful inclusive schools. *Journal of Educational Administration, 35*(5), 439-450.
- Hall, G. E., & Hord, S. M. (1987). *Change in schools: Facilitating the process*. Albany: State University of New York Press.



-
- Hall, G. E., & Hord, S. M. (2001). *Implementing change: Patterns, principles, and potholes*. Boston, MA: Allyn & Bacon.
- Hall, G. E., Loucks, S. F., Rutherford, W. L., & Newton, B. W. (1975). Levels of use of the innovation: A framework for analyzing innovation adoption. *Journal of Teacher Education, 26*, 52-56. doi:10.1177/002248717502600114
- Hallinger, P. (2009). *Leadership for 21st century schools: From instructional leadership to leadership for learning*. Hong Kong, China: The Hong Kong Institute of Education.
- Retrieved from
<http://www.ied.edu.hk/cplectures/include/getfile.php?file=1267581769.pdf&filepath=resource&filename=Hallinger%20-%20Booklet%20-%20Final.pdf>
- Hallinger, P., & Heck, R. H. (2010). Collaborative leadership and school improvement: Understanding the impact on school capacity and student learning. *School Leadership and Management, 30*(2), 95-110. doi:10.1080/13632431003663214
- Harn, B. A., Linan-Thompson, S., & Roberts, G. (2008). Intensifying instruction: Does additional instructional time make a difference for the most at risk first graders? *Journal of Learning Disabilities, 41*, 115-125. doi:10.1177/0022219407313586.
- Harry, B. (2012). Leadership and collaboration in home-school partnerships. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin (Eds.), *Handbook of leadership and administration for special education* (pp. 209-222). New York, NY: Taylor & Francis.
- Hattie, J. A. C. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. New York, NY: Routledge.
- Hehir, T. (2005). *New directions in special education: Eliminating ableism in policy and practice*. Cambridge, MA: Harvard Education Press.



-
- Hehir, T., & Katzman, L. I. (2012). *Effective inclusive schools: Designing successful schoolwide programs*. San Francisco, CA: John Wiley & Sons.
- Hirsch, E., Emerick, S., Church, K., & Fuller, E. (2007). *Teacher working conditions are student learning conditions: A report on the 2006 North Carolina Teacher Working Conditions Survey*. Hillsborough, NC: Center for Teaching Quality. Retrieved from <http://www.teachingquality.org/pdfs/twcnc2006.pdf>
- Holdheide, L. R., Goe, L., Croft, A., & Reschly, D. J. (2010). *Challenges in evaluating special education teachers and English language learner specialists*. Washington, DC: National Comprehensive Center for Teacher Quality.
- Honig, M. I. (2012). District central office leadership as teaching: How central office administrators support principals' development as instructional leaders. *Educational Administration Quarterly*, 48(4), 733-774.
- Honig, M. I., Copland, M. A., Rainey, L., Lorton, J. A., & Newton, M. (2010). *Central office transformation for district-wide teaching and learning improvement*. Seattle, WA: Center for the Study of Teaching and Policy.
- Hoover, J. J., Eppolito, A., Klingner, J. K., & Baca, L. (2012). Collaborative decision-making in multicultural contexts. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin (Eds.), *Handbook of leadership and administration for special education* (pp. 209-222). New York, NY: Taylor & Francis.
- Hoppey, D., & McLeskey, J. (2013). A case study of principal leadership in an effective inclusive school. *Journal of Special Education*, 45, 245-256.
doi:10.1177/0022466910390507.



-
- Hord, S. M., Rutherford, W. L., Huling-Austin, L., & Hall, G. E. (1987). *Taking charge of change*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Horner, R., Sugai, G., Smolkowski, K., Todd, A., Nakasato, J., & Esperanza, J. (2009). A randomized control trial of school-wide positive behavior support in elementary schools. *Journal of Positive Behavior Interventions, 11*(3), 133-144.
- Horner, R. H., Sugai, G., Todd, A. W., & Lewis-Palmer, T. (2005). School-wide positive behavior support. In L. Bambara & L. Kern (Eds.), *Individualized supports for students with problem behaviors: Designing positive behavior plans*. (pp. 359-390) New York, NY: Guilford.
- Idol, L. (2006). Toward inclusion of special education students in general education: A program evaluation of eight schools. *Remedial and Special Education, 27*(3), 77-94.
doi:10.1177/07419325060270020601
- Individuals With Disabilities Education Act, 20 U.S.C. § 1400 (2004).
- Ingram, A. L. (1996). Teaching with technology. *Association Management, 48*(6), 31-38.
- Janney, R., Snell, M. E., Beers, M. K., & Raynes, M. (1995). Integrating students with moderate and severe disabilities into general education classes. *Exceptional Children, 61*(5), 425-439.
- Johnson, S. M., Kraft, M. A., & Papay, J. P. (2012). How context matters in high-need schools: The effects of teachers' working conditions on their professional satisfaction and their students' achievement. *Teachers College Record, 114*(10), 1-39.
- Jorgensen, C. (2005). The least dangerous assumption: A challenge to create a new paradigm. *Disability Solutions, 6*(3), 1-10.



-
- Keyes, M., Hanley-Maxwell, C., & Capper, C. (1999). 'Spirituality? It's the core of my leadership': Empowering leadership in an inclusive elementary school. *Educational Administration Quarterly*, 35(2), 203-237. doi:10.1177/00131619921968527
- Kilgore, K., Griffin, C., Sindelar, P., & Webb, R. (2001). Restructuring for inclusion: A story of middle school renewal (part I). *Middle School Journal*, 33(2), 44-51.
- Klingner, J. K. (2004). The science of professional development. *Journal of Learning Disabilities*, 37, 248-255. doi:10.1177/00222194040370031001
- Kozleski, E., & Huber, J. J. (2012). System-wide leadership for culturally-responsive education. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin (Eds.), *Handbook of leadership and administration for special education* (pp. 155-169). New York, NY: Taylor & Francis.
- Lake, B. J., & Stewart, A. (2012). Building trust and responding to conflict in special education. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin (Eds.), *Handbook of leadership and administration for special education* (pp. 223-236). New York, NY: Taylor & Francis.
- Lane, K., Cook, B., & Tankersley, M. (2013). *Research-based strategies for improving outcomes in behavior*. Boston, MA: Pearson.
- Lashley, C. (2007). Principal leadership for special education: An ethical framework. *Exceptionality*, 15, 177-187. doi:10.1080/09362830701503511
- Lashley, C., & Boscardin, M. L. (2003). Special education administration at a crossroads. *Journal of Special Education Leadership*, 16(2), 63-75.



-
- Lee, V., Smith, J., Perry, T., & Smylie, M. A., (1999). *Social support, academic press, and student achievement: A view from the middle grades in Chicago*. Chicago, IL: Consortium on Chicago School Research.
- Leithwood, K., Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school Leadership. *School Leadership and Management*, 28(1), 27-42.
doi:10.1080/13632430701800060
- Leithwood, K., Patten, S., & Jantzi, D. (2010). Testing a conception of how school leadership influences student learning. *Educational Administration Quarterly*, 46(5), 671-706.
doi:10.1177/0013161X10377347
- Lieber, J., Hanson, M. J., Beckman, P. J., Odom, S. L., Sandall, S. R., Schwartz, I. S., . . . & Wolery, R. (2000). Key influences on the initiation and implementation of inclusive preschool programs. *Exceptional Children*, 67(1), 83-98.
- Loeb, H., Elfers, A. M., Knapp, M. S., Plecki, M. L., & Boatright, B. (2004). *Preparation and support for teaching: A survey of working conditions of teachers* [PDF document]. Retrieved from <http://depts.washington.edu/ctpmail/PDFs/Survey2WorkingPaper.pdf>
- Louis, K., Leithwood, K., Wahlstrom, K., & Anderson, S. (2010). *Investigating the links to improved student learning: Final report of research findings*. Minneapolis: University of Minnesota.
- Lynch, J. M. (2012). Responsibilities of today's principal: Implications for principal preparation programs and principal certification policies. *Rural Special Education Quarterly*, 31, 40-47.



-
- Marsh, J. A., Kerr, K. A., Ikemoto, G. S., Darilek, H., Suttorp, M., Zimmer, R. W., & Barney, H. (2005). *The role of districts in fostering instructional improvement: Lessons from three urban districts partnered with the Institute for Learning*. Santa Monica, CA: Rand.
- Marzano, R. J., & Waters, T. (2009). *District leadership that works: Striking the right balance*. Bloomington, IN: Solution Tree.
- Mayrowetz, D., & Weinstein, C. (1999). Sources of leadership for inclusive education: Creating schools for all children. *Educational Administration Quarterly*, 35(3), 423-449.
doi:10.1177/00131619921968626
- McLaughlin, M. J. (2009). *What every principal needs to know about special education*. Thousand Oaks, CA: Corwin.
- McLaughlin, M. J., Smith, A. F., & Wilkinson, T. G. (2012) Challenges for leaders in the not-so-new era of standards. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin (Eds.), *Handbook of leadership and administration for special education* (pp. 361-376). New York, NY: Taylor & Francis.
- McLeskey, J., Landers, E., Williamson, P., & Hoppey, D. (2012). Are we moving toward educating students with disabilities in less restrictive settings? *Journal of Special Education*, 46(3), 131-140. doi:10.1177/0022466910376670
- McLeskey, J., & Waldron, N. (2002). School change and inclusive schools: Lessons learned from practice. *Phi Delta Kappan*, 84(1), 65-72.
- McLeskey, J., & Waldron, N. (2006). Comprehensive school reform and inclusive schools: Improving schools for all students. *Theory into Practice*, 45(3), 269-278.



-
- McLeskey, J., & Waldron, N. L. (2011). Educational programs for elementary students with learning disabilities. Can they be both effective and inclusive? *Learning Disabilities Practice*, 26(1), 48-57. doi:10.1111/j.1540-5826.2010.00324.x
- McLeskey, J., Waldron, N., & Redd, L. (2014). A case study of a highly effective inclusive elementary school. *Journal of Special Education*, 48(1), 59-70.
doi:10.1177/0022466912440455
- McLeskey, J., Waldron, N., Redd, L., & Jones, T. (2012). *Professional development in an effective inclusive school*. Paper presented at the Council for Exceptional Children Convention, Denver, Colorado.
- McLeskey, J., Waldron, N., Spooner, F., & Algozzine, B. (in press). What are effective inclusive schools and why are they important? In J. McLeskey, N. L. Waldron, F. Spooner, & B. Algozzine (Eds.), *Handbook of research and practice for effective inclusive schools*. New York, NY: Routledge.
- National Center on Educational Outcomes. (2013). Alternate assessments for students with disabilities. Retrieved from
<http://www.cehd.umn.edu/nceo/topicareas/alternateassessments/altassesstopic.htm>
- National Center for Education Statistics. (2012). *The nation's report card. Mathematics 2011*. Washington, DC: Author.
- National Council on Disability. (2011). *National disability policy: A progress report*. Washington, DC: Author.
- Neumerski, C. M. (2013). Rethinking instructional leadership, a review: What do we know about principal, teacher, and coach instructional leadership, and where should we go from here? *Educational Administration Quarterly*, 49(2), 310-347. doi:10.1177/0013161X12456700



No Child Left Behind Act of 2001, 20 U.S.C. § 6319 (2008).

Olson, L. (2004). All means all. *Education Week*, 23(17), 44-60.

Osterman, K. F., & Hafner, M. M. (2009). Curriculum in leadership preparation:

Understanding where we have been in order to know where we might go. In

M. D. Young, G. M. Crow, J. Murphy, & R. T. Ogawa (Eds.), *Handbook of*

research on the education of school leaders (pp. 269-317). New York, NY: Routledge.

Pazey, B. L., & Cole, H. (2013). The role of special education training in the development of socially just leaders: Building an equity consciousness in educational leadership programs. *Educational Administration Quarterly*, 49, 243-271.

doi:10.1177/0013161X12463934

Pazey, B. L., & Yates, J. R. (2012). Conceptual and historical foundations of special education administration. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin (Eds.), *Handbook of leadership and administration for special education* (pp. 17-36). New York, NY: Taylor & Francis.

Pianta, R. C., & Hamre, B. K. (2009). Conceptualization, measurement, and improvement of classroom processes: Standardized observation can leverage capacity. *Educational Researcher*, 38(2), 109-119. doi:10.3102/0013189X09332374

Pugach, M., Blanton, V., Correa, V., McLeskey, J., & Langley, L. (2009). *The role of collaboration in supporting the induction and retention of new special education teachers* (NCIPP Document No. RS-2ES). Retrieved from University of Florida, National Center to Inform Policy and Practice in Special Education Professional Development website: http://ncipp.education.ufl.edu/files_6/NCIPP_Collab_ES_010310.pdf



-
- Powell, P. (2010). *An exploratory study of the presentation of special education law in administrative preparation programs for aspiring administrators* (Doctoral dissertation). Retrieved from Dissertation Abstracts International (Order No. AA13390580).
- Praisner, C. L. (2003). Attitudes of elementary school principals toward the inclusion of students with disabilities. *Exceptional Children*, 69(2), 135-145.
- Printy, S. M. (2008). Leadership for teacher learning: A community of practice perspective. *Educational Administration Quarterly*, 44(2), 187-226. doi:10.1177/0013161X07312958
- Rice, N. (2006). Opportunities lost, possibilities found: Shared leadership and inclusion in an urban high school. *Journal of Disability Policy Studies*, 17(2), 88-100. doi:10.1177/10442073060170020501
- Richter, M. M., Lewis, T. J., & Hagar, J. (2012). The relationship between principal leadership skills and school-wide positive behavior support: An exploratory study. *Journal of Positive Behavior Interventions*, 14(2), 69-77. doi:10.1177/1098300711399097
- Robinson, V., Hohepa, M., & Lloyd, C. (2009). *School leadership and student outcomes: Identifying what works and why*. Wellington, New Zealand: Ministry of Education.
- Robinson, V., Lloyd, C., & Rowe, K. (2008). The impact of leadership on student outcomes: An analysis of differential effects of leadership types. *Educational Administration Quarterly*, 44, 635-674. doi:10.1177/0013161X08321509
- Roy, P., & Hord, S. M. (2004). Innovation configurations chart a measured course toward change. *Journal of Staff Development*, 25(2), 54-58.
- Ryndak, D., Jackson, L., & Billingsley, F. (2000). Defining school inclusion for students with moderate to severe disabilities. What do experts say? *Exceptionality*, 8(2), 101-116.



-
- Ryndak, D., Reardon, R., Benner, S. R., & Ward, T. (2007). Transitioning to and sustaining district-wide inclusive services: A 7-year study of a district's ongoing journey and its accompanying complexities. *Research & Practice for Persons with Severe Disabilities*, 32(4), 228-246. doi:10.2511/rpsd.32.4.228
- Salisbury, C. L. (2006). Principals' perspectives on inclusive elementary schools. *Research & Practice for Persons with Severe Disabilities*, 31(1), 70-82.
- Salisbury, C. L., & McGregor, G. (2002). The administrative climate and context of inclusive elementary schools. *Exceptional Children*, 68(2), 259-281.
- Scruggs, T. E., & Mastropieri, M. A. (1996). Teacher perceptions of mainstreaming/inclusion, 1958-1995: A research synthesis. *Exceptional Children*, 63(1), 59-74.
- Shapiro, J. P., & Stepkavich, J. A. (2011). *Ethical leadership and decision making in education: Applying theoretical perspectives to complex dilemmas*. New York, NY: Routledge.
- Sindelar, P., Shearer, D., Yendol-Hoppey, D., & Liebert, T. (2006). The sustainability of inclusive school reform. *Exceptional Children*, 72(3), 317-331.
- Smylie, M. A., Mayrowetz, D., Murphy, J., & Louis, K. S. (2007). Trust and development of distributed leadership. *Journal of School Leadership*, 17(4), 469-503.
- Spillane, J. (2006). *Distributed leadership*. San Francisco, CA: Jossey-Bass.
- Steinbrecher, T., Mahal, S., & Serna, L. (2013). *Administrator knowledge: How it relates to hiring and retaining special educators*. Presented at the Council for Exceptional Children, San Antonio, Texas.



-
- Stonemeier, J., Trader, B., Kingston, M., Richards, C., Blank, R., & East, B. (2014). How policy alignment impacts: Sustainability of schoolwide transformation: Lessons from SWIFT knowledge development sites (Issue Brief No. 4). Lawrence, KS: National Center on Schoolwide Inclusive School Reform, The SWIFT Center.
- Sugai, G., O’Keeffe, B., Horner, R. H., & Lewis, T. J. (2012). School leadership and school-wide positive behavior support. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin (Eds.), *Handbook of leadership and administration for special education* (pp. 37-51). New York, NY: Routledge.
- Test, D. W., Mazzotti, V. L., & Mustian, A. L. (2012). Leadership for transition to postsecondary settings. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin (Eds.), *Handbook of leadership and administration for special education* (pp. 337-357). New York, NY: Taylor & Francis.
- Tomlinson, C. A. (2008). The goals of differentiation. *Educational Leadership*, 66(3), 26-30.
- Tschannen-Moran, & Hoy, W. (2000). A multidisciplinary analysis of the nature, meaning, and measurement of trust. *Review of Educational Research*, 70(4), 547-593.
doi:10.3102/00346543070004547
- Turnbull, A. P., Turnbull, H. R., Wehmeyer, M. L., & Shogren, K. A. (2013). *Exceptional lives: Special education in today’s schools*. Columbus, OH: Pearson.
- U.S. Department of Education. (2013). Individual with Disabilities Education Improvement Act: Data accountability center. Retrieved from IDEA Data Center website:
www.ideadata.org.
- Vannest, K. J., & Hagan-Burke, S. (2010). Teacher time use in special education. *Remedial and Special Education*, 31(2), 126-142. doi:10.1177/0741932508327459



-
- Waldron, N. (2007). Teacher attitudes toward inclusion. In J. McLeskey (Ed.), *Reflections on inclusion: Classic articles that shaped our thinking* (pp. 161-187). Arlington, VA: Council for Exceptional Children.
- Waldron, N. L., McLeskey, J., & Redd, L. (2011). Setting the direction: The role of the principal in developing an effective, inclusive school. *Journal of Special Education Leadership*, 24(2), 51-60. Retrieved from <http://education.ufl.edu/disability-policy-practice/files/2012/05/Waldron-et-al-JSEL-2011-Principal-copy-4.pdf>
- Waters, T., Marzano, R., & McNulty, B. (2004). McRel's balanced leadership framework: Developing the science of educational leadership. *ERS Spectrum*, 22(1), 4-10.
- What Works Clearinghouse (2009). Best practice for RTI: Small group instruction for students making minimal progress (tier 3). Retrieved from Reading Rockets website: <http://www.readingrockets.org/article/30676/>
- Yell, M. L., Thomas, S. S., & Katsiyannis, A. (2012). Special education law for leaders and administrators of special education. In J. B. Crockett, B. S. Billingsley, & M. L. Boscardin, (Eds.), *Handbook of leadership and administration for special education* (pp. 3-16). New York, NY: Taylor & Francis.
- Zavadsky, H. (2009). *Bringing school reform to scale: Five award-winning urban districts*. Cambridge, MA: Harvard Education Press.



Appendix A

Innovation Configuration for Principal Leadership for Students With Disabilities

Essential Components	Implementation Levels				
<p>Instructions: Place an X under the appropriate variation implementation score for each course syllabus that meets the criteria level from 0 to 3. Score and rate each item separately.</p>	Level 0	Level 1	Level 2	Level 3	Rating
	<p>There is no evidence that the component is included in the syllabus, or the syllabus only mentions the component.</p>	<p>Must contain at least one of the following: reading, test, lecture/presentation, discussion, modeling/demonstration, or quiz.</p>	<p>Must contain at least one item from Level 1, plus at least one of the following: observation, project/activity, case study, or lesson plan study.</p>	<p>Must contain at least one item from Level 1 as well as at least one item from Level 2, plus at least one of the following: tutoring, small group student teaching, or whole group internship.</p>	<p>Rate each item as the number of the highest variation receiving an X under it.</p>
<p>1.0 Instructional Leadership for All Students: All principals have expertise for instructional leadership that is focused on student outcomes and supports students with disabilities in achieving the curriculum standards expected of all students.</p>					
<p>1.1 - Ensures academic press, a normative emphasis on academic success and conformity to specific standards of achievement for all students.</p> <p>1.2 - Develops a positive disciplinary climate to ensure an orderly, safe, and supportive learning environment, including clear and consistent social and behavioral expectations.</p> <p>1.3 - Ensures high-quality instruction and coordinates a coherent curriculum, including the use of evidence-based practices (EBPs) for students with disabilities.</p>					



Essential Components	Implementation Levels				
<p>Instructions: Place an X under the appropriate variation implementation score for each course syllabus that meets the criteria level from 0 to 3. Score and rate each item separately.</p>	Level 0	Level 1	Level 2	Level 3	Rating
	<p>There is no evidence that the component is included in the syllabus, or the syllabus only mentions the component.</p>	<p>Must contain at least one of the following: reading, test, lecture/presentation, discussion, modeling/demonstration, or quiz.</p>	<p>Must contain at least one item from Level 1, plus at least one of the following: observation, project/activity, case study, or lesson plan study.</p>	<p>Must contain at least one item from Level 1 as well as at least one item from Level 2, plus at least one of the following: tutoring, small group student teaching, or whole group internship.</p>	<p>Rate each item as the number of the highest variation receiving an X under it.</p>
<p>1.0 Instructional Leadership for All Students: All principals have expertise for instructional leadership that is focused on student outcomes and supports students with disabilities in achieving the curriculum standards expected of all students.</p>					
<p>1.4 - Develops a system for progress monitoring to ensure early and ongoing monitoring of student progress and uses this information for program improvement.</p> <p>1.5 - Organizes working conditions for instructional effectiveness, providing the organizational supports needed to increase teachers' opportunities to teach and foster the success of all students in inclusive environments (e.g., working conditions, caseloads, resources, scheduling, teacher collaboration, co-teaching, schedules, use of space).</p> <p>1.6 - Provides opportunities for professional learning and teacher evaluation that are directly linked to curriculum, teaching, and learning.</p>					



Essential Components	Implementation Levels				
<p>Instructions: Place an X under the appropriate variation implementation score for each course syllabus that meets the criteria level from 0 to 3. Score and rate each item separately.</p>	Level 0	Level 1	Level 2	Level 3	Rating
	<p>There is no evidence that the component is included in the syllabus, or the syllabus only mentions the component.</p>	<p>Must contain at least one of the following: reading, test, lecture/presentation, discussion, modeling/demonstration, or quiz.</p>	<p>Must contain at least one item from Level 1, plus at least one of the following: observation, project/activity, case study, or lesson plan study.</p>	<p>Must contain at least one item from Level 1 as well as at least one item from Level 2, plus at least one of the following: tutoring, small group student teaching, or whole group internship.</p>	<p>Rate each item as the number of the highest variation receiving an X under it.</p>
<p>2.0 Strengthening Principal Leadership for Inclusive Schools: All principals are committed to developing inclusive schools that value and support all students, including those with disabilities.</p>					
<p>2.1 - Builds a shared vision for inclusive schools that focuses on high expectations and improved achievement for all students, including those with disabilities; fosters the acceptance of group goals; and communicates the vision to all stakeholders.</p> <p>2.2 - Builds a school-wide commitment to inclusive schools, working with teachers, students, and parents to include all students as valued members of the school community.</p> <p>2.3 - Builds a professional community that shares responsibility for improving the learning of all students, providing high-quality professional development (PD) and the necessary work context to ensure that all students have opportunities to achieve in inclusive settings.</p>					



Essential Components	Implementation Levels				
<p>Instructions: Place an X under the appropriate variation implementation score for each course syllabus that meets the criteria level from 0 to 3. Score and rate each item separately.</p>	Level 0	Level 1	Level 2	Level 3	Rating
	<p>There is no evidence that the component is included in the syllabus, or the syllabus only mentions the component.</p>	<p>Must contain at least one of the following: reading, test, lecture/presentation, discussion, modeling/demonstration, or quiz.</p>	<p>Must contain at least one item from Level 1, plus at least one of the following: observation, project/activity, case study, or lesson plan study.</p>	<p>Must contain at least one item from Level 1 as well as at least one item from Level 2, plus at least one of the following: tutoring, small group student teaching, or whole group internship.</p>	<p>Rate each item as the number of the highest variation receiving an X under it.</p>
<p>2.0 Strengthening Principal Leadership for Inclusive Schools: All principals are committed to developing inclusive schools that value and support all students, including those with disabilities.</p>					
<p>2.4 - Redesigns schools for inclusive education using systematic change processes.</p> <p>2.5 - Shares responsibility for leadership, engaging others in shared decision making.</p>					



Essential Components	Implementation Levels				
<p>Instructions: Place an X under the appropriate variation implementation score for each course syllabus that meets the criteria level from 0 to 3. Score and rate each item separately.</p>	Level 0	Level 1	Level 2	Level 3	Rating
	<p>There is no evidence that the component is included in the syllabus, or the syllabus only mentions the component.</p>	<p>Must contain at least one of the following: reading, test, lecture/presentation, discussion, modeling/demonstration, or quiz.</p>	<p>Must contain at least one item from Level 1, plus at least one of the following: observation, project/activity, case study, or lesson plan study.</p>	<p>Must contain at least one item from Level 1 as well as at least one item from Level 2, plus at least one of the following: tutoring, small group student teaching, or whole group internship.</p>	<p>Rate each item as the number of the highest variation receiving an X under it.</p>
<p>3.0 Parent Leadership and Support: All principals have the expertise to engage parents to foster learning for all students, including students with disabilities.</p>					
<p>3.1 - Engages parents to enhance students' opportunities for learning.</p> <p>3.2 - Engages parents in shared decision making as inclusive schools are developed and sustained by developing high-quality partnerships with parents, families, community members, and relevant agencies that are characterized by reciprocal communication, respect, and trust.</p>					



Essential Components	Implementation Levels				
<p>Instructions: Place an X under the appropriate variation implementation score for each course syllabus that meets the criteria level from 0 to 3. Score and rate each item separately.</p>	Level 0	Level 1	Level 2	Level 3	Rating
	<p>There is no evidence that the component is included in the syllabus, or the syllabus only mentions the component.</p>	<p>Must contain at least one of the following: reading, test, lecture/presentation, discussion, modeling/demonstration, or quiz.</p>	<p>Must contain at least one item from Level 1, plus at least one of the following: observation, project/activity, case study, or lesson plan study.</p>	<p>Must contain at least one item from Level 1 as well as at least one item from Level 2, plus at least one of the following: tutoring, small group student teaching, or whole group internship.</p>	<p>Rate each item as the number of the highest variation receiving an X under it.</p>
<p>4.0 District and State Leadership: All districts have one or more district administrator with expertise in special services and research-based practices for children with disabilities.</p>					
<p>4.1 - Strengthens alignment of systems by coordinating services, supporting families, providing PD, and overseeing compliance.</p> <p>4.2 - Strengthens decision making by supporting principals in making ethically sound, legally correct, and educationally useful decisions regarding inclusive schooling.</p> <p>4.3 - Strengthens instruction by supporting the development of principals as leaders of instruction for all learners in inclusive schools.</p> <p>4.4 - Strengthens relationships by collaborating with principals in building trust, negotiating conflict, and strengthening relationships with families and agencies to improve outcomes for students with disabilities.</p>					



Appendix B

Sources of Evidence-Based Practice in Special Education

Source	Description
Best Evidence Encyclopedia (BEE), Struggling Readers	BEE, which identifies evidence-based programs in general education, applied its standards for EBPs to programs aimed at struggling readers. (http://www.bestevidence.org/reading/strug/strug_read.htm)
Exceptional Children, 75(3)	This special issue contains five evidence-based reviews that applied Gersten and colleagues' (2005) and Horner and colleagues' (2005) standards for identifying EBPs in special education.
National Autism Center (NAC), National Standards Project	NAC applied systematic standards to determine established (i.e., EBPs), emerging, unestablished, and ineffective/harmful practices for children with autism. (http://www.nationalautismcenter.org/affiliates/reports.php)
National Center on Response to Intervention (NCRTI)	Although NCRTI does not denote which practices are EBPs, it provides information on quality, design, and effect size for each study reviewed on the basis of which educators can determine which practices meet EBP standards. (http://www.rti4success.org/chart/instructionTools/)
National Secondary Transition Technical Assistance Center (NSTTAC)	Practices for secondary transition of students with disabilities are categorized as having strong, moderate, potential, or low levels of evidence support for causal inference based on standards adapted from Gersten and colleagues (2005) and Horner and colleagues (2005). (http://www.nsttac.org/ebp/evidence_based_practices.aspx)
National Professional Development Center on Autism Spectrum Disorders	The Center identified 24 EBPs for students with autism spectrum disorder and included links to briefs that include step-by-step directions for implementation. (http://autismpdc.fpg.unc.edu/content/evidence-based-practices)
What Works Clearinghouse (WWC), Students with Learning Disabilities	WWC, which identifies EBPs in general education, has begun to review practices specifically for students with learning disabilities. (http://ies.ed.gov/ncee/wwc/reports/Topic.aspx?tid=19)
WWC, Early Childhood Education for Students with Disabilities	The WWC, which identifies EBPs in general education, has begun to review practices specifically for early childhood education for students with disabilities. (http://ies.ed.gov/ncee/wwc/reports/topic.aspx?tid=22)

Note. The sources listed above (Cook & Smith, 2012) applied systematic standards related to research design, quality of research, quantity of research, and magnitude of effect or provided information along each of these dimensions.

