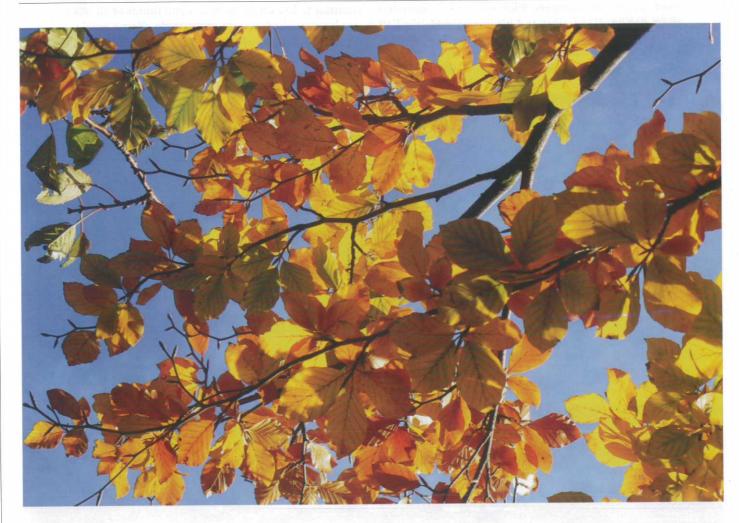
Transforming educational leadership to support personalised learning

Dr Mary Lynn Boscardin, Professor, College of Education, University of Massachusetts Amherst, USA



he word leadership evokes many connotations; administration, instruction, transportation, and service delivery are likely to be salient thoughts. In the United States as well as other countries, personalised learning is not a concept that is likely to immediately jump to mind, unless one is referring to special education. With results driven accountability now appearing in general education policy documents (Every Student Succeeds Act (ESSA), 2015), the expectation is for more personalised learning rather than the status quo. Educational accountability demands leaders be equipped not only with the prerequisite knowledge necessary to support instructional practices but they must also

be equipped with the necessary leadership skills in order to play a critical role in introducing, and guiding policies that support the success of all students. This discussion examines: how leadership roles and functions; professional leadership behaviors and standards; the relationship of leading to learning support; improved instructional practices and personalised learning contribute, to the transformation of the education mission.

Leadership roles and behaviors

"Leadership is like beauty – it is hard to define, but you know it when you see it" (Bennis (1989) in Hoy & Miskel, 2001, p.392). Often the words leader or leadership denote role or positon. For example,

the context for head teachers in the United Kingdom (UK) can vary ranging from leading one school to being responsible for leading more than one school. The titles also vary. Head teacher can be synonymous with principal, executive, associate, and co-head teacher. In the United States (US) leadership positions can vary by student populations and position within the system

The types of leadership knowledge needed to address the development of highly qualified leaders extend beyond the mastery of basic competencies. Murphy (2001) recommended that the field of educational leadership be re-cultured by highlighting "the centrality of learning, teaching, and school

improvement within the role of the school administrator" (p. 15). While the centrality of learning, teaching, and school improvement is important, leaders also must be equipped with the skills necessary to transform and elevate all divisions of an organisation. Hersey, Blanchard, and Johnson (2012) posited that leadership is situational, i.e., leadership is task-relevant, and leaders who possess the capacity to set high but attainable goals, are willing and able to take responsibility, and have acquired the relevant qualifications will most likely experience success influencing the ones they are charged with leading. Leaders must be versatile to accomplish these goals. Situational leadership provides an over-arching umbrella for more discrete forms of leadership that represent targeted leadership options that offer versatility for moving organisations in a new direction.

Transactional leadership essentially involves carrying out the day-to day tasks that leaves a sense of accomplishment based on a checklist (Barnett & McCormick, 2004; Bolger, 2001; Bryman, 1992; Burns, 1978; Leithwood & Jantzi, 2000; Mitchell & Tucker, 1992). Transactional leaders employ the use of contingency reward structures to implement education reform initiatives aligned with goals and objects.

Instructional leadership is characterised by the interactions of curriculum, Curriculum content, scope, sequence, and delivery in relation to the educational mission, expectations for student learning, monitoring of student achievement, and provision of safe school environments characterises instructional leadership. Instructional leadership is tied to closely structured curriculum accountability and learning outcomes, making for a close alliance with transactional leadership (Ashton & Duncan, 2012; Carver, 2012; Hallinger, 2003, 2005).

Transformational leaders inspire others to transcend personal interests and to develop and adopt an inclusive vision and mission aligned with organisational policies. Transformational leadership conjures images of the charismatic leaders, who exert influence through inspiration and motivation (Hallinger, 2003; Leithwood, 2001; Leithwood & Jantzi, 2006). Distributed leadership fundamentally differs from "distributing or delegating" forms of leadership. Distributed leadership utilises the expertise that is based on a common set of values held by the leadership team within an organisation (Billingsley, 2011; Elmore, 2000; Gronn, 2000; Lee & Hallinger, 2012; Hulpia, Devos, & Van Keer, 2011; Mascall, Leithwood, Straus, & Sacks, 2008; Sheppard, Hurley, & Dibbon, 2010; Spillane, Halverson, & Diamond, 2004; Spillane & Harris, 2008; Wallace, 2002). Laissez-faire leadership, in contrast to distributed leadership, favors hands-off behaviors with little connection to teams or the larger organisation (Lewin, Lippitt & White, 1939; Webb, 2007; Sadler, 2003; Bass, 1985).

Collaborative leadership need not be distributed as individuals may not have the opportunity to exercise leadership in regard to school based decision-making or functioning. Collaboration involves voluntary participation, joint work, and interdependence within group activity around group goals. Although there exists no single, agreed upon, formal definition of collaborative leadership, several important components have been identified as characteristic of collaborative practice: (a) common goals (Cook & Friend, 1991; Welch & Sheridan, 1995); (b) joint work or interdependence (Gray, 1989; Little, 1990; Welch & Sheridan); (c) parity (Cole & Knowles, 1993; Cook & Friend; Welch & Sheridan); and (d) voluntary participation (Cook & Friend; Hargreaves, 1994; Slater, 2004).

Because behavior change is slow and relies on opportunities for practice and reinforcement, professional standards are one mechanism for facilitating movement along the leadership continuum

Relational leadership is one of several emerging feminist approaches to leadership (Komives, Lucas, & McMahon, 2007; McIntosh, 2011; Regan & Brooks, 1995). The relational leader values the experience and perspectives of others and works to understand people through dialogue. Power is shared and strengthened through relationships.

Although leaders may have an affinity for particular leadership behaviors due to individual constitutions and dispositions, Hersey, et al. (2012) and Darling-Hammond, LaPointe, Meyerson, Orr, and Cohen (2007) suggest that leaders grow as they gain experience and that born leaders are rare. Research has shown that acquisition of leadership skills is dynamic and most likely to follow a developmental continuum rather than being limited to a specific role (Garand, 2014; Mosley, Boscardin, & Wells, 2014; Provost, Boscardin, & Wells, 2010; Schulze, 2014; Tudryn, Boscardin, & Wells, 2016). The dynamic process that emerged from the aforementioned studies is one of novice leaders maturing from transactional/instructional leaders who value goals, accountability, and outcomes, to veteran transformational/ distributed/collaborative leaders who value multiple leadership styles and developing a whole school leadership culture that values collegiality, administrative support, and high levels of open communication. As leaders grow knowledge and skill sets continue to grow, increasing range and repertoire. Because behavior change is slow and relies on opportunities for practice and reinforcement, professional standards are one mechanism for facilitating movement along the leadership continuum.

Role of professional leadership standards

Why professional leadership standards? Linda Darling-Hammond wrote, *High –performing principals are not just born, but can be made* (Darling-Hammond, LaPointe, Meyerson, Orr, & Cohen, 2007, Introductory Note). This statement as applied to all leaders provides rationale for professional leadership standards. Depending on the location standards range from simply defining roles to serve as measures of professional competency. Leadership standards are designed to improve instruction and increase student outcomes (Centre of Study for Policies and Practices in Education, 2013).

Rigorous leadership preparation and field-based experiences shape our professional identities through signature pedagogies (Schulman, 2005). According to Schulman, signature pedagogies are forms of instruction that come to mind when thinking about the preparation of members of particular professions. Professional education according to Schulman is not education for understanding alone; it is preparation for accomplished and responsible practice in the service of others. It is preparation for work where competency is marked by the awarding of a license or certificate. Professional standards must measure up to not just the academy, but also to the demands of the profession. After initial induction, professional identities continue to develop through the dissemination of formal and informal support, guidance, knowledge, strategies, and direction throughout careers. Professional preparation, experiences, and development provide tools that enhance the ability to lead and greatly influence successes.

Although standards have been used to combat low quality and extend opportunity (Porter, 1993), their use was not intended to be at the expense of higher levels of professional practice and accountability (Darling-Hammond, 1989). Recently, standards have been used to define criteria for assessments and to guide leader hiring practices. Standards affirm and lend perspective to the knowledge and skills necessary to be effective educational leaders that support personalised instruction. While educational leadership standards are only one mechanism for helping to better understand how leadership influences instructional practices and student learning, they serve as links to accountability (Boscardin & Lashley, 2012). The standards-based accountability reform movement has captured imaginations about the possibilities for linking leading, teaching, and learning.

The content of leadership standards transcend national boundaries. The Australian Professional Standard for Principals and the Leadership Profiles was developed through the Australian Institute for Teaching and School Leadership (2014). The Standard which reflects the complexity of the role and shared visions, is an integrated model that recognises three leadership requirements within five areas of professional practice. The companion validated Leadership Profiles detail each of the leadership requirements and professional practices. As stated in the report, "The most effective leaders see learning as central to their professional lives" (p. 3). The goal of the Standard and Profiles is to empower leaders to develop and support teaching so to maximise student learning.

The Standard emphasises operational, relational, strategic, and systemic forms of leadership. The Profiles emanate from these four foci and follow a proficiency continuum, much like that the continuum supported by the research on perceived approaches to leadership. The over-arching goal is one of producing high quality learning, teaching, and schooling that results in successful learners, confident individuals, and active informed citizens.

The National Standards of Excellence for Head teachers (2015) in the UK influence the work of school administrators and head teachers. The governance arrangements to which head teachers are accountable depend on the characteristics of the school or schools. Six key characteristics are embedded within the following four 'Excellence As Standard' domains for the UK head teachers:

- · Qualities and Knowledge
- · Pupils and Staff
- Systems and Process
- · The Self-Improving School System.

The Australian and UK standard domains have much in common with the 2015 US Professional Standards for Educational Leaders; that embody a research- and practice-based understanding of the relationship between educational leadership and student learning. The Professional Standards for Educational Leaders emphasise improved learning, achievement, development, and well-being of each student. The following 2015 Standards are integral to student success:

- 1 Mission, Vision, and Core Values
- 2 Ethics and Professional Norms
- 3 Equity and Cultural Responsiveness
- 4 Curriculum, Instruction and Assessment
- 5 Community of Care and Support for Students
- 6 Professional Capacity of School Personnel

- 7 Professional Community for Teachers and Staff
- 8 Meaningful Engagement of Families and Community
- 9 Operations and Management
- 10 School Improvement.

In practice, these domains reflect interdependent domains. Qualities and values of leadership work within the following three related clusters: (1) Curriculum, Instruction and Assessment, and Community of Care and Support for Students, (2) Professional Capacity of School Personnel, Professional Community for Teachers and Staff, Meaningful Engagement of Families and Community, and Operations and Management, and (3) Mission, Vision and Core Values, Ethics and Professional Norms, and Equity and Cultural Responsiveness. These all fall within the domain of School Improvement that propels each student to academic and personal success. These leadership attributes grew out of a theory of how educational leader practice influences student achievement.

The how of leadership is easier to objectively measure than the why. Effective leadership often resides in the values and motivations of leaders. Behaviour, disposition and belief complement their knowledge and skill. Attitudes, values, and beliefs are demonstrated through both verbal and non-verbal behaviors. Dispositions include demonstration of being growth-oriented, collaborative, innovative, analytical, ethical, perseverant, reflective, and equity-minded. While it is important for novice leaders build to mastery of the standards, it is essential that educational organisations be led by leaders that possess appropriate beliefs and attitudes.

The leadership standards previously discussed offer implicit support for personalised learning. Much can be gleaned from the US 2012 Council for Exceptional Children (CEC) Administrator of Special Education Standards that explicitly support personalised learning. The Administrator of Special Education standards are aligned with the CEC seven major preparation standards of assessment. The specialty set for administrators of special education consists of 38 knowledge statements and 45 skill statements in addition to the 26 advanced key elements located within one of the seven standards are based on empirical research, disciplined inquiry, informed theory, and the wisdom of practice.

Table 1 illustrates how the domains of the various sets of leadership standards align with each other. For example, only the CEC standards dedicate a specific domain to Research and Inquiry, though other standards have embedded references to this domain. The Australian Leading Teaching and Learning domain is an amalgamation of the CEC Assessment/Evaluation and Curricular Content Knowledge domains. The UK Self-Improving School Systems domain traverses the CEC Research and Inquiry, Leadership and Policy, and Collaboration domains. These observed similarities and differences among the various standards are confirmed through an analysis of principal leadership standards performed by Weinstein, Muñoz, and Marfán for the Organization for Economic Co-operation and Development (Centre of Study for Policies and Practices in Education, 2013).

Two primary types of leadership standards emerged across the sets of leadership standards Weinstein, *et al.* analysed for the Centre of Study for Policies and Practices in Education (2013): functional and behavioral. Functional standard domains represent the ability or skills necessary to establish a mission, generate organisational conditions, create harmony within the school,

Table 1: Side by side comparison of education leadership standards.

Administrators of Special Education at the Advanced Level (2012)	US Professional Standards for Educational Leaders (2015)	Australian Standard and Profiles (2014)	United Kingdom National Standards of Excellence for Head teachers (2015)	
- Assessment/Evaluation	- Curriculum, Instruction, and Assessment	- Leading Teaching and Learning		
- Curricular Content Knowledge	ge - Curriculum, Instruction, and - Leading Teaching and Learning Assessment		- Qualities and Knowledge	
- Program, Services, and Outcomes	- Professional Capacity of School Personnel - Operations and Management	- Leading Improvement, Innovation, and Change -Leading Management of the School	- Systems and Process	
- Research and Inquiry			- The Self-Improving School System	
- Leadership and Policy	- Mission, Vision, and Core Values - School Improvement	- Vision and Values	- The Self-Improving School System	
- Professional and Ethical Practice	nal and Ethical Practice - Ethics and Professional Norms - Develor - Equity and Cultural Responsiveness		- Pupils and Staff	
- Collaboration - Community Care and Support for Students - Professional Community for Teachers and Staff - Meaningful Engagement of Families and Community		- Personal Qualities, Social, and Interpersonal Skills - Engaging and Working with the Community	- The Self-Improving School System	

develop self and others, and manage pedagogy. The behavioral realms represent leadership processes, approaches, and dispositions such as flexible management for change, communication, values, and linking theory to practice.

So why has not more attention been given to personalised learning outside of the CEC 2012 standards? According to the McKinsey report (2007), leaders in high performing school systems devote approximately 80% of their time to improving instruction, and devising ways to better motivate and develop the instructional capacities of teachers. Greater school autonomy is linked to higher expectations for increasing student outcomes (Centre of Study for Policies and Practices in Education, 2013). Higher expectations lead to being asked to do more. The often exponential increase in duties and responsibilities makes it almost impossible to give student learning priority (Pont, Nusche, & Moorman, 2008), let alone personalised student learning, making it all that much more challenging to link leading to learning.

Linking leadership to learning

Research linking various aspects of leadership to all aspects of education that influence student learning is gaining traction in contemporary leadership research (Boscardin, 2007; Leithwood, *et al.*). As Leithwood, Louis, Anderson, and Wahlstrom (2004) note though, "leadership is second only to classroom instruction among all school-related factors that contribute to what students learn at school" (p. 3). More and more educational organisations are considering new ways to evaluate the connection between leadership behaviors and student achievement (Leithwood, *et al.*, 2004; Waters, Marzano, & McNulty, 2003).

Leithwood, et al. (2004) stated, "Students learn when

educational leaders foster safe, caring and supportive school learning communities and promote rigorous curricula, instructional and assessment systems. This work requires educational leaders to build and strengthen a network of organizational supports—the professional capacity of teachers and staff, the professional community in which they learn and work, family and community engagement, and effective, efficient management and operations of the school. In all of their work, educational leaders are driven by the school's mission, vision, and core values. They are called to act ethically and with professional integrity. And they promote equity and cultural responsiveness. Finally, educationally effective leaders believe their school can always be better. To realize their schools' visions of student learning and stay true to their schools' core values, educational leaders subject every realm of the school to improvement, including themselves and their own work. They are tenacious change agents who are creative, inspirational and willing to weather the potential risks, uncertainties and political fall-out to make their schools places where each student thrives" (p. 4).

Combining leadership domains (functions) with approaches (behaviors and dispositions) to leadership with findings from the literature (Boscardin, 2011; Boscardin, McCarthy, & Delgado, 2009; Crockett, 2011; Crockett, Becker, & Quinn, 2009; Murphy, 2001; O'Brien, 2006; Waters, et al., 2003), is one way to further expand the leadership paradigm. Boscardin, McCarthy, and Delgado (2009), Crockett (2011), Crockett, Becker, and Quinn (2009), and O'Brien (2006) identified leadership dimensions and evidenced-based leadership practices supporting special education administration and leadership which by de facto supports personalised learning. O'Brien (2006) conducted interviews with 64 participants across five countries; England, Scotland, North-

Table 2: Characteristic leader actions depending on leadership domains and approaches to leadership.

Approaches to Le	Approaches to Leadership								
Domain Areas	Transactional	Instructional	Transformational	Distributed	Collaborative	Relational			
Context for Leadership	Uses contingency reward structures to transact the vision and mission of the organisation.	Uses identification, acquisition, allocation, coordination, and social, material, and cultural resources necessary to establish the conditions for the possibility of teaching and learning.	Focuses on the common interests of the group for the purpose of elevating goals and developing skills of group members and creating intellectual stimulation to build common understandings and shared values.	Emphasises developing "leaderful" organisations through interacting components, leaders, followers, and situations, from which leadership functions evolve.	Emphasises shared leadership, equal partner-ships, diverse input, and improvement of professional knowledge and practice.	Uses human interactions to support the vision and mission of the organisation.			
Leadership, Policy, & School Reform	Employs the use of contingency reward structures to implement education reform initiatives aligned with laws and regulations.	Uses school reform policies, to influence education instruction.	Communicates and inspires a leadership vision and mission to guide education policies. Intervenes when issues/complaints arise.	Utilises expertise of personnel to understand and meet law and policy requirements.	Involves diverse stakeholder groups in identifying, and meeting legal and policy requirements.	Embraces the spirit of laws, regulations and polices to inspire a leadership vision.			
Curriculum Content Knowledge	Aligns reward structures with instructional program requirements and standards. Identifies practices aimed at serving learning needs of all students and requires staff to implement them.	Develops instructional programs that are aligned with curriculum goals.	Inspires others to transcend personal interests and to develop and adopt inclusive organisational goals aligned with the curriculum. Clarifies reasons for implementing strategies, and provides useful assistance for setting short-term goals for teaching and learning.	Motivates others to initiate leadership roles, encourages risk-taking, provides material help, and allows sufficient freedom for people to initiate and implement.	Collaborates with diverse stakeholder groups to develop instructional programs.	Uses relationships initiate instructions programs aligned that promote innovative teachin and learning.			
Program Development and Organisation	Defines program requirements and requires personnel to meet them.	Defines the program vision and program requirements.	Develops programs and supports teachers' ability to innovate and adapt instructional practices.	Motivates teachers to initiate leadership roles, encourages risk- taking, provides material help, and allows sufficient freedom for people to initiate and implement.	Involves diverse stakeholder groups in developing programs.	Collaborates and consults with thos individuals or growinvolved in the program planning and implementation.			
Economic & resource Management	Uses contingency reward structures to allocate and manage resources to identified areas of need.	Manages resources and allocates them in alignment with instructional needs.	Distributes resources according to the vision and mission of the organisation.	Invokes the expertise of leaders, followers, and situations to allocate resources to support programs.	Collaborates with diverse stakeholder groups in identifying and allocating resources.	Involves staff in resource management and budget building a prioritisation.			
Research & Inquiry	Identifies empirical and evidence- based practices that support leadership initiatives.	Builds a repository of instructional practices that have been deemed as scientifically based.	Interprets empirical and evidence- based practices to accomplish the goals and mission of the organisation.	Utilises the expertise of others in identifying empirical and evidence-based leadership initiatives to address the mission and goals of the organisation.	Various collaborative teams are formed to identify empirical and evidence-based practices that advance the mission and goals of the organisation.	Builds research networks to incre knowledge and d sharing.			

Approaches to Leadership								
Domain Areas	Transactional	Instructional	Transformational	Distributed	Collaborative	Relational		
Assessment/ Evaluation	Utilises assessment/ outcome data, and curriculum standards to determine where curriculum and instructional changes need to be made. Focuses on achieving required standards.	Supervises and evaluates instruction, monitors student progress.	Utilises assessment/ outcome data, and curriculum standards to determine where curriculum and instructional changes need to be made. Focuses on teachers achieving required standards and going beyond them.	Utilises expertise of personnel to evaluate programs.	Involves diverse stakeholder groups in evaluating programs.	Engages with colleagues using consultation, problem solving, and feedback gathering techniques.		
Professional Development and Ethical Practice	Defines professional development requirements and contingent rewards. Maintains of the organisational status quo for professional development.	Directly involved in classroom practices, promotes professional development and provides professional development aligned with school vision, content, and curriculum.	Demonstrates high expectations for work with pupils, provides individual support to the teacher, encourages the use of new ideas for teaching, models a high level of professional practice, encourages collaborative work among staff.	Creates a culture in which teachers learn from each other, and provides opportunity for continuous professional development.	Colleagues engage in group learning and problem solving (PLC's) and are part of organisational learning through the community of practice model.	Interacts with staff to identify and implement professional development and ethical practice needs.		
Human Resource Development & Supervision	Defines professional development requirements and contingent rewards.	Promotes professional development that is aligned with the instruction-al vision, content, and curriculum.	Demonstrates and communicates high expectations, encourages new ideas, models a high level of professional practice, and encourages collaborative work among staff.	Creates a culture that emphasises developing "leaderful" organisations through interacting components, leaders, followers, and situations, in which provides opportunity for continuous professional development.	Engages colleagues in group learning and problem solving through communities of practice and professional learning communities.	Engages with colleagues using consultation, problem solving, and feedback gathering techniques.		
Collaboration	Requires personnel to maintain the organisational status quo regarding required collaborative practices.	Engages the community to create shared responsibility for student and school success.	Creates structures to foster collaboration in order to build a collaborative culture.	Creates structures that foster collaboration and team work in order to establish a collaborative culture.	Fosters and utilises diverse stakeholder relationships as main component of leadership practice.	Fosters relationships as main component of leadership practice.		
Parent, Family, & Community Engagement	Requires the use of contingency rewards for collaboration among leaders.	Engages the community to create shared responsibility for teaching and learning.	Builds productive relationships with parents, family, and the community. Fosters collaboration among community leaders through encouragement, inspiration, and support.	Creates structures through interacting components, leaders, followers, and situations, in which provides opportunity for that foster collaboration and team work in order to establish a collaborative culture.	Fosters and utilises diverse stakeholder relationships as main component of leadership practice.	Fosters relationships as main component of leadership practice.		

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Leadership functions will continue to evolve with the field of educational leadership as new leadership behaviors emerge. Professional standards and domains help to **define professional identities**

ern Ireland, the United States, and Canada. From this research, the following five themes emerged as being important to the field of special education administration: (a) interpersonal, (b) personal, (c) educational, (d) organisational, and (e) strategic. The interpersonal theme included effective communication, productive relationships, and inspiring others. The personal dimension included professional values and ethics, personal strengths and commitment to ongoing personal and professional development, and decision-making and judgment. The educational domain included pedagogical knowledge and application, building learning communities, and an environment that maximises student learning. The organisational category included operating effectively within a regulatory and organisational framework, management of resources to achieve goals, and managing systems and processes. Lastly, in the strategic area, building school vision and culture, strategic planning, building leadership, and advocacy were the primary areas of interest.

In a study completed by Boscardin, McCarthy, and Delgado (2009), experts helped to identify statements supported by the theoretical, empirical and conceptual research, and practice literature that reflected evidence-based practices of administrators of special education. The literature supported statements that represented both the knowledge/cognitive foundations of the discipline and the skills necessary to perform effectively in the role of an administrator of special education and complemented one of six domains: (a) leadership and policy, (b) program development and organisation, (c) research and inquiry, (d) evaluation, (e) professional development and ethical practice, and (f) collaboration.

Crockett, et al. (2009) reviewed and analyzed 474 abstracts published in professional journals on the topic of special education administration, over four decades. Eight themes were identified, some of which have endured over time (e.g., law & policy, roles & responsibilities in administrating special education, leadership preparation & development, personnel training & development, service delivery models) and others that were emerging (e.g., school reform & student learning, communication & collaboration with stakeholders, technology). The result was nine domain areas that included: (a) leadership, policy, and school reform, (b) economic and resource management, (c) context for leadership, (d) instructional leadership, (e) evaluation of educational programs and program outcomes, (f) research and inquiry, (g) professional development and human resources, (h) collaborative leadership, and (i) technology.

Like the previous studies, Murphy (2001) identified four content areas supported by the general education leadership literature as essential to restructuring the organisation of pre-service administration programs: (a) developing caring and supportive behaviors and dispositions; (b) acquiring knowledge of variables influencing change; (c) encouraging collegiality and collaboration; and (d) understanding the ethical and moral foundations of leadership. Content offers a starting point but does not address enacting acquired knowledge.

Waters, et al. (2003) identified 21 leadership responsibilities that applied to all leaders and 66 associated practices that

correlated with student achievement using a meta-analysis of 70 research studies covering a 30 year period. The twenty-one leadership responsibilities were reassigned to seven broader categories: (a) leadership, (b) ecological context, (c) instructional programming, (d) evaluation, (e) professional development and human resources, (f) collaboration, and (g) economic resource management. Each of the twenty-one leadership responsibilities was associated with knowledge and skills, strategies and tools, and resources.

Upon reviewing the domains generated from the standards and literature reviews, eleven salient domain were identified after eliminating the redundancies. Returning to the idea that leadership is situational, Table 2 offers a menu of leadership approaches for enacting various functions/domains where the interactions depend on the circumstances presented.

Similar to the Australian Leadership Profiles (2014) developmental pathways for increasing leadership proficiency, this table places transactional and instructional leadership (basic) in close proximity and transformational, distributed, collaborative, and relational leadership (advanced) in more distal positions. As mentioned previously in the research, leaders progress from transactional/instructional leadership approaches to transformational/distributed/ collaborative/relational leadership approaches as they mature (Garand, 2014; Hersey, et al., 2012; Mosley, Boscardin, & Wells, 2014; Provost, Boscardin, & Wells, 2010; Schulze, 2014; Tudryn, Boscardin, & Wells, 2016). These approaches to leadership across domain areas are emblematic of and consistent with the complexities one would expect to find with attenuated levels of personalised learning.

Summary

Leadership functions will continue to evolve with the field of educational leadership as new leadership behaviors emerge. Professional standards and domains help to define professional identities and contribute to the training and professional growth of aspirant, new, and veteran leaders. Transforming leadership to support improved instruction and personalised learning for all students, however, depends on the interaction between leadership standards, domains, and functions with leadership behaviors, approaches and dispositions. Relationships between leadership behaviors and functions deserve closer empirical scrutiny to determine real contributions to improved instruction and increased educational outcomes not only at the school and district levels, but at the level of personalised student learning. The challenge for leaders will be to use their knowledge of leadership to strategically define leadership missions that are in concert with goals for supporting proven personalised learning for all students in their charge.

References

Ashton, B & Duncan, H 2012, 'A beginning rural principal's toolkit: A guide for success', *Rural Educator*, vol. 34, pp. 19–31.

Australian Institute for Teaching and School Leadership 2011, *Australian professional standard for principals and the leadership profiles*, Education Council, Carlton South, Vic.

Barnett, K, McCormick, J 2004, 'Leadership and individual: Principal-teacher relationships in schools', *Educational Administration Quarterly*, vol. 40, 406–434.

Bass, BM 1985, Leadership and performance beyond expectations, Free Press, New York.

Billingsley, BS 2012, 'Inclusive school reform: Distributed leadership across the change process,' in JB Crockett, BS Billingsley, & ML

Boscardin (eds.), Handbook for leadership and administration in special education, Routledge, New York.

Bogler, R 2001, 'The influence of leadership style on teacher job satisfaction', *Educational Administration Quarterly*, vol. 37, pp. 662–683.

Boscardin, ML 2011, 'Using professional standards to inform leadership in special education', in JM Kauffman & DP Hallahan (eds.), *Handbook of special education*, pp. 378-390, Taylor & Francis, New York, NY.

Boscardin, ML 2007, 'What is special about special education administration? Considerations for school leadership,' *Exceptionality*, vol. 15, pp. 189–200.

Boscardin, ML, McCarthy, E, & Delgado, R 2009, 'An integrated research-based approach to creating standards for special education leadership,' *Journal of Special Education Leadership*, vol. 22, pp. 68–84.

Boscardin, ML, & Lashley, CL 2012, 'Expanding the leadership framework: an alternate view of professional standards', (pp. 37–51), in J Crockett, B Billingsley, & ML Boscardin, (eds.), *The handbook of leadership & administration for special education*, Routledge, New York.

Bryman, A 1992, *Charisma and leadership in organizations*, Sage, London. Burns, JM 1978, *Leadership*, Harper and Row, New York.

Carver, CL 2012, 'Developing leadership content knowledge during school leader preparation', *International Journal of Educational Leadership Preparation*, 7, available at http://cnx.org/content/m44956/1.3/

Centre of Study for Policies and Practices in Education (CEPPE), 2013, 'Learning standards, teaching standards and standards for school principals: A comparative study', *OECD Education Working Papers*, No. 99, OECD Publishing, Chile, available at http://dx.doi.org/10.1787/5k3ts-jqtp90v-en

Cole, AL, & Knowles, JG 2009, Researching teaching: Exploring teacher development through reflexive inquiry, Backalong Books, Halifax, Nova Scotia.

Cook, L, & Friend, M 1991, 'Principles for the practice of collaboration in schools', *Preventing School Failures*, vol. 35, no. 4, pp. 6–9.

Council for Exceptional Children 2012, What every special educator must know: Ethics, standards, and guidelines for special educators (6th ed.), Arlington, VA.

Crockett, JB 2011, Conceptual models for leading and administrating special education. in J M Kauffman & DP Hallahan (eds.), *Handbook of special education* (Section VI), Routledge, New York.

Crockett, JB, Becker, MK, & Quinn, D 2009, 'Reviewing the knowledge base of special education leadership and administration', *Journal of Special Education Leadership*, vol. 22, pp. 55–67.

Darling-Hammond, L 1989, 'Accountability for professional practice', *Teachers College Record*, vol. 91, no. 1, pp. 59–80.

Darling-Hammond, L, LaPointe, M, Meyerson, D, Orr MT, Cohen, C 2007, Preparing school leaders for a changing world: lessons from exemplary leadership development programs, Stanford University, Stanford Educational Leadership Institute, Stanford, CA.

Elmore, RF 2000, *Building a new structure for school leadership*, Albert Shanker Institute, Washington, DC.

Garand, A 2014, Perceptions of leadership through the lens of special education administrators and principals (Unpublished doctoral dissertation), University of Massachusetts Amherst.

Gray, HL 1989, 'Gender considerations in school management: Masculine and feminine leadership styles', in C Riches & C Morgan (eds.), *Human Resource Management in Education* (pp. 38-45), Open University Press, Milton Keynes.

Gronn, P 2000, Distributed properties: A new architecture for leadership, *Educational Management & Administration*, vol. 28, pp. 317–338.

Hallinger, P 2005, 'Instructional leadership and the school principal: A passing fancy that refuses to fade away', *Leadership and Policy in Schools*, vol. 4, no. 3, pp. 221–240.

Hallinger, P, 2003, 'Leading educational change: Reflections on the practice of instructional and transformational leadership', *Cambridge Journal of Education*, vol. 33, no. 3, pp. 329–351.

Hargreaves, A 1994, Changing teachers, changing times, Teachers' College Press, New York.

Hersey, P, Blanchard, KH, & Johnson, DE 2012, Management of organizational behavior: Utilizing human resources 10th Edit, Prentice-Hall, Englewood Cliffs, NJ.

Hoy, W, & Miskel, C 2001, *Educational administration: Theory, research, and practice* (6th Edition), McGraw Hill Higher Education, New York, NY.

Hulpia, H, Devos, G, & Van Keer, H 2011, 'The relation between school leadership from a distributed perspective and teachers' organizational commitment: examining the source of the leadership function', *Educational Administration Quarterly*, vol. 47, no. 5, pp. 728–771.

Komives, SR, Lucas, N, & McMahon, TR 2007, Exploring leadership: For college students who want to make a difference (2nd ed.), Jossey-Bass, San Francisco.

Lee, MS, & Hallinger, P 2012, 'Exploring the impact of national context on principals' time use: Economic development, societal culture, and educational system', *School Effectiveness and School Improvement*, vol. 23, no. 4, pp. 461–482.

Leithwood, K 2001, 'School leadership in the context of accountability practices', *International Journal of Leadership in Education*, vol. 4, pp. 217–235.

Leithwood, K, Jantzi, D, 2006, 'Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices', *School Effectiveness and School Improvement*, vol. 17, pp. 201–227.

Leithwood, K, Louis, KS, Anderson, S, Wahlstrom, K 2004, *How Leadership Influences Student Learning*, (Executive Summary), University of Minnesota and University of Toronto, commissioned by The Wallace Foundation, available at www.wallacefoundation.org, accessed March 2016.

Lewin, K, Lippitt, R, White, RK 1939, 'Patterns of aggressive behavior in experimentally created social climates', *Journal of Social Psychology*, vol. 10, pp. 271–279.

Little, JW 1990, 'Teachers as colleagues', in A Lieberman (ed.), *Schools as collaborative cultures*, pp. 165–193, Falmer Press, London.

Mascall, B, Leithwood, K, Strauss, T, & Sacks, R 2009, 'The relationship between distributed leadership and teachers' academic optimism,' in A Harris (ed.), *Distributed Leadership* (pp. 81-100). Springer Science+Business Media B.V.

McIntosh, F 2011, The relational leader, Course Technology, Boston.

McKinsey & Company 2007, *How the world best-performing school systems come out on top*, available at http://mckinseyonsociety.com/how-the-worlds-best-performing-schools-come-out-on-top/, accessed March 2016.

Mitchell, DS, Tucker, S 1992, 'Leadership as a way of thinking', *Educational Leadership*, vol. 49, pp. 30–34.

Mosley, JI, Boscardin, ML, Wells, CW 2014, 'Perceptions of principal leadership behaviors in an era of accountability', *Journal of School Leadership*, vol. 24, pp. 1038–1072.

Murphy, J 2001 'The changing face of leadership preparation', *The School Administrator*, vol. 58, no. 10 pp. 14–17.

O'Brien, P 2006, "They know who I am" – Leadership capabilities in special education, *Premier's Special education Scholarship sponsored by the Anika Foundation*, New South Wales, Australia

Pont, B, Nusche, D Moorman, H 2008, *Improving school leader-ship. Volume 1: Policy and practice*, OECD, available at http://dx.doi.org/10.1787/9789264044715-en accessed March 2016.

Provost, J, Boscardin, ML, Wells, CS 2010, 'Perceptions of principal leadership behaviors in Massachusetts in the era of education reform',

Journal of School Leadership, vol. 20, pp. 532-560.

Regan, H, & Brooks, G 1995, Out of women's experience: Creating relational leadership, Corwin Press, Thousand Oaks, CA.

Sadler, P 2003, Leadership, Kogan Page, London.

Schulman, L 2005, 'The Signature Pedagogies of the Professions of Law, Medicine, Engineering, and the Clergy: Potential Lessons for the Education of Teachers', *Paper delivered at the Math Science Partnership Workshop:* "Teacher Education in Effective Teaching and Learning', National Research Council's Center for Education, Irvine, CA.

Schulze, RJ 2014, School principal leadership and special education knowledge, Unpublished doctoral dissertation, University of Massachusetts, Amherst.

Sheppard, B, Hurley, D, & Dibbon, D 2010, 'Distributed leadership, teacher morale, and teacher enthusiasm: Unraveling the leadership pathways to school success', *Paper presented at the American Educational Research Association*.

Slater, L 2004, 'Collaboration: A framework for school improvement', *International Electronic Journal for Leadership in Learning*, vol. 8, pp. 1206–9620.

Spillane, J, Halverson, R, Diamond, J 2004, 'Towards a theory of leadership practice: A distributed perspective, *Journal of Curriculum Studies*, vol. 36, no. 1, pp. 3–34.

Spillane, JP, & Harris, A 2008, 'Distributed leadership through the looking glass', *British Educational Leadership, Management & Administration Society (BELMAS)*, vol. 22, pp. 31–34.

Tudryn, P, Boscardin, ML, Wells, CW 2016, 'Distributed leadership through the lens of special education leaders', *Journal of Special Education Leadership*, vol. 29, no. 1, pp. 3–18.

UK Department of Education 2015, *National standards of excellence for headteachers*, Ref: DFE-00019-2015, Manchester, England.

Wallace, M 2002, 'Modeling distributed leadership and management effectiveness: Primary school senior management teams in England and Wales', *School Effectiveness and School Improvement*, vol. 13, pp. 163–186.

Waters, JT, Marzano, RJ, McNulty, BA 2003, Balanced leadership: What 30 years of research tells us about the effect of leadership on student achievement, Mid-continent Research for Education and Learning, Aurora, CO.

Webb, K 2007, 'Motivating peak performance leadership behaviors that stimulate employee motivation and performance', *Christen Higher Education*, vol. 6, pp. 53–71.

Welch, M, Sheridan, SM 1995, Educational partnerships: Serving students at risk, Harcourt Brace, Ft. Worth.

About the author

Mary Lynn Boscardin, Ph.D., is a Professor in the College of Education at the University of Massachusetts Amherst. She has been a driving force in the development of the field of Special Education Administration and Leadership. In 2014, she was became President of the International Council of Administrators of Special Education after a 14 year tenure as the editor of the Journal of Special Education Leadership. Professor Boscardin co-edited the Handbook of Leadership and Administration for Special Education (2012, with Crockett & Billingsley) published by Routledge. She has authored numerous publications, made several scholarly presentations, and engaged in extensive service and outreach.

