SUPPORTING EDUCATIONAL LEADERS' SELF-EFFICACY AND AGENCY

Introduction

In this research brief, Hanover Research (Hanover) reviews best practices for developing self-efficacy and agency among school leaders while also developing leadership skills for educators and staff at all levels. This brief is intended to help administrators determine best practices in fostering self-efficacy and agency and identify the impacts that educational leaders' degree of self-efficacy and agency have on their students and school communities.

Recommendations

- **Deliver targeted professional development sessions on specific agency needs to create a culture of meaningful support.** A culture of support can develop both individual and collective self-efficacy among leaders, which are both necessary to drive significant school improvement.

- **Offer opportunities to experience mastery with coaching support to develop self-efficacy.** Coaching activities, such as classroom observations and professional learning communities, are the most effective professional development experiences to develop self-efficacy.

- **Administer validated survey instruments to monitor self-efficacy.** Districts can use measures of self-efficacy to support individual leaders as part of a 360-degree evaluation process and to evaluate the effectiveness of efforts to improve self-efficacy.

Key Findings

- **Self-efficacy refers to leaders' belief in their ability to accomplish specific tasks that lead to improved outcomes.** Self-efficacy is distinct from leaders' belief that these activities will lead to the desired outcome and from non-task specific concepts such as self-esteem and self-confidence.

- **Self-efficacy supports leaders' overall job satisfaction and implementation of leadership behaviors**. Self-efficacy supports principals and assistant principals in implementing specific leadership behaviors linked to improved student outcomes, such as developing leadership and managing instructional improvement. Leadership self-efficacy also develops self-efficacy among stakeholders within a school.

- **Self-efficacy contributes to the development of agency.** Agency refers to individuals' belief in their ability to influence overall events, rather than to accomplish specific tasks, and encompasses the functions of intentionality, forethought, self-reactiveness, and self-reflectiveness. This generalized belief builds on self-efficacy beliefs, suggesting that developing self-efficacy is essential to supporting agency.

- **Opportunities to experience mastery are the strongest drivers of self-efficacy beliefs.** The other sources of self-efficacy—vicarious experiences, verbal persuasion, and affective states—are primarily important early in the learning process and become less influential after individuals have experienced mastery. However, leaders may benefit from professional development that addresses these sources of efficacy in addition to mastery experiences.

- **Districts and educational service agencies can promote self-efficacy through professional development activities that enable leaders to experience mastery**. Professional development is most effective at building self-efficacy when it aligns with general best practices for professional development and includes a coaching component. Districts and educational service agencies should incorporate these experiences into preparation programs for new and aspiring leaders as well as professional development for experienced leaders.

- **Districts should also work to support conditions that promote self-efficacy.** District leaders can build self-efficacy by supporting school leaders in specific district initiatives and providing supports that build self-efficacy across activities, such as effective personnel policies, prioritizing student achievement, investing in professional and leadership development, and emphasizing a sense of professional community. Leaders should also embrace a distributed leadership style that builds strong interpersonal relationships with a variety of stakeholders.

Defining Self-Efficacy

A major review of the literature on school improvement published by The Wallace Foundation in 2010 defines efficacy as:

> *"...a belief about one's own ability (self-efficacy), or the ability of one's colleagues collectively (collective efficacy), to perform a task or achieve a goal."*[1]

In the context of school leadership, self-efficacy refers to a leader's belief in their "capabilities to structure a particular course of action to produce desired outcomes in the school he or she leads."[2] Research often focuses on leaders' self-efficacy for leading change or school improvement initiatives.[3]

This definition draws on the work of psychologist Albert Bandura, who defines an efficacy expectation as "the conviction that one can successfully execute the behavior required to produce the outcomes."[4] This definition differentiates efficacy expectations from response-outcome expectations, also noted in Figure 1 which Bandura defines as the belief that a given behavior will produce a given outcome.[5]

Figure 1: Efficacy vs. Response-Outcome Expectations

EFFICACY EXPECTATION	RESPONSE-OUTCOME EXPECTATION
The confidence and conviction in *one's abilities* to perform certain tasks that may effect change.	The belief that a certain behavior will indeed produce an intended outcome.

Source: Psychological Review[6]

Bandura identifies four sources of efficacy beliefs, as summarized in Figure 2. **Efforts to improve self-efficacy leverage one or more of these sources to increase participants' efficacy beliefs.**

Figure 2: Sources of Efficacy Beliefs

Mastery Experiences
- provide information about one's successes, but also failures. Generally, successful experiences increase self-efficacy beliefs, while experiences of failure lower them.

Vicarious Experiences
- provide information about modeled attainments of others, which influence one's self-efficacy beliefs by demonstrating and transferring competencies (model learning) and by providing a point of reference for social comparison.

Verbal Persuasion
- by "significant others" can convince people of their capabilities, especially if this persuasion comes from a credible source.

Physiological and Affective States
- provide information about physiological and affective arousal during situations in which they capbility in the domain in question is demonstrated. In stressful situations people tend to read this somatic information as an indicator of dysfunction, thus impacting negatively on self-efficacy beliefs.

Source: Frontiers in Psychology[7]

Self-efficacy is distinct from related concepts, such as self-esteem and self-confidence, in that self-efficacy refers to individuals' beliefs concerning specific tasks, rather than their overall abilities. Leaders' self-efficacy will usually vary across different leadership tasks. For example, a leader may feel a high degree of self-efficacy for managing the school overall, but a lower degree of self-efficacy for evaluating teachers.[8]

Agency and Self-Efficacy

The related concept of agency focuses on participants' engagement in determining the context of activities.[9]

> *Agency is "...the human capability to influence one's functioning and the course of events by one's actions."*[10]

This definition is more generalized than Bandura's task-specific definition of self-efficacy, reflecting an individual's ability to influence outcomes across settings and activities.[11] According to Bandura, agency incorporates the four functions listed in Figure 3.

Figure 3: Bandura's Functions of Agency

Intentionality	The ability to form intentions that include strategies for realizing goals
Forethought	The ability to predict outcomes of prospective actions to guide and motivate efforts
Self-Reactiveness	The ability to self-regulate activity
Self-Reflectiveness	The ability to examine and reflect on one's functioning and make corrective adjustments

Source: Albert Bandura[12]

In the educational context, agency builds on task-specific self-efficacy beliefs.[13] A 2012 study of teacher self-determination in Australia argues that agency, self-efficacy,

and resilience function in "a symbiotic arrangement" where each element contributes to the other two, as illustrated in Figure 4.[14] This study concludes that both agency and resilience develop from self-efficacy, suggesting that building self-efficacy is essential to supporting agency.[15]

Figure 4: The Symbiotic Relationship of Agency, Self-Efficacy, and Resilience

Source: Australian Journal of Teacher Education[16]

Likewise, a 2017 study of student agency claims that "a strong sense of efficacy is vital to a sense of agency."[17] **In the remainder of this brief, Hanover Research focuses on strategies to develop self-efficacy, which may, in turn, support increases in agency among leaders.**

Impacts of Self-Efficacy

A substantial body of research finds correlations between school leaders' self-efficacy and measures of job satisfaction, as well as their implementation of effective leadership behaviors.[18] For example, assistant principals with high levels of self-efficacy are more likely to engage in the leadership activities listed in Figure 5.[19]

Figure 5: Assistant Principal Leadership Activities Associated with Self-Efficacy

Facilitating shared leadership
Working with teachers to change content and instructional methods if students were not doing well
Supporting differentiated instruction to enhance students' learning
Promoting a curriculum that supports admissions into college and readiness to pursue a career
Redesigning the school's organization to enhance teaching and learning
Managing facilities and their maintenance to promote a safe and orderly learning environment

Source: International Journal of Educational Policy and Leadership[20]

Self-efficacy supports principals in enacting instructional leadership to improve student outcomes.[21] A survey of

teachers and school leaders conducted by the Wallace Foundation finds significant correlations between school leaders' self-efficacy beliefs and the leadership behaviors listed in Figure 6. However, this study does not find a statistically significant correlation between individual principal efficacy and academic achievement. The impact of principal efficacy on student achievement is only statistically significant when individual and collective principal efficacy are combined, suggesting that both individual and collective efficacy are necessary for school improvement.[22]

Figure 6: School Leadership Behaviors and Conditions Influenced by Principal Self-Efficacy

Setting Directions	Developing People	Redesigning the Organization
Managing the Instructional Program	School Conditions	Classroom Conditions

Source: The Wallace Foundation[23]

Research also finds a relationship among self-efficacy beliefs for stakeholders within a school. Leaders with strong self-efficacy build positive relationships with stakeholders, increasing self-efficacy for these stakeholders. For example, a survey of 95 principals and 1,623 teachers finds a positive correlation between principals' self-efficacy for instructional leadership and teachers' collective efficacy. This relationship, in turn, supports higher student achievement in schools with strong collective teacher efficacy.[24]

Self-efficacy is particularly important to support shifts in the role of principals and other school leaders from a focus on organizational management to a focus on instructional leadership. Leaders with low self-efficacy for instructional leadership may be vulnerable to burnout and disengagement when facing the challenges of transitioning to instructional leadership.[25]

Supporting Self-Efficacy

Surveys of school principals identify perceived district support as a major factor contributing to school leaders' self-efficacy.[26] Principals who perceive high levels of support from their superintendents for specific improvement strategies also report high levels of self-efficacy for these strategies. For example, a study of a curriculum mapping initiative across several school districts in New York finds that principals report higher levels of efficacy for curriculum mapping when superintendents incorporate curriculum mapping into professional development plans.[27]

School and district improvement efforts should focus on factors that contribute to individual and collective leadership efficacy. Education agencies can build leadership efficacy by embracing a culture in which the agency's central

office focuses on supporting school and district leaders in implementing instructional improvements.[28] The Wallace Foundation identifies five district conditions that contribute to leadership efficacy, as shown in Figure 7.[29]

Figure 7: District Strategies to Build Leadership Efficacy

> **Ensuring that teachers and administrators have access to worthwhile programs of professional development, aimed at strengthening their capacities to achieve shared purposes**

> **Assigning priority, unambiguously, to the improvement of student achievement and instruction**

> **Making significant investments in the development of instructional leadership**

> **Ensuring that personnel policies support the selection and maintenance of the best people for each school**

> **Emphasizing teamwork and professional community**

Source: The Wallace Foundation[30]

Districts should establish realistic targets for school improvement, as research suggests that setting unattainable goals diminishes school leaders' self-efficacy.[31] Districts should also ensure that leaders have appropriate workloads. A study of 75 administrators responsible for supervising English as a second language (ESL) teachers finds a negative correlation between the number of teachers who administrators supervise and their self-efficacy beliefs. This finding suggests a negative correlation between administrators' workloads and their self-efficacy beliefs. If reducing administrator workloads is not feasible, the authors of this study suggest providing targeted professional development focused on areas of supervision where surveys suggest a need for additional support.[32]

Senior leaders can build self-efficacy in their subordinates by creating a positive working environment and setting high expectations for achievement.[33] Assistant principals report higher levels of self-efficacy in schools with strong professional cultures, suggesting that leadership efforts to improve culture can enhance individual self-efficacy.[34] School principals should work with teacher leaders to align teacher leadership with schoolwide improvement efforts and district initiatives.[35] Leaders can also work with school staff to reflect on their beliefs and encourage a growth mindset to support self-efficacy.[36]

> Districts and education service agencies can use the Principal Leadership Development Framework developed by ASCD to guide professional development focused on principals' leadership of their schools.[37]

Cultivating leadership among stakeholders is an essential role of effective school principals and educational leaders. In particular, research finds a correlation between distributed leadership within a school, including leadership roles for the stakeholders listed in Figure 8, and student achievement.[38] Research also finds that school principals report higher levels of self-efficacy when they perceive a high level of interpersonal support from students, parents, teachers, and support staff. This finding suggests a reciprocal effect in which principals' efforts to build self-efficacy among stakeholders can improve principals' self-efficacy as principals receive more support from stakeholders.[39]

Figure 8: Leadership Groups for Distributed Leadership

Principals

Assistant principals

Teacher leaders

Teacher teams
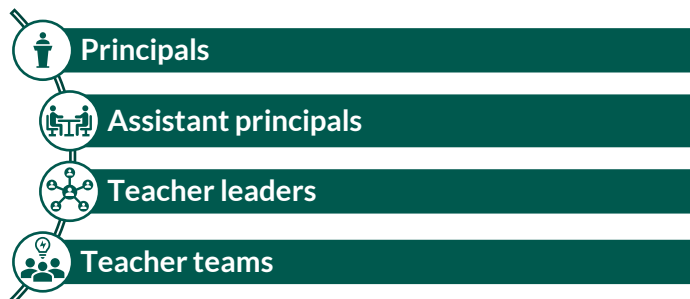
Source: The Wallace Foundation[40]

In addition to developing district conditions that contribute to leadership efficacy, districts and educational services agencies can provide leaders with experiences that influence the sources of efficacy beliefs described in Figure 2 on page 2 of this report.[41] Of these sources, research suggests that mastery experiences provide the strongest influence on school leaders' self-efficacy.[42] Figure 9 shows strategies districts and education services agencies can use to support mastery experiences.

Figure 9: Strategies to Support Mastery Experiences

> **Professional development that includes authentic problem solving related to leaders' daily work**

> **Structured reflection on past successful experiences**

> **Assessing self-efficacy through a 360-degree evaluation process**

Source: Phi Delta Kappan[43]

The other three sources of efficacy beliefs tend to be more important early in the learning process when leaders have not yet had the opportunity to experience mastery of a skill or task. Once leaders have experienced mastery, the other sources of efficacy beliefs are less likely to influence leaders' perceptions of self-efficacy.[44] However, districts and regional services agencies can incorporate these sources into professional development to enhance the impact of mastery experiences. For example, a professional development initiative focused on supporting school administrators in leading professional learning communities

(PLCs) uses simulated PLCs to develop self-efficacy. Participants' self-reported efficacy beliefs about PLCs increased after participating in the simulation, suggesting that simulated experiences can be effective in building self-efficacy among leaders who have not yet had the opportunity to experience mastery in authentic contexts.[45]

Professional Development to Support Self-Efficacy

Districts and educational services agencies should provide professional development to support self-efficacy in school leaders. Targeted professional development is essential to ensure strong retention of and implementation of improvement strategies by school leaders.[46]

Although research directly examining professional development to support self-efficacy in school leaders is limited, research examining teacher professional development suggests that collaborative professional development activities such as professional learning communities can enhance self-efficacy.[47] Research also finds that professional development can enhance teacher efficacy when it is embedded in teachers' daily work and adheres to general best practices for high-quality professional development, summarized in Figure 10 below.[48]

Figure 10: Features of High-Quality Professional Development

CONTENT FOCUS
- Focuses on strategies associated with specific curriculum content

ACTIVE LEARNING
- Engages participants directly in designing and trying out strategies

SUPPORTS COLLABORATION
- Creates space for participants to share ideas and collaborate in their learning

MODELS OF EFFECTIVE PRACTICE
- Provides participants with a clear vision of what best practices look like

COACHING AND EXPERT SUPPORT
- Sharing of expertise about content and evidence-based practices

FEEDBACK AND REFLECTION
- Provides built-in time for participants to think about, receive input on, and make changes to their practice

SUSTAINED DURATION
- Provides participants with adequate time to learn, practice, implement, and reflect on new strategies

Source: Learning Policy Institute[49]

As described in Figure 10, when providing professional development for school leaders, districts and education services agencies should ensure that professional development is sufficient in duration to allow for deep learning and provides opportunities for leaders to collaborate with a cohort of peers in similar job roles.[50]

Research suggests that coaching activities can be a particularly powerful source of mastery experiences. For example, a study comparing two professional development initiatives for teachers finds that an intervention that provided opportunities for teachers to experience mastery by implementing a strategy in their classroom with coaching support develops self-efficacy more effectively than an intervention that did not include coaching.[51]

Likewise, a 2015 study examines professional development for secondary science teachers using a cognitive apprenticeship model. This model uses coaching to guide teachers in scientific inquiry and designing inquiry-based instruction.[52] Teachers participating in this study reported that cognitive coaching increased their self-efficacy for teaching mathematics.[53]

The McREL Balanced Leadership program provides an example of a professional development initiative that uses coaching to support school leaders.[54] Principals who have participated in the Balanced Leadership program report higher levels of self-efficacy than principals in a control group who did not receive Balanced Leadership professional development.[55]

> ▶ **For more information on the McREL Balanced Leadership program, please follow this link.**

Districts and educational services agencies should incorporate these experiences into preparation programs for new and aspiring leaders as well as ongoing professional development for experienced leaders.[56] Leadership preparation programs can build self-efficacy through extended field experiences and mentoring activities that provide aspiring leaders with opportunities to experience mastery and receive feedback on their leadership. Field experiences should be of sufficient duration to enable aspiring leaders to build relationships with diverse stakeholders and implement school improvement strategies.[57]

Districts can use survey instruments to measure leaders' self-efficacy to support the individual evaluation process and to evaluate the impact of strategies to improve self-efficacy.[58] For example, the Principal Sense of Efficacy Scale measures self-efficacy for school leaders. Research suggests that this scale can reliably measure teachers' efficacy beliefs.[59]

Supporting Agency

Districts can build agency by empowering leaders to make decisions regarding their work and participate in decision-making processes at the district level. A 2015 book on agency for teachers defines agency as teachers' "active contribution to shaping their work and its conditions." This definition reflects an approach to school management which emphasizes empowering teachers to exercise professional judgement in instructional decisions and avoiding overreliance on centralized mandates.[60]

Districts and education services agencies can also build agency through professional development offerings. Figure 11, opposite, presents recommended strategies to build agency through professional development. These strategies were initially developed to support teacher agency but may also be applicable to professional development focused on building agency among school leaders.[61]

Figure 11: Strategies to Build Agency through Professional Development

Leverage participant leadership to improve professional development
Support engagement through professional learning networks
Balance loose and tight control of professional development based on individual needs
Include support for professional development as a criterion in the hiring process
Begin with small capacity-building steps and modify professional development to fit the local context

Source: Learning Forward[62]

Leaders can facilitate agency-building professional development by dedicating time for collaborative professional development in district schedules and calendars. For example, schools could reduce the use of professional development time for administrative issues to free up time for collaboration among teacher leaders.[63]

Caveat

The publisher and authors have used their best efforts in preparing this brief. The publisher and authors make no representations or warranties with respect to the accuracy or completeness of the contents of this brief and specifically disclaim any implied warranties of fitness for a particular purpose. There are no warranties that extend beyond the descriptions contained in this paragraph. No warranty may be created or extended by representatives of Hanover Research or its marketing materials. The accuracy and completeness of the information provided herein and the opinions stated herein are not guaranteed or warranted to produce any particular results, and the advice and strategies contained herein may not be suitable for every client. Neither the publisher nor the authors shall be liable for any loss of profit or any other commercial damages, including but not limited to special, incidental, consequential, or other damages. Moreover, Hanover Research is not engaged in rendering legal, accounting, or other professional services. Clients requiring such services are advised to consult an appropriate professional.

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