A scoping review

Impact of School leadership and District leadership on Student Outcomes

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Abstract

Purpose: To identify and describe the impact of school and district leadership on student outcomes, including identifying research gaps.

Methods: A scoping literature review was conducted that drew together a comprehensive range of evidence of successful educational leadership (school and district) and its impact on overall student achievement. The scoping review protocol involved an initial statement of the search strategy, multiple rounds of processing, and a thematic analysis of results.

Results: Practices related to
a) establishing goals and a vision,
b) creating a hospitable climate,
c) planning and coordinating instruction and curriculum,
d) promoting teacher professional development,
e) managing people and processes,
f) managing community engagement were tabled and analysed,
allowing for an analysis of which practices under these categories were most effective and had the most significant impact on student outcomes.

Keywords: school leadership, district leadership, student outcomes, student achievement

The author declares no conflicts of interest relating to this work.

Content

Introduction

Leadership in education is defined as "the shared work and commitments that shape the direction of a school or district and their learning improvement agendas, and that engage effort and energy in the pursuit of those agendas". (Knapp, Michael S et al., 2010) Student success and achievement in schools are not just dependent on teaching techniques, infrastructure, teaching and learning resources, and comprehensive, relevant curriculum. Over the years, it has become increasingly clear that leadership in education is imperative for establishing and running healthy schools and ensuring students have a safe, positive, and healthy schooling experience. Leaders in education, including state-level officials, district staff, principals, school board members, teachers and community members enact various leadership roles, provide direction for, and exercise influence over policy and practice. This environment of leadership and excellence, once established, thereby creates an environment conducive to academic, emotional, and interpersonal student success. The research studies considered for this review broadly look at student outcomes through the scope of academic outcomes, related to learning and assessment. For the purpose of this report, student outcomes have primarily been defined as academic outcomes relating to student learning and assessment because current research primarily focuses on academic outcomes as they are easily quantifiable and measurable , though outcomes relating to cognitive function, achievements, social skills, and values are also important in ensuring overall student well-being.

Leadership is second only to classroom instruction among school-related factors that affect student learning. Leadership is crucial in schools because leaders have the potential to unleash latent capacities in organisations. (Louis, K. S., Leithwood, K., Wahlstrom, K. L., Anderson, S. E., Michlin, M., & Mascall, B., 2010) In a detailed 2010 survey, school and district administrators, and policymakers in the USA declared "principal leadership among the most pressing matters on a list of issues in public school education. Teacher quality stood above everything else, but principal leadership came next, outstripping matters including dropout rates, STEM education, student testing, and preparation for college and careers." (Wallace Foundation, 2013)

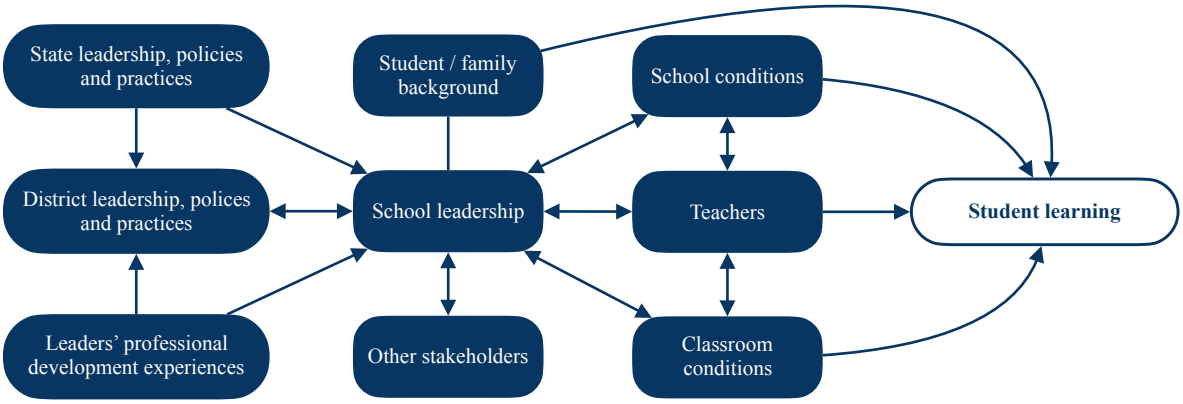

Fig 1.1. Leadership Influences on Student Learning
From 'Learning from Leadership: Investigating the links to Improved Student Learning' (Louis, K. S., Leithwood, K., Wahlstrom, K. L., Anderson, S. E., Michlin, M., & Mascall, B., 2010)

For the purpose of this report, the scope of educational leadership focuses on school and district leadership, specifically. This report aims to provide an understanding of the links between school and district leadership and student learning and outcomes. To establish healthy schools and school systems, where children thrive, we need to know what leaders can do and how they can do this.

The purpose of this investigation is to provide a comprehensive overview of the best practices– substantiated and validated by evidence-based research across the world –that school and district leaders can employ to improve student learning outcomes.

Research Question:

What is the impact of school leadership and district leadership on student outcomes?

Sub questions:

a. What is the importance of leadership within the school and district ecosystem?
b. What practices can school leaders and district leaders employ to positively increase student outcomes?
c. How can the district support the school leader in building leadership and student outcomes?

Materials and Method

A scoping review was selected in line with the research question that sought to explore the impact of school and district leadership on student outcomes, across different schools across the world, with a specific focus on the practices these leaders can employ to have the most significant impact on student learning, and thus student achievement. Scoping reviews broadly map published evidence in relation to exploratory research questions and thus can also help to identify areas where research is still needed (Munn et al., 2018). Scoping reviews are particularly useful when the evidence is complex or heterogeneous or the topic has not yet been comprehensively reviewed. They are more rigorous than traditional literature reviews as they aim for comprehensive descriptions of the topic according to stated search strategies that will support replication and verification. However, they have broader interests than systematic reviews as they report on a whole field, rather than critically appraising and analysing data in relation to a specific question.

In the case of this investigation, a scoping review methodology was suggested by the fact that by comprehensively gathering research on school and district leadership practices that impact student outcomes, a better understanding of these practices would be gained, which could inform efforts at replication.

The steps of this scoping review followed the Joanna Briggs Institute guidelines (Aromataris and Munn, 2017):

1. Determine the objectives, research question, and review protocol.
2. Choose target databases and sources of information.
3. Identify relevant search terms and create search strategies and conventions.
4. Run the search, adjusting strategies to avoid missing relevant references or too many irrelevant hits.
5. Process the initial pool of references, removing duplicates and skim reading, screening them against the inclusion criteria and selecting the final set.
6. Extract and tabulate the data from the included references according to the review protocol decided initially.
7. Conduct a thematic analysis according to the prior established protocol for responding to the findings.
8. Present the results.

The inclusion criteria were selected after running an initial search of a comprehensive set of criteria that are essential to school and student improvement. The inclusion criteria mentioned below are essential components of overall school development programs and were selected on the basis of their relevance specifically to practices that lead to student improvement:

1. Establishing goals and a vision
2. Creating a hospitable climate
3. Cultivating leadership in self and others
4. Planning and coordinating instruction and curriculum
5. Promoting teacher professional development
6. Managing people and processes
7. Managing community engagement
8. District leadership and student outcomes

Thematic analysis on these categories was then followed by the lead author. This involved extracting the details of the research articles, journals, and papers into the respective themes, analysing the results, drawing conclusions and implications for practices that directly and indirectly lead to an increase in student outcomes, and identifying further areas needing research.

A total of 19 articles, books, and papers were analysed. The table attached below sets out the details of the data sources.

S. No	Title	Reference	Type of evidence	Context
1	The School Principal as Leader: Guiding Schools to Better Teaching and Learning	Wallace Foundation, 2013.	Report	USA
2	Learning from Leadership: Investigating the Links to Improved Student Learning	Louis, K. S., Leithwood, K., Wahlstrom, K. L., Anderson, S. E., Michlin, M., & Mascall, B., 2010	Report	USA
3	Learning-focused Leadership and Leadership Support: Meaning and Practice in Urban Systems	Knapp, Michael S., et al., 2010	Report	USA
4	How Principals Affect Students and Schools: A Systematic Synthesis of Two Decades of Research	Grissom, Jason A., Anna J. Egalite, and Constance A. Lindsay., 2021	Report	USA
5	Successful Principal Leadership in Times of Change: An International Perspective	Day, Christopher, and Kenneth Leithwood, eds., 2007	Published book	International

S. No	Title	Reference	Type of evidence	Context
6	School Leadership and Student Outcomes: Identifying What Works and Why	Robinson, Viviane M., Margie Hohepa, and Claire Lloyd., 2007	Systematic review	International
7	Does School Leadership Matter for Student Learning in India? A Case Study of Sikkim	Mythili, N., 2017	Scientific journal publication	India
8	The effect of educational leadership on students' achievement: a cross-cultural meta-analysis research on studies between 2008 and 2018	Karadag, Engin., 2020	Meta-analysis research	USA and Asian countries
9	The Impact of Leadership on Student Outcomes: An Analysis of the Differential Effects of Leadership Types	Robinson, Viviane MJ, Claire A. Lloyd, and Kenneth J. Rowe., 2008	Meta-analysis literature review	USA
10	School Leadership and Student Achievement: The Mediating Effects of Teacher Beliefs	Ross, John A., and Peter Gray., 2006	Scientific journal publication	Canada
11	Successful School Leadership What it is and how it influences Pupil Learning.	Leithwood, Kenneth, et al., 2006	Peer reviewed Literature Review	International
12	Can Leadership Enhance School Effectiveness?	Hallinger, Philip & Heck, Ronald., 1999	Empirical review published in the book: 'Redefining educational management.'	International
13	Evidence-based leadership development: the 4L framework	Scott, Shelleyann, and Charles F. Webber., 2008	Article in scientific journal	International
14	Community Participation in Schools in Developing Countries: Characteristics, Methods and Outcomes	Russell, K. A., 2009	Qualifying paper	International
15	Community participation and institutional experiences in school education: School development and monitoring committees in Karnataka.	Niranjanaradhya, V. P., 2014	Report	Karnataka, India

S. No	Title	Reference	Type of evidence	Context
16	Superintendent Effect on Student Outcomes: Leadership style, Educational Attainment, and Experience	Allen, Casey L., 2017	Dissertation	USA
17	Deliverology in Practice: How Education Leaders are Improving Student Outcomes	Barber, Michael, Nick Rodriguez, and Ellyn Artis., 2015	Book	USA
18	A Principal Manager's Guide to Leverage Leadership 2.0	Bambrick-Santoyo, Paul., 2018	Book	USA
19	Coherent, Instructionally-Focused District Leadership: Towards a theoretical account	Sykes, Gary, et al., 2006	Report	USA

Discussion

School Leadership Practices that impact Student Outcomes

Establishing goals and a vision

In relation to establishing goals, expectations, and a vision for students, successful interventions suggest that effective principals shape a vision of academic success for all students. Schools with higher levels of student achievement in the USA were found to have principals who establish high expectations for students and teachers. "These schools are also likely to have a culture of 'collective leadership' that encourages teachers, students, parents, and other stakeholders to participate in the decision-making process" (Louis, Karen Seashore, et al., 2010). An effective principal also makes sure that the "notion of academic success for all gets picked up by the faculty and underpins a schoolwide learning improvement agenda that focuses on goals for student progress" (Knapp, Michael S., et al., 2010) .

Studies across several countries found that greater involvement from stakeholders in decision-making is characteristic of high performing schools. A study led by Philip Hallinger et. al found that collaborative decision-making and more flexible rule structures were associated with higher-achieving secondary schools in Singapore. This study also concluded that strong primary school principal leaders in Hong Kong tended to promote participation in decision making. (Hallinger, Philip & Heck, Ronald., 1999)

In a study of 63 best schools across countries, Kenneth Leithwood and Christopher Day found that "successful principals across countries not only identify important goals for the school organisation but do so in such a way that individual organisational members come to include the organisation's goals among their own" (Day, Christopher, and Kenneth Leithwood, eds., 2007). Three more specific sets of practices are typically included in this category: identifying and articulating a vision, fostering agreement about group goals and demonstrating high-performance expectations.

This study also states that while these leadership practices highlighted above reflect current evidence about what successful leaders do, they do not do all of these things all of the time. “One does not have to create a shared vision every day, for example, although one may look for ways to reinforce the vision every day. The way a leader enacts each set of practices will certainly vary by circumstance (and likely by personal style, as well). Principals who are successful in turning around failing schools do much more selling of their vision to staff than developing it collaboratively” ((Day, Christopher, and Kenneth Leithwood, eds., 2007).

A comprehensive study of Tasmanian schools confirmed that successful school principalship was an interactive, reciprocal and evolving process involving many players, which was influenced by and, in turn, influenced, the context in which it occurred. Successful leadership was underpinned by the core values and beliefs of the principal. These in turn, informed the principals’ decisions and actions regarding the provision of individual support, capacity building at the school level, school culture and structure, including the values and capacities of other members of the school community. These fed directly into the development of a shared school vision, which shaped the teaching and learning, student and social capital outcomes of schooling. (Day, Christopher, and Kenneth Leithwood, eds., 2007)

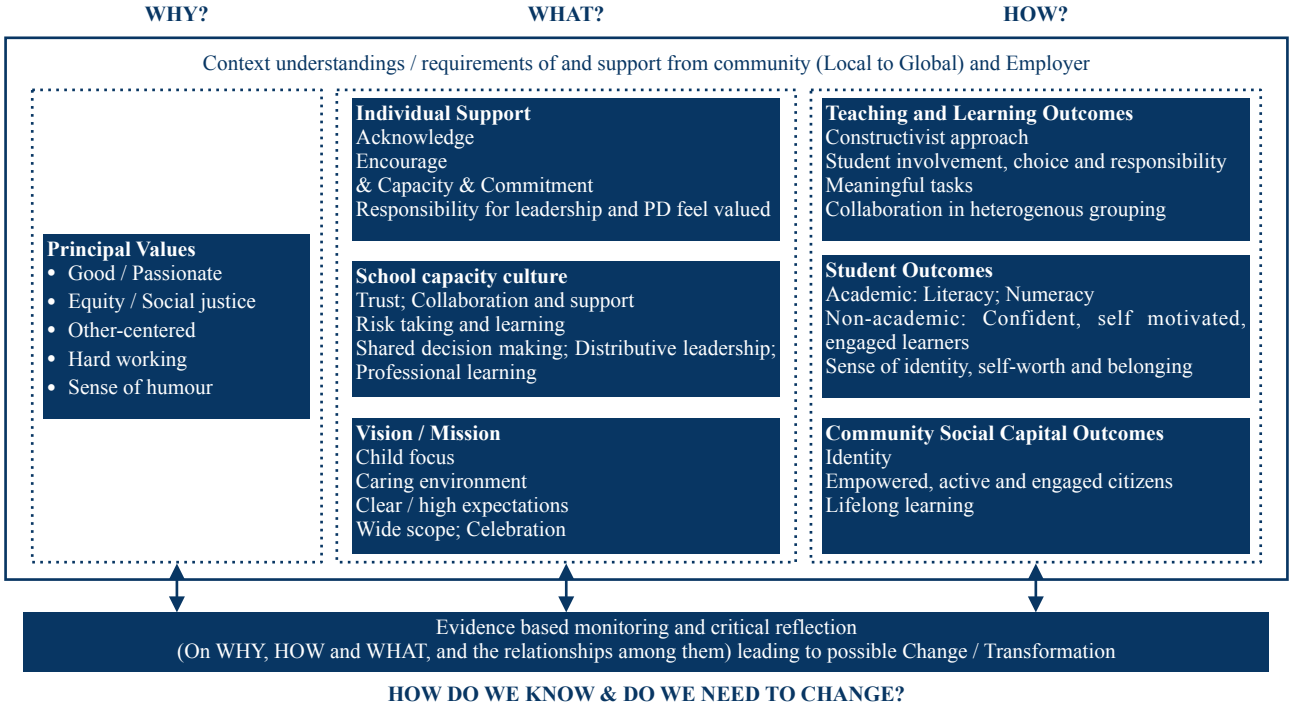

Fig 1.2. The Mulford-Johns model of successful school principalship
From ‘ Successful Principal Leadership in Times of Change: An International Perspective’ (Day, Christopher, and Kenneth Leithwood, eds., 2007)

In a study across 35 schools in Sikkim, Mythili. N reports that a “shared vision is directly correlated to teacher professional development, which in turn is directly correlated to school climate and child focus”. Thus practices of setting goals and visions for schools have a strong impact on teacher professional development and indirectly impact the other practices. (Mythili, N., 2017)

In a study of urban elementary schools across the USA, Viviane Robinson et al. found that goal setting has indirect effects on students by focusing and coordinating the work of teachers and, in some cases, parents. “Goals provide a sense of purpose and priority in an environment where a multitude of tasks can seem equally important and overwhelming. Clear goals focus attention and effort and enable individuals, groups, and organisations to use feedback to regulate their performance” (Robinson, Viviane MJ, Claire A. Lloyd, and Kenneth J. Rowe., 2008).

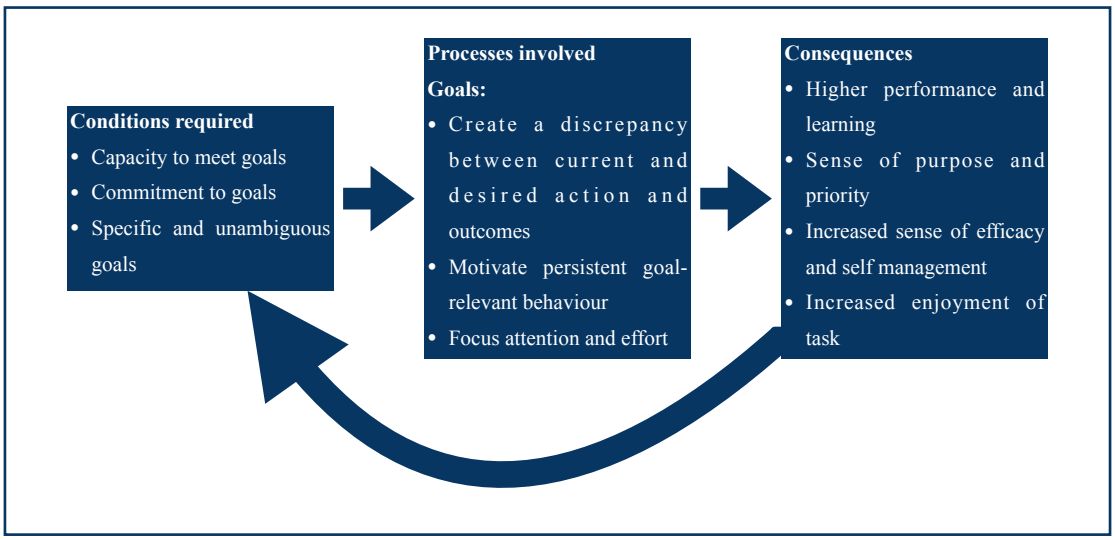

Fig. 1.3 Why Goal Setting works in Schools
From 'The Impact of Leadership on Student Outcomes: An Analysis of the Differential Effects of Leadership Types'
(Robinson, Viviane MJ, Claire A. Lloyd, and Kenneth J. Rowe., 2008)

In a systematic review of school leadership and student outcomes across nine countries, Viviane. M. Robinson found that goal setting works by creating a discrepancy between what is currently happening and a desired future state. "When people are committed to a goal, this discrepancy is experienced as constructive discontent that motivates goal-relevant behaviour. Goals focus attention and lead to more persistent effort. This, in turn, leads to higher performance and learning, a heightened sense of purpose, increased self-efficacy and self-management, and increased enjoyment of tasks" (Robinson, Viviane M., Margie Hohepa, and Claire Lloyd., 2007).

Goal, expectations, and vision setting practices that can be employed by school leaders to positively impact student outcomes

- Involve teachers, students, parents, and other stakeholders to participate in the decision-making process.
- Co-create a schoolwide learning improvement agenda that focuses on goals for student progress so that individual organisational members come to include the organisation's goals among their own.
- Set relevant learning rather than performance goals when people lack the skill and knowledge to achieve the goals.
- Encourage and reward learning from mistakes.
- Set more inclusive goals and set goals for all critical outcomes.

Creating a hospitable climate

In relation to creating a hospitable climate in schools, schools with higher levels of student achievement were found to have principals engaging in practices that encourage a school environment marked by trust, efficacy, teamwork, engagement with data, organisational learning, and continuous improvement.

A study of four successful Swedish schools found that successful principalship depends on how principals act on structure and culture with a purpose to contribute to changes that should lead to successful schools. A successful school is defined in Swedish law and policy documents as a school that shows "high performance both in academic and social goals". Successful principals contribute to the success in reaching academic and social goals of their schools by their strategic work with changes in structure and culture. The principals act on structure and culture with a clear link to the opinions and culture in the school district. These principals have a dual focus on knowledge in subjects and school climate and on structure and culture and were considered to be good communicators by their staff. (Day, Christopher, and Kenneth Leithwood, eds., 2007)

Professor Viviane. M. Robinson in her systematic review of school leadership and student outcomes found that one of the key school dimensions that impact student achievement is 'ensuring an orderly and supportive environment'. This entails creating a safe caring and orderly school environment in which "staff can teach and students can learn". The indicators that contributed to this dimension included such things as a focus by leadership on cultural understanding and a respect for difference, leaders' provision of a safe orderly environment with a clear discipline code, and minimal interruptions to teaching time. It also incorporated the protection of faculty from undue pressure from parents and officials, and effectiveness in resolving conflicts. "Leadership of effective schools is distinguished by its emphasis on and success in establishing a safe and supportive environment through respectful relationships and clear and consistently enforced social expectations and discipline codes" (Robinson, Viviane M., Margie Hohepa, and Claire Lloyd., 2007).

Practices that can be employed by school leaders to establish a hospitable climate in schools to positively impact student outcomes

- Create and follow a clear discipline code.
- Ensure that teachers' responsibilities are appropriately allocated and that there are minimal interruptions to teaching time.
- Create a school code that has an equal focus on pedagogy and academics and on structure and culture in school.

Cultivating leadership in self and others

A study of 180 schools across 9 districts in the USA is the largest study to date to confirm through quantitative data that effective school leadership is linked to student achievement. Researchers at the universities of Minnesota and Toronto found an empirical link between school leadership and improved student achievement from detailed case studies and large-scale quantitative analysis, the research shows that most school variables, considered separately, have at most small effects on learning. The real payoff comes when individual variables combine to create significant impact. Creating the conditions under which that can occur is the job of the principal. These researchers found that schools with higher levels of student achievement are more likely than others to have principals who establish high expectations for students and teachers and are attentive to multiple measures of student success. They are also more likely to have cultures of "collective leadership" that encourage teachers and other stakeholders in the decision-making process. When it comes to leadership in schools, this research highlights that in all schools, principals and district leaders exercise the most influence on decisions. However, they do not lose influence as others gain it. (Louis, Karen Seashore, et al., 2010)

Collective leadership occurs because effective principals encourage others to join in. These findings emphasise principals' sense of collective efficacy as a key to leadership influence on teaching and learning that is best described as adopting a mindset of "Together, we can do this." In schools with higher levels of student achievement, the school's leadership team placed priority on knowing the students as individuals—as both learners and members of a cultural community. (Louis, Karen Seashore, et al., 2010)

In a comprehensive study of the 63 best schools across countries, researchers found that successful principals focus on understanding and developing people. Three specific sets of practices are typically associated with this broad category: providing support to individual staff, offering intellectual stimulation that promotes reflection, and modelling desired values and practices. "Teachers are motivated to persist at tasks about which they feel efficacious and their sense of efficaciousness is powerfully influenced by the sort of mastery experiences normally associated with effective staff development initiatives of both a formal and informal type; building capacity leading to a sense of mastery is highly motivational" (Day, Christopher, and Kenneth Leithwood, eds., 2007).

In the study of high-performing Swedish schools, successful principals in these schools were self-confident and outspoken and were convinced of their capacity to implement school improvement through changes in both structure and culture. They showed high self-esteem and an internal locus of control which helped them to challenge problems. This meant they knew they had to act, being the one setting limits or drawing the lines with authority and coming to crucial decisions after a democratic dialogue with co-workers. (Day, Christopher, and Kenneth Leithwood, eds., 2007)

In the case study of 35 schools in Sikkim, Mythili. N recommends a 'School Leadership Movement' (SLM) as a way forward to practice leadership for learning. SLM is about creating awareness, co-creating objectives for leadership for learning and a shared vision and perspectives on school leadership through sharing of knowledge and best practices. "Stakeholder participation, expanding the scope of central programmes, people development and strengthening school–university connections for leadership for learning are the four vehicles recommended that are required to achieve the aims of SLM" (Mythili, N., 2017).

Here, it becomes imperative to draw a distinction between instructional leadership which focuses on academic outcomes and transformational leadership which includes academic outcomes but also focuses on more social and interpersonal outcomes. Research indicates that the impact of "instructional leadership on student academic outcomes is three to four times greater than that of transformational leadership" (Robinson, Viviane MJ, Claire A. Lloyd, and Kenneth J. Rowe., 2008).

However, that is not to say that transformational leadership does not have its merits. Research on Canadian schools conducted by John.A.Ross and Peter Gray indicates that leaders who adopt a transformational leadership style are likely to have a positive impact on teacher beliefs about their collective capacity and on teacher commitment to organisational values. "Leaders can expect that these teacher beliefs will make a modest but significant contribution to enhanced student achievement" (Ross, John A., and Peter Gray., 2006).

Practices that can be employed by school leaders to cultivate leadership in schools

- Prioritise knowing the students as individuals first—as both learners and members of a cultural community.
- Establish high expectations for students and teachers.
- Provide support to individual staff when needed.
- Offer intellectual stimulation that promotes reflection in meetings and shared spaces.
- Model and encourage desired values and practices.

Planning and coordinating instruction and curriculum

When it comes to planning and coordinating instruction and curriculum, research on high-performing urban schools in the USA highlights that in these schools, regular instructional support was available to all teachers, especially novices, and was offered by administrative leaders and several others in the school who had assumed newly reconfigured roles that offer instructional leadership. These schools had also devised their own system for tracking students' progress and for making regular adjustments in their learning experiences, based on measures of their progress, that incorporated district tracking measures and other data the school found useful. (Knapp, Michael S., et al., 2010)

In a systematic synthesis of two decades of research (2000-2021) on the impact of school leadership on student outcomes, through synthesising quantitative and qualitative studies, the researchers Jason Grissom et al identify four principal practices that are linked to effective outcomes, as well as three foundational skills. The first and most important of these practices is engaging in instructionally focused interactions with teachers. Forms of engagement with teachers that centre on instructional practice include "teacher evaluation, instructional coaching, and the establishment of a data-driven, school-wide instructional program to facilitate such interactions" (Grissom, Jason A., Anna J. Egalite, and Constance A. Lindsay., 2021).

In the systematic review of research on leadership in schools across 9 countries, Prof. Viviane M. Robinson found that planning, coordinating, and evaluating the curriculum has a small to moderate impact on student outcomes. In high performing schools, the leadership was more directly involved in coordinating the curriculum across year levels than in lower performing schools. This included such activities as "developing progressions of teaching objectives for reading across year level" (Robinson, Viviane M., Margie Hohepa, and Claire Lloyd., 2007). The degree of leader involvement in classroom observation and subsequent feedback was also associated with higher performing schools. Teachers in such schools reported that their "leaders set and adhered to clear performance standards for teaching and made regular classroom observations that helped them improve their teaching". There was greater emphasis in higher performing schools on ensuring that staff systematically monitored student progress, and that "test results were used for the purpose of programme improvement" (Robinson, Viviane M., Margie Hohepa, and Claire Lloyd., 2007). Teachers' use of data to evaluate student progress, adjust their teaching, plan their weekly programme and give students feedback, was a strong indicator of school quality, and level of school quality had a significant influence on student achievement in reading and mathematics. (Robinson, Viviane M., Margie Hohepa, and Claire Lloyd., 2007)

Planning and coordinating instruction and curriculum practices that can be employed by school leaders to positively impact student outcomes

- Provide/ensure regular instructional support is available to all teachers.
- Devise a school-wide, data-driven system for tracking students' progress and for making regular adjustments in their learning experiences that also incorporates district tracking measures.
- Develop progressions of teaching objectives for reading across year levels.
- Set and adhere to clear performance standards for teaching.
- Conduct regular classroom observations that help teachers improve their teaching.
- Emphasise the importance of staff systematically monitoring student progress and that students' test results will be used for the purpose of student improvement.

Promoting teacher professional development

When it comes to teacher professional development and its impact on student outcomes, teacher motivation and increased competence are crucial factors. Teacher motivation is found to have the strongest relationship with student achievement. Research highlights that leadership effects on student learning occur largely because leadership strengthens the professional community; teachers' engagement in the professional community, in turn, fosters the use of instructional practices that are associated with student achievement. Leadership practices targeted directly at teachers' instruction have significant, although indirect, effects on student achievement. When principals and teachers share leadership, teachers' working relationships are stronger and student achievement is higher. The professional community effect may reflect the creation of a supportive school climate that encourages student effort above and beyond that provided in individual classrooms. (Figure attached below for reference) (Louis, K. S., Leithwood, K., Wahlstrom, K. L., Anderson, S. E., Michlin, M., & Mascall, B., 2010)

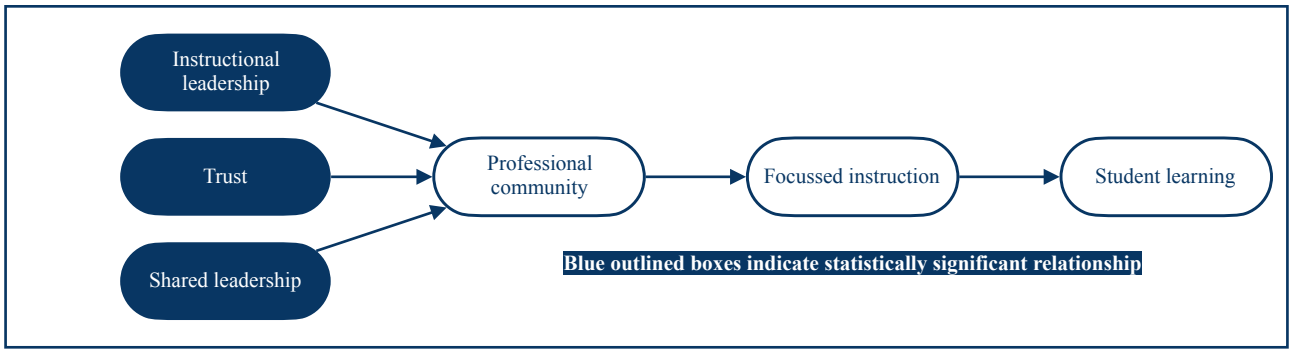

Fig. 1.4 Effects of Principal's Leadership Behaviours on Teachers and Student Learning
From 'Learning from Leadership: Investigating the Links to Improved Student Learning'
(Louis, K. S., Leithwood, K., Wahlstrom, K. L., Anderson, S. E., Michlin, M., & Mascall, B., 2010)

In the systematic synthesis of two decades of research (2000-2021) on the impact of school leadership on student outcomes, one of the key practices employed by successful principals is facilitating productive collaboration and establishing professional learning communities, which include strategies that promote teachers working together authentically with systems of support to improve their practice and enhance student learning. (Grissom, Jason A., Anna J. Egalite, and Constance A. Lindsay., 2021)

In the systematic review of school leadership, Prof. Viviane. M. Robinson highlights that a key practice of successful principals is not just promoting teacher professional development, but also participating in it. The leader participates with his or her staff as the leader, learner or both. The contexts for such learning could be both formal (staff meetings and professional development) and informal (discussions about specific teaching problems). In higher achieving and higher gain schools, teachers report their school leaders (usually the principal) to be more active participants in teacher learning and development than in lower achieving or lower gain schools. This research also posits that leadership works indirectly by creating the conditions that enable teachers to be more effective with students. "By participating with staff, leaders are likely to have a much more detailed appreciation of the changes in student grouping, timetabling, teaching resources and time allowances that will help staff change their practice. They will also have a much deeper appreciation of the likely stages and duration of the change process" (Robinson, Viviane M., Margie Hohepa, and Claire Lloyd., 2007).

In one study which used a social network approach to understanding the source of a principal's influence, teachers were asked to indicate who they approached for advice about their teaching. Principals were significantly more likely to be nominated as sources of advice in higher achieving schools. The authors suggest that leaders who are perceived as sources of instructional advice and expertise gain greater respect from their staff and hence have greater influence over how they teach. (Robinson, Viviane M., Margie Hohepa, and Claire Lloyd., 2007)

Practices around teacher professional development that can be employed by school leaders to positively impact student outcomes

- Encourage productive collaboration among teachers in formal (staff meetings) and informal (group discussions) settings.
- Establish a professional learning community of teachers in school.
- Actively participate in these professional learning communities, as a leader or learner, or both. The contexts for such learning could be both formal (staff meetings and professional development) and informal (discussions about specific teaching problems).
- Provide instructional advice and expertise in these meetings.

Managing people and processes

This domain refers to setting up structures and processes in school to manage human resources: teachers, school staff, parents, and students. A key component of successful management is collaboration and shared responsibility. In "Learning from Leadership: Investigating the Links to Improved Student Learning", researchers found that in high performing schools in the USA, principals actively create structures and opportunities for teachers to collaborate. They collaborate with influential teacher leaders and outside experts to address particular improvement initiatives. At the same time, teachers collaborate with one another, and teachers in instructional leadership roles work across curriculum and grade-level boundaries. These schools had high collective leadership ratings on the teacher survey measures. (Louis, K. S., Leithwood, K., Wahlstrom, K. L., Anderson, S. E., Michlin, M., & Mascall, B., 2010)

In the study of successful urban schools in the USA, researchers found that in these schools, a school-wide learning improvement "agenda" was in place, which constituted a set of improvement goals generated and communicated by a leadership team, led by the principal and including assistant principals and several teacher leaders. In these schools, school staff shared responsibility for student progress, reflected in a set of agreements as well as unspoken norms among school staff, to assume such responsibility. (Knapp, Michael S., et al., 2010)

In the study of the 63 best schools across countries, research highlights the reason why collaboration and active participation are such active and important components of effective schools. People are motivated when they believe the circumstances in which they find themselves are conducive to accomplishing the goals they hold to be personally important. (Day, Christopher, and Kenneth Leithwood, eds., 2007).

Successful principals in Swedish schools had the ability to combine different roles: "the principal was a school manager as well as a leader, the division of duties were arranged in a clear structure but a rotation of responsibilities was also arranged, they demonstrated trust in teachers, parents, students, and would clarify objectives through open discussions with teachers" (Day, Christopher, and Kenneth Leithwood, eds., 2007).

Arguably the most important aspect of managing a school effectively to ensure a steady growth of student outcomes is the concept of 'relational trust' as put forward by Prof. Viviane. M. Robinson. Relational trust is defined as "the willingness to be vulnerable to another person based on one's confidence that that person will fulfil important obligations and expectations relevant to the shared task of educating children." It is an integral part of the relationships between principals and teachers, teachers and teachers, teachers and parents, and teachers and students.

Relational trust is determined by a school leader's qualities of interpersonal respect, personal regard for others, competence, and integrity. When a school leader operates through relational trust, it results in teachers feeling more positive about being innovative and taking risks. Teachers' outreach with parents increases, commitment and loyalty towards the school by teachers and parents increases, and the professional community is also strengthened. These factors, in turn, lead to an increase in academic performance- in reading and mathematics levels as compared to low trust schools. They also lead to an increase in social outcomes where students report that they feel safe, cared for, and positively challenged in school. (Figure attached below for reference) (Robinson, Viviane M., Margie Hohepa, and Claire Lloyd., 2007)

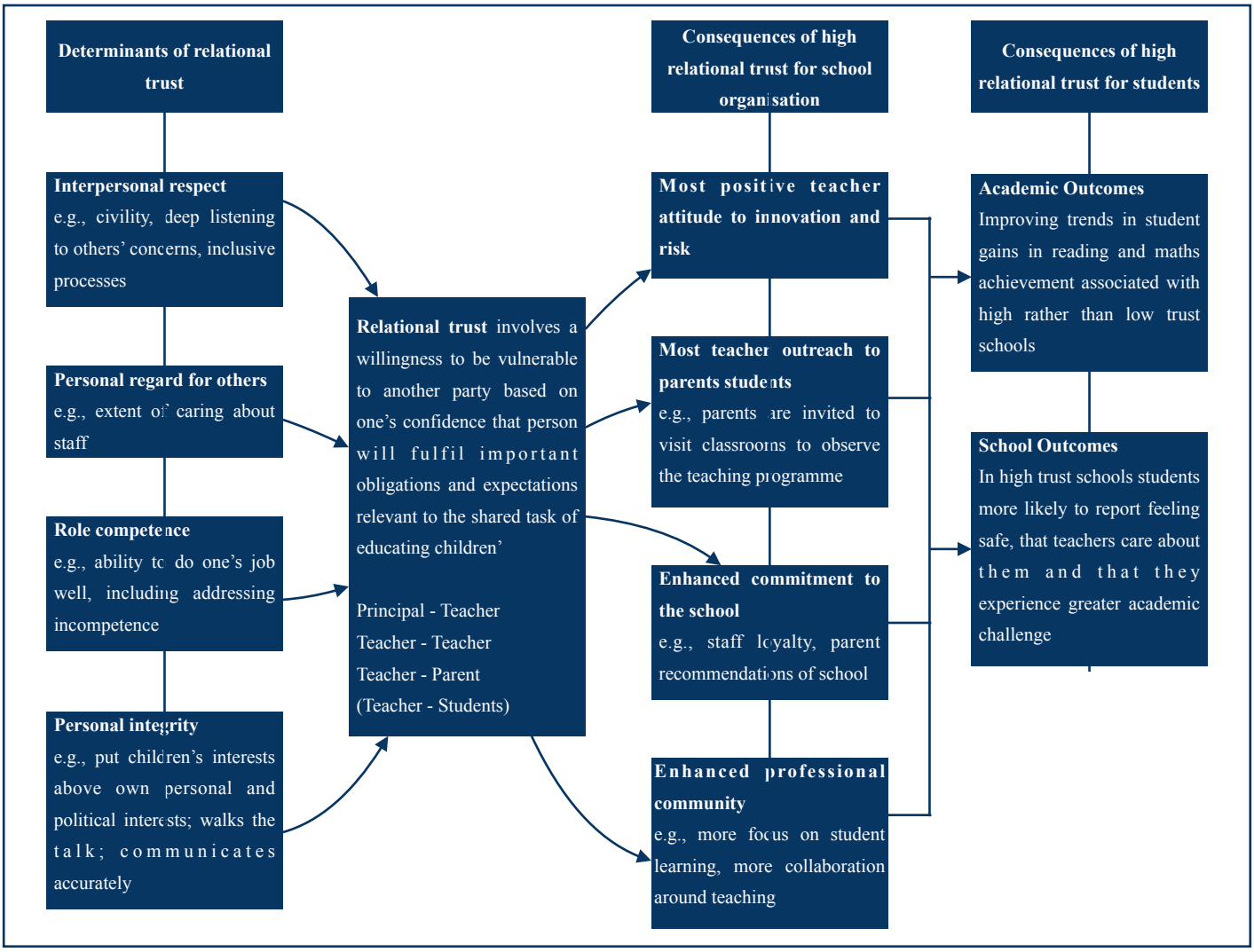

Fig. 1.5 How Relational Trust works in Schools
From 'School Leadership and Student Outcomes: Identifying What Works and Why'
(Robinson, Viviane M., Margie Hohepa, and Claire Lloyd., 2007)

Practices around managing people and processes that can be employed by school leaders to positively impact student outcomes

- Create structures and opportunities in schools for teachers to collaborate. Eg: professional learning communities, co-planning lessons and curriculum, collaborative problem solving spaces.
- Collaborate with influential teacher leaders and external experts to address particular school improvement initiatives.
- Set a school wide learning improvement agenda- each individual in the school team sets ambitious learning goals for themselves.
- Co-create a set of norms and goals with teachers in a way that all will be answerable for their efforts to accomplish improvement goals, which include improving student outcomes. Clarify norms and goals through open discussion with teachers.
- Arrange for rotation of responsibilities among staff.

Managing community engagement

When it comes to community engagement, it becomes imperative to define the scope and meaning of the 'community'. In the context of school education, the community refers to the parents, residents, local officials, and other members who reside in the geographical area around a school.

Community participation or engagement could refer to anything from the community paying for the school to participate in planning and auditing of the system to deciding the school curriculum, and everything else in between.

The community can participate in a number of decision-making areas and points, which benefits many other factors. However, decisions around "pedagogy, student monitoring, policy, and planning receive less participation than decisions involving the budget, personnel, and infrastructure" (Russell, K. A., 2009).

In a study on the role of School Management Committees (SMC) in school education in Karnataka, India, the roles of the community in school education include "advocating enrollment and education benefits, boosting morale of school staff, raising money for schools, ensuring students' regular attendance and completion, constructing, repairing and improving school facilities, recruiting and supporting teachers, making decisions about school locations and schedules, monitoring and following up on teacher attendance and performance, actively attending school meetings to learn about children's learning progress and classroom behaviour, forming village education committees to manage schools, providing skill instruction and local culture information, helping children with studying,garnering more resources and solving problems through the education bureaucracy, advocating and promoting girls' education, identifying factors contributing to educational problems (low enrollment, high repetition and dropout); and preparing children's readiness for schooling by providing them with adequate nutrition and stimuli for their cognitive development" (Niranjanaradhya, V. P., 2014).

The same study found that there are multiple challenges in running SMCs in schools which could be combatted through effective school and district leadership. The study found that though children were part of SMCs as part of an effort to ensure child participation, they were not given sufficient opportunities and space in SMC meetings. Clear processes and procedures to address this were needed. Training itself needed to be more effective. The training given by the state was not found very helpful and empowering, while the training given by NGOs were considered useful. It was critical, therefore, to see how the government training could be improved. The monthly meetings of SMCs did not necessarily take place regularly and with a sufficient number of participants. The reason was cited to be lack of time. However, deeper analysis suggested that the meeting times did not fit with the daily routine, particularly among women members or because of very short notice. These considerations needed to be kept in mind while operationalizing SMCs.

Community engagement practices that can be employed by school leaders to positively impact student outcomes

- Involve children actively in SMCs by allotting them clear roles and responsibilities.
- Factor in constraints and set SMC meetings at a time that is convenient for all members.

District Leadership Practices that impact Student Outcomes

District leadership refers to the actors at a district level who take academic and administrative decisions for the district and frequently interact with the school leaders. A comprehensive study of 180 schools across 9 states in the USA found that there are certain district level practices that positively impact the collective efficacy of school principals, which in turn leads to stronger schools and better capacity and capability of the school to work towards student outcomes. These practices are "district provision of human and financial resources; encouragement by districts of relationships with parents and the community; allowing schools sufficient flexibility in pursuit of district goals; insisting on data-based decision making in schools; assisting schools in the interpretation and use of data; district policies that enable principals to staff their schools with the people they need; provision of clear direction to schools through the establishment of achievement standards and the development of district-wide curricula" (Louis, Karen Seashore, et al., 2010).

However, it is important to note that the positive impact spoken of above is seen only when all these practices are emphasised equally. Districts that emphasise only one or two of these actions may create systemic tension. For example, the study found that "investing in the professional development of school leaders had limited effects on efficacy and student achievement unless districts also developed and communicated clear goals for improvement; setting student learning targets did not pay off unless those initiatives were accompanied by leadership development activities focused on instructional leadership roles; and district-sponsored professional development had a negative effect when it failed to acknowledge different needs among schools" (Louis, Karen Seashore, et al., 2010).

Districts that had high performing schools, first and foremost, led the development of district curriculum and learning standards that were explicitly portrayed to be aligned with, but exceeded those of the state. In these districts, proactive district leaders targeted schools and students for early intervention, rather than waiting until the "problem" actually materialised. Leaders in higher performing districts communicated explicit expectations for principal leadership and provided learning experiences in line with these expectations; they also monitored principal follow-through and intervened with further support where needed. (Louis, Karen Seashore, et al., 2010).

Similar results were found in a study of public schools in Kentucky, USA. A similar role assumed by district leaders in India is that of school superintendents in the USA. In Kentucky public school districts, the superintendent fills a pivotal leadership role. Superintendents are leaders of leaders. While they lead the districts, their followers are often leading others within the district. The style of leadership used by organisational leaders can have an effect on goal attainment and outcomes. Casey Allen found that Kentucky's public school superintendents were faced with new challenges that require effective leadership to meet expectations of increasing student performance. Results of all statistical analyses (t-test, ANOVA) lacked significant results, indicating that superintendent leadership, educational attainment, and experience did not have a relationship to student outcomes. The discussion of this study relates the outcomes to existing research and literature on superintendent leadership, but also notes the challenges of quantifying superintendent effect when looking only at direct student outcomes. (Allen, Casey L., 2017)

Similar findings can be found in 'Coherent, Instructionally-Focused District Leadership: Towards A theoretical Account' which draws upon case literature, related research, and organisational theory to examine the role that all school districts in the USA can and some school districts do play in improving and equalising student outcomes—not instead of, but in the context of state accountability systems and associated elements of systemic school reform. In many of the cases cited in this report, the evidence that the leadership and policy activity described in the cases is actually improving student outcomes is modest. Even combined across all cases, the evidence is suggestive rather than summarily convincing. (Sykes, Gary, et al., 2006)

The report states that "in addition to the challenges of establishing common goals and identifying a reliable technology of instruction to pursue them, districts have also faced the challenge of developing the capacity to pursue goals effectively." In effective districts, factors in the state and local context converge to prompt the local political system to establish a singular, unifying focus on high and equitable student outcomes" (Sykes, Gary, et al., 2006).

This report also suggests that the cultures and operations of schools are shaped by both the administrative and professional systems of their districts. "Schools have their own internal dynamics, but an environment of strong, unified administrative systems shapes these dynamics, focusing them on district goals, promoting the specific capacities required to pursue the goals, and aligning the use of resources to support coordinated use of the capacities. The conditions essential to improved and more equitable student performance are shared motivating goals, aligned capacity, and concentrated resources" (Sykes, Gary, et al., 2006).

The report also suggests that many districts fail to produce high and equitable learning outcomes because they never establish the attainment of such outcomes as a clear, pre-eminent goal. "In some districts, the goal of high and equitable learning outcomes may be established rhetorically yet lack the driving power provided by a dominant coalition and political champion or champions. Other districts may establish the goal but stall out when a shaky coalition collapses. Still other districts simply fail to establish the goal altogether" (Sykes, Gary, et al., 2006).

Today's schools need a balance of structure and culture. In spite of this, the study of Swedish principalship has shown that, in their daily activities, far too many principals focus on structure and stability rather than culture and change. This attitude is probably influenced by the surrounding political and administrative system, which, by and large, demands structure-oriented leadership. On the other hand, in their rhetoric, school ideologues and school politicians want leaders who reflect a democratic spirit and focus on pedagogical leadership and school improvement. (Day, Christopher, and Kenneth Leithwood, eds., 2007)

When it comes to community engagement, a National University of Education Planning and Administration (NUEPA) study revealed that the SMC members require greater support to understand the systems and functioning of the education system. Several SMC members continued to work on the instruction of the head teacher since they were not aware of the procedures and functions of committees. The study also found that SMC members were not aware of the records kept in the schools and that SMC members had restricted access to the same. Linkage with the government officials concerned also needed to be facilitated.

As a solution to this problem, the BRC and DIET could be made accountable for training programmes since they are meant to provide it and the training should be designed to bring professionalism and managerial skills. At the end of each training programme there should be a mechanism to take feedback from the participants, and the training programme should also include a focus on the financial details to build accountability and transparency. (Niranjanaradhya, V. P., 2014)

In the study of leadership practices in urban school systems, researchers found that in one particularly successful school, the district central office had placed priority on assisting the school principal in becoming a strong instructional leader, while also helping the principal attend to other aspects of the management of the school. The district reform plan granted the principal significant discretion (and some additional discretionary resources) to define and deploy staff in ways that optimally support instruction and to access resources for professional development. The principal had made use of this discretion to configure her leadership team and engage several external partners to help address particular instructional improvement issues. Clear system-wide improvement expectations had been communicated from both the district and state that set direction and lent urgency to the school's efforts on behalf of its students, an urgency this principal accepts and leverages in her dealings with her staff. (Knapp, Michael S., et al., 2010)

When it comes to data driven decision making, the study by Leithwood et.al found that if the district was not using data to make educational decisions for educational improvement actions, it was unlikely to be happening at the school level. A positive link between district data use initiatives and student achievement occurs only when data use is linked with higher collective efficacy—"when principals believe that they have the capacities for meeting district improvement goals" (Louis, K. S., Leithwood, K., Wahlstrom, K. L., Anderson, S. E., Michlin, M., & Mascall, B., 2010).

To build a data driven decision making process in schools, William Robinson suggests a comprehensive action plan. William Robinson is the executive director of the University of Virginia Partnership for Leaders in Education. Early on in the process of working with schools in Virginia, he quickly discovered that the first obstacles to school improvement were not at the school level or principal level: they were at the district level. The problem lay in the fact that too many systems were already in place that were inhibiting schools' ability to improve. If districts expected schools to follow a data-driven approach, they had to model it first. He suggests the following action plan for district leaders to build a data driven approach in their districts (Bambrick-Santoyo, Paul., 2018) :

Action Plan for districts to build a data-driven approach in schools
(Bambrick-Santoyo, Paul., 2018)

Step 1: Select Quality Interim Assessments

If standards are meaningless until you define how to assess them, then principal management is directionless without district-wide quality interim assessments. A quality set of assessments requires the following characteristics:

a. Common. All the schools that you lead should have the same interim assessments. Not only are standards meaningless until you define how to assess them, but school data is meaningless if it cannot be adequately compared.

b. Interim. Conducting assessments every six to nine weeks enables you to gauge your schools' performance periodically: not too frequently (which would keep you from really being able to analyse the information) and not too infrequently (which would keep you from seeing if you're making progress). The key to being interim—and valuable—is that the assessments find the right place in your district-wide calendar. They cannot compete with report card night or major celebrations, or teachers will not have time to analyse the results and prepare their reteach.

c. Transparent. If assessments are the road map for rigour, then your schools—teachers and leaders alike—need to see the assessments before they start teaching. If they don't see them, they have no way of knowing the level of rigour to which they are teaching. The purpose of an interim assessment is not to evaluate a school but to figure out what to do to improve it. Without transparency, data analysis is impossible—as is quality curriculum planning

d. Aligned. Interim assessments are only as valuable as they are aligned to college-ready rigour. Alignment to your state test is an important, necessary step in that direction, but it's insufficient unless the level of rigour the state test sets will prepare students for higher learning. Don't let the perfect be the enemy of the good. A decent assessment can allow you to drive instruction better than no assessment at all.

Step 2: Set Up Foundational Curriculum and Lesson Plans

C. Kirabo Jackson and Alexey Malackin from Northwestern University found that giving high-quality plans to weaker teachers had as high an impact as moving their students to the classroom of a teacher in the 80th percentile. In other words, giving newer or more struggling teachers better-quality plans can have as much impact as coaching these teachers to be more effective.

With this in mind, you might discover that one of the gaps in your community of schools is the quality of the curriculum itself—that the curriculum and lesson plans teachers are using shoot well below the rigour of your end-goal assessment. The power of data-driven instruction is that it will expose these gaps. That alone will make major practical inroads, as teachers will start supplementing and improving lesson plans to give students what they need. You may also decide you need to invest in higher-quality curriculum and lesson planning overall.

You have two options: support your teachers' and coaches' development as curriculum and lesson planners, or try to acquire a better off-the-shelf curriculum. Beware that the second option has its drawbacks: it is what teachers do with the curriculum that will make the difference for your students. Whatever you choose, make sure that the development of teachers' and leaders' ability to revise and implement planning is a core part of your strategy.

Step 3: Put Schedules and Structures for Data Meetings in Place

Coaching data meetings: Make sure each principal has a schedule that locks in quality data meetings—either in her own schedule or those of her leadership team.

A Principal's Schedule: Prioritizing Culture and Data

Time	Monday	Tuesday	Wednesday	Thursday	Friday
7 AM					
:30	Greeting and Breakfast	Greeting and Breakfast		Greeting and Breakfast	Greeting and Breakfast
8 AM					
:30	Staff Culture Check	Morning Assembly			Morning Assembly
9 AM		1st Grade Weekly Data Meeting	Feedback Meeting		Staff Culture Check
:30			Feedback Meeting		
10 AM	Observe 1st Grade Team	2nd Grade Weekly Data Meeting		4th Grade Weekly Data Meeting	
:30			Observe 4th Grade Team		
11 AM					3rd Grade Weekly Data Meeting
:30					
12 PM		Staff Culture Check			
:30	Lunch	Lunch	Lunch		Lunch
1 PM	Observe 2nd Grade Team				Feedback Meeting
:30		Observe 3rd Grade Team			Leadership Team Meeting
2 PM	Meeting with Principal Supervisor				
:30		Check-in with AP	Feedback Meeting		Feedback Meeting
3 PM			Feedback Meeting		Big-Project Work Time
:30			Feedback Meeting		
4 PM	Dismissal	Dismissal		Dismissal	
:30			PD Session	Staff Culture Check	
5 PM					

A strong principal schedule locks in only about 40 percent of that principal's time. The rest is left open for everything else: the students, parents, and events of the day. When principals protect 40 percent of their time for instructional leadership, they have the means to support their school's needs at both the immediate and the long term.

Step 4: Roll Out Professional Development on Data-Driven Instruction

When working with multiple schools, first figure out what's going right in the district so that you can replicate it at schools that haven't seen the same successes yet. Focusing on the bright spots in your schools will point you to the exemplar you are looking for your struggling schools to replicate. Without an exemplar, you cannot fix the error, because you haven't yet identified what you want it to look like when it's fixed—or what strategies will make it look that way.

Step 5: Build the Right Dashboard

The following criteria can be followed while making a data dashboard:

Keep it short: Less data is more—when you have the right data. Make it a goal to narrow your dashboard to just one to two pages for every ten schools. This will also force you to be disciplined about what data you will monitor closely.

Keep it measurable: importance of being able to see the exemplar. To see it, you need to measure it. In the case of a dashboard, when a lever is subjective (like any measure of student or staff culture), you need to create a rubric or checklist or survey that will allow you to measure your success

Focus on the levers:The fastest way to pare your data down to the most important is to look at the leadership levers.

Network Interim Data Dashboard		Network Avg	School A	School B	School C	School D	School E	School F	School G	School H
Interim Assessments	Target	Avg	A	B	C	D	E	F	G	H
ELA IA 5–8	65%	54%	50%	51%	57%	72%	49%	45%	54%	57%
ELA IA Gr 5	65%	59%	52%	50%	60%	73%	53%	54%	71%	59%

Observation and Feedback										
Number of O/F Meetings (this week)	15		8	8	15	18	7	4	15	12
Number of Feedback Meetings (last 30 days)	50		30	22	45	55	52	15	45	42
Avg. Observations/ Teacher (last 30 days)	3		2.00	1.47	3.00	3.67	3.47	1.00	3.00	2.80

Step 6: Collect Student Work

Once you have your dashboard in place, you can create systems around collecting student work. Here are some keys for ensuring that looking at student work is realistic, even for a principal manager:

• Go high-medium-low—schools. If you manage more than five schools, you will not have time to look at student work from all of them. But you can choose student work from your top school (your exemplar), a medium school, and a struggling school. Then you can see how close each of them are to the exemplar and begin to assess the size and nature of the gap.

• Go high-medium-low—student work. Just as high-medium-low works for schools, it works for student work samples as well. One of the fastest ways to access student work is to have each school pick just a few student work samples from a given assessment: one or two high-achieving, middle, and lower-performing students.

Put the collection work on your team. Given your responsibilities as a district manager, you don't have time to collect this student work yourself. But you can absolutely lean on your team to do so. Start by asking principals to collect the work samples from the key grade levels or subjects where the data would be best for a deep dive.

Step 7: Analyse Student Work

Another challenging aspect of being a district manager is that your scope reaches far beyond a single school, and often a single grade span. don't do it alone. Many networks already have staff members who specialise in particular content areas: a literacy expert, a STEM expert, and so forth. Sometimes that expert is one of your top principals, other times it is a coach or even a top teacher. These experts will be your eyes, and they will help you determine the right course of action. But this will only work if you train them—and break some bad habits.

Too often our educational systems have created a false dichotomy between assessment on the one hand and curriculum and teaching on the other. Because of that, often we have taken our best teachers and instructional leaders and made them coaches of pedagogy rather than learning. In short, they become experts on the cycle of a reader's workshop, but they no longer look closely at student work to make sure students learned. To be sure, quality pedagogy is important to advance student learning, but if we don't connect it to student work, it won't drive results: we'll build a process and not an outcome. If we want to change learning for students, everyone has to be on the same page. Curriculum, pedagogy, and assessment must go hand in hand.

Here are the keys:

- Start from student work, not from pedagogy. If we start from pedagogy, this leads us to entrench ourselves in a given pedagogy rather than do whatever it takes for children to learn. The fastest way to change this problem is to analyse student work before looking at how the material was taught. Talk to any great educator—teacher, coach, principal—and she will tell you that as soon as you start from student work, the sharp divisions melt away, and you start borrowing the best practices from all sorts of different approaches.
- Trust your gut and press for clarity. When your content specialists present you with their analysis, don't just accept it; look at the student work yourself. At a minimum, you can press for clarity.
- Create a cheat sheet. For your purposes, you won't be able to monitor all the standards across all assessments; you can only focus on the highest leverage. Ask your specialists to create a simple cheat sheet that summarises the gap in student work in the most succinct way possible.

Think about the power of monitoring learning. By building a dashboard, collecting student work, and summarising key student learning actions across your schools, you move away from being a distant manager toward being an on-the-ground leader who is driving results. The most successful district managers don't wait for their principals to figure out data on their own; they do the work with them, side by side. This is the single most distinguishing characteristic between district managers who get many of their schools to succeed and those that don't: they get into the weeds and participate in doing the work

District leadership practices that impact school leadership and thus positively impact student outcomes

- District provision of human and financial resources.
- Encourage schools to build relationships with parents and the community.
- Allow schools sufficient flexibility in pursuit of district goals
- Insist on data-based decision making in school and assist schools in the interpretation and use of data.
- Employ district policies that enable principals to staff their schools with the people they need.
- Develop district-wide curricula.
- Target schools and students for early intervention, rather than waiting until the "problem" actually materialises.
- Communicate explicit system-wide improvement expectations for principal leadership and provide learning experiences in line with these expectations.
- Place priority on assisting school principals in becoming strong instructional leaders, while also helping the principal attend to other aspects of the management of the school.
- Select and implement quality interim assessments that are common across schools, interim in frequency, transparent, and aligned to expectations.
- Compile and share high-quality lesson plans with newer or struggling teachers in the district.
- Share a schedule with school leaders that includes time for data meetings with teachers.
- Identify the exemplar school in the district and use that as a reference or model for struggling schools to replicate.
- Build a simple and accessible data dashboard for the district.
- Collect student work from at least 3 high-medium-low schools in the district to compare to the exemplar and determine the size and nature of the learning gap in the district.
- Ask principals to collect the work samples from the key grade levels or subjects where the data would be best for a deep dive.
- Appoint a data analysis team of student work consisting of staff members who specialise in certain content areas.
- Start data analysis by analysing student work- what the student understood first, before pedagogy- how the material was taught.
- Co-create a cheat-sheet that summarises the gap in student work.

Conclusion and directions for future research

Research conducted since 1990 on the question of 'Does school and district leadership affect student outcomes?' and the sub-question of 'What is the importance of leadership within the school and district ecosystem?' review affirms the importance of effective school and district leadership in running successful high-performing schools. In the past forty-odd years of extensive school improvement and leadership research, school improvement programs across the globe have benefitted extensively from findings from both theory and practice. This research positively indicates that school leaders and district leaders make a positive difference in student outcomes.

When it comes to the research question of 'What is the impact of school and district leadership on student outcomes?', this scoping review confirms that leadership plays a crucial role in creating an environment conducive to student success through the key domains of setting goals and a vision, creating a hospitable school environment, cultivating leadership in self and others, planning curriculum, promoting and participating in teacher professional development, managing people and processes, and through community engagement.

The sub-question of 'What practices can school leaders and district leaders employ to positively increase student outcomes?' is answered through key practices highlighted extensively in this review. These practices employed by school leaders include but are not limited to setting relevant learning goals for teachers and students, co-creating a clear discipline code, setting a clear schedule for staff and community meetings, and actively participating in teacher professional development.

Data on district leadership and its impact on student outcomes has mixed results with some research supporting a minimal impact of district leadership on student outcomes and some research proving a clear connection between strong district leadership and effective school management. However, from this review, the overall impression that one gets is that districts that have clear action plans and a strategy for modelling and supporting data-driven instruction do create and run successful school systems and thus, indirectly impact student achievement.

While this scoping review supports the belief that school and district leadership practices can influence student outcomes, this conclusion is tempered in one important respect: school and district leaders achieve effects on student achievement indirectly. The image drawn from this review is that of leaders who are able to work with and through the school stakeholders, namely teachers, parents, and relevant authorities to shape a strong school culture. These leaders work with these stakeholders to encourage the development of a school culture in which staff find meaning in their work and are motivated to learn and solve problems through collaboration.

However, there are continuing limitations in this knowledge base. Persisting blind spots in this research base form the basis of identification of priorities in this field. These could be tackled by certain developments in the field of educational leadership research, which are as follows:

- Simplify the conceptual confusion in how school leaders can employ a vision, mission, and goals to achieve student outcomes. Vision, mission, and goals occur as a significant variable in school and student success but in some places, these constructs are defined conceptually and in others, more operationally. There is a tendency for research to offer a framework of these variables, without fully elaborating on how and why these variables would interact to result in an increase in student outcomes.

- Broaden the scope of the investigation of leadership impacts beyond school and district leadership. The notion of distributed leadership is talked of widely, While there is extensive research on the need and impact of effective principalship, however not enough research on the impact of systemic and state leadership on student achievement is available. With the exception of a few research studies, concerted effort is needed to investigate the impact of effective leadership on student achievement more broadly, while ensuring a simultaneous focus on school leadership.
- Study leadership in cultural contexts, especially in developing countries. Elaborate and extensive research on the impact of school leadership is funded and conducted in developed nations. The learnings derived from these studies, although useful, are not necessarily applicable in settings where bigger concerns like lack of school infrastructure, shortage of teaching staff, poor public health take precedence over student learning outcomes. There is much to learn through explicit attention to effective leaders and the impact of effective leadership in developing countries like India. The field of educational leadership would benefit richly from these insights.
- Broaden the scope of student outcomes from academic outcomes to include socio-emotional, cognitive, developmental, interpersonal outcomes. Research that links educational leadership with quantifiable academic outcomes has been conducted. However, a future, interesting direction of research would be to evaluate the correlation between educational leadership and other outcomes-crucial to a student's overall well-being- listed above.

These directions by no means represent the only ones that could be beneficial to educational leadership research. They do, however, represent priority directions. Overall, however, this scoping review has captured crucial leadership practices that indirectly lead to an increase in student outcomes, thus highlighting optimal directions for further study and application.

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