



Leadership and Communication for Educational Effectiveness: A Systematic Review

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ABSTRACT

This systematic review provides empirical and practice-specific evidence regarding the ways in which leadership and communication shape educational effectiveness across diverse educational contexts. Using PRISMA as a guide we screened and evaluated the literature, retaining 12 studies for narrative thematic synthesis. The evidence base is methodologically diverse, but dominated by cross-sectional quantitative designs with qualitative studies and course-focused contributions. Four themes emerged. For one, communication serves as a primary mechanism operating to translate leadership into staff outcomes, especially in terms of teacher wellbeing and performance. And second, digital communication technologies serve as leadership infrastructure underpinning coordination and collective efficacy that inform collaboration and technology enabled pedagogy. Thirdly, link to the learning outcomes are most often indirect and act through pedagogy, teacher leadership or teachers use of ICT. Fourth, leadership communication is embedded in accountability, legitimacy and reputational risk management in digitally visible environments. In general terms, it can be said that educational effectiveness is best conceptualised on multi-dimensional indicators and the leadership communication itself is an organisational capability that can be developed. Implications are also discussed for: improving communication routines; curation of platform governance; and research designs and measurement coherence.

Keywords: educational leadership; leadership communication; educational effectiveness; digital communication; technology leadership; systematic review

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1. INTRODUCTION

Educational institutions today face challenges (Arruti & Paños-Castro, 2025; Saddiqa et al., 2021; Saseendran & Thomas, 2025). Education is no longer seen merely as a place to receive instruction, but as a broader endeavour. It is an effort, as (Kachchhap, 2020) and (Montes, 2025) noted, education helps people grow in various ways. It lets them reach their potential and contribute to society. Education helps people think critically, be creative, and adapt to situations (Arruti & Paños-Castro, 2025; Pinheiro & Azevedo, 2026). These skills are important for dealing with the complexities of the world, such as globalisation, technological disruption and civil society 5.0. Schools are expected to show progress in several areas. These areas include not only academic success but also fairness, student happiness, job readiness and trust from important people.

Many factors make it tough for schools to meet these expectations. accountability systems, bureaucracy, management and technological development require attention (Mayes et al., 2015; Sjamsoeddin et al., 2023). These disruptions force schools to adapt. To address this problem, we view effectiveness as a set of factors, not a single measure. Understanding what makes an institution effective is now a focus in both research and practice. This is because effectiveness is seen as a multifaceted concept, not just one metric.

Leadership is often cited as a primary driver of institutional success because leaders determine priorities and the attention and resources devoted to various elements, while also creating the socially formative and organisational conditions under which teaching, learning, and support services are practiced (Osman et al., 2025; Rahayu et al., 2025). However, leadership is not a direct cause of effectiveness; it is an aspect of everyday processes that convert intentions into organized action. One of the most drastic of those processes is evolution in communication (Tezer & Süt, 2017; Utomo et al., 2025). Through communication, leaders define the problem and aspiration space, create shared meaning, integrate across professional silos, facilitate feedback and learning processes while fostering relational conditions of trust, psychological safety and commitment (Akhtar et al., 2019; Pasquon, 2025; Polk et al., 2017). Therefore, leadership and communication must be conceptualised not as distinct domains but rather as mutually reinforcing organisational capabilities that together drives school effectiveness (Ibrahim et al., 2018; Manadin et al., 2023; Palmer et al., 2026).

Following with this conceptualisation, a significant knowledge base exists focused on leadership and communication in education settings, with an increasing number exploring both constructs concurrently. The fact that studies investigate heterogeneous indicators of educational effectiveness in relation to diverse conceptualisations and measures of leadership communication hampers any synthesis even further (Aprillia et al., 2020; Villavicencio-Morales & Palacios-Zamora, 2025). K–12 research often focuses on principals and instructional improvement, while higher education research emphasises departmental leadership, governance and multi-stakeholder communication. This diversity clearly reflects genuine contextual differences, but it has also led to an uneven body of literature. In this literature, similar constructs are often labeled and assessed inconsistently. Only a limited number of reviews synthesize this evidence, aiming to map how leadership–communication

research has been conducted and its collective implications for educational effectiveness. Therefore, a systematic review is needed to unify theoretical frameworks, methodologies, measures, and empirical trends into a cohesive narrative. This will help identify which findings are robust or fragile and highlight ongoing gaps in the research.

Accordingly, this article presents a systematic review of leadership and communication for educational effectiveness. Guided by PRISMA for transparent reporting, the review synthesises evidence from 12 included studies and addresses three research questions: (RQ1) How are leadership and communication conceptualised and operationalised in educational institutions, particularly in relation to technology-enabled leadership and digitally mediated communication? (RQ2) What patterns of association are reported between leadershipcommunication constructs and effectiveness-related outcomes (RQ3) What contextual and methodological features appear to shape these reported relationships, and where do evidence gaps remain?

2. METHOD

The present study used a systematic review design, with identification, screening, eligibility and inclusion decisions reported following PRISMA principles (Benabou & Touhami, 2025; Toscano-Hernández et al., 2024). The literature search was performed in Scopus, the main bibliographic database. Because it allows for reproducible field-based queries and provides broad coverage of peer-reviewed journals in education and the social sciences, Scopus was chosen (Baas et al., 2020; Schotten et al., 2017).

Search strategy

In Scopus, a field syntax query with the keywords (*TITLE-ABS-KEY (Leadership AND Communication) AND TITLE-ABS-KEY (school OR education)*), which means that we need articles containing both leadership and communication in its title/abstract/keyword and also either school or education in its title/abstract/keyword. The initial search was carried out in April 2026. The search focused on words found in titles, abstracts, and author keywords. Search results were screened and filtered against eligibility criteria as detailed below. Anyway Methods Studies were relevant if they met the following criteria: (1) After 2015; (2) Document type: journal article; (3) Scopus subject area: Social Sciences; and (4) Substantial focus related to leadership and communication in schools or school contexts. We excluded studies that did not meet these criteria or were too loosely related to leadership communication as an analytic concern.

Screening and selection

Records were exported from the Scopus query for screening. Duplicates (if any) were removed. Screening was conducted in two steps: (1) title and abstract screening to exclude clearly irrelevant studies; (2) full-text screening to validate inclusion of eligible studies against the inclusion criteria. A diagram of the full identification → screening → eligibility trajectory and final included set is shown in figure 1.

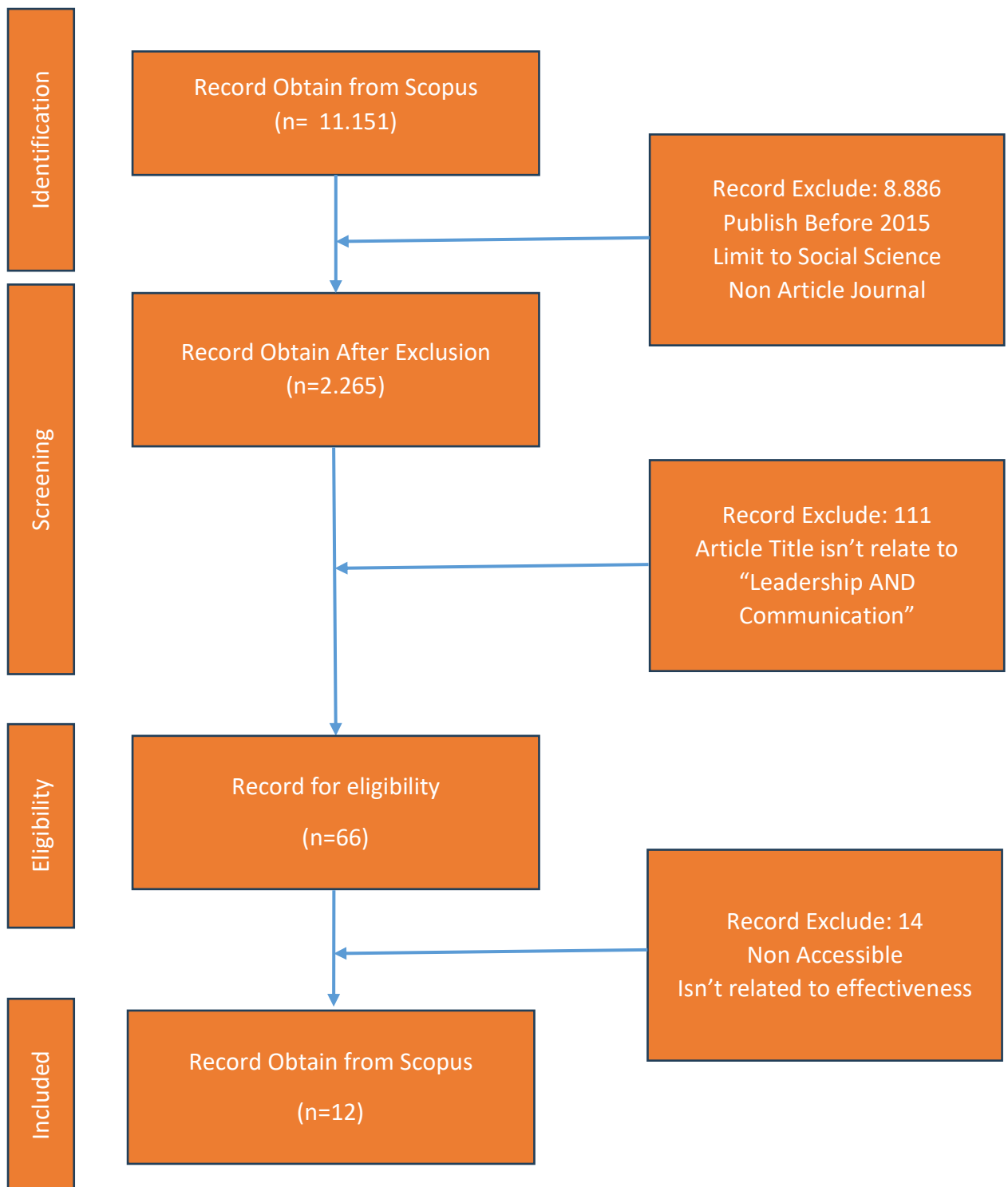


Figure 1 Prisma Flow

Data extraction

Data were extracted from each article using a pre-defined template across bibliographic data (authors, year, title), context/sector (e.g., K2 or higher education; country/setting) study design and sample, measures of leadership and communication with operational definitions

informed by the literature, effectiveness-related outcomes and main results. The extracted data were then used in filling the study overview table and conducting a thematic synthesis

3. RESULT AND DISCUSSION

RESULT

As a result of identifying, screening and checking the eligibility through PRISMA framework process, finally 12 studies were included for synthesis. These 12 studies form the evidence base of this systematic review and were analysed using standardised data extraction and narrative thematic synthesis.

Characteristics of the included studies

The evidence base within both school and higher education is covered across the 12 studies with an emphasis on K-12 empirical work. Quantitative designs (e.g., surveys and correlational/SEM models) were implemented in most studies, there were relatively few qualitative investigations (e.g., interview-based thematic analyses) and review-type papers. Distinctively, the studies consisted of an operationalisation of leadership as e-leadership/technology leadership, style or practices under accountability, and communication through skills, practices, digital channels or mediated public engagement. Narrower educational effectiveness outcomes (ranging from improvement in teacher performance, viability (well-being), teachers ICT use to community engagement through partnership processes and institutional legitimacy/accountability management);

Table 1. Global Overview

Author	Context	Method	Leadership-communication construct(s)	Effectiveness-related outcome(s)
(Ibrahim et al., 2018)	Schools (Malaysia)	Quantitative, cross-sectional survey	E-leadership practices; intra-team communication	Teacher wellbeing/job satisfaction
(Yusof et al., 2020)	Schools (Malaysia)	Quantitative, SEM	Principal leadership; digital communication (mediator)	Collaborative community (schoolcommunity collaboration)
(Gyeltshen, 2021)	Middle secondary schools (Bhutan)	Quantitative survey	Principal technology leadership	Teachers ICT use in teaching
(Demirdag, 2022)	Teachers, multi-level schools (Türkiye)	Quantitative, correlational/SEM	Leadership style; communication skills (mediator)	21st-century (teacher-related capacity) skills

(Sahni et al., 2022)	Higher education (Dental education, USA)	Mixed methods (course evaluation)	Leadership communication training (curricular intervention)	Perceived professional readiness for leadership roles
(Mamat et al., 2023)	Schools (Malaysia)	Quantitative survey	Teacher leadership; ICT use	Student achievement (Malay language)
(Gupta et al., 2023)	Higher education (India)	Quantitative, SEM (UTAUT3)	E-leadership; virtual communication technology adoption	Intention/actual use of VCT (capability for leading virtually)
(Ata Saltan, 2023)	K-2 administrators (Trkiye)	Scoping review	Technology leadership; ICT competence; technostress	School effectiveness-related themes reported in literature
(Safwan et al., 2025)	Private secondary schools (Pakistan)	Qualitative (IPA)	Organisational leadership support; communication skills	Teacher performance (reported mechanisms)
(Sahidin et al., 2026)	Senior high schools (Indonesia)	Quantitative, path analysis	Situational leadership; interpersonal communication; supervision	Teacher performance
(Dor Shalom & Berkovich, 2026)	Schools (Global)	Qualitative interviews	Public-facing leadership communication on Facebook	Legitimacy/accountability management (public trust/reputation)
(Sysoeva & Shabashova, 2023)	Higher education (Russia)	Descriptive/course design paper	Leadership and communication course (interdisciplinary)	Leadership/communication skill development (educational outcomes)

Studies tangential to this domain included, but were not limited to: (a) leadership enabled by technology, and (b) leadership styles e.g., situational, transformational/transactional/laisser-faire studies, and c. leadership practices that took place in electronically mediated public spaces, e.g., social media accountability work. Communication was operationalized as (a) interpersonal communication skills (openness, empathy, support, reciprocity); b) team and organisational communication processes; c) mediated/digital communication channels. Only a few did so at an abstract level; the rest of

us were stuck in near-term indicators related to effectiveness — teacher performance and wellbeing, student achievement, technology integration into classroom pedagogic structure, collaboration with communities on prudent matters and how governance structures responded/reacted to reputational/legitimacy management under pressures of external accountability.

Theme 1 - Communication as a pathway linking leadership to staff-related effectiveness.

Communication is a mediator between leader and employee outcomes. Communication serves as a vehicle whereby leadership translates into staff-level outcomes strongly linked to effectiveness, which is a consistent theme throughout the evidence base. Quantitative analyses found that some leadership-related variables were positively related to communication variables, which were associated with desirable outcomes. For instance, e-leadership practices such as facilitating online communications, file sharing and online meeting reinforced team communication, and strong team communication was linked to higher wellbeing of teachers (Ibrahim et al., 2018). Likewise, a similar study looked at leadership style and the strength of communication ability as an explanatory pathway between leadership styles and other broader work competencies (e.g., 21st-century skills) confirming that the impact of leaders influence may be accounted for by the quality of communication practices (Demirdag, in press). Research on teacher performance identified interpersonal communication as a significant predictor and an organisation condition that is fundamental to facilitate effective teaching work (Safwan et al., 2025; Sahidin et al., 2026).

Theme 2 – Digital communication technologies as a leadership infrastructure for coordination and capability building.

A number of studies framed digital communication tools not just as channels, but infrastructures that determine the way in which leadership unfolds and how work is coordinated. School contexts where digital communication was framed indicated that leadership might affect collaboration through enabling or configuring stakeholder interaction (Yusof et al., 2020). On another hand Gyeltshen (2021) as technology leaders were also associated with teachers classroom ICT use, which indicates the extent to which leaders behaviours and supports focused on technology can impact enactment of digitally enabled pedagogy. Within contexts such as higher education settings, educational leaders' virtual communication technology adoption (Gupta et al., 2023) was examined through an acceptance lens foregrounding determinants (e.g. performance expectancy, effort expectancy, facilitating conditions,) that may help leaders maintain communication and coordination in these virtual environments. Evidence from practice, however, suggests that students can develop leadership communication skills through structured training and curricula (Sahni et al., 2022; Sysoeva & Shabashova, 2023)), supporting the idea of competence in people communication as a form of professional capability.

Theme 3 - From leadership and communication to learning outcomes: indirect links through pedagogy and teacher practice

Only a few studies linked leadership and communication more directly to learning-related outcomes, usually through proximal variables like teacher practice, pedagogy, and technology integration. For example, a study found that teacher leadership by managing pedagogy and ICT was positively associated with students' achievement (Mamat et al., 2023). Correspondingly, principals technology leadership is positively associated with teachers ICT use and it indicates a mechanism from leadership to instructional technology utilization, leading to the pathways of instructional quality and learning processes (Gyeltshen, 2021). In combination, these studies suggest that educational effectiveness (when conceived as student learning) is more frequently modeled in terms of proximal instructional mechanisms than through direct leadership–outcome models.

Leadership communication under accountability: visibility, legitimacy and risk management Qualitative evidence suggests that leadership communication can also fulfill governance and legitimacy functions, particularly in settings observable online. Dor Shalom & Berkovich (2026) describe school leaders' experiences in using social media communication to their communities, and how public facing communication with high transparency forms a significant leadership practice influenced by and influences parents, local stakeholders, reputational concerns and accountability expectations that often create tensions between openness (dialogue) versus control (risk management). This view expands effectiveness beyond internal performance metrics to external institutional legitimacy and the ability to continue functioning as trusted partners of both communities and authorities. Furthermore, technology leadership is often mentioned side by side with ICT competence and technostress (Ata & Saltan, 2023), suggesting that leadership in a technology-enriched environment can be both liberating and taxing for principals.

DISCUSSION

This review shows that leadership and communication are most reliably linked to educational quality via immediate organisational and instructional mechanisms. The most robust and consistent empirical pattern is the effect of leadership on staff-related outcomes (e.g., teacher wellbeing, performance), which tends to occur through communication processes and skills, including interpersonal communication quality and intra-team communication climates (Ata & Saltan, 2023; Ibrahim & Othman, 2019; Safwan et al., 2025; Sahidin et al., 2026; Sysoeva & Shabashova, 2023). A second dimension is the technological mediation, which serve as a viable infrastructural solution for coordination and stakeholder engagement but creates different kind of demands regarding capability and workload and accountability.

Across contexts, the evidence reviewed provides supports an interpretation in which communication is the work of leadership: direction clarification, coherence and execution are all undertaken through its medium with relationships to staff and stakeholders maintained (Sahidin et al., 2026; Sysoeva & Shabashova, 2023). The results support three reinforcing mechanisms. To begin, leadership communication enhances effectiveness through relational and informational conditions that support teaching work (e.g., openness, support, feedback), which can reflect in teacher wellbeing and performance outcomes. Inevitably, second, when communication is mediated through digital technologies the effectiveness of leadership rests

on a leader's ability to choose, institutionalise and manage sites of communications whereby it makes work easier and less fragmented. Third, in the case of environments that are visible to the public, its communication is embedded with accountability and legitimacy work; leadership communication becomes reputational governance instead of internal coordination. These mechanisms collectively help explain why studies record heterogeneous effects: effectiveness is multi-faceted and leadership communication can hit different facets (instructional vs. organisational vs. relational versus public-facing) depending on context.

The synthesis indicates that leadership communication should be treated as an organisational capability that can be developed by educational institutions. But in practice, leaders may prioritise: (1) establishing systems of routine, two-way communication that articulates and supports teachers' daily instructional work (e.g., structured feedback loops; clear coordination routines); (2) investing in precise skill development on key areas through both formal training and reflective practice –, with an emphasis on conflict resolution strategies, listening skills, and the ability to adapt messages to varying audience needs; (3) curating a strategy for few coherent digital communication platforms with explicit norms (purpose, response expectation, privacy boundaries), to mitigate fragmentation; and then lastly (4) when employing open social media instituting governance protocols around who does what by when and how any concerns will be elevated within institutional chain of command such as delegation guidelines on approval or moderation of posts and a protocol response for crisis-management versus transparency mechanisms under real-time accountability pressures.

Based on this finding there is also a lack of construct discipline and design diversity in future research. Priority directions include: (1) creating more precise, multi-dimensional measures of leadership communication which can also distinguish between skills, practices, channels, and governance; (2) examining directional mechanisms using longitudinally- or multi-level- or experimental/quasi-experimental designs to reduce ambiguity about directionality; (3) expanding effectiveness outcomes beyond performance proxies by including equity, inclusion and wellbeing indicators; comparing K–12 and higher education through harmonised constructs in order to facilitate cross-sector learning; and studying the conditions under which digital communication enhances coordination measured as both facilitating conditions around policy, training workload and technostress as well as unconsidered outputs.

This review is constrained by both size and composition of the final evidence base (12 studies) and heterogeneity of constructs, contexts, and outcomes among them. Most included studies are based on cross-sectional self-report data, which limits causal claims and may influence associations through common-method variance. This synthesis also combines evidence from across educational sectors and settings, and some findings may depend on particular governance arrangements, availability of digital infrastructure, or cultural norms regarding leadership and communication. Finally, the review cannot report a singular effect size or coherent causal pathway because studies in this review operationalise effectiveness through different proxies.

4. CONCLUSION

The evidence synthesised in this review suggests that leadership and communication contribute to educational effectiveness primarily through how leaders structure sensemaking, coordination, and relationships, increasingly within technology-mediated and publicly visible environments. Advancing the field will require more integrative theorising of leadership communication, stronger designs to test mechanisms over time, and broader outcome models that reflect the multiple dimensions of educational effectiveness.

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