Volume-2/Issue-2/April-June, 2025.

Print ISSN: 1595-6520; Electronic ISSN: 1595-6539.

Original Research Article

TRENDS AND CHALLENGES IN EDUCATIONAL LEADERSHIP MODELS: A COMPARATIVE REVIEW OF OECD COUNTRIES

Nancy Nnebuihe NWOSU

Department of Educational management, Faculty of Arts and Education, University of Africa, Nigeria nnebuihenwosu75@gmail.com

Abstract: This article explores the evolving trends and persistent challenges in educational leadership across selected OECD (Organisation for Economic co-operation and development) countries like Canada, Australia, the United Kingdom, and Japan alongside Nigeria, using a dual theoretical framework of transformational and distributed leadership. Drawing on empirical evidence from the OECD's TALIS 2018 dataset and Bowers' (2020) congruency-typology model, the study examines alignment between principal and teacher perceptions of leadership for learning across different national contexts. Key findings indicate that Canada demonstrates a strong instructional leadership model with a majority of schools in the high-congruence (CB1) typology, while Australia reveals a hybrid leadership structure characterized by effective data use but strained by accountability demands. The UK, although guided by robust leadership standards, exhibits significant misalignment (CB3), suggesting disconnect between policy and practice. Japan shows a transitional model with growing emphasis on data-driven decision-making but limited participatory leadership. In contrast, Nigeria is predominantly situated in the misalignment category, reflecting systemic barriers such as inadequate leadership training, centralized control, and weak teacher autonomy. The study highlights policy fragmentation, limited capacity-building, role overload, and equity concerns as crosscutting challenges. It concludes by emphasizing the need for context-responsive, inclusive, and professionalized leadership models to enhance school effectiveness and instructional improvement globally.

Keywords: Educational leadership, OECD, Instructional Leadership, Distributed Leadership, Policy, School Governance.

Reference to this paper should be made as follows:

Nwosu, N. N. (2025). Trends and challenges in educational leadership models: A comparative review of OECD countries. *International Journal of Leadership, Quality Education and African Development, 2*(2), 181-191.

.....

Copyright © 2025 IJLQEAD

INTRODUCTION

Educational leadership has increasingly been recognized as a central driver of school improvement and student success across global education systems. Within OECD and non-OECD countries alike, school leaders are no longer perceived merely as administrators but as pivotal agents in fostering teaching quality, enhancing school culture, and achieving equity in learning outcomes (OECD, 2020). In response to changing educational demands is driven by globalization, technological advancements, and sociopolitical shifts on leadership models have evolved significantly. Traditional hierarchical structures have gradually given way to models that emphasize pedagogical support, collective responsibility, and evidence-informed decision-making. The result is a growing emphasis on instructional and distributed leadership practices that empower both school leaders and teachers to co-construct meaningful educational experiences. This article explores the trends and challenges shaping educational leadership in

selected OECD countries, with comparative insights drawn from Canada, Australia, the United Kingdom, Japan, and Nigeria (Hallinger, 2003).

At the heart of this study is a dual theoretical grounding in transformational and distributed leadership. Transformational leadership, rooted in the work of Burns (1978) and later adapted to educational contexts by Leithwood and Jantzi (1990), emphasized the importance of vision-setting, innovation, and capacity-building in driving systemic change. Complementing this, distributed leadership theory, popularized by Spillane (2006), shifts focus from individual leadership to a shared, collaborative model wherein teachers and other stakeholders actively contribute to leadership functions. These frameworks are particularly relevant in the current global landscape, where leadership effectiveness depend not just on visionary direction, but also on the ability to mobilize collective expertise in a context-responsive manner. By integrating both theories, this article examines how schools are adapting leadership practices to meet the demands of contemporary education while confronting structural and contextual barriers such as policy fragmentation, limited leadership preparation, role overload, and socio-economic inequity (Bowers 2018).

This study further utilizes the empirical foundation provided by the OECD's Teaching and Learning International Survey (TALIS) 2018 and a typological framework developed by Bowers (2020), which categorizes schools based on levels of congruence between teacher and principal perceptions of leadership for learning. The analysis highlights how different national contexts shape leadership trends and challenges, with Canada exemplifying strong instructional leadership amid policy inconsistencies, and Australia showing a hybrid model stressed by accountability pressures. Meanwhile, Japan is gradually transitioning from a hierarchical to a data-driven model, while the UK maintains a standards-based system strained by overemphasis on performance metrics. Nigeria presents a contrasting picture, where distributed leadership remains largely theoretical due to systemic limitations such as weak infrastructure, hierarchical culture, and inadequate capacity-building programs (Burn, 1978). Through comparative and empirical analysis, this article offers insights into how leadership models must adapt to improve alignment, build professional capacity, and promote inclusive and effective school environments (Spillane, 2006).

THEORETICAL FRAMEWORK

This study draws upon the dual theoretical foundations of transformational leadership and distributed leadership, both of which have significantly influenced educational leadership discourse and practice. Transformational leadership, first conceptualized by Burns (1978) and later adapted for educational settings by Leithwood and Jantzi (1990), emphasized the role of school leaders in motivating and empowering staff to exceed expectations, embrace change, and pursue a shared vision. In the educational context, transformational leaders articulate a compelling school mission, foster trust, encourage professional growth, and model ethical behavior to effect sustainable organizational change. Research shows that such leadership practices correlate positively with teacher job satisfaction, collective efficacy, and student academic success (Hallinger, 2003). However, critics like Neumerski (2013) argued that transformational leadership may lack clarity in how it translates into tangible instructional improvement without the integration of instructional practices.

In complement to transformational leadership, distributed leadership theory provides a framework for understanding leadership as a collective, rather than individual, endeavor. Rooted

in the work of Spillane (2006), distributed leadership conceptualizes leadership as being stretched across various actors like principals, teachers, and sometimes even students through formal and informal roles. It recognizes that leadership effectiveness increases when multiple stakeholders share responsibility for school improvement and instructional quality. This model aligns well with the complexities of contemporary schools, which require adaptive expertise and collaborative cultures to navigate ever-changing educational demands. Empirical evidence from OECD countries shows that schools with high levels of distributed leadership report stronger professional learning communities, greater teacher agency, and improved student outcomes (Harris, 2008). When combined, transformational and distributed leadership theories offer a robust analytical lens through which to examine both the visionary and participatory dimensions of educational leadership in varied national contexts.

METHODOLOGY

This study adopts a comparative qualitative research design with integrated empirical analysis, aimed at examining the evolving trends and contextual challenges in educational leadership across five countries: Canada, Australia, the United Kingdom, Japan, and Nigeria. The methodological approach is rooted in cross-national comparative inquiry, which facilitates the identification of both convergences and divergences in leadership practices, governance structures, and implementation barriers (Bray et al, 2007). While Canada, Australia, the UK, and Japan are high-income OECD member states characterized by mature educational systems and structured policy environments, Nigeria is purposefully included to provide a contrasting perspective from the Global South, enabling an analysis of leadership under more resource-constrained and structurally diverse conditions (Bush, 2011).

The study employs document analysis as its data collection method, drawing on a wide array of qualitative and empirical sources, including the OECD's Teaching and Learning International Survey (TALIS) 2018, Bowers' congruency-typology model of leadership for learning, national leadership policy frameworks, peer-reviewed articles, and grey literature from governmental and intergovernmental bodies (Bowen, 2009; OECD, 2020). The TALIS dataset provides statistically robust insights into the alignment between school leaders and teachers in terms of leadership for learning, while the typology model by Bowers (2020) categorized schools into CB1, CB2, or CB3 types based on congruence in leadership perceptions. This empirical foundation is supplemented by national-level policy documents and contextual studies, including those from Nigeria which allow for grounded comparisons across settings.

The analysis is structured around three interrelated dimensions: (1) leadership model orientation, (2) policy and governance structures, and (3) key challenges in implementation. The first dimension focuses on the dominant leadership paradigms such as instructional, transformational, and distributed leadership prevalent in each country. The second examines the distribution of leadership authority and policy coherence, particularly within centralized versus decentralized systems (Pont et al., 2008). The third explores barriers to effective leadership implementation, including accountability overload, leadership training deficits, and contextual inequities (Leithwood et al., 2008). This integrative analytical framework supports a nuanced, context-aware comparison of educational leadership, grounded in both policy documentation and cross-national empirical data.

Trends in Educational Leadership

Recent developments in educational policy and practice have brought significant transformations in leadership models across global contexts, particularly within OECD countries. These evolving trends reflect a shift from traditional, hierarchical management toward more pedagogically focused, collaborative, and data-informed approaches. The following discussion explores four major trends shaping contemporary educational leadership: the rise of instructional leadership, the emergence of distributed leadership, the integration of technology and data analytics, and the professionalization of leadership through formal standards and credentials.

Shift Toward Instructional Leadership

Across OECD countries, a growing emphasis on instructional leadership model that prioritizes curriculum oversight, teacher development, and student outcomes has emerged as a dominant trend. A Nigerian study in Anambra State found that principals' instructional leadership significantly predicted teacher professional development: a 1% increase in monitoring student progress corresponded to a 3% enhancement in teacher growth, and development of academic standards led to a 4% rise; however, maintaining high visibility somewhat reduced development by 4% (He et al., 2024). In Australia, the Grattan Institute highlighted the impact of appointing dedicated math instructional leaders and allocating consistent curriculum time, leading to marked improvements in primary school numeracy performance UNESCO and regional research further support this, linking principals' instructional leadership to enhanced teacher performance and student achievement (Goss et al., 2024).

Emergence of Distributed Leadership

Distributed leadership has gained momentum in countries hailed for innovative educational models, notably Finland and the UK. Finnish schools, grounded in a culture of trust and collaboration, embrace distributed leadership by engaging teachers, support staff, and even students in decision-making resulting in stronger teacher empowerment and collective responsibility for student outcomes (Teachclass, 2024). Systematic reviews confirm that distributed leadership fosters teacher collaboration and organizational innovation. In the UK, national educational reforms encourage collaborative frameworks essential to new standards, and schools increasingly appoint learning coordinators and specialist teachers to share leadership functions, especially within academy models.

Integration of Technology and Data-Driven Leadership

Digital transformation and data analytics are reshaping leadership practice in OECD countries. School leaders in Japan and Australia are now expected to leverage performance data to inform decision-making and accountability processes. Brookings and OECD reports highlight how data-driven approaches help leaders monitor system-wide targets, tailor support for underperforming schools, and evaluate teaching effectiveness Moreover, the OECD's INES programme spotlights growing investments in digital school resources and analytics to foster evidence-based leadership practice (Custer et al, 2024).

Professionalization and Leadership Standards

OECD nations have increasingly formalized school leadership through credentialing and national standards. In the UK, the Department for Education mandates National Professional Qualifications (NPQs) for school leaders, covering areas such as senior leadership, headship, literacy, and behaviour. By 2024, there were ten NPQ strands aimed at strengthening leadership expertise (Ambition Institute, 2025). Australia has similarly implemented the Australian Professional Standard for Principals, detailing leadership profiles and ongoing development pathways. These frameworks underscore a shift toward more rigorous, profession-wide accountability and preparation (Australian Professional Standard for Principals – AITSL 2023).

Challenges in Educational Leadership

Educational leadership in both developed and developing countries face a range of persistent and evolving challenges that directly impact school effectiveness, teacher development, and student outcomes. While global reforms have emphasized leadership as a catalyst for educational transformation, practical implementation is often hindered by systemic and contextual barriers. The following discussion explores key empirical challenges confronting school leaders, including policy fragmentation, inadequate capacity building, accountability pressures, and issues of equity and inclusivity (Custer et al., 2024).

Policy Fragmentation and Inconsistency

In decentralized education systems, policy fragmentation poses a major challenge to cohesive leadership development and practice. Canada exemplifies this issue, as the governance of education is constitutionally assigned to provincial governments, resulting in varying leadership standards, training requirements, and support structures across provinces. For instance, while Ontario has a robust leadership development framework emphasizing instructional leadership, other provinces may lack similarly structured programs, leading to disparities in leadership effectiveness and student outcomes. According to TALIS 2018 data and corroborated by Printy and Liu, such decentralization weakens national-level accountability and hinders the scalability of best practices across jurisdictions (Printy & Liu, 2021). Bowers also highlights this issue through latent class analysis, which showed that even within high-performing countries, leadership congruency varies significantly depending on policy coherence and implementation at the regional level (Bowers, 2018).

Capacity Building and Leadership Preparation

Effective leadership preparation remains uneven globally, with many countries facing a mismatch between the evolving demands of school leadership and the depth and quality of their training programs. Finland is frequently cited as a best-practice model due to its rigorous, research-based leadership development pathways that emphasize pedagogical skills, ethical leadership, and inclusive practices. By contrast, countries such as Nigeria, as well as some OECD members, struggle with outdated or limited leadership training opportunities, often lacking systemic mentorship or induction processes. As revealed by Ololube et al. (2016), Nigerian school leaders often ascend to leadership positions without formal preparation, relying

heavily on hierarchical authority rather than collaborative competencies. This gap impairs the ability of principals to act as instructional leaders and hampers sustainable school improvement, especially in underperforming regions.

Accountability Pressures and Role Overload

The increasing demand for performance metrics and external accountability has reshaped the landscape of educational leadership, often to the detriment of instructional priorities. In countries like the United Kingdom and Australia, leaders are evaluated not only on school outcomes but also on compliance with inspection frameworks and administrative efficiency (Paulley & Buseri, 2019). According to Shaked (2023) this leads to leadership misalignment, particularly in CB3 schools where principals report high administrative engagement but teachers perceive low instructional support. The TALIS 2018 report confirms that these pressures have contributed to role overload diminished professional autonomy, and declining job satisfaction among school leaders. Such environments can disincentivize innovation and shift focus away from student-centered leadership, creating a culture of compliance rather than collaboration (Shaked, 2023).

Equity and Inclusivity

Educational leadership must increasingly navigate complex socio-economic and cultural dynamics, yet leadership frameworks often fall short in promoting equity and inclusivity. Many leadership models remain silent on issues of systemic inequality, despite growing student diversity in most education systems. In both developed and developing contexts, leaders in disadvantaged schools face additional challenges including resource scarcity, cultural marginalization, and low community engagement. As noted by Printy and Liu (2020), distributed leadership is more difficult to implement in inequitable settings due to pre-existing trust deficits and capacity gaps. Furthermore, the OECD (2020) observed that schools serving high-minority or low-income populations are less likely to have access to experienced and well-trained leadership. In Nigeria, Yusuf (2005) found that inequities in school funding and teacher support limit the effectiveness of distributed leadership and prevent the full realization of inclusive practices. Addressing these disparities requires context-responsive leadership strategies that prioritize equity as a core dimension of school improvement.

Comparative Insights into Educational Leadership Models: A Focus on Nigeria and Selected OECD Countries

Empirical evidence from the OECD's TALIS 2018 dataset and a body of scholarly literature provides a nuanced and comparative understanding of educational leadership models across various national contexts. Bowers, in his development of the congruency-typology model, categorizes school leadership into three typologies based on alignment between principals' and teachers' perceptions of leadership for learning: CB1 (high alignment), CB2 (moderate alignment), and CB3 (misalignment) (Bowers, 2018). Nigerian schools, according to this model and reinforced by Karima and Alam, often fall under the CB3 typology, where significant discord exists between leadership intent and teacher engagement. The study by Karima and Alam identifies that while distributed leadership is conceptually endorsed in Nigeria, its practical execution is hampered by hierarchical school cultures, inadequate teacher autonomy, and aging

leadership with limited succession planning. This misalignment weakens school effectiveness, particularly in the areas of professional collaboration, feedback systems, and decision-making structures (Karima & Alam, 2024).

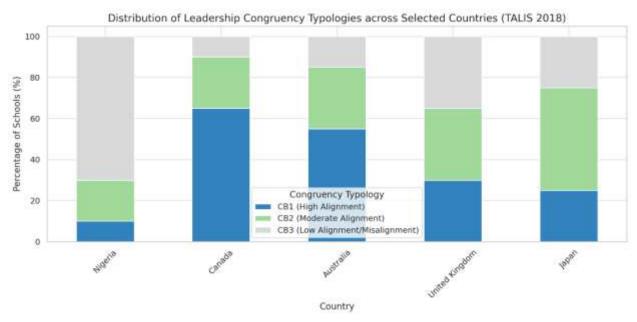
In contrast, Canada's instructional leadership model exhibits higher congruence between school leaders and teachers, particularly in provinces like Ontario, where education reforms have targeted teacher training, instructional supervision, and leadership development. TALIS (2018) findings show that a majority of Canadian principals frequently engage in practices such as goal setting, teacher mentoring, and monitoring of teaching strategies key indicators of CB1 leadership typology (OECD, 2018). However, challenges of policy fragmentation persist due to Canada's decentralized educational governance, creating disparities across provinces. This fragmentation limits nationwide consistency in the application of instructional leadership models. Nevertheless, Canadian schools demonstrate high teacher trust and collaborative cultures that support sustained professional learning contrasting sharply with the fragmented and underresourced leadership culture in Nigerian schools.

Australia presents a hybrid leadership structure that blends instructional leadership with data-informed accountability mechanisms. TALIS data illustrates strong engagement in teacher coaching and curriculum coordination by Australian school leaders. These schools typically fall into CB1 or CB2 typologies, with Bowers highlighting high teacher-principal alignment in pedagogical priorities. However, empirical findings also reveal that performance audits, national testing regimes, and regulatory burdens generate leadership fatigue and resistance among teachers (Bowers, 2018). Such tensions can compromise instructional innovation and weaken collegial leadership dynamics. The United Kingdom offers a more standards-based leadership model, epitomized by the National Professional Qualifications (NPQs). Although these frameworks promote role clarity and progression pathways for leaders, they can also result in rigidity. UK schools, particularly in the CB3 typology, often show dissonance between policy expectations and teacher experience of leadership, which is exacerbated by an overemphasis on performativity and target compliance (Printy & Liu, 2021).

Japan offers a transitional model, evolving from a traditional hierarchical structure toward a more data-driven and collaborative leadership framework. According to TALIS 2018 data, Japanese principals report low levels of engagement in distributed leadership practices, especially regarding teacher participation in decision-making (Bowers, 2018). However, Japan demonstrates increasing use of school data systems and feedback loops to inform instructional strategies, aligning with CB2 typology schools in Bowers' analysis. Despite policy efforts to decentralize authority and encourage participatory governance, entrenched cultural norms around deference to authority and top-down decision-making have slowed the uptake of inclusive leadership. For Nigeria, the Japanese experience offers valuable lessons in the complexities of shifting leadership paradigms. It underscores the importance of aligning cultural norms with policy goals and the necessity of investing in leadership capacity-building structures (Ogata et al., 2024).

Across all these jurisdictions, distributed and instructional leadership models are becoming increasingly relevant, yet implementation success is heavily mediated by local governance structures, teacher capacity, cultural expectations, and resource availability. Nigeria's experience with distributed leadership is conceptually promising but remains empirically inconsistent due to systemic constraints (Ogata et al., 2024). Canada and Australia show stronger implementation, yet face their own challenges of fragmentation and accountability overload, respectively. The UK and Japan highlight the consequences of over-standardization and slow

cultural adaptation. Overall, these findings stress the importance of contextual leadership models that are informed by local realities, empirically grounded in teacher-principal congruence, and responsive to both instructional needs and organizational development goals.



The bar chart provides a visual summary of the distribution of school leadership congruency typologies (CB1: high alignment, CB2: moderate alignment, and CB3: misalignment) across Nigeria, Canada, Australia, the United Kingdom, and Japan, based on TALIS 2018 data. The analysis highlights that Nigeria has a disproportionately high concentration of CB3 schools, pointing to a significant disconnect between principals' leadership practices and teacher engagement, largely due to systemic and structural constraints. In contrast, Canada demonstrates a dominant presence of CB1 schools, reflecting strong instructional leadership, professional collaboration, and policy alignment. Australia exhibits a hybrid profile, with a mix of CB1 and CB2 schools, indicating balanced leadership efforts but also notable stress due to accountability demands. The United Kingdom reveals a more polarized structure with considerable representation in CB1, CB2 and CB3 typologies, suggesting that while leadership standards are clearly defined, practical application often suffers from bureaucratic pressures and performance-driven expectations. Japan predominantly falls into the CB2 category, highlighting a system in transition shifting from hierarchical to data-driven leadership, yet still grappling with the full adoption of participatory leadership practices.

CONCLUSION

This study underscores the critical role of educational leadership in shaping school effectiveness, teacher development, and student outcomes across diverse national contexts. By integrating transformational and distributed leadership theories with empirical data from TALIS (2018) and Bowers' congruency-typology model, the analysis reveals distinct patterns of leadership alignment and systemic challenges. High-performing systems like Canada and Australia demonstrate strong or hybrid leadership models with varying levels of alignment and innovation, whereas nations like Nigeria and, to a lesser extent, the UK and Japan, continue to grapple with

policy-practice gaps, limited leadership preparation, and insufficient inclusivity. These disparities highlight the urgent need for leadership frameworks that are not only evidence-informed but also adaptable to contextual realities, culturally responsive, and grounded in equity and collaboration. Addressing challenges such as policy fragmentation, capacity gaps, and role overload requires deliberate policy reform, sustained investment in leadership development, and stronger mechanisms for teacher-principal collaboration. Ultimately, building effective, inclusive, and future-ready leadership systems will be essential for achieving meaningful educational transformation across both developed and developing countries.

Recommendations

Based on the findings of this study, it is recommended that educational policymakers and stakeholders prioritize the development of coherent, context-sensitive leadership frameworks that integrate both transformational and distributed leadership principles. Governments should invest in sustained, research-informed leadership training programs that equip school leaders with the skills needed for instructional guidance, collaborative governance, and culturally responsive decision-making. To address policy fragmentation, especially in decentralized systems like Canada and Nigeria, national standards should be harmonized with regional practices to ensure consistency and equity. Furthermore, reducing accountability pressures and role overload particularly in the UK and Australia requires a recalibration of performance metrics to emphasize professional autonomy and instructional leadership over bureaucratic compliance. Efforts should also be made to enhance equity and inclusivity by supporting school leaders in under-resourced areas through targeted mentorship, resource allocation, and inclusive policy implementation. Embracing these strategies will strengthen leadership coherence, promote teacher engagement, and improve overall school effectiveness across diverse educational systems.

REFERENCES

- Ambition Institute. (n.d.). *National Professional Qualifications (NPQs)*. https://www.ambition.org.uk/npqs-national-professional-qualifications/
- Australian Institute for Teaching and School Leadership (AITSL). (n.d.). *Australian Professional Standard for Principals*. https://www.aitsl.edu.au/tools-resources/resource/australian-professional-standard-for-principals
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27-40.
- Bowers, A. J. (2020). Examining a congruency-typology model of leadership for learning using two-level latent class analysis with TALIS 2018 (OECD Education Working Papers No. 219). OECD Publishing.
- Bray, M., Adamson, B., & Mason, M. (2007). *Comparative education research: Approaches and methods*. Springer.
- Bush, T. (2011). Theories of educational leadership and management (4th ed.). London: Sage.
- Custer, S., King, E. M., Atinc, T. M., Read, L., & Sethi, T. (n.d.). Toward data-driven education systems: Insights into using information to measure results and manage change. AidData, William & Mary; Brookings Institution.
- Goss, P., Sonnemann, J., & Chisholm, C. (2024). *The maths guarantee: How to give all children the best start*. Grattan Institute. https://grattan.edu.au/report/the-maths-guarantee/.

- Hallinger, P. (2003). Leading educational change: Reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education*, *33*(3), 329-352.
- Harris, A. (2008). Distributed leadership: According to the evidence. *Journal of Educational Administration*, 46(2), 172-188.
- He, P., Guo, F., & Abazie, G. A. (2024). School principals' instructional leadership as a predictor of teacher's professional development. *Asian-Pacific Journal of Second and Foreign Language Education*, 9, Article 63.
- Imoni, R. I. (2018). *Leadership distribution in government secondary schools in Nigeria: Fact or fiction?* [PhD thesis, University of Nottingham]. https://eprints.nottingham.ac.uk/51759/
- Karima, B., & Alam, G. M. (2024). Compatibility of distributive leadership, teacher autonomy and school effectiveness in Nigeria. *International Journal of Management in Education*, 18(4).
- Leithwood, K., Harris, A., & Hopkins, D. (2008). Seven strong claims about successful school leadership. *School Leadership and Management*, 28(1), 27-42.
- Leithwood, K., & Jantzi, D. (2006). Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School Effectiveness and School Improvement*, 17(2), 201-227.
- Neumerski, C. M. (2013). Rethinking instructional leadership: What do we know about principal, teacher, and coach instructional leadership, and where should we go from here? *Educational Administration Quarterly*, 49(2), 310-347.
- OECD. (2020). TALIS 2018 results (Volume II): Teachers and school leaders as valued professionals. OECD Publishing. https://www.oecd.org/education/talis/talis-2018-results-volume-ii-19cf08df-en.htm.
- Ogata, H., Liang, C., Toyokawa, Y., Hsu, C.-Y., Nakamura, K., Yamauchi, T., Flanagan, B., Dai, Y., Takami, K., Horikoshi, I., & Majumdar, R. (2024). Co-designing data-driven educational technology and practice: Reflections from the Japanese context. *Technology, Knowledge and Learning*, 29, 1711-1732.
- Ololube, N. P., Onyekwere, L. A., & Agbor, C. N. (2016). Effectively managing inclusive and equitable quality education to promote lifelong learning opportunities for all. *Journal of Global Research in Education and Social Science*, 8(4), 179-195.
- Paulley, F. G., & Buseri, J. C. (2019). The teacher and nation building in contemporary Nigeria. In Y. M. Abudulrahman & F. G. Paulley (Eds.), *Education and development in society*.
- Pont, B., Nusche, D., & Moorman, H. (2008). *Improving school leadership Volume 1: Policy and practice*. Paris: OECD Publishing.
- Printy, S. M., & Liu, Y. (2021). Distributed leadership globally: The interactive nature of principal and teacher leadership in 32 countries. *Educational Administration Quarterly*, 57(2), 243-280.
- Shaked, H. (2023). Instructional leadership in school middle leaders. *International Journal of Educational Management*, 27(6/7), 1288-1302.
- Spillane, J. P. (2006). Distributed leadership. San Francisco: Jossey-Bass.
- UNESCO International Institute for Educational Planning (IIEP). (2023). *Middle-tier instructional leadership: A missing link in education reform*. https://www.iiep.unesco.org/en/middle-tier-instructional-leadership-missing-link-education-reform-13930

Yusuf, M. O. (2005). An investigation into teachers' self-efficacy in implementing computer education in Nigerian secondary schools. *Meridian: A Middle School Computer Technologies Journal*, 8(2).