

# Enhancing English Proficiency in Education Through the Role of Digital Transformation Leadership

*Meningkatkan Kecekapan Bahasa Inggeris dalam Pendidikan melalui Peranan Kepimpinan Transformasi Digital*

Masdiana Binti Che Jamil<sup>a</sup>, Senthamarai A/P Subramaniam<sup>b</sup>, Norziana Binti Nasir<sup>c</sup>, Zuriah Binti Mad Ali<sup>d</sup>

<sup>a, b, c, d</sup>Institut Aminuddin Baki, Malaysia

\*Corresponding author: [masdiana@iab.moe.gov.my](mailto:masdiana@iab.moe.gov.my)

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## Abstract

*The changing technology and globalisation have rapidly brought global changes to the way education is delivered. Therefore, digital transformation models need to be integrated into leaders' thought processes and programs to support national language policies. In Malaysia, the "Upholding the Malay Language and Strengthening the English Language" (MBMMBI) policy seeks to protect the status and reputation of the Malay Language while promoting English as a competitive language. This qualitative study examines the engagement of digital transformation leadership in implementing an educational reform agenda that aligns with MBMMBI objectives to promote the use of technology in English language learning. Leaders of digital transformation are strategic, visionary leaders who drive educational and technological change by advancing pedagogical innovation towards more effective, bilingual, and equitable high-quality education. Utilising digital media, online resources, and evidence-based language assessment solutions, these leaders can lead the way to an enriched, interactive learning environment that enhances student engagement and English language learning without sacrificing national linguistic identity. The paper further develops how digital leadership can address teacher readiness, equitable access, and content and curriculum fit, thereby securing the survival of the Malay language and English in the national learning system. The study concludes by emphasising the critical role that visionary, technology-led leadership plays in achieving the ambitions of MBMMBI and in increasing Malaysia's global education role.*

**Keywords:** Digital Leadership, Educational Reform, MBMMBI, Bilingual Education, English Proficiency.

## Abstrak

*Transformasi digital: Pembangunan pesat teknologi dan globalisasi telah mengubah pendidikan dan pentadbir serta pemimpin pendidikan perlu mengamalkan model transformasi digital untuk selaras dengan dasar bahasa kebangsaan. Dasar Memartabatkan Bahasa Melayu dan Memperkuuh Bahasa Inggeris (MBMMBI) di Malaysia sedang dilaksanakan untuk mengekalkan status bahasa Melayu dengan menggalakkan penguasaan bahasa Inggeris sebagai pemacu dalam mempromosikan daya saing antarabangsa. Kertas penyelidikan*

*kualitatif ini membentangkan kesan pemimpin transformasi digital terhadap pembaharuan pendidikan MBMMBI berkaitan dengan pelaksanaan MBMMBI melalui teknologi dalam pendidikan bahasa Inggeris. Dengan bantuan pemimpin transformasi digital sebagai perancang strategik yang berwawasan, mereka mengaitkan inovasi pedagogi dengan inovasi teknologi untuk meningkatkan keberkesan pengajaran, memperluas kapasiti dwibahasa dan memperluas peluang untuk akses saksama kepada pendidikan berkualiti. Dengan bantuan instrumen digital, sumber, dan alat berasaskan data dalam pengajaran bahasa, pemimpin ini dapat membina persekitaran yang lebih kaya dan interaktif yang menghasilkan peningkatan penglibatan pelajar dan penguasaan bahasa Inggeris sambil mengekalkan identiti linguistik kebangsaan. Kertas ini juga berhujah bahawa kepimpinan dalam era digital boleh menangani isu-isu berkaitan kesediaan guru, akses saksama, dan penajaran kurikulum untuk membolehkan bahasa Melayu dan Inggeris terus berkembang dalam sistem pendidikan Malaysia. Tujuan umum kajian ini adalah untuk menekankan kepentingan kepimpinan berteknologi tinggi dalam mencapai aspirasi MBMMBI dan meningkatkan kedudukan pendidikan Malaysia di peringkat global.*

**Kata kunci:** Kepimpinan Digital, Reformasi Pendidikan, MBMMBI, Pendidikan Dwibahasa, Kecekapan/Penguasaan Bahasa Inggeris.

## INTRODUCTION

As the world becomes increasingly global, English proficiency has moved from the realm of secondary education to an important aspect of international communication, business, and mobility. Improving the English proficiency of the youth is a key national goal in Malaysia to tap into career opportunities and be an impactful global player (Lee, 2025). However, the standards of education are declining by the day, and the potential of students is not being realised in the science, technology, and world business studies disciplines, which demand creative development in education and training (Lee, 2025).

This government commitment is reflected primarily in the Upholding the Malay Language and Strengthening the English Language (MBMMBI) policy, which mediates between national language identity and English skill demands (Sin, 2025). Meanwhile, for the Ministry, the aim is to integrate technological advancements – i.e., Artificial Intelligence (AI) for teaching and learning upgrades (Sin, 2025). This policy-technology nexus is indicative of a nationwide call to action if students are to be prepared with language competencies at every level of society.

As much as they're a piece of reform as part of the curriculum, School Principals are central to this reform, having the mandate of driving digital change at the school level. This work has been completely disrupted by pervasive technology innovation that has necessitated new digital leadership skills (McCarthy et al., 2023; Orfanidou & Kopsidas, 2023). Principals are now seen as dynamic digital stakeholders, negotiating digital challenges and opportunities to navigate pedagogical innovation (Ghavifekr & Yue, 2022; Karaköse & Tulubas, 2023), situating national policy through the practice of pedagogy in the classroom. The current study explores the role of digital transformation in improving English proficiency in Malaysian schools.

This research concludes that strong school leaders are change agents with the potential to leverage technology to make English learning and teaching more interactive and efficient. Principals can contribute to teacher preparedness, equity in access and alignment with the core curriculum using digital leadership models in line with the advocacy of the Malaysian Education Blueprint (2013-2025). This study examines how strategic digital leadership could deliver on the MBMMBI's policy ambitions by transforming digital platforms and data-driven applications without compromising national language identity.

## LITERATURE REVIEW

### Malaysian School English Proficiency

English is taught compulsorily in Malaysian schools, but there can be some variability in students' proficiency. Variations are generally explained by variation in teaching methods, school assets, and policy (Ramakrishnan et al., 2025). The personal style teacher in a private school environment who can think a little more about new technology and smaller class sizes will likely offer a student-centred, more participative teaching approach. Alternatively, teachers in government schools could probably use a more cramming approach, as classroom space in these locations is limited and syllabi are very rigorous. Student-centred teaching is more effective, but pedagogical freedom is constrained by factors such as outdated curricula and examination stress (Ramakrishnan et al., 2025).

### Policy Initiatives

Larger policies such as MBMMBI and the Highly Immersive Programme (HIP) are designed to promote English without abandoning Malay, and it is in line with the overall goal or a national framework of the Malay language reform process (Rasidi et al., 2020). HIP, in particular, aims to promote the use of English through a series of school-based intervention activities -- such as debates and language camps -- in an educational context, providing an immersive environment for learning English. However, the application is inequitable, as city schools, which are resourced and have competent leaders, are more effective in implementing it than rural schools, which suffer from underqualified teachers and limited budgets (Adnan & Mohamad, 2024; Kamsin & Mohamad, 2020). Such disparity illustrates how a wide range of existing educational inequalities can be exacerbated when policing policy is enacted without targeted intervention to address them in practice (Rivano, 2023).

### Digital Transformation in Language Education

Digitalisation has opened up opportunities for the English language through web-friendly systems, mobile applications, and hybrid forms of education. These resources allow teachers to offer interactive, personalised instruction (Wu & Huang, 2025). However, access to technology is only one piece of the puzzle in the meaningful integration of digital tools into pedagogy; practical teacher training and strong institutional leadership are at the other end of the scale, helping facilitate this integration. Infrastructural inequalities also serve as a challenge with unstable internet connectivity in rural areas (e.g. unreliable internet connectivity) as a potential cause that may mitigate the benefits of online learning and highlights the need for an ecosystem planning for comprehensive planning and equitable distribution of resources to implement online learning in future (Wu & Huang, 2025), which underscores the need for such infrastructure.

### Leadership's Role in Digital Transformation

School admin is the key to implementing digital change at the school level and linking it to school outcomes. Principals influence the school climate, inspire teachers, and make a concerted effort to support technology in serving the wider learning needs (Mutil et al., 2024). Strong leaders not only offer resources, but model technology use as well, which creates an innovative culture. Leadership development in Malaysia has also found that

collaboration and vision are essential for sustainable digital integration, especially in low-resource schools (Ramalingam et al., 2024).

### New Technologies for Language Learning

Technologies like VR and AR create immersive environments for students to practice their English skills, offering engaging alternatives to conventional methods (Prabakaran et al., 2025). Pros have been reflected in proficiency and digital literacy education; however, some cons come with it, such as costs, the need for teacher training, and infrastructure limitations that hinder its uptake. Extended in the absence of authoritative leadership and policy interest, the technologies will perpetuate educational inequalities; however, there is significant promise if taken broadly and inclusively (Prabakaran et al., 2025).

**Table 1**

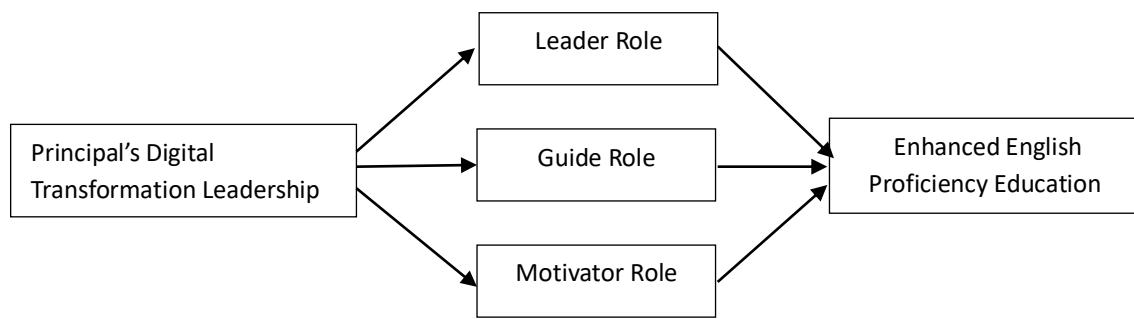
*Digital Transformation Leadership Roles in Enhancing English Proficiency*

Role	Brief
Principal as a Digital Leader	Acts as a visionary leader in integrating digital platforms, online resources, and data-driven tools to improve English teaching effectiveness and student engagement.
Principal as a Digital Guide	Provides direction and training to teachers on incorporating technology into classroom practices, ensuring alignment with MBMMBI policy.
Principal as a Digital Motivator	Inspires and motivates teachers to embrace innovation, reduces resistance to change, and creates a culture of digital confidence.

(Source: Adapted from Digital transformation and innovation for enhancing the performance of primary schools in Malaysia by A. Ibrahim, M. J. Jusoh, N. Tahir, S. S. B. Hamzah, & M. Tasikhan, 2024)

**Figure 1**

*Framework of Digital Transformation Leadership in Enhancing English Proficiency*



### METHODOLOGY

A qualitative approach was used to examine the experiences and perceptions of school leaders and how they can contribute to improving English proficiency through digital transformation leadership. A qualitative approach was also appropriate for the study because it is well-suited to detailed descriptions of complex phenomena in their natural form, which

was not possible with a purely quantitative approach (Arinaitwe, Kamugisha, & Kobusingye, 2024). This was necessary to respond to the question: In what ways do school leaders utilise digital transformation leadership to improve English language proficiency in correlation with the MBMMBI policy?

### **Research Design and Sampling**

For this study, a purposive sampling method was used, and participants with hands-on experience in digital school leadership practices were easily selected. Principals and school leaders were of interest since they have the power to initiate digital actions and school culture (Mutil et al., 2024). The main stipulation was that participants had to be school principals with experience in this role for the last 2 years, who had implemented or led a digital transformation project or initiative in English teaching and learning. Six school leaders from diverse urban and rural schools participated in the study to capture a range of views and data. Sample size was within qualitative research standards, where depth and detail were preferred to the number of data points collected (Roberts, 2020). All participants were given an information sheet and gave informed consent before they were engaged.

### **Data Collection Procedure**

Roberts (2020) suggested that interview questions should be formulated in advance to generate rich data from participants, and the sampling procedure utilised was a semi-structured interview guide. The interview questionnaire was constructed in four main sections for comprehensive coverage. The first of these focused on leadership vision and policy context, which informed the principal's understanding of the MBMMBI policy. The second, Implementation of Digital Practices, focused on the specific tools and approaches developed. The third section addressed Challenges and Enabling Factors, while the fourth section, Monitoring and Impact Assessment, further refined this.

Semi-structured interviews navigated the tension between structure and flexibility, allowing the researcher to probe key areas of interest while giving participants the space and agency to expand on their experiences. This has been particularly effective for leadership research, where narrative and person-specific insight is the gold standard for demystifying fuzzy phenomena (Dunwoodie, Macaulay, & Newman, 2022). Data were collected through face-to-face and web-based interviews using secure sites that allowed respondents to be easily accessed. Interviews lasted 45-60 minutes and were audio-recorded with the subjects' consent. Online interviews were accepted as a valid and legitimate means of interviewing, given the logistical and geographic challenges that arise in educational research (Dunwoodie et al., 2022).

### **Data Analysis Approach**

Thematic analysis, a qualitative method (Arinaitwe et al., 2024), a common approach to identifying patterns in interview data, was used for data analysis. We were to use manual coding for data analysis to obtain a thorough understanding of the data, given the small project size. There was also considerable input required to create a database for the coding process. This process entailed transcribing interviews, iteratively coding, and identifying themes related to roles and challenges in digital leadership. To provide methodological transparency, the following illustration depicts the coding journey from an example of raw data excerpt to the creation of the theme:

- i. Raw Data (Participant Quote): "I always make sure I am the first to learn and apply all new courses and technology applications before teaching them to teachers and students."

- ii. Initial Code: Principal as a lead learner
- iii. Focused Code: Modelling digital competence
- iv. Final Theme: Leading by Example

The analysis began with familiarisation, where I read the transcripts many times. This was followed by generating initial codes, with key statements manually annotated with margin notes and a structured coding manual. Next, the codes were consolidated into possible themes, which we reviewed for coherence. These themes were honed iteratively. The analysis actively included direct participant quotes and anchored the evidence on the lived experiences of the principals highlighted in the Results section. Thematic analysis offered a structured yet flexible method that could be employed for both deductive coding, based on the literature, and inductive coding, based on participants' accounts (Braun and Clarke, cited in Arinaitwe et al., 2024). This was to ensure that the findings were theoretically sound yet evidence-based. To ensure coding accuracy, an inter-coder agreement protocol was established, in which two researchers independently coded a subset of transcripts and compared their analyses for agreement.

### **Trustworthiness and Ethical Concerns**

To increase trustworthiness and credibility, the work employed member checking, with participants checking the accuracy of their interview transcripts and using triangulation of data sources to compare the findings with policy papers and the literature on digital leadership in education. These were consistent with Dunwoodie et al.'s (2022) guidelines, which noted the importance of methodological transparency as one of the key ways to ensure rigour in qualitative research in educational and organisational contexts. Best practices in qualitative research, including ethical expectations such as informed consent, confidentiality, and voluntary participation, were also firmly upheld (Roberts, 2020). All data were anonymised at the time of transcription, during transcription, and during analysis, and pseudonyms were used in the reporting of the findings to enhance participant anonymity. Information was stored on password-protected devices for safeguarding in accordance with ethical research protocol.

## **RESULT**

In this section, we present the results of the thematic analysis of semi-structured interviews conducted with six school principals. Based on the rigorous process outlined in the methodology, the analysis revealed six primary themes that represent the essential strategic leadership practices adopted to improve English through digital transformation. This information was gleaned from the participants' individual stories about their leadership vision, implementation, struggles, and monitoring practices. The results reveal that principals employ diverse, context-specific practices aligned with the existing literature on best practices in digital leadership (Mariani et al., 2021; Suhaibah & Ahmad Zabidi, 2024). The main themes identified are: (1) The use of digital resources in rural schools; (2) The emergence of English-rich school cultures in urban schools; (3) Proactive planning and engagement in external education programs; (4) The ongoing assessment of digital

applications and skills; (5) Feedback, reflection, and intervention; and (6) Community building for teams. Taken together, the results indicate that principals are not only instructional managers but also digital transformation agents, who work with school-level programs and initiatives to align them with national policy such as the *Memartabatkan Bahasa Malaysia dan Memperkuat Bahasa Inggeris* (MBMMBI) policy and the Malaysia Education Blueprint (2013–2025).

### **Theme 1: Utilising Digital Tools in Rural Schools**

Rural principals reported a strong motivation to use offline and online technologies to address pervasive resource and access gaps. They intentionally used apps such as Google Classroom and WhatsApp groups, supplemented by offline learning modules, to address unreliable internet access. This is a dynamic and adaptable leadership practice in which principals, within constraints, set high targets for students (Farah & Mahani, 2024). One of the primary sources of encouragement, as one rural school principal stated, "is the students' spirit, even at the rural school, students' spirit to study English and put new technology to the test is rising. And they want to know more and more" (Principal 1). This development in closing the digital divide is an equity-centric approach to leadership, preventing lower-income students from falling behind in the national effort to enhance students' English readiness.

### **Theme 2: Developing English-Rich School Cultures in Urban Schools**

Urban principals identified a rich, well-drenched school culture in English as an important strategy. According to Adnan and Mohamad (2024), their strategies were to call for English to be made present in assemblies, create language corners, and add English into co-curricular activities such as debate and drama, which were in keeping with the goals of the Highly Immersive Programme (HIP). "I absolutely do not want to be in a safe zone," one principal told me, "Because I have to have continuous activities outside of my safe zone. Despite being in the vicinity of an urban school, the program activity related to the technology use of English is always being carried out among teachers and students" (Principal 2). With this type of focus not on resources but on cultural change, it is typical of a transformational leader, with the principal driving the language culture of the school, and hence giving the confidence to fluent students to move around the globe.

### **Theme 3: Proactive Planning and Participation in External Programs**

The most prominent practices identified in the literature also focused on strategic planning and attendance in off-campus programs created by the State Education Department (JPN) and the District Education Office (PPD). This served to ensure adherence of school-level activities to the national policy documents, such as the Malaysia Education Blueprint (2013–2025). The principals demonstrated strategic vision in implementing the programs to develop teachers' capacity and enhance students' learning capabilities. One principal showed personal commitment to staying up to date: "I make sure always to be the first one out there to find and use all the new courses and technology programs. I then teach them to all teachers and students. I have constant contact with JPN and PPD to ensure that all our updates are up to date" (Principal 3). In this way, the tradition demonstrates principles that straddle micro-level classroom practice and macro-level policy recommendations to achieve alignment and long-term success in English language teaching projects.

#### **Theme 4: Continuous Monitoring of Online Applications and Competence**

The research validated the fact that principals rely on systematic observation to assess the usability of online applications and the effectiveness of teachers and students in using them. This also meant periodic monitoring, classroom observation, and formative evaluation, characteristic of instructional leadership (Fazal et al., 2022). The principal emphasised leading by example, and with the most available resources, "I ensure that all staff, and particularly the people in administration, regularly oversee the usage of any technology apps presented through these tools. We need to use them to the maximum and stay updated always" (Principal 4). Principals provided these quality control services by continually monitoring gaps, spotting them early, and verifying that the work in digital transformation is translating into language learning that yields actionable output in practice.

#### **Theme 5: Feedback, Reflection, and Intervention**

Feedback and reflection had always been central to instructional leadership for principals. They conducted feedback sessions, nurtured a reflective pedagogy among instructors, and instituted targeted interventions, such as remedial instruction and special workshops, to tackle vulnerabilities. This is consistent with models of reflective leadership, which permit ongoing school development (Suhaibah & Ahmad Zabidi, 2024). The process, being a collaborative one, was echoed by a principal saying, "We as principals cannot function alone ('syok sendiri'). We have to solicit feedback, reflect, and take action if we want better results. We have to be in the room constantly to help and to recover" (Principal 5). The principals help establish a responsive and supportive environment aligned with professional growth and quality improvement in teaching as they go through this feedback and intervention cycle.

#### **Theme 6: Fostering Teamwork and Community Engagement**

Encouraging teamwork and community engagement. Lastly, the principals noted the imperative to strengthen collaborative relationships between teachers, parents, and the wider community. They shifted to prioritising English mastery at the communal level and expanded the support network for language learning. It is therefore a system leadership model characterized by shared goals and shared commitment to facilitate sustainable transformation (Ghavifekr & Yue, 2022). As one principal states, "In my opinion, teamwork is the key, and we must not forget to include the community in all school activities. English language mastery and literacy require the efforts of all. It is one for all, and all for one" (Principal 6). By developing such a common culture among them, principals manage their leadership more effectively, establishing a community with an enormous impact upon student achievement.

### **DISCUSSION**

This study aimed to explore how leadership in digital transformation in Malaysian schools contributes to improved English language proficiency, particularly within the framework of the "Upholding the Malay Language and Strengthening the English Language" (MBMMBI) policy. The findings highlight that principals employ a range of context-based practices that extend beyond administrative coordination: they position themselves as digital leaders, instructional managers, and community partners. These results align with well-established leadership principles, suggesting that effective digital transformational leadership is not a new concept but an extension of the instructional and transformational leadership paradigms

to the technology domain. Collectively, these approaches demonstrate the role of school leaders in implementing national education policies and the tangible instructional and learning outcomes that result. The findings also resonate with the research model (Figure 1) of school principals, who emerge as leaders, agents of change, and digital navigators, thereby enhancing the ability to speak English fluently.

Emphasis was placed on digital tools to bridge the rural-urban divide. Principals in rural schools optimised low-bandwidth and offline computer-based applications for universal access. At the same time, their urban counterparts utilised more advanced infrastructure to create English-rich environments supported by the Highly Immersive Programme (HIP). This aligns with the Digital Guide Role in the model, in which principals facilitate the use of computer-based applications to enhance student learning. This is conceptually consistent with situational and transformational leadership theories, which emphasise the importance of local contexts within the broader policy agenda (Farah & Mahani, 2024; Adnan & Mohamad, 2024). Specifically, the effort to build English-rich contexts in urban schools exemplifies transformational leadership, in which leaders inspire and engage their staff with a shared vision for change, thereby fostering bilingual readiness, one of the theoretical assumptions underlying it (Korejan & Shahbazi, 2016). This suggests that digital transformation leadership is not inherent but must be adaptable based on available resources, culture, and readiness.

The results also highlighted the importance of "systemic monitoring" and planning to sustain reforms. Principals' involvement in district (PPD) and state (JPN) programs facilitated access to external support, professional development, policy alignment, and consequently, increased institutional capacity. This process of aligning school needs with general policy goals is indicative of instructional leadership. Strong leaders, as Hallinger (2005) suggests, focus on their students by securing the focus and resources needed to concentrate on a smaller number of measurable, data-driven goals established by the school community. For these school leaders, regular assessment of online applications and student proficiency enabled accountability and the agility to act promptly when gaps were identified. These strategies exemplify the Principal's Transformation Leadership component of the model by providing leadership vision and direction aligned with state and national teaching priorities. This reinforces the assertions of Mukhtar and Abd Razak (2024) and Jaafar et al. (2021) that instructional leadership involves planning and informed decision-making for the future.

Another aspect of this discourse involves principals as instructional leaders who engage in feedback, reflection, and teacher learning. Principals lead this vision, fostering professional learning communities and peer-sharing opportunities, as well as specific interventions, as part of the Leader Role of the model. It is not merely strategic direction-setting but rather instilling in teachers the motivation and tools to genuinely integrate digital pedagogy in the classroom. This corresponds to "Individualised Consideration," a component of transformational leadership, where leaders mentor and provide individual attention to support professional development (Korejan & Shahbazi, 2016). This finding is consistent with Fazal et al. (2022), who state that resilient schools succeed when leadership values continuous reflection and professional development. Principals implemented these practices, demonstrating that leadership can directly impact teaching quality and student outcomes.

Distributed leadership was another significant theme. Principals learned that English language proficiency cannot be built solely within school walls but requires the active participation of parents, society, and other stakeholders. These activities, such as parent computer training and neighbourhood-based English programs, expanded the offerings for students. This aspect strengthens this model's collaborative strand of the Transformation Leadership function, which views the principal as an intermediary between the school and the external environment. This establishment of collective efficacy is echoed in early work on

school leadership, which suggests that effective leaders are guided by articulated values and cultivate an uplifting climate central to school success, particularly during adversity (Hallinger, 2001; Day et al., 2001). These are consistent with Mutil et al. (2024), who contend that digital leadership must be participatory and networked, that is, not constrained by institutional boundaries, to build equity and sustainability.

## **CONCLUSION**

Finally, the research also demonstrates that digital transformation leadership is at the core of improving the English proficiency of Malaysian students under the MBMMBI policy. Principals fulfil this role by enacting six interrelated practices, including the use of digital technologies, culture-enriched English, strategic planning, monitoring, constructing reflection and intervention, and engaging in practices for the development of collaborative partnerships. These practices are further directly translated into the research model (Figure 1), thus ensuring that bridging the intersection of leadership functions and digital guidance contributes to material improvement in student outcomes.

Moving beyond a broad, one-size-fits-all approach, this article contributes to the digital leadership literature in many unique ways. In contrast, studies have previously devoted significant attention to examining the adoption of technology in resource- and resource-dominated Western contexts, yet this study proposes a more nuanced, context-dependent approach to digital leadership. This exemplifies how effective leadership behaviours are strategically tailored to address localised problems, such as the rural-urban digital divide, and mobilised to pursue national policy mandates, here the dual objectives of the MBMMBI to promote better English and retain the national language.

This implementation, relevant to specific contexts and policies, is an improvement in how the practice of digital leadership is enacted across a variety of challenging educational institutions. Additionally, this study adds to the educational leadership literature by demonstrating the impact of contextual differences (specifically in city and countryside schools) on the production of digital programs. It also highlights the imperatives of building digital competence, strategic planning, and community capacity as the means by which reform can make itself stick, if not just become more equitable. From a policy perspective, the results highlight the importance of sustained investment in leadership development, infrastructure, and monitoring to achieve the aspirations of the Malaysia Education Blueprint (2013–2025).

Lastly, the results speak to the aspirational potential of digital leadership to translate bilingual competence into reality while retaining the national language. As technology is a pivotal strategic driver of learning, the principals themselves can develop deeper learning ecologies to prepare students to take on more than just exam-crunching; they can prepare students to succeed in an increasingly globalised society. Consequently, enhancing principals' digital transformation leadership competency is a key component for fulfilling MBMMBI targets and sustaining the future competitiveness of the education system in Malaysia.

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## REFERENCES

Adnan, E. F., & Mohamad, M. (2024). The impacts and challenges of implementation of Highly Immersive Programme (HIP) towards English learning in Malaysian primary schools: A literature review. *International Journal of Academic Research in Progressive Education and Development*, 13(3), 1–20. <https://doi.org/10.6007/IJARPED/v13-i3/22889>

Dunwoodie, K., Macaulay, L., & Newman, A. (2022). Qualitative interviewing in the field of work and organisational psychology: Benefits, challenges and guidelines for researchers and reviewers. *Applied Psychology*, 72(3), 863–889. <https://doi.org/10.1111/apps.12414>

Day, C., Harris, A., & Hadfield, M. (2001). Challenging the orthodoxy of effective school leadership. *International Journal of Leadership in Education*, 4(1), 39–56. <https://doi.org/10.1080/13603120117505>

Fadhlurrahman, W., Rasidi, W., Mydin, A.-A., & Rasidi, W. F. (2020). *Peranan pemimpin pertengahan sekolah dalam menerajui dasar pendidikan: Suatu sorotan literatur sistematik terhadap pelaksanaan dasar MBMMBI* [The role of schools' middle leaders in leading education policy: A systematic literature review on the implementation of MBMMBI policy]. *Malaysian Journal of Social Sciences and Humanities*, 2(2), 231–239.

Fazal Mohamed Mohamed Sultan, F. M. M., Karuppannan, G., & Rumpod, J. (2022). Instructional leadership practices among headmasters and the correlation with primary schools' achievement in Sabah, Malaysia. *English Language Teaching*, 15(2), 50–60. <https://doi.org/10.5539/elt.v15n2p50>

Ghavifekr, S., & Yue, W. S. (2022). Technology leadership in Malaysian schools: The way forward to Education 4.0—ICT utilization and digital transformation. *International Journal of Asian Business and Information Management*, 13(3), 1–18. <https://doi.org/10.4018/ijabim.20220701.0a3>

Hallinger, P. (2001). Leading educational change in East Asian schools. *International Studies in Educational Administration*, 29(2), 61–72.

Hallinger, P. (2005). Instructional leadership and the school principal: A passing fancy that refuses to fade away. *Leadership and Policy in Schools*, 4(3), 1–20. <https://doi.org/10.1080/15700760500244793>

Ibrahim, A., Jusoh, M. J., Tahir, N., Hamzah, S. S. B., & Tasikhan, M. (2024). Digital transformation and innovation for enhancing the performance of primary schools in Malaysia. *Masyarakat, Kebudayaan dan Politik*, 37(4), 446–458. <https://doi.org/10.20473/mkp.V37I42024.446-458>

Jaafar, M., Asimiran, S., Abdullah, A., & Alias, S. N. (2022). Systematic literature review: Strategic leadership practices among school leaders in Malaysia. *International Journal of Academic Research in Business and Social Sciences*, 12(3), 128–138. <https://ir.uitm.edu.my/id/eprint/45161/1/45161.pdf>

Julius, A., Kamugisha, N., & Kobusingye, P. (2024). Integration of qualitative data analysis techniques into academic research papers. *Journal of Research Methodology*, 10, 161–170.

Kamsin, S. R., & Mohamad, M. (2020). The implementation of Highly Immersive Programme (HIP) speaking activities in Malaysian schools: A literature review. *Creative Education*, 11(9), 1783–1794. <https://doi.org/10.4236/ce.2020.119130>

Karaköse, T., & Tulubas, T. (2023). Digital leadership and sustainable school improvement: A conceptual analysis and implications for future research. *Educational Process: International Journal*, 12(1), 7–18. <https://doi.org/10.22521/edupij.2023.121.1>

Korejan, M., & Shahbazi, H. (2016). An analysis of the transformational leadership theory. *Journal of Fundamental and Applied Sciences*, 8(3S), 452–461. <https://doi.org/10.4314/jfas.v8i3s.192>

Lee, L. T. (2025, February 13). Strengthening English proficiency crucial for Malaysia's future. *New Straits Times*.

Mat Rahimi, Y., Mohd Yusri, I., & Zahari, A. (2016). *Kepimpinan digital pemimpin sekolah*. Seminar Nasional Pengurusan dan Kepimpinan Pendidikan ke-23, 1–8.

McCarthy, A. M., Maor, D., McConney, A., & Cavanaugh, C. (2023). Digital transformation in education: Critical components for leaders of system change. *Social Sciences & Humanities Open*, 8(1), 100479. <https://doi.org/10.1016/j.ssho.2023.100479>

Mukhtar, S., & Abd Razak, A. Z. (2024). Strategic approaches to enhancing school performance through instructional leadership in Malaysia. *Environment-Behaviour Proceedings Journal*, 9(SI20), 75–80. <https://doi.org/10.21834/e-bpj.v9iSI20.6095>

Mutil, G., Busari, A. H., Mazlan, M. N. A., & Ujil, A. T. (2024). Readiness of school leaders in Malaysia to face the VUCA (Volatile, Uncertain, Complex, Ambiguous) era: A recent comprehensive structured review. *International Journal of Education, Psychology and Counseling*, 9(55), 556–575. <https://doi.org/10.35631/IJEPC.955037>

Orfanidou, C., & Kopsidas, O. (2023). *Educational leadership in the age of digital transformation. Education and Information Technologies*. <https://doi.org/10.1007/s10639-023-11847-5>

Prabakaran, N., Patrick, H., & Kareem, J. (2025). Enhancing English language proficiency and digital literacy through metaverse-based learning: A mixed-methods study in higher education. *Journal of Information Technology Education: Research*, 24(1), 1–10. <https://doi.org/10.28945/5484>

Ramalingam, S., Saforrudin, N. B., Harun, N. B., Salamat, Z. B., & Yunus, R. (2024). *Enhancing educational leadership through digital transformation: A school-based digital leadership project in Malaysian school*. Proceedings of the International Conference on Business Studies and Education (ICBE), 358–370. <https://www.icbe.my/wp-content/uploads/2024/04/44.pdf>

Ramakrishnan, S., Selvarajoo, P. C. B., & Govindarajoo, M. V. V. (2025). English language learning in Malaysian schools: A comparison between government and private schools' teachers' teaching methodologies to improve student learning. *Edelweiss Applied Science and Technology*, 9(6), 976–988. <https://doi.org/10.55214/25768484.v9i6.8005>

Roberts, R. (2020). Qualitative interview questions: Guidance for novice researchers. *The Qualitative Report*, 25(9), 1–12.

Sin, Y. A. (2025, February 13). Education Ministry committed to enhancing English proficiency [WATCH]. New Straits Times.

Wu, Z., & Huang, R. (2025). The impact of digital transformation on the quality of college English teaching: The mediating role of teachers' support. *Asia Pacific Journal of Education*, 1–17. <https://doi.org/10.1080/02188791.2025.2467941>