

**ENHANCING PEDAGOGICAL LEADERSHIP IN  
MALAYSIAN IB SCHOOLS: A CONTEXTUAL MODEL  
EVALUATION**

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**Abstract**

Pedagogical leadership has emerged as a vital concept in contemporary educational discourse, intersecting with various leadership paradigms. In Malaysia, significant investments have been made in education reform, particularly highlighted in the Malaysian Education Blueprint (2013-2025), emphasizing access, quality, equity, unity, and efficiency. Amidst this backdrop, pedagogical leaders are increasingly recognized as strategic enablers of educational advancement and professionalism among teachers. However, while pedagogical leadership frameworks are abundant in Western contexts, their application and understanding in Malaysian IB schools remain limited. This paper presents a critical evaluation of a conceptual model of pedagogical leadership within a private Malaysian IB school, derived from a holistic case study

approach. Through thematic analysis, the model's components were refined, incorporating Eastern philosophy to align with the school's ethos and needs. The evaluation, based on focus group discussions, highlights both positive perceptions and limitations of the model, emphasizing the dynamic nature of leadership and its context-specific application. The findings underscore the need for continual refinement and contextualization of pedagogical leadership models in diverse educational settings.

Keywords: Pedagogical leadership, Malaysian IB schools, Conceptual model evaluation, Contextualization, Focus group discussions.

## **Introduction**

Pedagogical leadership, a burgeoning concept within contemporary educational discourse, is increasingly acknowledged for its evolution and intersection with various leadership paradigms such as transformational, instructional, and distributed leadership (Male & Palaiologou, 2015; Rojas Carrasco et al., 2020; Ghavifekr et al., 2019; Yang & Lim, 2020). In Malaysia, the government's substantial allocation of approximately 15.6 percent from RM50.4 billion in the 2021 budget reflects a commitment to education reform (Normah, 2020). The Malaysian Education Blueprint (2013-2025) articulates a vision aimed at enhancing the education system's access, quality, equity, unity, and efficiency. Within this framework, recent research underscores the pivotal role of pedagogical leaders as strategic drivers facilitating teachers' professionalism and educational progress (Leo, 2015; Muli et al., 2017). Additionally, pedagogical leaders are instrumental in enhancing effectiveness and efficiency within school communities, as highlighted in studies by Dwivedi, Chaturvedi & Vashist (2020) and Heikka et al. (2019a, 2019b). The imperative for pedagogical leaders of the 21st century lies in their ability to cultivate relevant skills and adopt forward-thinking mindsets, thereby enabling school transformations from mediocrity to excellence (Greenhill, 2010).

## **Background**

The concept of pedagogical leadership, as recognized by scholars, entails individuals' efforts to facilitate school transformation through various

means such as teacher training, pedagogical practices, collaborative group work, and professional development initiatives (Male & Palaiologou, 2017; Fonsén & Ukkonen-Mikkola, 2019). Central to pedagogical leadership is the cultivation of a positive school culture marked by ongoing enhancements in academic pursuits and organizational processes, ultimately leading to improved teacher and student outcomes (Bøe & Hognestad, 2017). The absence of pedagogical leadership results in organizations operating solely through repetitive management processes, which fail to address present and future challenges crucial for their survival and success (Bush &

Glomer, 2016; Peng et al., 2016). This importance is underscored in numerous national education policies (Gento Palacios et al., 2020).

Moreover, while recent scholarly focus on pedagogical leadership has predominantly originated from Western perspectives (Male & Palaiologou, 2015, 2017; Bøe & Hognestad, 2017; Leo, 2015; Fonsén & Ukkonen-Mikkola, 2019), the understanding of pedagogical leadership in Malaysia remains in its nascent stage (Rahman et al., 2017; Samad et al., 2017). This lack of emphasis may obscure the significance of pedagogical leadership amidst the broader discourse on instructional, distributed, transformational leadership, and professional learning communities (Safiek, 2020; Rasidi et al., 2020; Sabri & Baba, 2017; Balachandran & Mohammad, 2021), thus highlighting a gap necessitating further research to deepen comprehension and application of pedagogical leadership in the Malaysian context.

Furthermore, building upon a comprehensive case study conducted in a private Malaysian International Baccalaureate (IB) School, the final phase

of the research endeavors to assess a contextually grounded model derived from thematic analysis of preceding inquiries. The development of this research-based contextual model of pedagogical leadership aims to empower pedagogical leaders in addressing organizational challenges related to teaching and learning by providing a structured framework for decision-making and action-taking. Understanding the genesis and components of this model is essential for readers to grasp its implications within the Malaysian IB Education landscape.

### **Explanation of the Pedagogical Leadership Model in the Context of Malaysian IB Education Provider**

The initial conception of this model, stemming from earlier phases of study, aimed to elucidate and bolster understanding of pedagogical leadership within the school's leadership community. Functionally, it serves to enhance the school's standard operating procedures and supplements its existing pedagogical leadership framework endorsed by the International Baccalaureate Organization (IBO). Additionally, it enables the school community to anticipate areas for pedagogical leadership development and cultivate a sustainable pool of future leaders. Initial data analysis, derived from interviews with the school's pedagogical leaders regarding their strategies, challenges, and suggestions for mitigating leadership obstacles, yielded a prototype model of pedagogical leadership. Transcripts were categorized into four overarching themes: (a) Becoming (the qualities a pedagogical leader should embody), (b) Doing (the actions a pedagogical leader should undertake),

(c) Achieving and Evaluating (the goals and assessment criteria for pedagogical leadership), and (d) Reflecting for Tomorrow (the forward-thinking considerations for pedagogical leadership).

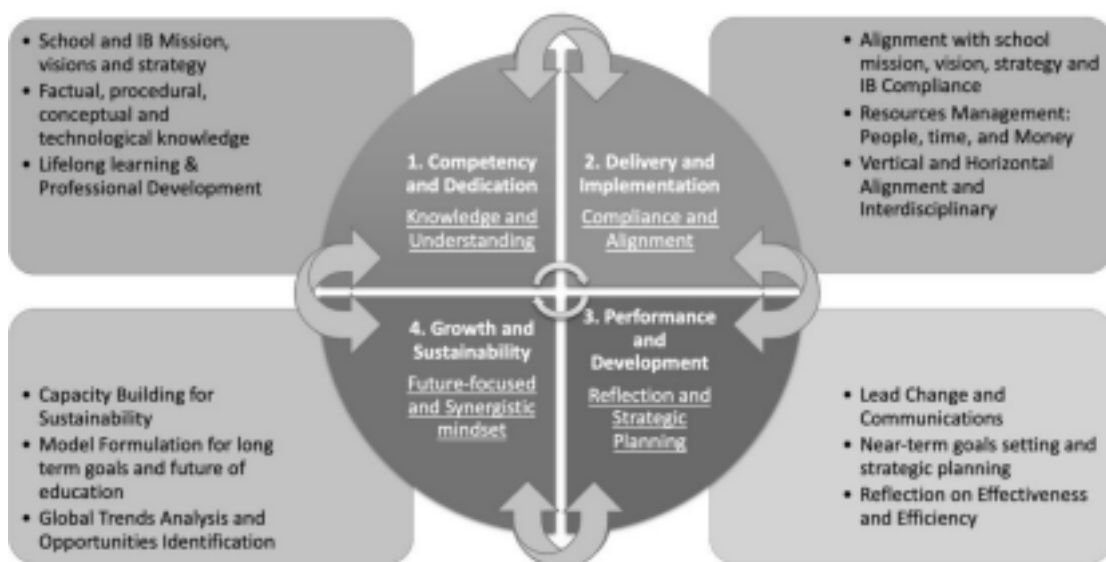


**Figure 1:** *The four themes emerged on Pedagogical Leaders in the Malaysian IB Education Group*

Subsequent data analysis refined the model, aligning it with four key themes depicted in Figure 2: (a) Competency and Dedication (derived from 'Becoming'), (b) Delivery and Implementation (derived from 'Doing'), (c) Performance and Development (derived from 'Achieving & Evaluating'), and (d) Growth and Sustainability (derived from 'Reflecting for Tomorrow'). Each quadrant, represented within a circle, symbolizes the cyclical nature of pedagogical leadership, transitioning either clockwise or counterclockwise based on situational needs. Adjacent to each quadrant are code groups extracted from participant transcripts, organized to support the respective quadrant.

Furthermore, insights from reflective journal entries, interviews with the school chairman and senior pedagogical leaders, prompted the integration

of Eastern philosophy, particularly Confucian teachings, into the model. This unique fusion aimed to cater to pedagogical leaders within the Mandarin Language Department. Aligning the four quadrants of the Pedagogical Leadership Model with Confucius's philosophy yielded congruence in nature and function: (a) Individual level (aligned with Self-cultivation in Confucian teaching), (b) Departmental level (aligned with Family in Confucian teaching), (c) School level (aligned with Nation Governing in Confucian teaching), and (d) Global level (aligned with Global Peace in Confucian teaching). This integration underscores the dynamic and unique nature of leadership as a journey, emphasizing continuous change and development across three dimensions. Additionally, insights from existing IB guidelines and handbooks for pedagogical leaders were integrated into each quadrant, gleaned through document analysis conducted in earlier research phases.



**Figure 2:** *The Enhanced Model of Pedagogical Leadership*

The below is based on the standards and implementation within the pedagogical leadership Model

### Criterion for Quadrant 1 (Competency and Dedication)

This criterion, depicted in Figure 3, outlines the standards for Quadrant 1 of the Pedagogical Leadership Model, focusing on Competency and Dedication. Educational Leader (Pemimpin Pendidikan) 2021, Volume 9, Page 58 provides a detailed explanation of the criteria set forth within this quadrant, emphasizing the essential qualities and commitments required of pedagogical leaders.

### Criterion for Quadrant 2 (Delivery and Implementation)

Figure 4 illustrates the criteria established for Quadrant 2, which pertains to Delivery and Implementation within the Pedagogical Leadership Model. This section, as detailed in Educational Leader (Pemimpin Pendidikan) 2021, Volume 9, Page 59, delineates the expectations and strategies concerning the execution and enactment of pedagogical leadership responsibilities.

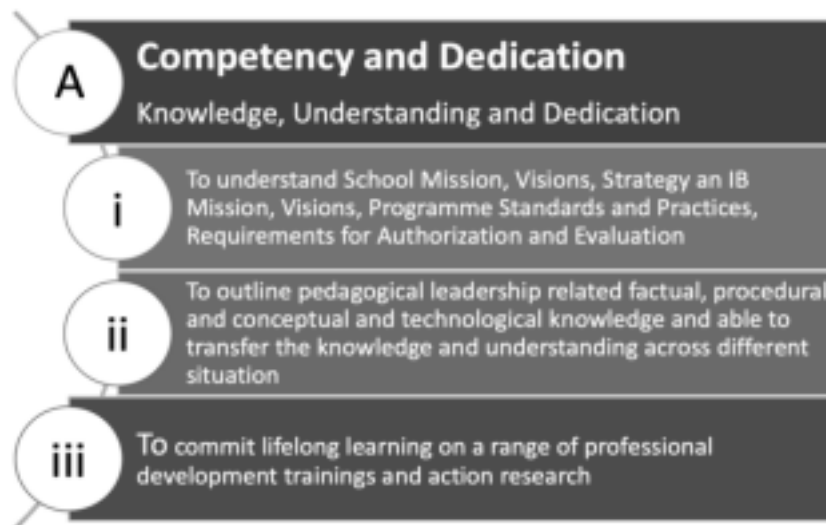
### Criterion for Quadrant 3 (Performance and Development)

Quadrant 3, addressing Performance and Development, is expounded upon in Figure 5. Educational Leader (Pemimpin Pendidikan) 2021, Volume 9, Page 60 provides an in depth examination of the criteria encompassed within this quadrant, highlighting the measures and considerations for assessing performance and fostering professional growth.



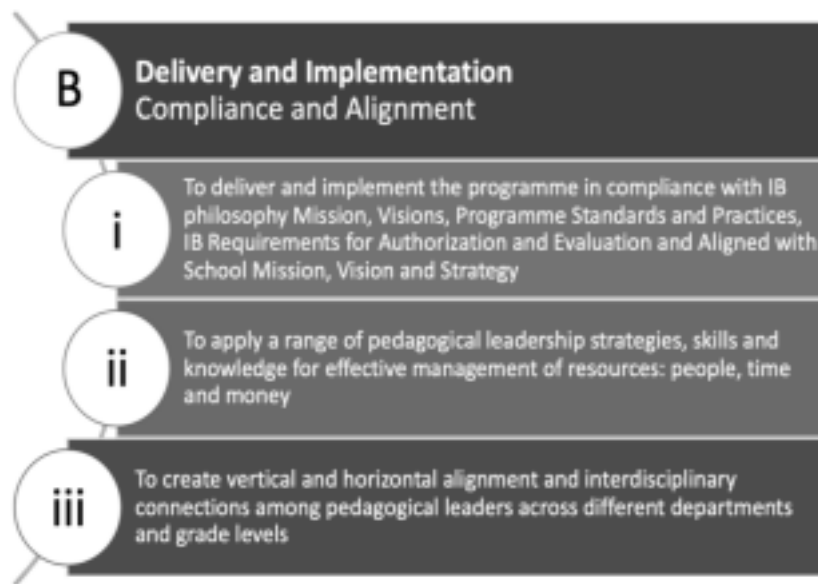
## Criterion for Quadrant 4 (Growth and Sustainability)

Figure 6 presents the criteria for Quadrant 4, focusing on Growth and Sustainability within the Pedagogical Leadership Model.



Novice	Practitioner	Mastery
i. able to understand School Mission, Visions, Strategy and IB Mission, Visions, Programme Standards and Practices, Requirements for Authorization and Evaluation	i. able to describe School Mission, Visions, Strategy and IB Mission, Visions, Programme Standards and Practices, Requirements for Authorization and Evaluation by giving multiple examples	i. able to explain School Mission, Visions, Strategy and IB Mission, Visions, Programme Standards and Practices, Requirements for Authorization and Evaluation by giving extensive examples and making connections in a global context
ii. able to outline limited pedagogical leadership related factual, procedural, conceptual and technological knowledge and limited ability to transfer the knowledge and understanding across different situations	ii. able to discuss substantial understanding about pedagogical leadership related factual, procedural, conceptual and technological knowledge by giving multiple examples and able to transfer the knowledge and understanding across different situations	ii. able to interpret pedagogical leadership related factual, procedural, conceptual and technological knowledge with extensive examples and able to effectively transfer the knowledge and understanding across different situations
iii. able to demonstrate limited commitment on lifelong learning through a range of professional development trainings and action research	iii. able to show higher commitment on lifelong learning through active participation in a range of professional development trainings and action research	iii. able to prioritise commitment on lifelong learning through continuously participating and conducting a range of professional development trainings and action research

**Figure 3: Criterion for Quadrant 1 (Competency and Dedication)**



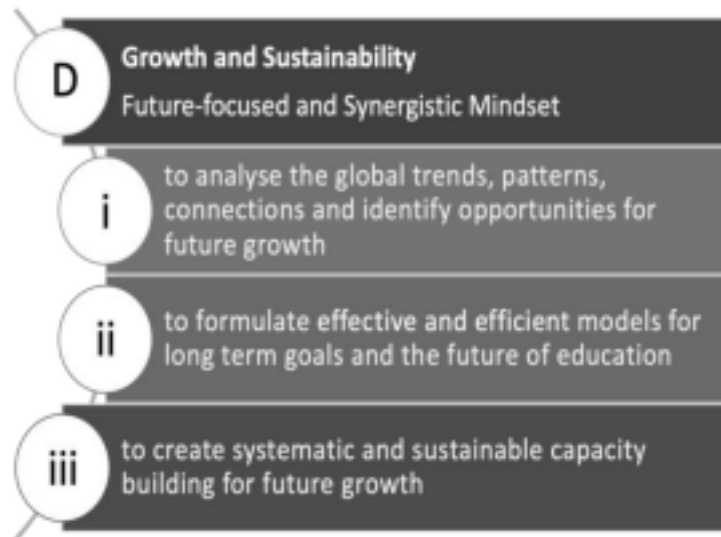
Novice	Practitioner	Mastery
i. able to deliver and implement the programme in compliance with IB philosophy, Mission, Visions, Programme Standards and Practices, IB Requirements for Authorization and Evaluation and aligned with School Mission, Visions and Strategy with a lot of guidance from the IB and School	i. able to deliver and implement the programme in compliance with IB philosophy, Mission, Visions, Programme Standards and Practices, IB Requirements for Authorization and Evaluation and aligned with School Mission, Visions and Strategy confidently and independently	i. able to deliver and implement the programme beyond the expectations of compliance with IB philosophy, Mission, Visions, Programme Standards and Practices, IB Requirements for Authorization and Evaluation and aligned with School Mission, Visions and Strategy
ii. able to apply very limited pedagogical leadership strategies, skills and knowledge for effective management of resources: people, time and money	ii. able to apply and explain substantial pedagogical leadership strategies, skills and knowledge for effective management of resources: people, time and money	ii. able to apply and justify extensive pedagogical leadership strategies, skills and knowledge for effective management of resources: people, time and money in a holistic and interconnected approach
iii. able to outline partial vertical and horizontal alignment and limited interdisciplinary connections among pedagogical leaders across different departments and grade levels	iii. able to create vertical and horizontal alignment and interdisciplinary connections among pedagogical leaders across different departments and grade levels	iii. able to evaluate and improve vertical and horizontal alignment and enhance meaningful interdisciplinary connections and engagements among pedagogical leaders across different departments and grade levels

**Figure 4:** *Criterion for Quadrant 2 (Delivery and Implementation)*



Novice	Practitioner	Mastery
i. able to reflect the effectiveness and efficiency of the <b>limited</b> pedagogical leadership practices from a <b>department or programme perspective</b> in relation to school performance and development from various stakeholders	i. able to reflect <b>confidently and independently</b> on the effectiveness and efficiency of the pedagogical leadership practices from a <b>school perspective</b> in relation to school performance and development from various stakeholders	i. able to reflect <b>critically and creatively</b> on the effectiveness and efficiency of the pedagogical leadership practices from a <b>global perspective</b> in relation to school performance and development from various stakeholders
ii. able to describe near-term goals and outline action plans <b>lack of clarity and focus</b> for school performance and development	ii. able to explain near-term goals and strategise action plans for school performance and development	ii. able to prioritise near-term goals and strategise <b>impactful, realistic, achievable and time-framed</b> action plans for school performance and development in line with <b>global development</b>
iii: able to initiate limited change at <b>department or programme level</b> with a lot of <b>support and guidance</b> from school and communicate among stakeholders	iii: able to lead change <b>confidently and independently</b> at school level and communicate <b>effectively</b> among stakeholders	iii: able to lead change <b>beyond school level</b> and communicate <b>effectively and on timely-manner</b> among stakeholders to gain their support

**Figure 5: Criterion for Quadrant 3 (Performance and Development)**



Novice	Practitioner	Mastery
i. able to identify <b>limited</b> global trends, patterns, connections and describe opportunities with <b>lack of clarity and future-focused for growth</b>	i. able to analyse the global trends, patterns, connections and identify opportunities for future growth	i. able to synthesise the global trends, patterns, connections with <b>future-focused and synergistic mindset</b> and to prioritise opportunities for future growth in a <b>global context</b>
ii. able to outline <b>brief</b> models for <b>near-term</b> goals and the future of education	ii. able to suggest models for <b>long term goals</b> and the future of education among <b>IB Community</b>	ii. able to formulate <b>effective and efficient</b> models for <b>long term goals</b> and the future of education in a <b>global context</b>
iii: able to plan capacity building for future growth	iii: able to create <b>systematic and sustainable</b> capacity building for the future growth of education industry in <b>IB Community</b>	iii: able to create systematic and sustainable capacity building for the future growth of education industry in a <b>global context</b>

**Figure 6: Criterion for Quadrant 3 (Growth and Sustainability)**

### **Purpose of this Study**

Following the introduction of the Pedagogical Leadership Model for a private Malaysian Education Provider, this paper endeavors to evaluate the model critically through insights gained from a focus group session. Educational Leader (Pemimpin Pendidikan) 2021, Volume 9, Page 61 elucidates the purpose of this study, which aims to harness the perspectives of pedagogical leaders to inform, guide, evaluate, and

refine the model. This endeavor is motivated by the scarcity of studies on pedagogical leadership within Malaysia, particularly among IB schools, accentuating the need for contextually relevant research and application. The article outlines two key research questions derived from a broader study, seeking to elucidate negative perceptions of the model among pedagogical leaders and assess its effectiveness in enhancing understanding of pedagogical leadership within the school community. While the article focuses on these specific questions, it acknowledges the broader research context from which they stem, indicating a wealth of descriptive data underpinning the conceptualization of the Pedagogical Leadership Model, albeit beyond the scope of this article

## **Methodology**

This segment elucidates the methodology employed in the broader study, of which this article is a component, utilizing a comprehensive case study approach within a Malaysian IB education provider spanning from mid-2020 to mid-2021. The study unfolds in three distinct phases:

**Phase 1:** This phase encompasses participant observation, document analysis, field observations, and reflective journaling.

**Phase 2:** Involving online personal interviews with nineteen selected pedagogical leaders, supplemented by reflective journaling.

**Phase 3:** Comprising focus group interviews with twenty-one pedagogical leaders, accompanied by reflective journaling.

Data collection from these diverse sources is meticulously analyzed utilizing ATLAS.ti Qualitative Data Analysis Software (version 9) employing methodological, data, researcher, and theoretical triangulation techniques. This multifaceted triangulation approach aims to conceptualize a comprehensive model of pedagogical leadership, informed by the strategies, challenges, and practicalities encountered by pedagogical leaders within the school.

The recorded interviews and focus groups undergo transcription, coding, and thematic analysis to address each research question holistically. For the purposes of this article, data subsets are selected through iterative and reflective methodologies to illuminate the content, processes, and contextual study of pedagogical leadership within the private Malaysian IB education provider.

## **Findings**

### **Research Question 1: Negative Perceptions of Pedagogical Leaders on the Model of Pedagogical Leadership**

Some participants expressed reservations about the comprehensiveness of the Model of Pedagogical Leadership, suggesting that it may not adequately address all dimensions of pedagogical leadership. One participant, referencing their interview script, highlighted that the model might not fully capture the diverse expectations and suggestions of different pedagogical leaders, stating:

“The Model may not be able to answer all the questions concerning pedagogical leadership, nor does it represent all expectations or suggestions of different pedagogical leaders.” (Participant R19, Reference 83:2)

Similarly, another participant agreed, stating that the model might fall short in addressing all challenges faced in pedagogical leadership, as mentioned in their interview:

“The highest level of leadership is leadership with 'heart', with unconditional and unquestionable love and dedication of AGAPE. Use your heart, your feelings, step out from your comfort zone into that unknown over the cliff. That is what you believe in in your lifetime.” (Participant R19, Reference 83:3)

Moreover, concerns were raised regarding the universal applicability of the model across different departments, programs, or schools. Participant R15 suggested that not all leadership knowledge is explicit and can be documented or portrayed in a model, emphasizing the importance of soft skills, such as interpersonal skills, which are essential for effective leadership:

“In Quadrant 1, I would suggest including interpersonal skills essential for building relationships. Similarly for other quadrants lack of soft skills which are a combination of people skills, social skills, communication skills, character or personality traits, attitudes, mindsets which are desirable in any leader.” (Participant R15, Reference 93:30)

## **Research Question 2: Understanding Enabled by the Conceptualized Model**

Participants acknowledged that the conceptualized model could enhance existing standard operating procedures for pedagogical leadership within the school. One participant, referring to their interview, noted that the model aligns with the beliefs of the school and reflects the principles and practices of the International Baccalaureate (IB) framework:

“When I look at the four quadrants that she has, yes, it's for IB school. And at the same time, it also reflects our standards and practices, and the principles and practices that we have in our IB documents. So, it is in line with the beliefs of our school.” (Participant R1, Reference 83:8)

Another participant described the model as comprehensive, particularly in an international school setting, focusing more on leadership aspects rather than teaching and learning concepts:

“This Model is more like a comprehensive model of leadership in an international school setting - it is a conceptual model mostly reflecting leadership aspects and not so much on the concept based on teaching and learning.” (Participant R12, Reference 90:31)

Furthermore, participants highlighted the model's potential contribution to teacher training and evaluation, particularly in the Mandarin Department. Participant R4 expressed confidence that following the model could guide individuals to become effective leaders, not only within the school but



also within the broader IB community:

“We can use this in the education area, and then how are we going to do like training or like how the pedagogical leadership can grow. And I think it's like, if we follow this, the model actually, I think we can know how to be a very good leader. And we can contribute not only to the school but also can contribute to the community like the IB community. So this is the impressive, impressive part for me.” (Participant R4, Reference 83:9)

The chairman of the school, drawing from their interview, provided insightful commentary on blending Western and Eastern philosophies within the model, emphasizing the dynamic nature of leadership across different stages of life:

“If you take the First Quadrant, as some young buddy, you know, coming to education, coming to the teaching profession, that's the self-improvement time... So it is so dynamic. When you are about 40- 50 years old, it is when you are in the Third Quadrant. Then the last quadrant is perhaps when you're 50 years, 60 years or beyond, like me. So is where you start talking about a visionary, a worldwide global issue of education, on professional, on something like that.” (Participant R19, Reference 83:5)

## **Discussion**

Educational institutions operate within intricate systems that require continual adaptation and refinement to progress effectively (Muli et al., 2017). Moving forward, pedagogical leaders must delineate the

components of high-quality educational reforms and translate these visionary ideals into actionable strategies within their school environments to realize their objectives (Glickman & Burns, 2020). Throughout this process, it is imperative for pedagogical leaders to remain vigilant in identifying and addressing obstacles that impede goal attainment. Additionally, forthcoming research endeavors should explore innovative approaches to mitigate persistent challenges within educational organizations, particularly in areas such as technology integration and resource management (Bond & Giles, 1997; Pettersson, 2021).

Furthermore, there is a pressing need for schools to implement robust mechanisms for assessing the progress of both educators and students. By accurately gauging the advancement of teachers and learners, educational institutions can ascertain their respective positions within the learning continuum. Should individuals demonstrate signs of lagging behind in specific subject areas, pedagogical leaders play a pivotal role in facilitating remediation efforts, providing ample time and resources for targeted learning interventions. Collaborating closely with teachers, pedagogical leaders can foster an environment conducive to innovation, enabling educators to explore and implement strategies tailored to the unique needs of their students (Radinger, 2014).

## **Conclusions**

In the pursuit of 21st-century competencies, the development of personal, social, and emotional skills alongside moral sensitivity holds paramount

importance. Pedagogical leaders must possess a keen awareness of their school's current standing, future objectives, and the requisite strategies to achieve these goals, while also delineating clear lines of responsibility for educational outcomes (Fernandez et al., 2019; Radinger, 2014).

Subsequent research endeavors could delve into establishing implementation timelines and projecting the anticipated impacts, leveraging descriptors and rubrics to aid academic departments in formulating annual pedagogical plans. Moreover, initiatives aimed at enhancing teachers' professional growth necessitate pedagogical leaders' proactive engagement in fostering innovation, guiding the teaching-learning process, nurturing a culture of continuous learning, and fostering inclusivity within educational institutions (Atasoy, 2020).

Alternatively, endeavors in this direction may involve the provision of training and capacity building programs on pedagogical leadership, featuring a structured framework conducive to self-directed learning and instructional facilitation.

Any prospective model or framework pertaining to pedagogical leadership should integrate mechanisms for self-reflection, distill key insights, offer guidance for future training initiatives, and foster a comprehensive understanding of pedagogical leadership principles, frameworks, and practices. To date, extensive research has been conducted on concept-based learning and teaching methodologies. Diverging from traditional objectives-based content programs, which predominantly focus on factual knowledge and skill acquisition, concept

based curricula prioritize the comprehension of overarching concepts. This model embraces a holistic approach, emphasizing the centrality of conceptual understanding while acknowledging the significance of factual knowledge and skills. However, it is crucial to recognize that certain components of pedagogical leadership, particularly those of a tacit nature, may evade explicit representation and can only be comprehensively grasped through firsthand observation and experiential practice.

## REFERENCES

- Andrews, D., & Abawi, L. (2017). Three-dimensional pedagogy: A new professionalism in educational contexts. *Improving Schools*, 20(1), 76–94.  
<https://doi.org/10.1177/1365480216652025>
- Atasoy, R. (2020). The Relationship between School Principals' Leadership Styles, School Culture and Organizational Change. *International Journal of Progressive Education*, 16(5), 256-274.
- Balachandran, B. A., & Mohammad, W. M. R. W. (2021). Pelaksanaan Lesson Study (Amalan Kolaborasi) dalam peningkatan Tahap Pengetahuan Pedagogi Guru Bahasa Melayu di Sekolah Rendah Tamil Daerah Seremban. *Jurnal Dunia Pendidikan*, 3(2), 154–163.
- Bi, Leilei & Ehrich, John & Ehrich, Lisa C. (2012). Confucius a transformational leader: Lessons for ESL leadership. *International Journal of Educational Management*. 26. 391-402.
- Bøe, M., & Hognestad, K. (2017). Directing and facilitating distributed pedagogical leadership: Best practices in early childhood education. *International Journal of Leadership in Education*, 20(2), 133-148.
- Bond, R., & Giles, C. (1997). The contracting resource base: a catalyst

for educational administration reform. *International Journal of Educational Management*.

Bryant, D, Walker, A, Wong YL, Adames, A and Katyal, K. 2019. A distributed perspective on middle leadership in International Baccalaureate continuum schools in North-East Asia.

Bethesda, MD, USA. International Baccalaureate Organization.

Bush, T., & Glover, D. (2014). School leadership models: What do we know?. *School Leadership & Management*, 34(5), 553-571.

Bush, T., & Glover, D. (2016). School leadership and management in South Africa: Findings from a systematic literature review. *International journal of educational management*.

Butt, M. I. (2017). Principal, as a Pedagogical Leader: In the Perspective of Good Governance in the Public Sector Colleges of Pakistan. *International Journal of Management and Applied Science*, 3(3), 81-84.

Dwivedi, P., Chaturvedi, V., & Vashist, J. K. (2020). Transformational leadership and employee efficiency: knowledge sharing as mediator. *Benchmarking: An International Journal*.

Farrell, M. (2017). Leadership Reflections: Leadership Skills for Knowledge Management.

*Journal of Library Administration*, 57(6), 674–682.

<https://doi.org/10.1080/01930826.2017.1340768>

Fonsén, E., & Ukkonen-Mikkola, T. (2019). Early childhood education teachers' professional development towards pedagogical leadership. *Educational research*, 61(2), 181-196.

Gallardo, M., Heiser, S., & Arias McLaughlin, X. (2017). Developing pedagogical expertise in modern language learning and specific learning difficulties through collaborative and open educational practices. *The Language Learning Journal*, 45(4), 518-529.

Gento Palacios, S., Gonzalez-Fernandez, R., & Silfa Sencion, H.-O. (2020). Affective dimension of teacher's pedagogical leadership. *Revista Complutense De Educacion*, 31(4), 485–495.  
<https://doi.org/10.5209/rced.65635>

Ghavifekr, S., Radwan, O., & Velarde, J. M. (2019). Teachers' Perceptions of Principals' Instructional Leadership Roles and Practices. *Persepsi Guru Terhadap Peranan Dan Amalan Kepimpinan Instruksional Pengetua.*, 44(2), 72–83.

<https://doi.org/10.17576/JPEN-2019-44.02-08>

Glickman, C. D., & Burns, R. W. (2020). Leadership for Learning:: How to Bring Out the Best in Every Teachers. ASCD.

- Greenhill, V. (2010). 21st Century Knowledge and Skills in Educator Preparation. *Partnership for 21st century skills*.
- Fernández, R. G., Ruiz, A. P., Gómez, E. L., & Palacios, S. G. (2019). Exploring Teacher's Pedagogical Leadership: The Formative Dimension. *Contextos Educativos-Revista De Educacion* , (24), 9-25.
- Heikka, J., Pitkäniemi, H., Kettukangas, T., & Hyttinen, T. (2019a). Distributed pedagogical leadership and teacher leadership in early childhood education contexts. *International Journal of Leadership in Education*, 1-16.
- Heikka, J., & Suhonen, K. (2019b). Distributed pedagogical leadership functions in Early Childhood Education settings in Finland. *Southeast Asia Early Childhood Journal*, 8 (2),43-56.
- Leo, U. (2015). Professional norms guiding school principals' pedagogical leadership. *International Journal of Educational Management*.
- Lynn-Sze, J. C., Yusof, N., & Ahmad, M. K. (2014). The relevance of Confucian values to leadership communication. *Jurnal Komunikasi: Malaysian Journal of Communication*, 30.
- Male, T., & Palaiologou, I. (2015). Pedagogical leadership in the 21st century: Evidence from the field. *Educational Management Administration & Leadership*, 43(2), 214– 231.



<https://doi.org/10.1177/1741143213494889>

Male, T., & Palaiologou, I. (2015). Pedagogical leadership in the 21st century: Evidence from the field. *Educational Management Administration & Leadership*, 43(2), 214- 231.

Male, T., & Palaiologou, I. (2017). Pedagogical leadership in action: Two case studies in English schools. *International Journal of Leadership in Education*, 20(6), 733-748.

Mitchell, R., Boyle, B., Parker, V., Giles, M., Joyce, P., & Chiang, V. (2014). Transformation through tension: The moderating impact of negative affect on transformational leadership in teams. *Human Relations*, 67(9), 1095-1121.

Muli, J. V. M., Díaz, I. A., & Montoro, M. A. (2017). Leadership in Pedagogical Management: a vision of Secondary School Principals. *Journal for Educators, Teachers and Trainers*, 8(1).

Noor Azimah Abdul Rahim (2020, November 24). Post-Budget 2021: Integrity is essential

for education budget.. *The Edge Malaysia*.

<https://www.theedgemarkets.com/article/postbudget-2021-integrity-essential-education-budget>.

- Onodipe, G., Robbins, M., Ayuninjam, G., Howse, T., Cottrell-Yongye, A., & Curry Savage, J. (2020). Growth of Pedagogical Practice in an Active Multidisciplinary FLC on Flipped Learning. *International Journal for the Scholarship of Teaching and Learning*, 14(2), 2.
- Peng, D., & Vaš'atková, J. P. (2016). Headteacher as pedagogical leader in pedagogical leadership in schools. *GRANT journal*, 5(2), 58-60.
- Pettersson, F. (2021). Understanding digitalization and educational change in school by means of activity theory and the levels of learning concept. *Education and Information Technologies*, 26(1), 187-204.
- Radinger, T. (2014). School Leader Appraisal—A Tool to Strengthen School Leaders' Pedagogical Leadership and Skills for Teacher Management?. *European Journal of Education*, 49(3), 378-394.
- Rahman, N. A. S. bt A., Noor, M. A. b M., Yusof, R. bt, & Yusof, H. bt. (2017). Kesahan Model Amalan Kepimpinan Guru. *JuKu: Jurnal Kurikulum & Pengajaran Asia Pasifik*, 3(2), 1–11.
- Rasidi, W. F. W. M., Mydin, A. A., & Ismail, A. (2020). Professional Learning Community: Strategi Bimbingan Instruksional dan Amalan Profesional Guru. *JuPiDi: Jurnal Kepimpinan Pendidikan*, 7(3), 38–54.

Rodriguez-Gallego, M. R., Ordonez-Sierra, R., & Lopez-Martinez, A. (2020). School management: Pedagogical leadership and school improvement. *Rie-Revista De Investigacion Educativa*, 38(1), 275–292. <https://doi.org/10.6018/rie.364581>

Rojas Carrasco, O. A., Vivas Escalante, A. D., Mota Suarez, K. T., & Quinonez Fuentes, J. Z. (2020). Transformational leadership from the perspective of humanist pedagogy. *Sophia-Coleccion De Filosofia De La Educacion*, 28, 237–262. <https://doi.org/10.17163/soph.n28.2020.09>

Sabri, W. N. A. B. M., & Baba, S. (2017). Amalan Kepemimpinan Kolaboratif Dalam Kalangan Pemimpin Instruksional Di Sekolah Rendah. *JuPiDi: Jurnal Kepimpinan Pendidikan*, 4(3), 1–19.

Safiek, M. (2020). Kepimpinan Guru Besar dalam Pelaksanaan Pendidikan Abad Ke-21: Satu Kajian Preliminari. *Attarbawiy: Malaysian Online Journal of Education*. <http://eprints.iab.edu.my/v2/956/>

Samad, R. S. A., Wahab, H. A., & Nee, L. Y. (2017). The Factor of Principal Instructional Leadership Roles that Contributes to Teachers' Creative Pedagogy In Kuala Pilah Primary Schools, Negeri Sembilan, Malaysia. *JuKu: Jurnal Kurikulum & Pengajaran Asia Pasifik*, 4(4), 44–52.

Wanner, T. (2015). Enhancing Student Engagement and Active Learning through Just-in Time Teaching and the Use of Powerpoint. *International Journal of Teaching and Learning in*

*Higher Education*, 27(1), 154-163.

Wolgast, A., & Fischer, N. (2017). You are not alone: Colleague support and goal oriented cooperation as resources to reduce teachers' stress. *Social Psychology of Education*, 20(1), 97-114.

Yang, W., & Lim, S. (2020). Toward distributed pedagogical leadership for quality improvement: Evidence from a childcare centre in Singapore. *Educational*

*Management Administration & Leadership*, 1741143220975768.

<https://doi.org/10.1177/1741143220975768>