

Distributed pedagogical leadership practice for sustainable pedagogical improvement: A literature review (2010–2023)

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Abstract

Leadership from a distributed pedagogical perspective involves engaging multiple professionals in implementing shared responsibilities. In educational organizations, leadership responsibility structures have changed, with researchers advancing a more decentralized leadership system for sustainable pedagogical improvement. These global changes in education systems have informed the demand for sustainable quality teaching, the desire for 21st-century learning skills, and rapid progress in education. As a result, traditional individual 'heroic leadership' is no longer tenable in any learning environment that intends to achieve quality pedagogical outcomes. Therefore, this narrative review paper aims to examine the essence of distributing pedagogical leadership responsibilities among multiple professionals to understand how the concept is perceived in diverse educational contexts and settings. This study reviewed relevant empirical research studies conducted to investigate the concept of distributed pedagogical leadership in Finland, Norway and Singapore. The findings revealed some gaps that informed our understanding of the concept and recommended further research studies.

1 | INTRODUCTION

In over a decade, leaders' roles and responsibilities in educational learning organizations have been experiencing a paradigm shift in different parts of the world (Chen, 2023). Similarly, leadership structures and responsibilities have continued developing and taking different forms (Mukan et al., 2015). Education systems are shifting from

hierarchical individualized leadership to decentralized shared responsibilities with multi-professional personnel (Zulkifly et al., 2020). This is due to changes in global education systems and pedagogical structures, demands for sustainable quality teaching, the desire for 21st-century learning skills, and rapid progress in the field of education (Jie & Cheah, 2021). With these changes and transformations, an individual's heroic leadership is no longer tenable in any learning environment that intends to achieve quality pedagogical outcomes (Shava & Tlou, 2018).

The dynamism, inclusivity and collegial practice of a team in a community of practice are facilitated through enhanced educational leadership and collaborative engagements among the stakeholders (Cansoy et al., 2022). Administrative formal, and informal position holders in the organization are responsible for creating and cultivating a conducive learning environment that encourages innovation, and creativity among learners and assists students in reaching their full potential by offering them the best learning experience in and out of the classroom (Álvarez-Arregui et al., 2021). However, in the traditional hierarchical structure of leadership, teachers are required to enact narrowly conceived standardized curricula making them less curriculum thinkers (Yang & Lim, 2023).

Teaching is a leadership profession where the teacher directs and guides the pedagogical processes to produce knowledge and collaborations with colleagues for continuous learning achievements (Chen, 2023). Pedagogy entails all the teaching and learning activities and processes a teacher directs, facilitates and leads in the classroom to help learners generate pieces of knowledge, attitudes and skills that guide the curriculum (Loughran, 2013; Waring & Evans, 2015). Additionally, leadership is the art of guiding individuals or groups in achieving strategic visions and goals through the participation and collaboration of all stakeholders (Bellibaş et al., 2021; Jie & Cheah, 2021). According to Sergiovanni (2005) through leadership in the classroom, teachers can understand the problems their learners are facing, help them to manage these problems, and navigate through these problems in the future.

Therefore, pedagogical leadership creates structures where roles and responsibilities are shared to support the strategic visions and values for a growing sustainable learning environment (Alameen et al., 2015; Contreras, 2016; Fonsén et al., 2023). Formal and informal teacher leaders are the central pillars of building a successful and conducive school environment for sustainable teaching and learning (Grice, 2019; Jie & Cheah, 2021). When leadership responsibilities are decentralized and evenly shared in the learning community, the teachers are focused on influencing professional development, school change and learners' academic improvement (Chen, 2023; Nguyen et al., 2019). When leadership responsibilities are distributed to the stakeholders, they develop the capacity to understand how leadership is enacted and the challenges faced in the organization (Heikka, 2014). Once responsibilities are distributed in educational organizations, a considerable number of teachers actively participate in collegial decision-making processes for sustainable pedagogical development and achievements (Grice, 2019; Mukan et al., 2015).

It is against this background that this paper intends to investigate how distributed pedagogical leadership (DPL) enhances sustainability in the teaching and learning processes in different educational settings and contexts. In this narrative literature review, the included research articles were searched, identified, selected, analysed, and interpretations made from pieces of evidence of literature on the central phenomenon under investigation. The study aimed to explore the perceptions and understanding of educational stakeholders on the enactment of DPL practice at different educational levels. Additionally, we purposed to understand the novelty of the concept in enhancing sustainable pedagogical improvements, particularly for quality teaching among teachers and learning achievement for the learners.

To gain nuanced insightful knowledge and practice of the concept of DPL, the researchers searched, identified and included recent and relevant works of literature from peer-reviewed journal-publishing organizations with highly ranked publications such as open-access journals in Elsevier-Science Direct, Google search, Semantic Scholar, Sage journals, Taylor & Francis Online, and Springer. Other searches were through electronic referencing of topics relevant to the journal articles which led to a snowball effect in compiling the evidence. Further intensive searches for full-text open-access research articles and abstracts were obtained from the electronic databases of Emerald Insights, Education Research Information Centre (ERIC), Web of Science, Springer Journal Archives, Sage Journals, EBSCOhost, Wiley online library, and Elsevier's Scopus. Finally,

extensive searches were done on Google Scholar, ResearchGate, and other online catalogues provided by the University of Szeged online library services.

From the searches, the most recent, and relevant peer-reviewed articles were identified and included in this review. After the search, the authors noted that there were no published literature review articles, concept papers, empirical research reviews, books, or other documents on this topic published before 2010. Therefore to guide and expedite the search, exclusion, and inclusion processes, broad keywords such as distributed leadership, pedagogical leadership, instructional leadership, leadership, school leaders, and pedagogy were used for directing the search for relevant works of literature from 2010 to 2024. Later, these keywords were narrowed to distributed leadership, and pedagogical leadership to help in refining the search to the specific intended concept of DPL as presented in [Table 1](#).

However, during the search, other related areas such as principal leadership, and teacher leadership emerged and were considered useful for further explorations in the future. All the 11 peer-reviewed empirical research studies found from the search were selected to provide empirical shreds of evidence. These studies were conducted in Australia, Finland, Norway, and Singapore. This informed the desire to further understand this concept in diverse educational settings in the world. Thus, this paper aims to review the literature from 2010 to 2023 on the enactment of DPL in different educational contexts in the world. The following overarching research question is the main inquiry addressed in this study:

What is the perception and understanding of education stakeholders on the concept of distributed pedagogical leadership and practice from works of literature between 2010 and 2023?

To address this research question, the paper is structured as follows. First, we unpacked the concept of DPL in different contexts to understand how it is perceived and practised. Second, we reviewed the works of literature to gather empirical pieces of evidence on the practice in vocational education and training schools and early childhood education settings. Third, we dig through the empirical evidence to discuss how the practice facilitates quality pedagogical development for sustainable teaching and learning and learners' achievements. Finally, the paper concludes by providing the limitations of the review, the implications, and recommendations for future research work on the concept.

2 | THE CONCEPT OF DISTRIBUTED PEDAGOGICAL LEADERSHIP PRACTICE

The concept of DPL has been vaunted as a plausible element in enhancing quality and sustainable pedagogical improvement and learners' academic achievement in different educational contexts (Heikka, 2014). This concept embeds hybrid educational leadership concepts of research practices namely distributed leadership (DL) and pedagogical leadership (PL; Grice, 2019; Heikka et al., 2013). The prominence is to show how the leadership concept is used in educational settings around the world, why it is adopted as a best practice in enhancing sustainable quality teaching and learning outcomes in learning contexts as well as what is done for it to be relevant

TABLE 1 The literature search results as guided by the keywords.

| Number/ concept | Distributed leadership | Pedagogical leadership | Teacher leadership | Instructional/ principal leadership | Distributed pedagogical leadership |
|-------------------------|---------------------------|---------------------------|-----------------------|---|--|
| Searched (2000–2024) | 325 | 92 | 156 | 25 | 11 |
| Included | — | — | — | — | 11 |

in the implementation of teacher education curriculum (Grice, 2019; Heikka, 2014; Heikka et al., 2013; Heikka & Suhonen, 2019; Yang & Lim, 2023).

Empirical studies have been carried out on the significance of DPL in the improvement of learning institutions' leadership processes as well as learners' academic performance and achievement as postulated in 21st-century learning skills. Most of the studies on this topic, however, have mainly been done on the continents of Europe and Asia thus limiting the experiences from the other parts of the world where the concept is not known or considered a new educational leadership practice. Some studies illuminated the enactment of DPL practices with a focus on early childhood education (ECE) centres as well as vocational education and training (VET) in secondary schools from different contexts (Bøe & Hognestad, 2017; Grice, 2019; Heikka et al., 2021; Jäppinen, 2010, 2012; Yang & Lim, 2023). However, from the reviewed literature, the researchers deduced that most educational stakeholders from different contexts and levels of learning are not well informed on this concept as a practice for enhancing quality teaching and learning in the community of practice.

Additionally, a considerable body of reviewed literature from empirical studies has revealed that DPL practice has a significant influence on the pedagogical process which facilitates, improves, and promotes teachers' classroom practices that enrich the academic progress of learners which in turn enhances the expected learning outcomes (Heikka & Suhonen, 2019; Jäppinen, 2010; Jäppinen & Sarja, 2012; Spillane, 2005). Subsequently, studies have ascertained that DPL practices play a pivotal role in shifting the emphasis of sustainable quality teaching and learning activities that are more on improving the academic achievement of learners (Bøe & Hognestad, 2017; Heikka, 2014; Jäppinen, 2010; Yang & Lim, 2023).

Heikka and Suhonen (2019) opined that DPL encompasses implementing leadership practices by involving multiple professional teachers in pedagogical development through collaborative interdependence in the learning community. The concept of DPL is essential for quality teaching as supported by many successful teachers who concurred that a good practice should not depend on only unrelated application of techniques (Heikka et al., 2021). Involving teachers in participative leadership and collegial decision-making processes is considered critical in creating a feeling of responsibility in the team which enhances the achievement of goals and a shared sense of direction in the organization (Grice, 2019; Muijs & Harris, 2007).

However, Jäppinen (2010) ascertained that the DPL concept was created from distributed leadership by scholars who focused more on both shared, delegated, and collaborative elements of leadership as a definition and description of this concept. DPL as a leadership concept opens a new space for conceptualizing the perceptions and understanding of leaders, their actions, and responsibilities in complex, unique, and dynamic learning organizations (Bøe & Hognestad, 2017). DL is perceived to be a theoretical concept used to explain the pedagogical aspects of shared actions, and researchers have embraced it to further generate nuanced insightful experiences from the concept of DPL in education (Heikka & Suhonen, 2019). This concept connects DL and PL practices as appropriate for stakeholders' interaction when implementing their leadership responsibilities (Grice, 2019; Heikka et al., 2013).

3 | FINDINGS FROM THE REVIEW OF THE EMPIRICAL RESEARCH LITERATURE

The pieces of evidence are gathered from 11 empirical research studies on DPL that were conducted in Australia, Finland, Norway, and Singapore. This narrative literature review intended to provide a subjective perspective on the central phenomenon under investigation. Additionally, we provided a detailed and comprehensive analysis of the current knowledge on DPL and how its implementation influences sustainable quality pedagogical improvements in different teaching and learning contexts. For a comprehensive analysis and synthesis of the review of the findings, the narration is categorized into three components: (a) *DPL practice in vocational education and training contexts*; (b) *DPL practice in early childhood education (ECE) contexts*; and (c) *DPL practice for sustainable quality pedagogical improvements*.

3.1 | DPL practice in VET contexts

Jäppinen (2010) in a study in Finland entitled 'Preventing Early Leaving in VET: Distributed Pedagogical Leadership in Characterizing Five Types of Successful Organizations' opined that DPL is a process where teaching and learning is a collaborative responsibility shared in a systematic pedagogical process. Through even distribution of pedagogical responsibilities, all the members of the staff interact and conduct their daily routines in a shared atmosphere both over social interaction activities in the learning environment. The study explored collaborative endeavours to understand how the DPL concept assisted students in transitioning from basic education to vocational education level of education. In the enactment of DPL practice, the members of staff were encouraged to develop collaborative and interactive pedagogical space in which the stakeholders had shared responsibilities for pedagogical improvement and quality learning outcomes. Through DPL, students learning responsibilities are shared by multiple working personnel in long-term and systematic pedagogical practices (Jäppinen, 2010).

Within the community of practice, the stakeholders form a collaborative joint structure that was agreed upon by every member of the team based on accumulative collective cognition and understanding. Additionally, Jäppinen (2010) argued that when there is collaboration in a team, an interactive synergy among the members of staff is inculcated in practice which transforms their collective thinking thus enhancing a greater ability of shared intelligence that supersedes that of an individual member. The members of the organization have the responsibility of establishing a productive pedagogical atmosphere within the learning environment that encourages multi-professional responsibilities and participation to improve the learners' learning outcomes.

The overall ability of members to create sustainable and productive pedagogical spaces is premised on innovativeness, creativity, fruitfulness, sensitivity of leadership structures, and models, development of pedagogical and organizational leadership, coherence, versatility, commitment, interaction, and networking in the personnel's working environment and culture (Jäppinen, 2010, p. 300). Furthermore, the synergetic collaboration of the members of staff enhances their collective thinking, harnesses greater ability, and brings about the intelligence needed to help learners in their learning and education.

Jäppinen and Sarja (2012) in a study 'Distributed Pedagogical Leadership and Generative Dialogue in Educational Nodes' further advanced that DPL practice is the professional characteristics within the pedagogical spaces that are embraced by all stakeholders (principals, administrative officers, teachers, assistants, students, other support personnel, partners, and parents) who agree to share common visions and mission. The study aimed to understand the stakeholders' collaborative endeavours with the generative nodes in the transitions between basic education and VET in Finland (Jäppinen & Sarja, 2012, p. 64).

Once leadership elements are shared or delegated, the interests, visions, aims, and values are collectively nurtured to achieve what an individual cannot achieve separately. Through DPL, synergetic collaboration is manifested with the actions of the whole learning community becoming greater than the divided parts. To support students' learning paths in the learning environment, proper channels of communication 'sit in the center of all human relationships' in the teams and the whole organization (Jäppinen & Sarja, 2012, p. 64). Through active and interactive interpersonal communication, productive collaboration and participative interactions are tenable to manage students' progress.

Furthermore, synergetic relationships and collegial leadership practices are developed within a focused collective work interaction that is jointly agreed upon and directed by each member of the learning community. Leaders work in collaboration with every member of the organization through collective cognition and understanding. Generative dialogue is formulated to generate a common framework of thinking shared meaning and a collective worldview as an innovative tool in a community of practice. The stakeholders were encouraged to reflect on how their collaboration practice influenced or could influence the learning paths of the students. Through such reflections, stakeholders can shape their contextual goals and design collaborative activities through their social relationships (Jäppinen & Sarja, 2012). Therefore, in this context, DPL means shared knowledge, experiences, and understanding that evokes synergetic working relationships.

In another study that aimed at introducing both a theoretical notion and a practical model of DPL in VET in Finland, entitled 'Distributed Pedagogical Leadership in Support of Students Transition', Jäppinen (2012) pontificated that DPL has its background in distributed leadership, leaderful practices, and managing without leadership that helps in the shifting leadership from individual centrality to an innermost quality leadership practice in a professional learning community. DPL concept concerns every member of the school community as it is embedded in a collaborative practice of leadership where everyone has a sense of belonging. Each member of the learning community collaboratively leads the pedagogical activities through shared cognition and understanding to create a synergetic working environment.

All stakeholders in the organization are engaged in pedagogical activities and actions that are executed in a unique and dynamic process. Collaborative leadership is the innermost practice in a professional community of practice. Since DPL is both fluid and mutable, it concerns the creation of a synergy that is characterized by collaborative leadership by every member of the learning organization. For the study, leadership practices are enshrined in collective (every member can serve as a leader and be involved in leadership implementation); concurrent (leadership is practised at the same time by any member of the learning community); collaborative (everyone has authority to speak and control the entire organization); and compassionate practices (the dignity of every single member of the community is preserved and everyone is considered during decision-making and implementation processes; Jäppinen, 2012, p. 26).

Jäppinen and Maunonen-Eskelinen (2012) conducted a study in Finland entitled 'Organizational Transition Challenges in the Finnish Vocational Education - The Perspective of Distributed Pedagogical Leadership'. Their findings revealed that stakeholders are engaged in interactive and collaborative learning processes that help to improve their organizational skills and the school's pedagogical practices. Through collaborative learning, stakeholders in the learning community analyse issues from diverse perspectives and search for mitigative remedies beyond their limitations.

They observed that DPL is developed from hybrid concepts of distributed leadership (DL), and pedagogical leadership (PL) for collaborative learning actions. While DL is about accumulative and collaborative engagement where the leadership activities and practices are used to express democracy, increase work effectiveness, and build human capacity, PL is about stakeholders sharing their ideas, initiatives, and expertise in a collaborative learning environment to build a learning ecology for all. Through DPL, the leaders can influence collective efficacy, and thoughts, and provide a changing working experience through the empowerment of the professional learning community.

From this perspective, DPL is a collaborative action where collective cognition, shared understanding, and synergy are created during pedagogical development (Jäppinen & Maunonen-Eskelinen, 2012). Learning communities are designed to provide a healthy learning ecology flexible enough to be restructured, modified, and redesigned whenever possible and necessary. This is possible through collaborative learning and community building where everyone thinks together and engages through interactive shared dialogues. DPL practice in a school system facilitates organizational adaptability in acquiring and developing new pedagogical opportunities for teachers and students.

3.2 | DPL practice in ECE contexts

Heikka et al. (2013) in their study entitled 'Enacting Distributed Pedagogical Leadership in Finland: Perception of Early Childhood Education Stakeholders' postulated that pedagogical leadership is significant to pedagogical development and improvement in ECE contexts. The study purposed to investigate how DPL is practised in ECE contexts in Finland. The interdependence of pedagogical leaders and stakeholders in the enactment of leadership practices is perceived as an important element in effective pedagogy and curriculum change as well as efficient pedagogical implementation and improvement. They urged that DPL practice was majorly involved

with pedagogical development where the institution's leadership and the stakeholders work interdependently in enacting leadership for effective pedagogical improvement.

Distributed pedagogical leadership as an educational leadership concept has a hybrid connection between DL and PL approaches. DL increases interaction between stakeholders by assisting in the implementation of leadership responsibilities through better interconnection, consistency, and coherence in service delivery. The pedagogical achievement of DL is determined by the synergy and interactive influences of every member of the community of practice. On the other hand, PL involves taking responsibility for the shared understanding of the learning community with a focus on the students' learning, capacity building of the teachers, and values and beliefs about education in general practice. DPL enriches pedagogical development through capacity building by creating a zone of interdependence among the stakeholders. This, therefore, helps improve the distribution of responsibilities, functions, and cognition among the stakeholders involved in enacting leadership.

Distributed pedagogical leadership practice empowers teachers to be involved in formal and informal leadership positions and responsibilities. This is made possible through the core elements of DL: (a) involvement of multiple individuals in leadership; (b) a focus on leadership enactment rather than leadership roles; (c) interdependence of the leadership enactment by multiple individuals; and (d) the connection of the significance of leadership to educational work (Heikka et al., 2013, p. 257).

From the findings, the researchers revealed that distributing pedagogical leadership to multiple individuals was highly regarded by all the participants. Teachers in VET schools were perceived as leaders in pedagogy but only when formally appointed to administrative leadership positions. The perception of the participants was that pedagogical leadership was connected to administrative leadership at the ECE centres. However, the interdependence between people and their enactment of their leadership responsibilities was mainly for pedagogical improvement as a core element of DPL practice. In pedagogy, DPL purposed to help in capacity building for the stakeholders by creating a zone of interdependence to enhance pedagogical development (Heikka et al., 2013, p. 272).

In a study 'Distributed Pedagogical Leadership in Early Childhood Education' by Heikka (2014), DPL in education is observed as a practice that focuses on the core responsibility of school leadership under the guidance of a leader. The study aimed to understand how the zones of interdependence were created between the leadership enactment by the ECE centre directors and the teachers. A key part of DPL practice was the ability of the pedagogical leader to mobilize people and the community to face their challenges and to make progress towards solving them. Heikka (2014) believes that the concept of DPL in ECE contexts is best understood as a practice of distributing leadership responsibilities among teacher leaders, followers, and other members of the school community.

The researcher found out that DPL in the school setup, responsibilities, and practice are "stretched over" the whole school, social, and community context. The significance of DPL in the teaching and learning process, the school vision, mission and goals, management of the instructional programs as well as promoting the school learning climate (Hoy & Miskel, 2004). The main responsibility of a pedagogical leader differs from that of a regular administrative leader in many meaningful ways (Fabry et al., 2022) with principals spending most of their time dealing strictly with administrative work whilst pedagogical leaders deal with pedagogical issues and responsibilities (Leo, 2015). The leadership enactment and interdependence are embedded in the core elements of implementing DPL as involving multiple persons in leadership, the enactment of pedagogical leadership through the ECE contexts, and the interdependence in leadership enactments (Heikka, 2014, p. 38).

Heikka and Suhonen (2019) in their study 'Distributed Pedagogical Leadership Functions in Early Childhood Education Settings in Finland' purposed to develop an understanding of the interdependence between centre directors and ECE teachers. This study investigated the implementation of DL practice in harnessing teachers' skills and their leadership positions in enacting PL within ECE settings. DL approach was termed to assist both the centre directors and teachers to set and attain their goals through support, organizational changes, pedagogical development, enhancing teachers' professional development, and directing curriculum implementation and reforms. The essence of DL is the mutual understanding of the meaning of the organization by every member of the team (Heikka & Suhonen, 2019).

The enactment of PL was between the formal leaders and the ECE teachers. The enactment of separate but interdependent leadership responsibilities in ECE was grounded on the five dimensions of DPL (Heikka, 2014; Heikka & Suhonen, 2019). The teachers' pedagogical leadership responsibilities are planning, preparing, developing, and assessment of the teaching and learning processes. DPL therefore emerges as a leadership practice that enhances professional interdependence between administrative leaders and working teachers through organizational shared goals, visions, and pedagogical improvement strategies.

The interdependence in DPL practice is a constructive element of implementing leadership practices. This approach is supported by sharing responsibilities through (a) collaborated distribution—people sharing the time, place, tasks, and goals, (b) collective distribution—organizational leaders working separately but interdependently with teachers to enable everyone to achieve their common goals, (c) coordinated distribution—the shared tasks and evaluation is accomplished by certain sequences of action. Through these distributions, effective organizations involve teachers in formal and informal leadership opportunities and responsibilities and participate in collegial decision-making processes. Well-organized distribution of responsibilities, and functions, and aligned synergetic relationships in the teams and professional community of learning.

From their findings, the ECE stakeholders and professionals were very eager to embrace the concept of DPL. The enactment of PL was being done separately by formal and informal leaders within their teams but interdependently through ECE organizational contexts. However, ECE teachers in Finland were found to lack authority, autonomy, power, and support when enacting their leadership practices. The researcher identified the following functions of DPL: constructing shared vision, goals, and mutual values between centre staff; developing ECE pedagogy within the centres; facilitating learning and expertise of educators; building the operational structures and culture of the centre; and enhancing efficient and participatory decision-making within the centres (Heikka & Suhonen, 2019, p. 47).

Another study 'Distributed Pedagogical Leadership and Teacher Leadership in Early Childhood Education Contexts' by Heikka et al. (2021) opined that the distribution of leadership responsibilities is a combination of individual and collective responsibilities of the leaders in the education contexts. These responsibilities are implemented between the leaders and the teachers in the organization. The processes are therefore largely influenced by the effective implementation of distributed leadership roles and teachers' skills and leadership positions in implementing pedagogical leadership in and out of the classroom. To achieve common goals and vision of the organization, there is a need to create a zone of interdependence between the leaders and the stakeholders.

The scholars premised their key findings on the following five dimensions of DPL as identified in a study (Heikka, 2014, p. 82) and considered them as crucial in sharing DPL responsibilities: (i) enhancing shared consciousness of visions and strategies between the stakeholders; (b) distributing responsibilities for pedagogical leadership; (c) distributing and clarifying power relationships between the stakeholders; (d) distributing the enactment of pedagogical improvement within centres; and developing a strategy for DPL.

This study advanced the significance of involving teachers in leadership development and responsibilities. From their findings, teachers perceived their pedagogical leadership responsibilities to be inherently built into their teaching profession. Effective engagement of teachers as leaders enhances higher teacher commitment to pedagogical development and improvement (Heikka et al., 2021). Teachers' functions and responsibilities include leading curriculum pedagogy; organizing daily routines and activities; enhancing pedagogical development; directing and facilitating teaching practices; organizing the division of labour within teams; collaborative engagements with parents, synergetic professional learning; and collegial and participative decision-making processes (Heikka et al., 2021).

3.3 | DPL practice for sustainable quality pedagogical improvements

Bøe and Hognestad (2017) in a study entitled 'Directing and Facilitating Distributed Pedagogical Leadership – Best Practices in Early Childhood Education' purposed to examine how formal teacher leaders at the middle management level direct and facilitate the provision of resources for the implementation of DPL in Norway. DPL

practice as a hybrid leadership concept was used as a useful for understanding teachers as leaders. It encouraged the distribution of leadership responsibilities in school organizations as a bottom-up approach to promoting interactive and collaborative practice. They discouraged the 'hero-hierarchical-thinking' where one person performs all the leadership responsibilities with a few in the middle level only carrying out delegated duties. They employed a qualitative shadowing research method to explore the nature of formal and informal leadership. This entailed closely monitoring and observing the leadership practitioners over a period.

Through DPL practices, formal teachers as leaders are expected to have greater influence in pedagogical development through more delegated leadership responsibilities that give them authority to direct how work is done and ensure that everyone in the team participates in such activities. However, through delegated responsibilities, formal teacher leaders are under immense pressure to direct and facilitate staff resources for successful collaboration and quality pedagogical improvement. Pedagogical work should be evenly distributed to everyone on the staff. When pedagogical work is well distributed to the whole staff, the formal teacher leaders and their colleagues perform similar tasks interdependently in a collaborative relationship. For quality pedagogical development and improvement to be achieved, strong pedagogical leadership practices are essential in developing best practices in collaborative and teamwork engagements in the teams.

Grice (2019) in a research study in Australia entitled 'Distributed Pedagogical Leadership for the Implementation of Mandated Curriculum Change' reiterated that leading as a practice is significant in helping to understand the concept of pedagogical leadership with a focus on actions and influence of leaders and teachers. Pedagogical leaders, in the leadership structure of any learning community, have a great influence on educational work policy and students' learning outcomes, especially during rapid curriculum changes and pedagogical improvements. To understand the concept and practice of DPL, the author opined that it is important to first understand distributed leadership and the collective distribution of responsibilities to teachers and students as forms of pedagogical leadership. Furthermore, the distribution of leadership responsibilities is about leadership practices and has nothing to do with titled roles or positions of power in the learning organization. Distributed leadership involves sharing leadership responsibilities among the stakeholders who enact leading tasks and functions in the learning communities regardless of their positions, authority, or structures. When responsibilities are shared, multiple collective influences emerge in shared accountability among teachers and also students resulting in positive outcomes in the teaching and learning process.

The study was conducted in two primary schools involving principals and middle-level teacher leaders. Data were collected using semi-structured interview protocols with a qualitative case study research method. The findings revealed that collective pedagogical leading among principals and teachers as middle-level leaders are needed for pedagogical change to take place. The primary schools employed collaborative practice and collective group inquiry, where middle-level teacher leaders were autonomous pedagogical leaders. Pedagogical leaders played an important role in harnessing DPL autonomy by fostering collegiality among the participants and facilitating collaborative engagements that cultivated trust in their social interactions and communication practices.

The study expressed that teacher leadership is connected to DPL as such teacher leaders in the middle level of the leadership structure of the schools influenced the practice of teacher leadership and made sustainable differences in pedagogical development and students' learning. Conversely, the author noted that the confusion in the hierarchical and administrative leadership responsibilities in primary schools in Australia may cause conflicts that may further constrain the professional learning communities and endanger trust among the leaders and middle-level teacher leaders. It was recommended that teachers need support with pedagogical change in their work as curriculum developers and implementers to help them build their professional learning capacity and leadership autonomy in the classroom.

Concomitantly, Yang and Lim (2023) in their study 'Towards Distributed Pedagogical Leadership for Quality Improvement: Evidence From a Childcare Center in Singapore' explored the centre-based conditions that could hinder or facilitate teachers' DPL in ECE community practice. Similarly, the study aimed to understand how stakeholders negotiate collaborative relationships and build a shared vision in their pedagogical practices. According to

the Singapore national context of quality improvement, they involve all teachers and stakeholders in the building and constructing quality discourse and dispositions within the community of practice. They found out that DPL helps in building a discourse within a community of practice in a learning setup. This process involves the construction and co-construction processes of teachers as well as educational stakeholders who value the present and future of their young learners (p. 4).

They identified and used these interdependent dimensions of DPL as identified in the previous studies (Heikka, 2014; Heikka et al., 2021; Heikka & Suhonen, 2019) and further expounded them as follows: (a) teachers involved in strategic planning; (b) encouraging participation, providing sufficient resources; (c) teachers sharing authority in decision-making and developing leadership tasks; (d) designing leadership functions with teachers who facilitate pedagogical reflection and learning within teams; and (e) teachers co-create procedures, structures, and plans for efficient practice of DL (Yang & Lim, 2023, p. 5). Involving teachers as leaders gives them autonomy in pedagogical decision-making processes that enhance their professional development. DPL empowers teachers as pedagogical leaders to direct and facilitate professional learning and enhance quality pedagogical improvement in the classroom. Teachers as leaders participate in leading pedagogical development through their interdependence and collegial decision-making in their teams.

These dimensions of DPL ascertain that through DL in pedagogical practice, teacher learning is supported since it is important to any key education reform, especially in curriculum orientations. It is worth noting that it is through a well-structured DPL practice that the teachers' roles are recognized and enhanced as they are seen as autonomous pedagogical decision-makers. Through teacher learning and leading, stakeholders in the pedagogical spaces learn from experiences and practices to guide the process of solving everyday challenges that may occur in the classroom and the learning communities. All pedagogical leaders, teachers, and students are involved in learning innovations and curricular reforms.

4 | DISCUSSION

The works literature reviewed as presented in Table 2 revealed the perceptions and understanding of the education stakeholders in ECE centres, primary schools, and secondary VET school contexts in Australia, Finland, Norway, and Singapore where the concept of DPL is actively and prominently implemented. The findings from the reviewed studies showed that an effective leadership structure is supported by well-DPL responsibilities through trust and providing leadership opportunities for teachers and other members of the learning organization (Grice, 2019; Heikka & Suhonen, 2019).

The concept of DPL is connected to distributed and pedagogical leadership approaches that advance the synergetic relationships between school leaders as chief pedagogical leaders (i.e., *centre directors, head teachers, principals, and their deputies*), teacher leaders, and teachers in the enactment of their devolved and shared leadership responsibilities. When certain responsibilities are delegated to the teacher leaders and teachers in a well-organized distribution process, it creates a zone of interdependence where pedagogical leadership responsibilities are separately enacted but interdependently shared among the stakeholders in their respective teams and departments (Heikka, 2014; Heikka & Suhonen, 2019). It suffices to note that even as pedagogical leadership responsibilities are devolved in a top-to-bottom approach, authority and power relations remain and are directly connected to the organization leaders (Grice, 2019; Heikka, 2014).

Additionally, in the distribution of responsibilities, every member of a team is involved in collective, coordinative, and collaborative engagements through shared actions and pedagogical cognitions (Jäppinen, 2010). As espoused by Grice (2019), leading in curriculum and pedagogical development is intended to allow school leaders and teachers to participate in the enactment of shared responsibilities in their organization regardless of their positions, authority, organizational culture, or structures. Similarly, in professional educational contexts, leadership responsibilities are distributed by the organizational leader as a prime pedagogical leader to teachers,

TABLE 2 Reviewed works of literature: Research designs, methods, and key findings.

| No. | Author(s) & year of publication | Project title | Research setting | Research designs and methods | Key findings |
|-----|--|--|--|--|--|
| 1. | Jäppinen (2010) | Preventing Early Leaving in VET: Distributed Pedagogical Leadership in Characterizing Five Types of Successful Organizations | Vocational secondary school education (VET) in Finland | Mixed Methods Research—case studies, questionnaires, interviews & document analysis | DPL—the lens through which pedagogical early learning is enhanced through synergetic collective thinking in diverse educational contexts |
| 2. | Jäppinen and Sarja (2012) | Distributed Pedagogical Leadership and Generative Dialogue in Educational Nodes | Vocational secondary school education (VET) in Finland | Qualitative case study—face-to-face interviews, online discussions, observations | DPL—diversity in harmony where shared knowledge and understanding evoke synergetic relationships in the learning community |
| 3. | Jäppinen (2012) | Distributed Pedagogical Leadership in Support of Student Transitions | Vocational secondary school education (VET) in Finland | Mixed Methods Research—single case study, interviews, survey questionnaires | DPL is considered a source of collaboration between stakeholders by sharing tasks and joint goals by executing common activities |
| 4. | Jäppinen and Maunonen-Eskelinen (2012) | Organizational Transition Challenges in the Finnish Vocational Education—The Perspective of Distributed Pedagogical Leadership | Vocational secondary school education (VET) in Finland | Mixed Methods Research case study | DPL—leadership influences individual actions and thoughts and changes work experiences and work activities |
| 5. | Heikka et al. (2013) | Enacting Distributed Pedagogical Leadership in Finland: Perceptions of Early Childhood Education Stakeholders | Early Childhood Education in Finland | Qualitative case studies focus group discussions | DPL—pedagogical development which involves capacity building of the whole system through a zone of interdependence between stakeholders |
| 6. | Heikka (2014) | Distributed Pedagogical Leadership in Early Childhood Education | Early Childhood Education in Finland | Qualitative case studies interviews, focus group discussions, questionnaires, observations | DPL—pedagogical leaders are responsible for creating a community for learning and communication |

(Continues)

TABLE 2 (Continued)

| No. | Author(s) & year of publication | Project title | Research setting | Research designs and methods | Key findings |
|-----|---------------------------------|---|---|---|--|
| 7. | Bøe and Hognestad (2017) | Directing and Facilitating Distributed Pedagogical Leadership: Best Practices in Early Childhood Education | Early Childhood Education Centres in Norway | Qualitative shadowing case study | DPL—pedagogical tasks facilitate interactional and collaborative relationships for quality academic improvements |
| 8. | Grice (2019) | Distributed Pedagogical Leadership for the Implementation of Mandated Curriculum Change | Primary schools in Australia | Qualitative case study—semi-structured interviews | Pedagogical change requires genuinely distributed leadership that comes from the building trust among stakeholders, reducing hierarchies, and prioritizing learning |
| 9. | Heikka and Suhonen (2019) | Distributed Pedagogical Leadership Functions in Early Childhood Education Settings in Finland | Early Childhood Education in Finland | Qualitative case study—semi-structured interviews, documents | DPL—Centre directors and teachers enact leadership responsibilities separately, but interdependently at different levels for effective functioning |
| 10. | Heikka et al. (2021) | Distributed Pedagogical Leadership and Teacher Leadership in Early Childhood Education Contexts | Early Childhood Education in Finland | Explanatory sequential mixed methods (qualitative and quantitative inquiries) | DPL—affects teachers' pedagogical leadership, learning, and involvement in quality improvement Teachers as leaders encourage pedagogical reflection in their team |
| 11. | Yang and Lim (2023) | Towards Distributed Pedagogical Leadership for Quality Improvement: Evidence From a Childcare Centre in Singapore | Early Childhood Education in Singapore | Exploratory, interpretive case study mixed methods (focus group discussions, interviews, observations, document analysis) | DPL—enhances the participation of teachers in pedagogical development and collective decision-making |

caretakers, heads of departments, informal teacher leaders, and other stakeholders to create a conducive and productive pedagogical space where sustainable quality teaching and learning are conducted to enhance students' engagement and desire organizational pedagogical achievement (Heikka et al., 2021; Heikka & Suhonen, 2019; Jäppinen, 2010).

Moreover, when more professional actors are involved in enacting delegated leadership responsibilities and actively participate in acts of collegial decision-making processes, they influence increased expertise, job satisfaction, the building of human capital, and synergetic relationships among the members (Grice, 2019; Jäppinen & Maunonen-Eskelinen, 2012; Yang & Lim, 2023). The significance of distributing pedagogical leadership responsibilities in a learning organization is that both leaders and teachers are considered pedagogical leaders in and out of the classroom and they not only lead the pedagogical activities but also learn from each other thus positively influencing the teaching and learning activities (Grice, 2019; Yang & Lim, 2023).

Furthermore, through a distributed leadership approach, multiple personnel are involved in enacting shared leadership responsibilities delegated by the formal leaders which nurtures a dynamic interaction within the intersubjective working space in the learning community (Grice, 2019; Heikka et al., 2021). School leaders, teacher leaders, and teachers interact with each other in collective, collaborative, and coordinated pedagogical work in the organization (Heikka, 2014; Jäppinen, 2012). When leading responsibilities are devolved and delegated to multiple actors in the organization, leading and following practices shift between people who interdependently alternate roles and responsibilities during the implementation of different pedagogical activities (Grice, 2019; Heikka et al., 2021; Yang & Lim, 2023).

Additionally, teachers become leaders when they implement these delegated responsibilities to direct and facilitate pedagogical changes and development for sustainable quality pedagogical improvement and enhanced student achievements (Grice, 2019; Heikka et al., 2021; Yang & Lim, 2023). By connecting the pedagogical leadership approach in a hybrid leadership concept of DPL, pedagogical work is shared among the school leaders, informal and formal teacher leaders, and classroom teachers as pedagogical leaders who perform similar delegated leadership tasks, functions, and responsibilities separately but interdependently within their respective teams (Bøe & Hognestad, 2017; Grice, 2019; Heikka & Suhonen, 2019).

It is worth noting that the concept of teacher leadership was identified and prominently featured in some of the reviewed empirical research studies (Bøe & Hognestad, 2017; Grice, 2019; Heikka, 2014; Heikka et al., 2021; Heikka & Suhonen, 2019; Yang & Lim, 2023). The researchers opined that teacher education has a significant correlation with the practice of DPL but has not been exhaustively researched (Bøe & Hognestad, 2017; Grice, 2019; Heikka et al., 2021). According to Grice (2019), teacher leadership involves distributing pedagogical leadership to teacher leaders and teachers for collective professional support and learning during curriculum change. When pedagogical leadership responsibilities are shared with the teachers, leaders maintain their responsibilities as positional leaders and teachers influence and facilitate pedagogical development by leading teaching and learning processes in the classroom.

Therefore, since teacher leadership is significantly correlated with the practice of DPL in learning communities, there is a need to further investigate its connection to DPL practice and related educational leadership concepts. From the pieces of evidence from the reviewed empirical literature, participants involved in those studies supported the need for teacher leaders and teachers as pedagogical leaders to be given more authority, power, and autonomy in the acts of decision-making in and out of the classroom to effectively implement the delegated pedagogical leadership responsibilities and enhance their teaching and leadership skills for sustainable quality pedagogical development and improvements (Bøe & Hognestad, 2017; Grice, 2019; Heikka & Suhonen, 2019).

5 | LIMITATIONS

This narrative literature review identified some limitations that were largely influenced by the research contexts and settings as presented in Table 2. The works of literature reviewed were all empirical research

studies conducted in the global north, particularly in Australia, Finland, Norway, and Singapore. Eight of these studies were conducted in Finland while Australia, Norway, and Singapore had a study each. Similarly, the empirical studies reviewed were conducted in three educational contexts, that is ECE, primary, and secondary schools. Only four were conducted in VET secondary schools, one in primary schools, and six were conducted in ECE centres. In addition, most of the studies used either mixed methods research or qualitative research designs and methods for data collection and analysis. Quantitative research approaches were employed only in mixed methods research designs with survey questionnaires used to collect data from the participants.

On the other hand, there are no known studies on the practice of DPL that have been conducted in elementary schools, other sectors of secondary schools, teacher education institutions, or higher education contexts in the global south of the world. The concept advances the significance of shared leadership responsibilities with stakeholders, especially teachers. However, no study has been conducted to further investigate the role of students in the enactment of this practice. We believe that in higher educational contexts, the engagement of teachers and students as participants would enrich and provide a deeper understanding of this concept, especially in enhancing students' leadership culture for sustainable academic achievements. Therefore, this study considers these limitations as valid gaps that need to be addressed in future research studies to help in exploring this leadership approach in diverse educational contexts and settings.

6 | CONCLUSION AND IMPLICATIONS

The purpose of this literature review was to investigate how DPL can be conceptualized in different educational contexts and settings in the world. Through the works of literature, we examined how the enactment of shared leadership responsibilities is perceived and understood by different education stakeholders. The pieces of evidence gathered revealed that there was a need to promote the culture of DPL in different spheres and contexts of education. The literature showed that much emphasis has been put mainly on ECE, primary schools, and secondary VET levels in different contexts. This revealed that the topic has not been exhaustively studied as a concept of educational leadership and management, particularly in the global south of the world.

The concept as a central phenomenon is associated with the sustainability of distributed leadership at the expense of pedagogical leadership. It highlighted the roles of centre managers and delegated responsibilities to leaders and leaders in the learning organization. The varied leadership trajectories as revealed by the works of literature are focused mainly on the duties of the early childhood centre manager, principals, and teaching staff as well as the organization's stakeholders. It implies that empirical evidence contributed to most of the identified development of DPL practice in educational contexts.

Therefore, to develop a more robust conceptual and theoretical background on the elements and dimensions of DPL, there is a need to conduct validation of the concept of DPL by employing diverse and varied research designs and approaches where multiple sources of data and tools are used and broader comprehensive and in-depth data analysis methods applied. The result equally implies the need to further investigate the practice of DPL by documenting best practices of pedagogical improvement that will support strong and productive collegiality among stakeholders in all spheres and levels of education in the world. The culture of teacher leadership also emerged as significant and closely connected to the concept of DPL (Grice, 2019; Heikka et al., 2021). However, it is only one study (Heikka et al., 2021) investigated the interconnection of these concepts. Future studies should investigate how the enactment of DPL practice influences the empowerment of teachers as leaders in the learning environment for sustainable pedagogical improvement.

ACKNOWLEDGEMENTS

The authors wish to appreciate the support received from the Stipendium Hungaricum Tempus Public Foundation, Hungary, the Doctoral School of Education at the Institute of Education, University of Szeged, as well as the team at the university's library for the expeditious proofreading and plagiarism check services.

FUNDING INFORMATION

This study has not been funded by any organization.

CONFLICT OF INTEREST STATEMENT

The authors declared no potential conflicts of interest concerning the research, authorship, and/or publication of this article.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available from the corresponding author upon reasonable request.

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How to cite this article: Okiri, P. O., & Hercz, M. (2024). Distributed pedagogical leadership practice for sustainable pedagogical improvement: A literature review (2010–2023). *European Journal of Education*, 00, e12723. <https://doi.org/10.1111/ejed.12723>