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The tenets of distributed pedagogical leadership in educational contexts—A systematic literature review on perception and practice

Peter Ochieng Okiri and Mária Hercz

Abstract

The concept of distributed pedagogical leadership (DPL) practice in education is advanced as an acceptable element in enhancing the quality of pedagogical improvement and the academic achievement of learners across educational contexts. This concept is conceived as a leadership style, where stakeholders are formally and informally involved in the leadership process. The interdependence of stakeholders in the enactment of this concept is underpinned by the five dimensions of DPL, namely: enhancing shared consciousness of visions, and strategies between stakeholders; distributing responsibilities for pedagogical leadership; distributing and clarifying power relationship between the stakeholders; distributing the enactment of pedagogical improvement within centers; and developing a strategy for DPL. This study employed a systematic literature review that mapped relevant literature to the topic. The database of sources consists of 10 articles on DPL published in the English language and in high-ranking journals between January 2010 and December 2021. The review highlights empirical and theoretical-conceptual contributions to the literature on DPL including the methodologies used in the studies. The study extensively expounds on the underpinning theoretical and conceptual frameworks to elucidate this concept. The result implies the need to promote the culture of DPL in all learning levels and spheres of education.

Keywords

Distributed pedagogical leadership, distributed leadership, pedagogical leadership, teacher leadership, instructional leadership, leadership

Introduction

The concept of distributed pedagogical leadership (DPL) is advanced as an interactive educational leadership model as an acceptable element in enhancing the quality of pedagogical improvement

Corresponding author:
Mária Hercz, Faculty of Primary and Pre-School Education, Eötvös Loránd University, Budapest, Pest, Hungary.
Email: hercz.maria@tok.elte.hu

and the academic achievement of learners in different educational contexts (Heikka et al., 2021; Jäppinen, 2010; Yang and Lim, 2020). As advanced by Bøe and Hognestad (2017) and Heikka et al. (2021), this concept is premised on a hybrid of two educational leadership practices, namely, distributed leadership (DL) and pedagogical leadership (PL). The purpose of this study is to demonstrate how the use of this concept enhances quality teaching and learning, the reasons for its adoption as a best practice in enhancing desired pedagogical outcomes (Bøe and Hognestad, 2017), and actions taken to ensure its relevance at different levels of educational contexts (Jäppinen and Maunonen-Eskelinen, 2012; Yang and Lim, 2020). This study's adopted a running definition is advanced by Jäppinen and Sarja (2012) as '*distribution of interests, visions, aims, and values for the purposes of achieving something more than the actors can perform separately*.' This will help in illuminating the tenets of DPL as a way of creating synergy through collaborative and collective practice by educational stakeholders.

A number of empirical studies (Bøe and Hognestad, 2017; Heikka *et al*., 2021; Jäppinen, 2010; Jäppinen and Maunonen-Eskelinen, 2012; Yang and Lim, 2020) have been conducted on the significance of DPL in the improvement of leadership practices in educational contexts as well as the academic achievement of learners as guided by 21st-century learning skills (Heikka et al., 2013; Heikka and Suhonen, 2019; Yang and Lim, 2020). Further, other studies have elucidated the enactment of DPL practices with a major focus on Early Childhood Education (ECE) centers as well as secondary schools across different contexts (Bøe and Hognestad, 2017; Heikka et al., 2021; Heikka and Suhonen, 2019; Jäppinen, 2010, 2012; Jäppinen and Sarja, 2012; Yang and Lim, 2020). Subsequently, their findings demonstrated that most stakeholders either lack an understanding of the epistemology of this form of educational leadership as a theoretical concept, or contextual practices differently inform their perception (Heikka, 2014; Heikka et al., 2013; Jäppinen, 2012; Jäppinen and Maunonen-Eskelinen, 2012). All these studies, however, have been conducted in Europe, and Asia, which thus limits the experiences of other regions of the globe to the significance of the concept.

To address these concerns, this systematic review, therefore, is guided by the studies' theoretical and conceptual frameworks advanced by researchers (Bøe and Hognestad, 2017; Heikka, 2014; Heikka et al., 2013; Heikka and Suhonen, 2019; Jäppinen, 2010; Jäppinen and Maunonen-Eskelinen, 2012; Jäppinen and Sarja, 2012) in further exploring the role of DPL in pedagogical implementation and improvement. Based on the findings and discussions of the studies, the researchers suggested the need for further intensive empirical and theoretical studies to gather relevant evidence on the importance of this concept as a multifaceted educational leadership tool (Bøe and Hognestad, 2017; Yang and Lim, 2020). This study, therefore, intends to present relevant insights on the practice of DPL and its influence on the management of leadership responsibilities with the inclusion of multiple personnel within the educational contexts. To understand this concept, we highlight the meaning of the two overarching concepts: DL and PL practices as tools in educational leadership.

The concept of distributed leadership

To fully understand the concepts of educational leadership and practice in the instructional process, Diamond (2013) developed DL as a tool for conceptualization of leadership within pedagogical spaces. He opined that the core elements of DL practice are integrated into leaders, followers, and the leadership situation. Furthermore, he defined leadership from the perspective of a distributed lens, which was also advanced by Spillane (2005) as activities designed by organizational members to influence knowledge and practice. Educational leaders are perceived as a *'constellation*

of individuals' in a learning environment whose endeavor is to influence instructional processes through commitment to leadership roles, and responsibilities. Harris (2005) argued that when multiple personnel share leadership, it is implemented by different individuals with each playing distinct roles and an interdependent level of performance. Diamond (2013) further advanced that DL is a hybrid type leadership that is practiced alongside individual leaders formally and informally by the teachers. The concept of shared leadership is further illuminated as a practice that involves multiple actors in decision-making and the day-to-day implementation of instruction processes (Harris, 2003, 2010; Joo, 2020). This scenario promotes democracy, which thus increases effectiveness that helps in building an interactive workforce based on human capacity building in the organizational context (Jäppinen, 2010; Sergiovanni, 1998). Furthermore, Muijs and Harris (2007) argued that when leadership is well distributed among teacher leaders, they become more of curriculum thinkers and less of implementers. As a result, performance is enhanced because learners are facilitated through a widely conceived standardized curriculum (Gronn, 2008; Singh et al., 2012).

Consequently, Spillane (2005) alluded that DL is premised on practice instead of either leaders or their roles, functions, routines, and organizational structures. DL is democratic, shared, and a form of team leadership, where practice is premised on multiple leaders and their interaction with followers. However, Hairon and Goh (2015) disagreed with Spillane and suggested that although DL is equated to shared, democratic, and delegated forms of leadership, its definition remains elusive with many scholars using the definition of leadership as the meaning of DL. Specifically, DL nurtures and cultivates staff collaboration within the pedagogical spaces. This interaction is influenced by situations and people in the organization. Ho et al. (2021) postulated that the influence of leadership is significant in nurturing collaborative and collective practice with followers. In other words, a sense of shared leadership enhances interactive and collaborative learning situations (Dhani and Bakshi, 2020). Teachers and learners are involved in decision-making processes, and parents are encouraged to exercise leadership as informal stakeholders (MacBeath, 2005; Singh et al., 2012). Spillane (2005) suggested that to render DL effective, multiple individuals, with or without leadership positions, should take up leadership responsibilities. He advanced that DL is less on the influence of leaders on followers but more on the role of followers as elements of DL practice (MacBeath, 2005; Spillane, 2005). However, as viewed by certain educators, DL is a concept developed with school leaders in mind. As such, it should not be considered a "blueprint" for effective educational leadership practice because it does not promote positive learners' outcomes in terms of instructional achievement, and improvement for teachers, and learners (Hairon and Goh, 2015; Spillane, 2005).

However, Mukan et al. (2015: 42) advanced that DL may be perceived from three aspects, namely: (a) leadership as derivative from the quality of leaders collaborating with each other; (b) leadership as informed by the openness with a possibility to occur both within and outside the organization; and (c) leadership experiences as distributed among other multiple actors. DL is perceived as a practice that involves the implementation of leadership enactment based on the potential of all members of an organization. Through these activities, a development of a collegial process occurs in a system that is dynamic, all-inclusive, and synergetic because it is spread throughout the organization and beyond. DL is classified as pragmatic, strategic, incremental, and mercantile. These classifications imply that DL can be widely distributed from principals, teachers, support staff, students, and other stakeholders (Mukan et al., 2015). Zulkifly et al. (2020: 4) argued that DL focuses on establishing collegial relationships in the organization as based on the following characteristics: (a) assisting the leadership of others, (b) supporting the leadership of others, (c) DL influences process, (d) encompasses both formal and informal forms of leadership practice,

(e) involves co-performance leadership, (f) interactive leadership, (g) lateral leadership practice, (h) involves multiple leaders in a team, (i) emphasizes on active cultivation and nurturing of leadership potentials within a team, and (j) each member is assumed to have some potential expertise needed by the organization.

Both studies concluded that the concept of DL involves the distribution of responsibilities, tasks, and influence on other members in a team or organization. From the distributed perspective, multiple teacher leaders interact with one another, and their leadership situations inform practice in the organization. Moreover, interaction among multiple teacher leaders can be formal or informal according to the responsibilities to be practiced by said leaders (Mukan et al., 2015; Zulkifly et al., 2020). In support of the abovementioned arguments, Bubale et al. (2021) espoused that teacher collegiality is effort concerted by all stakeholders to create an effective instruction process for sustained pedagogical improvement as well as to enable teachers to gain the freedom to coalesce and collectively brainstorm on instructional challenges that they may be facing in practice. The authors further advanced that DL creates a platform for teacher's professional development and enables them to effectively participate in routine and non-routine creative tasks that enhance high-quality learning improvement as well as the academic success of learners (Bubale et al., 2021).

Furthermore, Shava and Tlou (2018) proposed that 21st-century educational reforms, and paradigm shifts, demand appropriate and well-articulated educational leadership in learning situations. Thus, DL is premised on shared and collective concepts of leadership practice that engages every member of the staff in institutions. Therefore, leadership responsibilities should be distributed among members, especially when intensive tasks or complex duties are undertaken. Moreover, the authors argued that the dynamics of educational leadership is deviating from "hero" individual-led management practice to hierarchical systems, which serve with a group of followers, and with limited engagement in leadership processes (Gronn, 2008; Harris, 2003). In such an environment, expected learning outcomes and achievements of learners are never tenable (Shava and Tlou, 2018). Timperley (2008) opined that leadership should never be perceived as actions, and roles played by individuals. It transcends sharing or delegating duties, roles, responsibilities, power, or authority. Instead, it focuses on distributing leadership to others as well as creating cognition of hierarchical interactive leadership in the teams.

However, scholars have also identified DL as the main cause of great disagreements and leadership confusion in many learning organizations. The reason for this may be leadership peer-rivalry, ego, and competition (MacBeath, 2005). Subsequently, formal leaders confuse the distribution of leadership as a delegation of responsibilities and roles. Moreover, DL is associated with the distribution of incompetency, and inefficiency in the organization. Based on such arguments, many researchers on leadership have embarked on intensive empirical exploration on the significance of DL as an essential component of DPL.

Concept of pedagogical leadership

According to different leadership authors (Alameen et al., 2015; Carroll-Lind et al., 2016; Cejas-Martínez et al., 2021; Contreras, 2016; Fonsén et al., 2020; Male and Palaiologou, 2012, 2015, 2017; Varga et al., 2020), the concept of PL is essentially intended to support the instructional process in the learning environment. Pedagogy pertains to the plans or expectations of teachers during the learning situation for the interest of learners inside the classroom (Alameen et al., 2015; Sergiovanni, 1998; Waring and Evans, 2015). According to Abel (2016), PL supports

classroom teachers in their instructional role of implementing the curriculum. It encompasses many roles in teaching and learning situations through establishing organizational norms of continuous quality achievement among learners (Varga et al., 2020). Furthermore, pedagogical leaders tend to influence the academic outcomes of learners by fostering close family-like relationships, ensuring fidelity in learning organization, enhancing curriculum philosophy, using student data to evaluate the effectiveness of instructional programs, as well as meeting established standards to optimize the learning environment (Abel, 2016; Varga et al., 2020). As a practice, PL is viewed as direct and indirect forms of leadership of school leaders (Varga et al., 2020) because they influence the achievement of learners in the learning process.

Alternatively, Sergiovanni (1998: 38) defined PL as an investment in capacity building by developing "academic capital for students and intellectual and professional capital of the teacher." He opined that PL adds value to learning processes by developing various forms of human capital to improve expected learning outcome. Principals practice of building an effective human capital facilitate the process of PL by ensuring that the interests of learners are prioritized and served well due to the need to apply leadership competencies necessary for achieving sustainable practice in schools (Male and Palaiologou, 2015;Varga et al., 2020). As a complex process, PL requires a substantial amount of diverse knowledge support. According to Male and Palaiologou (2012), pedagogical leaders consistently exceed their traditional leading role as school administrators by spending more time focusing on the development of pedagogical and content knowledge as well as curriculum implementation, instruction, and assessment of the learning process through learner-centered leadership. Subsequently, Bertrand (2008) suggested that if practiced appropriately, PL may encourage responsiveness among the staff in the working environment. Leaders in a stakeholders group can understand one another by developing cordial working relationships (Bertrand, 2008; Male and Palaiologou, 2012, 2015). PL is considered a paradigm shift from a leader-centered style of leadership to an interactive, and collaborative orientation through a democratic workplace environment (Varga et al., 2020). Bertrand (2008: 219–220) argued that PL refers —"to the establishment and reinforcement of a climate and culture that expects staff members to provide an environment that deliberately supports the learning of young children."

For Male and Palaiologou (2015), PL is a form of governance practice designed for the integration of instruction into education as a praxis, that is, PL is concerned not only with the dichotomy of instructional processes and expected outcomes of learners but also with integration into a teaching and learning ecology within a community of practice in the educational contexts (Male and Palaiologou, 2012, 2015, 2017). The authors postulated that pedagogy should be a set of practices that shape the instructional processes to meet the expected outcomes of learners through overarching processes related to the effective management of educational settings. The term leadership in pedagogy is perceived when teachers act as leaders in a learning situation within their respective classrooms through an interactive and direct contact with learners during the instructional excursion (Male and Palaiologou, 2015, 2017). Subsequently, the major role of pedagogical leaders is to focus on the future of learners without influencing decision-making processes. This role should be fulfilled through practical engagement of actions in the teaching and learning processes (Varga et al., 2020). Leadership, as a process that involves the interpretation, comprehension, and application of the actions of human beings, should be practiced to scaffold the consequences of these actions on other people (Male and Palaiologou, 2017). Male and Palaiologou (2015) cited that the role of pedagogy in leadership is to purposely to shape and inform the behavior of leaders and to exert influence through theory, practice, and social axes. Moreover, human systems should endeavor to conceptualize pedagogy in an increasingly complex manner to comprehend

the concept of the practice of and instruction in leadership in pedagogy. This step is necessary because pedagogy has shifted from the transmission of knowledge to learners to their involvement in a facilitated learning process (Fonsén et al., 2020). Scholars advanced PL as an ethical leadership approach, which should be geared toward the establishment of a value-oriented instructional culture within a community of practice in educational programs (Abel, 2016; Male and Palaiologou, 2012, 2015).

Although concurring with the abovementioned sentiments, Heikka et al. (2020) proposed that the involvement of teachers in PL is essential not only in the reform and implementation of the curriculum but also in the assurance that teachers take charge of the curriculum process. Any curriculum reform requires high levels of commitment from teachers as instructional leaders because they are lead implementers of all pedagogical processes (Heikka and Waniganayake, 2011; Ho, 2010). PL entails taking responsibility for pedagogically shared aims, goals, and visions as well as methods of learning in the instructional processes (Forssten Seiser, 2019; Heikka et al., 2020).

For this study, therefore, PL in educational setup geared towards expanding an understanding to the meaning of PL in any ecological interaction in the community of practice (Male and Palaiologou, 2015). To achieve success in teacher leadership, the need emerges for the design of a well-planned and structured strategy of leadership (Harris, 2010). Teachers, when implementing PL, work independently as pedagogical developers but interdependently in their teams (Forssten Seiser, 2019; Male and Palaiologou, 2017). PL is necessary since it helps develop an empowered staff that is willing to self-direct their pedagogical work. The responsibility of pedagogical leaders is to support others to reflect, research, inspire, and shape the instructional process (Forssten Seiser, 2019; Heikka et al., 2020; Waring and Evans, 2015).

Hence, in the past decade, DPL has emerged as a new educational leadership practice model in different educational settings. Notable leadership scholars and researchers have made significant contributions to its conceptualization as well as application. Therefore, the main purpose of this literature review is to analyze the perception and practice of DPL stakeholders from different contexts with a blended leadership practice of both DL and PL. To achieve the aim, a systematic literature review was employed guided by the following objectives: (i) the influence of DPL on the development of teacher involvement in leadership in educational contexts; (ii) the significance of DPL and teacher leadership for quality improvement in educational environments; (iii) significance of the dimensions of DPL in educational contexts; and (iv) the role of stakeholders in the implementation of DPL functions in education.

Methodology

Figure 1 illustrates the process of conducting the search, inclusion strategies, and shortlisting of the literature.

To achieve the abovementioned objectives, the study conducted a systematic review of the relevant literature which was mainly derived from the bibliographic references of previously published studies. The search and PRISMA (*Preferred Reporting Items for Systematic Reviews and Meta-Analyses*) method for reporting systematic reviews was employed as adopted from Dhani and Bakshi (2020). An intensive search for relevant bibliographic references was obtained from journal-publishing organizations with highly ranked publications such as open access journals in Elsevier-Science Direct, Google search, Sematic Scholar, Sage journals, Taylor & Francis Online (Routledge), Springer, and other relevant publishers. Other searches were conducted

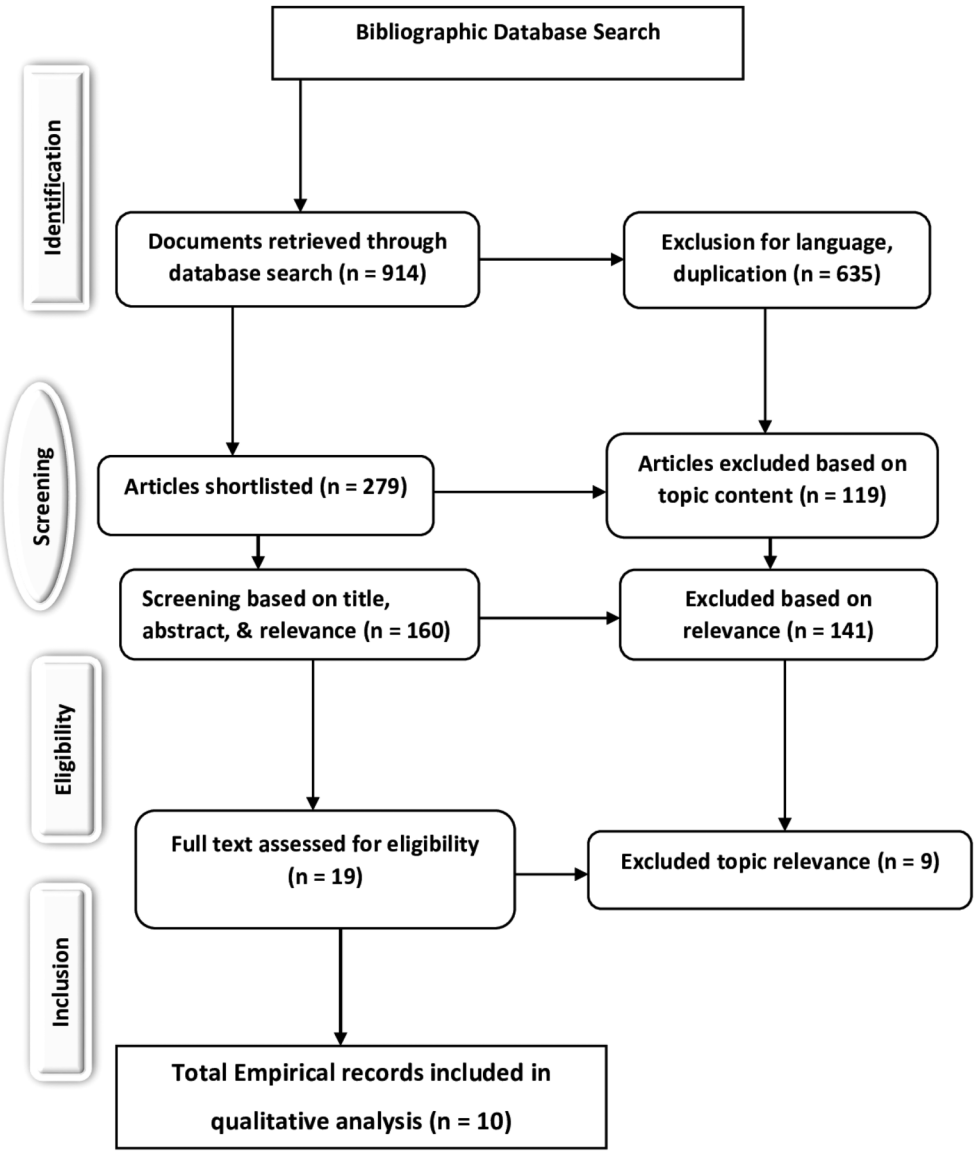

Figure 1. PRISMA flow chart of exclusion and inclusion strategies.

through electronic referencing of topics relevant to the journal articles which led to a snowball effect. Further search for research articles (full text, open access, and abstracts) were obtained from the e-databases of Emerald Insights, Education Research Information Center (ERIC), Springer Journal Archives, Sage Journals, EBSCOhost, ResearchGate, and Academia. Another further extensive search was conducted on Google Scholar, and other online catalogs through the online library service of the University of Szeged.

Inclusion and exclusion of articles

During the search process, the study paid particular attention to peer-reviewed articles on the topic to get a deeper understanding on the tenets of DPL among educational stakeholders through empirical studies. For the included articles, the study considered articles and reviewed papers related to the topic. The exclusion process began prior to importing articles into a bibliographic list. Non-English articles and those with missing abstracts, and meta-data were excluded. During the screening process, articles related to DL, PL, instructional leadership, and other topics related to leadership were screened and those found irrelevant to the topic were removed. During the screening stage of the abstracts, importance focus was given to abstracts related to the topic. Those that were irrelevant were excluded. Finally, during the full-text screening stage, only detailed empirical articles on DPL in educational contexts were included whereas those from other fields were excluded from the list (Dhani and Bakshi, 2020) (Table 1).

Findings

Theoretical underpinnings of DPL in education

The theoretical framework presented in this review is adopted from Heikka (2014) and Jäppinen (2012). This theoretical concept is premised on the concepts of DL and PL as educational leadership practices. Heikka (2014) suggested that DL theory is conceived as human capacity building with the objective of assisting educators to comprehend how leadership is a practice by stakeholders in an environment of collaborative and shared actions. Conversely, PL theory is conceived as the main form of leadership of teacher leaders in instructional contexts. This notion is further highlighted in research findings that illustrate that responsibilities related to PL are not well distributed during the practice leadership. For Jäppinen (2012), DL is about creating shared cognition and synergy in an organization through acts of collective, concurrent and collaboration. It is perceived as a tool for increasing pedagogical effectiveness through building human capacity. DPL activates the shared cognition through collective decision-making process in jointly agreed actions.

The theory is further advanced in studies by Heikka et al., (2020, 2021) and Heikka and Suhonen, (2019), who proposed the core understanding of this concept and highlighted the key elements of DPL. DL and PL create an understanding of educational leadership when enacted in learning. Heikka et al. (2020: 82) stated that the interdependence of the stakeholders in the enactment of DPL is embedded in "enhancing shared consciousness of visions and strategies; distributing responsibilities for PL; distributing and clarifying power relationships; distributing the enactment of pedagogical improvement and finally developing strategies for DPL." This theoretical framework is the foundation of this review which will be informed by the abovementioned dimensions of DPL based on the relevant literature.

Tenets of DPL—perception and practice

DPL is coined from two major leadership practices, namely, DL and PL (Heikka, 2014; Heikka et al., 2013; Jäppinen, 2010; Jäppinen and Sarja, 2012). The literature derived from the empirical studies reviewed (Heikka and Suhonen, 2019; Jäppinen, 2010; Jäppinen and Sarja, 2012; Spillane, 2005) revealed that DPL practice exerts a major significant influence on instructional processes that facilitate, and promote the instructional practices of teachers, thus enriching the academic progress of learners, which, in turn, enhances expected learning outcomes. Subsequently, studies have

Table 1. A list of reviewed articles.

S. no.	Author(s)	Year of publication	Title	Research setting	Level of education	Type of research	Methods	Key findings
1.	Aini-Kristiina Jäppinen	2010	Preventing early leaving in VET: distributed pedagogical leadership in characterising five types of successful organisations	Vocational secondary school education (VET) in Finland	Secondary (vocational) schools	Empirical-Case Study	Mixed Methods Research	Schools consciously share and develop DPL practices to prevent early leaving
2.	Aini-Kristiina Jäppinen and Anneli Sarja	2012	Distributed pedagogical leadership and generative dialogue in educational nodes	Vocational secondary school education (VET) in Finland	Vocational secondary schools	Empirical-Case Study	Qualitative	Shared knowledge and understanding that evokes synergy, that is the secret of DPL lies in diversity in harmony
3.	Aini-Kristiina Jäppinen	2012	Distributed pedagogical leadership in support of student transitions	Vocational secondary school education (VET) in Finland	Vocational secondary schools	Empirical-Case Study	Mixed Methods Research	DPL is considered as a source of collaborative leadership in a professional learning community
4.	Aini-Kristiina Jäppinen and Irmeli Maunonen-Eskelinen	2012	Organisational transition challenges in the Finnish vocational education —Perspective of distributed pedagogical leadership	Vocational secondary school education (VET) in Finland	Vocational secondary schools	Empirical-Case Study	Mixed Methods Research	Leadership influences individual actions and thoughts and changed work experiences and work activities
5.	Johanna Heikka, Eeva Hujala, Manjula Waniganayake, and Jillian Rodd	2013	Enacting distributed pedagogical leadership in Finland: Perceptions of early childhood education stakeholders	Early childhood education in Finland	Early childhood education	Empirical-Case Study	Focus Group Discussion	DPL is perceived as the interdependence between leadership enactment for the purposes of pedagogical improvement

(continued)

Table 1. (continued)

S. no.	Author(s)	Year of publication	Title	Research setting	Level of education	Type of research	Methods	Key findings
6.	Johanna Heikka	2014	Distributed pedagogical leadership in early childhood education	Early childhood education in Finland	Early childhood education	Thesis	Focus Group Discussion	In DPL leaders are responsible for creating a community that for learning and communication
7.	Marit Bøe and Karin Hognestad	2017	Directing and facilitating distributed pedagogical leadership: Best practices in early childhood education	Early childhood education centers in Norway	Early childhood education	Empirical-Case Study	Qualitative Shadowing	Strong leadership is necessary to develop best practices in collaboration and teamwork
8.	Johanna Heikka and Katja Suhonen	2019	Distributed pedagogical leadership functions in Early Childhood Education settings in Finland	Early childhood education in Finland	Early childhood education	Empirical-Case Study	Semi-Structured Interview Focus Interview	Leadership of the center directors and the teachers were enacted separately, but interdependently
9.	Weipeng Yang and Sirene Lim	2020	Towards DPL for quality improvement: Evidence from a childcare centre in Singapore	Early childhood education in Singapore	Early childhood education	Empirical-Exploratory Interpretive Case Study	Focus Group Method	DPL affects teachers' pedagogical leadership, learning, and involvement in quality improvement
10	Johanna Heikka, H. Pitkäniemi, T. Kettukangas, and T. Hyttinen	2021	Distributed pedagogical leadership and teacher leadership in early childhood education contexts	Early childhood education in Finland	Early childhood education	Empirical-Explanatory Sequential	Mixed Methods Research	DPL enhances participation of staff in pedagogical development

ascertained that DPL practices play a pivotal role in shifting the emphasis of school-level instructional activities that target the improvement of the academic outcomes of students (Bøe and Hognestad, 2017; Heikka, 2014; Jäppinen, 2010; Yang and Lim, 2020). According to Heikka and Suhonen (2019), DPL encompasses the enactment of leadership practices by involving multiple teachers in pedagogy through interdependent ways. DPL practice is central to quality instruction. This notion is supported by many teachers who concur that good practice should be independent of the unrelated application of techniques (Heikka et al., 2021).

As advanced by Jäppinen (2010), researchers derived the concept of DPL from DL and focused more on the shared and collaborative elements of leadership as a definition and description of this concept. DL is perceived as a theoretical concept that is used to explain the pedagogical aspects of shared actions. Thus, researchers have embraced it to expound the concept of DPL, especially in educational contexts. DPL is a process where the learning of students is a collaborative responsibility that is shared among multiple leaders through short and long-term plans in a systematic pedagogical process. Through the distribution of responsibilities that encompasses all members, the staff interacts and conducts daily routines within a shared atmosphere over activities related to social interaction in a situational setting. The study aimed at exploring collaborative endeavors to understand the way the concept assists learners' transition between basic education and vocational high school education. In the enactment of DPL, staff members were encouraged to develop a productive pedagogical space in which stakeholders designated multiple professional responsibilities for the instructional achievement of learners. When collaboration exists in a team, an interactive synergy among staff members is inculcated, which transforms into collective thinking. In turn, the ability of shared intelligence is enhanced, supersedes that of individual members. The study employed mixed methods and case study approaches for data collection. Data were collected from 14 institutions of learning using questionnaires, interviews, and document review and analysis. A total of 26 in-depth interview sessions were conducted in the learning institutions. The questionnaires and interviews produced qualitative and quantitative data for analysis.

Similarly, Jäppinen and Sarja (2012) referred to DPL as the professional characteristics of a learning community of practice intentionally or purposely embraced by instructional actors to achieve a common mission. Once elements, such as interests, visions, aims, and values are distributed, they are collectively and collaboratively nurtured to achieve what an individual actor cannot or may not achieve separately. Through DPL, synergy is manifested where the actions of an organization become greater than its divided parts. Furthermore, through collaborative synergy and collegiality, concrete leadership practices are developed. Leaders work in collaboration with the members of the community through collective cognition. A generative dialogue is formulated to produce a common framework that serves as an innovative tool. For example, the authors employed the case study method in two learning institutions in the Finnish educational system. Stakeholders were encouraged to reflect on the possible influence of their collaboration practice on the learning paths of students. Data was collected using five tape-recorded online discussions, six face-to-face semi-structured interviews, and observations of teachers, and leaders in the organization. Qualitative concept analysis was used to analyze the collected data.

Jäppinen (2012) conducted another study that intended to introduce a theoretical perception and a practical model of DPL. The author suggested that DPL has its background in DL practices, and management without leadership, which helps in shifting leadership from an individual centricity to that of social interactive practice. DPL is embedded in the collaborative practice, where every member feels a sense of belonging in the community of practice. All stakeholders are engaged in actions that are executed in a dynamic process. DPL is fluid and mutable at the same time. In

this study, leadership is enshrined in collective, concurrent, collaborative, and compassionate practices. The study employed a mixed-method approach and collected quantitative and qualitative data from the participants. Quantitative data were collected through a national survey using a web-based questionnaire, which was administered to 150 Finnish VET institutions. Conversely, qualitative data were collected from six in-depth interviews conducted in a single-case vocational institution and from 145 other institutions with 256 participants who answered the questionnaires. The participants included the principals of the schools, five-unit leaders, and heads of various training divisions. Qualitative concept analysis was used to analyze data, which enabled the generation of general ideas. Furthermore, the study used statistical analyses that comprised two-tailed independent sample tests as *t*-values.

Jäppinen and Maunonen-Eskelinen (2012) conducted a study in Finland and posited that engagement and interaction among stakeholders in the learning context can help to improve their organizational skills and the pedagogical practices of schools. The authors observed that DPL was derived from DL and PL and collaborative learning actions. Although DL is centered on accumulative and collaborative engagement, PL denotes the sharing of ideas, initiative, and expertise among stakeholders in a collaborative learning environment to establish a learning ecology for students, teachers, and leaders. Through DPL, leaders can influence collective efficacy, and cognition that provide a dynamic working experience through empowerment of stakeholders. The study employed the TenKeys® model in Finnish VET schools and administered web-based questionnaires in 150 learning institutions. Six in-depth interviews with leadership representatives and eight teachers were conducted. Data analysis was performed through multi-methodologically quantitative and qualitative concept analyses.

Heikka et al. (2013) postulated that the interdependence of pedagogical leaders and stakeholders in the enactment of leadership practice is perceived as an essential element of effective pedagogy and curriculum change as well as efficient pedagogical implementation and improvement. The authors suggested that DPL is mainly involved in pedagogical improvement, where the leadership and stakeholders interdependently work in enacting leadership. DPL is associated with DL and PL approaches, where DL increases interaction between stakeholders, whereas PL is involved with taking responsibility for the shared understanding. DPL enriches pedagogical development through capacity building by creating a zone of interdependence among stakeholders. The study employed a focus group method to collect data from targeted participants. A total of 18 focused group discussion interviews were conducted with 34 ECE leaders from six municipalities. Qualitative content analysis was used to analyze the collected data. This process enabled the researchers to generate a collectively constructed perspective of leadership within their organizations. They equally applied a substantive inquiry into the data collected during the discussions.

Heikka (2014) further proposed that DPL in education is observed as a practice that focuses on the core responsibility of school leadership under the guidance of a formal leader. A key part of this practice is the ability of the pedagogical leader to mobilize the community to face challenges and to make progress toward solving them. DPL in education is best understood as a practice that is distributed among teacher leaders, followers, and the school community. The study employed qualitative content analysis with substantive content analysis of the focus group discussion on leadership, individual interviews, observations, and questionnaires. A distributed representative method was applied for cross-group examination and analysis of substantive data.

Bøe and Hognestad (2017) encouraged the distribution of leadership in school organizations as a bottom-up approach for promoting interactive and collaborative practice. The authors discouraged the "hero-hierarchical thinking" where one person performs all leadership responsibilities with a

few in the middle level only implementing their delegated duties. The authors employed a qualitative shadowing research method to explore the nature of formal and informal leadership. This method entailed close monitoring and observation of leadership practitioners over a certain period. The purposive sampling method was used to select the participants. Data collection was performed through interviews, field notes from observations, and videos of the participants.

DPL as suggested by Heikka and Suhonen (2019), the interdependence by the center directors and teachers in enacting leadership roles and responsibilities is vital in achieving the common goals, vision, and mission. The DPL concept is considered as a constructive element of leadership implementation. Furthermore, the dimensions of DPL facilitate the interdependence through collaborated, and coordinated distributions. DPL is grounded on the core element of DL which is that PL is enacted separately but interdependently in educational contexts. In the study, qualitative data were collected using six semi-structured interviews, and written documents from the ECE center directors and teachers. An inductive, qualitative content analysis was employed in which the researchers analyzed interview data and written documents from participants. Lastly, an inquiry was conducted into the substantive content of the interview data, which were separately transcribed.

The adopted dimensions of DPL practice are concomitant with those advanced by Yang and Lim (2020), who explored center-based conditions that could hinder or facilitate the DPL of teachers of ECE. The study employed an exploratory, interpretive qualitative single-case design. The childcare centers were purposefully selected. The participants consisted of eight principals and nine ECE teachers. Data were generated from field notes from observations of the non-participants records, individual semi-structured interviews, informal conversations, email exchanges, relevant curricular and pedagogical document analysis, pictures of the physical environment, strategic plans analysis, and focus group discussions across 10 months. DPL helps in building discourse within a community of practice in a learning setup. DPL involves teachers in collective decision-making, identifying gaps in the learning situations, and giving opportunities to initiate new ideas in the organization. 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. Furthermore, they elucidated these interdependent dimensions and expounded them as teachers involved in strategic planning; encouraging participation, providing sufficient resources; sharing authority in decision-making and developing leadership tasks; designing leadership functions with other teachers who facilitate pedagogical reflection and learning within teams; and co-creating procedures, structures, and plans for the efficient practice of DL (p. 5). These dimensions indicate that utilizing DL in pedagogical practice, teacher learning is important to any key education reform, especially in curriculum orientation, through a well-structured DPL practice viewed as autonomous to pedagogical decision-makers.

Finally, Heikka et al. (2021), argued that responsibilities for PL are implemented between ECE center directors and teachers. The authors suggested that the processes are majorly influenced by sufficient enactment of DL and the teachers' leadership skills and positions in implementing DL. Moreover, the authors opined that DL has positive impact on the teachers in reaching the goals set for enhancing professional development of the staff and fostering curriculum reforms. Leadership in ECE is a combination of individual responsibilities and collective work of the staff members. This is facilitated through the five dimensions of DPL namely: (a) enhancing shared consciousness of visions and strategies between the stakeholders; (b) distributing responsibilities for PL; (c) distributing and clarifying power relationships between the stakeholders; (d) distributing the enactment of pedagogical improvement within centers; and (e) developing strategy for DPL. The study which employed the mixed-method approach with an explanatory sequential design conducted a quantitative inquiry to understand the mechanisms used to produce certain

quantitative analyses. The integration of the quantitative and qualitative methodologies enabled the authors to produce a holistic view of the DPL concept.

Discussions

Development of involvement of teachers in leadership

DPL enhanced innovation, creativity, development of pedagogical and organizational teacher leadership, commitment, and interaction through shared responsibilities (Jäppinen, 2010; Yang and Lim, 2020). It involved the collective, responsible, and professional actions of teachers that facilitated the engagement and commitment of students to their studies (Jäppinen, 2010). As postulated by Jäppinen and Sarja (2012), the participants demonstrated that leadership whose representatives were teachers was never smooth due to the selective implementation of the practice or lack of collaboration among leaders in the institution. This scenario affected the generation of learning dialogue among teachers as well as the development of substantive educational nodes for students during the transition process. Jäppinen (2012) illustrated that high levels of mistrust existed between school leaders and teachers as well as among teachers that hindered the involvement of teachers in leadership responsibilities. In institutions where DPL was practiced, it was perceived as a professional internal element substance, and its characteristics were enacted by stakeholders, especially teachers.

Significance of teacher leadership for quality improvement

A practice of shared tasks and goals being collectively executed by all teachers in leadership was observed. Leadership practice was collective, in that, each staff of the community served as a leader (Heikka et al., 2021). Furthermore, leadership practice was concurrent—(any staff member was capable of enacting leadership roles at the same time), collaborative—(the entire institution of learning was controlled and managed by all staff members), and compassionate—(the ideas of all members were considered and given importance and equal measure during execution in every decision-making and consultation process) (Jäppinen, 2010; Jäppinen and Maunonen-Eskelinen, 2012; Jäppinen and Sarja, 2012). Shared responsibilities enable the staff members of an organization to possess a cognitive idea and synergy by jointly enacting leadership responsibilities executing shared actions. Some studies found that in DPL, each teacher was collaboratively involved in the enactment of leadership practice in pedagogical activities through joint agreements on methods and directions to improve the quality of learning and teaching (Heikka, 2014).

Significance of dimensions of DPL in educational contexts

Premised on the dimensions of DPL, PL was highly valued among participants although it was not evenly distributed (Heikka et al., 2013, Heikka *et al*., 2019). Teachers are considered pedagogical leaders only when they are formally appointed as assistant directors within their respective centers. The perception is that DPL enacted is only connected with the position of the center director, which is not the case. Interdependence should be practiced among leaders and stakeholders to make PL visible. This process should focus on the interaction and collaboration between systems of leadership enactment and the development of a culture of distributed pedagogical practices (Heikka *et al*., 2019). Furthermore, DPL dimensions proposed for democratically shared responsibilities in which

principal, who plays a rightful leadership role, willingly, delegate certain leadership responsibilities to multiple persons in the learning organization (Heikka, 2014). These leadership responsibilities were shared between the principal and the teacher leaders although the principal remains the overall person in-charge in the institution. In addition, teachers directly practiced PL during instructional situations because they stand first and closest in caring relationships with learners (Bøe and Hognestad, 2017). The main responsibility of teachers was to guide students academically, socially, emotionally, psychologically, and spiritually as they transition from the world of childhood to that of adulthood. Consequently, the responsibility of the principal was to collaborate with teaching faculty in the community of practice to manage pedagogical programs. The significance of DPL lies in the teaching and learning processes; school vision, mission, and goals; management of instructional programs; and promotion of the school learning climate.

According to the DPL dimensions, every staff member felt sense of belonging to the organization due to the presence of a collaborative and interdependent leadership experience through multiple levels and involvement of multiple personnel in leadership (Bøe and Hognestad, 2017). However, from the studies, leadership was not enacted independently but interdependently by individuals and multiple leaders in some institutions. Although shared responsibilities enhanced collaborative relationships, in DPL, teacher leaders needed to be empowered to perform similar leadership practices to develop best practices in collaboration.

The roles of stakeholders in the implementation of DPL functions

Heikka and Suhonen (2019: 48–53) identified the following leadership functions: constructing shared vision, goals, and values for ECE; developing learning centers pedagogy; facilitating learning and increased expertise educators; building the operational structures and the culture of the centers and enhancing efficient and participative decision-making in the context. From the studies, it was argued that leadership in different organizations was established around the center director but not sufficiently distributed to stakeholders. In other circumstances, center leaders enacted leadership separately and not interdependently at different levels, which, thus, influenced the functions of the centers. The autonomous pedagogical decision-making that enhanced the professional development of teachers as well as curricular reforms within a learning institution was well practiced (Yang and Lim, 2020). DPL enhanced the teachers' ability to lead in professional learning as well as in the pedagogical improvement of a learning community of practice. Notably, DPL was disaggregated to be engagement of teachers and stakeholders in organizational decision-making, sharing instructional experiences, or information search and dissemination. The researchers identified challenges that hindered the full enactment of DPL. These included short of the workforce; the poor working relationship between parents, the existing and new teaching staff, and the expectations of stakeholders in the construction of pedagogical shared vision and strategies to be used in pedagogical changes. As illustrated by Heikka et al. (2021), stakeholders appreciated the dimensions of DPL as implemented within their centers. This perception enhanced a shared consciousness of vision and strategies among stakeholders. Moreover, the teachers with leadership roles in centers were perceived to encourage pedagogical reflections in their organizations.

Implications, limitations, and scope of future research

The main aim of this literature review is to investigate the perception and conceptualization of DPL in different educational contexts. Through the review, the examination of the perception and

conception of different stakeholders in ECE and secondary education revealed the need to promote the culture of DPL across the spheres and contexts of education. The literature revealed that much emphasis has been mainly placed on ECE contexts. Moreover, the concept has been associated with the sustainability of DL at the expense of PL. It highlighted the roles of center managers and the delegation of responsibilities to teacher leaders. Various leadership trajectories, as revealed by the literature, are mainly focused on the duties of managers of centers for ECE, the teaching staff, as well as the stakeholders of the organizations. This implies that empirical evidence contributed to most of the identified development of DPL culture in educational contexts. Similarly, empirical evidence was collected from the participants through semi-structured interviews, observations, and focus group discussions. Thus, the need emerges to conduct a validation of DPL using a mixed-method approach to develop a more robust theoretical background of the dimensions of DPL. As such, various tools can be employed, and broad, comprehensive, and in-depth data analysis methods can be utilized across educational contexts, especially in education programs in higher education. The result equally implies the need to further investigate DPL practice by documenting best practices for pedagogical improvement, which can provide support for strong and productive collegiality among educational stakeholders.

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ORCID iD


Peter Ochieng Okiri https://orcid.org/0000-0003-2163-4830

References

Abel M (2016) *Why Pedagogical Leadership?*. National Louis University: McCormick Center for Early Childhood Leadership. McCormickCenter.nl.edu.

Alameen L, Male T and Palaiologou I (2015) Exploring pedagogical leadership in early years education in Saudi Arabia. *School Leadership & Management* 35(2): 121–139.

Bertrand J (2008) *Understanding, Managing, and Leading: Early Childhood Programs in Canada*. Toronto: Thomson Nelson.

Bøe M and 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.

Bubale D, Kasule GW and Mbabazi MEG (2021) Relation between distributed leadership and pupils' performance in government-aided primary schools in Kayunga District, Uganda. *International Journal of Educational Social Sciences Research* 4(2): 146–163.

Carroll-Lind J, Smorti S, Ord K, et al. (2016) Building pedagogical leadership knowledge in early childhood education. *Australasian Journal of Early Childhood* 41(4): 28–35.

Cejas-Martínez MF, Mendoza-Velazco DJ, Navarro-Cejas M, et al. (2021) Pedagogical leadership within the framework of human talent management: A comprehensive approach from the perspective of higher education in Ecuador. *Integration of Education* 25(1): 8–21.

Contreras TS (2016) Pedagogical leadership, teaching leadership and their role in school improvement: A theoretical approach. *Propósitos y Representaciones* 4(2): 231–284.

Dhani R and Bakshi R (2020) A systematic literature review of distributive leadership applications for meeting challenges of VUCCA educational environment under COVID-19. *GMJ* 14(2): 2–16. https://www.researchgate.net/publication/351757024

Diamond JB (2013) *Distributed Leadership: Examining Issues of Race, Power, and Inequality*. In: Tillman CL and Scheurich JJ (eds) *Handbook of Research on Educational Leadership for Equity and Diversity*. New York: Routledge, pp. 83–104.

Fonsén E, Lahtinen L, Sillman M, et al. (2020) Pedagogical leadership and children's well-being in Finnish early education. *Educational Management Administration & Leadership* 50(6): 979–994.

Forssten Seiser A (2019) Exploring enhanced pedagogical leadership: An action research study involving Swedish principals. *Educational Action Research* 28(5): 791–806.

Gronn P (2008) The future of distributed leadership. *Journal of Educational Administration* 46(2): 141–158.

Hairon S and Goh JW (2015) Pursuing the elusive construct of distributed leadership: Is the search over? *Educational Management Administration & Leadership* 43(5): 693–718.

Harris A (2003) Teacher leadership as distributed leadership: Heresy, fantasy or possibility? *School Leadership & Management* 23(3): 313–324.

Harris A (2005) Reflections on distributed leadership. *Management in Education* 19(2): 10–12.

Harris AT (2010) Using Professional Learning Communities to Build Teacher Leadership Capacity: Creating Sustainable Change in Education. *Online Submission*. http://eric.ed.gov/?id=ED513642.

Heikka JE (2014) *Distributed pedagogical leadership in early childhood education*. Tampere University Press.

Heikka JE, Hujala E, Wanaiganayake M, et al. (2013) Enacting distributing pedagogical leadership in Finland: Perceptions of early childhood education stakeholders. *Researching Leadership in Early Childhood Education*: 255–273.

Heikka JE, Kahila SK and Suhonen KK (2020) A study of pedagogical leadership plans in early childhood education settings in Finland. *South African Journal of Childhood Education* 10(1): 1–9.

Heikka JE, Pitkäniemi H, Kettukangas T, et al. (2021) Distributed pedagogical leadership and teacher leadership in early childhood education contexts. *International Journal of Leadership in Education* 24(3): 333–348.

Heikka JE and Suhonen KK (2019) Distributed pedagogical leadership functions in early childhood education settings in Finland. *Southeast Asia Early Childhood Journal* 8(2): 43–56.

Heikka JE and Waniganayake M (2011) Pedagogical leadership from a distributed perspective within the context of early childhood education. *International Journal of Leadership in Education* 14(4): 499–512.

Ho DCW (2010) Teacher participation in curriculum and pedagogical decisions: Insights into curriculum leadership. *Educational Management Administration & Leadership* 38(5): 613–624.

Ho J, Shaari I and Kang T (2021) The distribution of leadership between vice-principals and principals in Singapore. *International Journal of Leadership in Education*: 1–21. https://doi.org/10.1080/13603124.2020.1849811.

Jäppinen AK (2010) Preventing early leaving in VET: Distributed pedagogical leadership in characterising five types of successful organisations. *Journal of Vocational Education & Training* 62(3): 297–312.

Jäppinen AK (2012) Distributed pedagogical leadership in support of student transitions. *Improving Schools* 15(1): 23–36.

Jäppinen AK and Maunonen-Eskelinen I (2012) Organisational transition challenges in the Finnish vocational education—Perspective of distributed pedagogical leadership. *Educational Studies* 38(1): 39–50.

Jäppinen AK and Sarja A (2012) Distributed pedagogical leadership and generative dialogue in educational nodes. *British Educational Leadership, Management and Administration Society* 26(2): 64–72.

Joo YH (2020) The effects of distributed leadership on teacher professionalism: The case of Korean middle schools. *International Journal of Educational Research* 99: 101500.
MacBeath J (2005) Leadership as distributed: A matter of practice. *School Leadership & Management* 25(4): 349–366.
Male T and Palaiologou I (2012) Learning-centred leadership or pedagogical leadership? An alternative approach to leadership in education contexts. *International Journal of Leadership in Education* 15(1): 107–118.
Male T and Palaiologou I (2015) Pedagogical leadership in the 21st century: Evidence from the field. *Educational Management Administration & Leadership* 43(2): 214–231.
Male T and Palaiologou I (2017) Pedagogical leadership in action: Two case studies in English schools. *International Journal of Leadership in Education* 20(6): 733–748.
Muijs D and Harris A (2007) Teacher leadership in (in)action: Three case studies of contrasting schools. *Educational Management Administration & Leadership* 35(1): 111–134.
Mukan N, Havrylyuk M and Stolyarchuk L (2015) Theoretical framework of leadership in higher education of England and Wales. *Comparative Professional Pedagogy* 5(1): 39–45.
Sergiovanni TJ (1998) Leadership as pedagogy, capital development and school effectiveness. *International Journal of Leadership in Education* 1(1): 37–46.
Shava GN and Tlou FN (2018) Distributed leadership in education, contemporary issues in educational leadership. *African Educational Research Journal* 6(4): 279–287.
Singh M, Han J and Woodrow C (2012) Shifting pedagogies through distributed leadership: Mentoring Chilean early childhood educators in literacy teaching. *Australasian Journal of Early Childhood* 37(4): 68–76.
Spillane JP (2005) Distributed leadership. *The Educational Forum* 69(2): 143–150.
Timperley H (2008) A distributed perspective on leadership and enhancing valued outcomes for students. *Journal of Curriculum Studies* 40(6): 821–833.
Varga R, Dijana V and Peko A (2020) Being an influential pedagogical leader: Headteachers' view on necessary competences. *Journal of Contemporary Educational Studies* 71(2): 174–195.
Waring M and Evans C (2015) *Understanding pedagogy: Developing a critical approach to teaching and learning*. Routledge.
Yang W and Lim S (2020) Toward distributed pedagogical leadership for quality improvement: Evidence from a childcare centre in Singapore. *Educational Management Administration & Leadership* 51(2): 289–307.
Zulkifly NA, Ismail IA and Asimiran S (2020) Collegial and distributed leadership: Two sides of the same coin? *International Journal of Leadership in Education*: 1–14. https://doi.org/10.1080/13603124.2020.1804623.

Author biographies

Peter Ochieng Okiri has growing interest in 21st century educational leadership and governance. He is a teacher educator and currently pursuing his PhD in the University of Szeged, Hungary at the Doctoral School of Education in the Faculty of Humanities and Social Sciences. He specializes in educational leadership and management as well as learning and instruction in teacher education.

Mária Hercz loves and enjoys working with children, mentoring students especially those preparing to be future teachers in the early year education. She is an associate professor at the Faculty of Primary and Pre-School Education, in the Eötvös Loránd University, Budapest, Hungary. She has supervised several students in the University of Szeged and Eötvös Loránd University pursuing different levels of degrees in education.