

The impact of headmaster distributive leadership towards professional learning communities

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ABSTRACT

Effective school leadership has a massive impact on excellence and success. This study was conducted to identify distributive leadership and professional learning communities (PLC) practice in cluster primary schools of excellence (CPSE) in Kedah, Malaysia. This study also aimed to analyze the extent of principals' distributive leadership influencing PLC practices and examine the relationship between these two variables. A total of 162 respondents from randomly selected five primary schools participated in the survey. The findings showed that the level of distributive leadership ($M=4.4$, $SD=0.4$) and teacher PLC practice ($M=4.3$, $SD=0.4$) were very high. The findings also showed a strong and significant positive relationship between principals' distributive leadership and teachers' PLC practice ($r=.72$). Furthermore, the findings indicated the existence of a strong influence for all dimensions of distributive leadership on PLC practices ($r^2=.60$, $p<.05$). The findings of this study can be used as an essential guide in improving skills, adding knowledge of leadership management, and enhancing PLC practices in producing positive work culture towards realizing educational excellence.

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1. INTRODUCTION

The excellence and success of a school lie in the effectiveness of the leadership brought by the school administrators. In this regard, in the second wave of the Malaysian Education Development Plan (MEDP) 2013-2025, the main agenda of the Ministry of Education Malaysia (MOE) is focused on improving the quality of leadership in every school in Malaysia [1]. In its fifth shift, this foundation has been clearly stated in the MEDP 2013-2025, namely: "Ensuring High-Performance Leadership is placed in Every School." One of the leadership practices by school leaders is applying distributive leadership, which is an essential element in the successful implementation of the MEDP 2013-2025 [2].

According to Harris and Spillane [3], distributive leadership is leadership that can be shared, "share leadership" in which the leader (in this context is the headmaster or principal) and staff (senior assistant teachers and teachers) share duties and responsibilities in achieving the school goals. The distributive leadership style allows leaders to share an increasing workload with subordinates [4], [5]. This is because the responsibility to improve school achievement lies with the leaders alone, but it is the sharing of tasks together with the school people.

Through the fourth shift of MEDP 2013-2025, MOE has sought to transform the teaching profession into a profession of choice. One of the shifts focuses on developing teachers' professional learning community (PLC) practices. In this fourth shift, teachers will have the opportunity to enrich their PLC practices as the education system creates a peer mentoring culture. It can happen through mentoring, development, and sharing of best practices and increase peer accountability in meeting professional career standards [1]. This case is because teachers are the mediators who communicate directly with the students. Therefore, teachers need to be constantly sensitive to new and up-to-date knowledge to educate students through the right approach with 21st century education [6].

According to Hassan, Ahmad, and Boon [7], developing PLC practices can further enhance the effectiveness of teaching and learning in the classroom. However, the practice of PLC to be developed, interpolated, and given sustenance from the headmaster is very necessary [8]. To produce students who can compete globally over time [9], especially towards the vision of cluster schools of excellence.

The establishment of cluster schools of excellence has been stated in the National Education Blueprint (NEB), launched on 16th January 2006. The creation of cluster schools of excellence is based on both NEB and the 6th Strategic Thrust, which is to Boost the Excellence of Educational Institutions. Schools in Malaysia have widely practiced the practice of PLC since its introduction by MOE to improve school effectiveness since 2013 [10]. Programs such as lesson study, teacher sharing, and learning walk are among the strategies introduced and practiced by teachers at the school level to implement PLC. This case indicates that teachers have become familiar with the term PLC, which requires teachers to acquire knowledge of learning and teaching, improving PLC practice, which contributes to the teaching profession [11].

However, most schools are still confused and do not appreciate the true essence of PLC and only claim that their schools are schools that practice PLC [12], [13]. In addition, a study by Chong, Faizal, and Zuraidah [14] also found that schools still do not use professional partnerships or sharing among teachers. Therefore, this study was conducted to identify the level of PLC practice and distributive leadership among school leaders. In addition, this study also looked at the relationship between distributive leadership and PLC practices. We also explored the dimensions of distributive leadership that impacted the PLC practices.

2. LITERATURE REVIEW

Many studies related to distributive leadership revolve around the context of schools in England and the United States and are beginning to grow slowly in Asian countries [15]. In Malaysia, an exploratory study of distributive leadership found that 74% of teachers stated that distributive leadership was practiced in their schools [16]. This finding is in line with studies of distributive leadership in technical and vocational schools [17] and a national school in Selangor, Malaysia [18]. The findings of these studies are in line with distributive leadership practices implemented in the West.

Nevertheless, there is still a need to expand research in this area further to focus on aspects of the influence and power of distributive leadership in the context of organizational and cultural diversity [19]. The proposal is also reported in the Teaching and Learning International Survey Report (TALIS), which states that studies support the concept of distributive leadership practices. However, effective methods of implementing distributive leadership are still poorly discussed [20], [21]. Distributive leadership is said to significantly influence the improvement of student achievement and the teaching system in schools [22]. Some of the principles of distributive leadership proposed can help management in the success of teaching activities in schools, namely: i) Leadership is practiced to improve performance; ii) Development requires a continuous learning process between all parties; and iii) Leaders are models [23].

2.1. Distributive leadership theory

Although many theories can be associated with distributive leadership, the researcher referred to Gronn's Theory [24]. According to this theory, leadership is a process of influencing others directly in any action, and this theory can describe distributive leadership in two behavioral contexts. First, distributive leadership is a distributed pattern of leadership without being focused on one leader. It covers the tasks in each position, whether a task is assigned to a group of members. Second, distributive leadership is a collective action within an organization. The intended joint efforts include collaboration in performing tasks, sharing expertise and skills between members in drafting work, and the institutional structure likened to a committee [25], [26].

Gronn [24] has adopted the basic theory of Engestrom [27], which emphasizes collective activity, prioritizes division of tasks, opens social relationships, and encourages change. The foundations of this theory relate to the ideas and concepts, the natural environment, the surrounding society, technology, and others, which react with each other to achieve organizational goals. In addition, it also involves contemporary factors as a catalyst to the importance of distributive leadership practices. The problems faced in the organization require consideration in the organization's capacity as a whole, based on distributive leadership

that is seen as appropriate in today's increasingly complex contemporary era [28]. Problematic situations can enhance the cooperative attitude in the organization, especially in task coordination, and this case can achieve this cooperative attitude through the implementation of distributive leadership.

2.2. Professional learning theory

Through this study, the researchers used the theory of professional learning practice highlighted by previous studies [29]–[31]. Here are the basic practices that have been highlighted by the three founders of the professional learning theory. The theories comparison is represented in Table 1.

Based on the theories, it can be concluded that the interpretation of each professional learning theory is based on the same practice only from year to year; there is improvement through the addition of diversified practices according to learning methods appropriate to current technology. The researchers found that Mansor, Norwani, and Yunus theory [31] encompasses all theoretical best practices applied in professional learning theory. The diversity of these practices can provide a variety of options to teachers to enrich their level of professionalism. Thus, this study focuses on the school-based professional learning practices presented by Mansor, Norwani, and Yunus [31] and is made a dependent variable. Such practices are self-directed learning, observation and assessment, problem-solving, training, action research, professional portfolios, and learning groups.

Table 1. Professional learning theory component matrix

Theory components	Sparks and Horsley [29]	Roberts and Pruitt [30]	Mansor, Norwani, and Yunus [31]
Self-directed learning	X		X
Observation & Assessment	X	X	X
Collaborative problem solving	X	X	X
Training	X		X
Action research			X
Learning groups		X	X
Professional portfolios		X	X

3. RESEARCH METHOD

3.1. Research design

This study used a quantitative method by a cross-sectional survey. This method was chosen based on its ability to provide a numerically measurable explanation for both variables. In addition, this method saves time, is more economical and accurate in providing information related to the study population, and is suitable for descriptive studies when the researchers want to see the relationship between variables in a real-life context [32]. In education, cross-sectional studies using questionnaires are popular where researchers only collect data at one time [33].

3.2. Population and sampling

The study population concentrated on teachers in the cluster primary schools of excellence (CPSE) in Kota Setar, Kedah, Malaysia. For this study, the sampling only involved teachers in four CPSE in the district of Kota Setar, involving a total of 279 teachers. The number of teachers engaged as study respondents was determined based on Krejcie and Morgan's [34] sample size determination table. Out of 279 teachers, only 162 teachers were required as the study sample. Sample size determination was carried out, taking into account the significance level at $p < .05$. However, the researcher has increased the total study sample to 170 people. This case is in line with the recommendation by previous researchers [32], [35]. They stated that a larger sample size is better for avoiding errors in sampling, improving reliability, anticipating the probability of questionnaires not being returned, and studies involving questionnaire methods preferably require a larger sample.

3.3. Instrumentation

This study used two instruments, namely the distributive leadership instrument and the PLC practice instrument. This distributive leadership instrument was translated and adapted from the Distributed Leadership Readiness Scale questionnaire by Gordon [36]. The questionnaire had 40 items that measure four dimensions of distributive leadership practices, namely: i) Setting and sharing the school's mission, vision, and goals; ii) School culture; iii) Shared responsibilities; and iv) Leadership practices. Meanwhile, the PLC practice questionnaire contained 33 items from five dimensions [37]. These questionnaires used a 5-point Likert scale, from one (totally disagree) to five (totally agree).

4. RESULTS

4.1. Descriptive statistic analysis

Data analysis for the headmasters' distributive leadership level is as shown in Table 2. The results showed that the distributive leadership practices were based on four dimensions, namely school culture had the very highest mean value ($M=4.5$, $SD=0.7$), followed by setting and sharing school's mission, vision, and goals ($M=4.5$, $SD=0.4$), shared responsibility ($M=4.4$, $SD=0.4$) and leadership practices ($M=4.3$, $SD=0.4$). Overall, the study's findings showed that the headmasters' level of distributive leadership practices based on these four dimensions was very high, which meant they emphasized the approach in their administration.

Table 2. Level of headmaster's distributive leadership in CPSE

Dimension	Mean	SD	Level
Setting and sharing school's vision, mission and goal	4.5	0.4	Very high
School culture	4.5	0.7	Very high
Shared responsibility	4.4	0.4	Very high
Leadership practices	4.3	0.4	Very high

Table 3 shows the level of PLC practice. Findings showed the level of PLC practice based on five dimensions, where the dimension of the supportive situation was at a very high level ($M=4.5$, $SD=0.4$), followed by collective learning and application ($M=4.48$, $SD=0.34$) and subsequently sharing values and vision ($M=4.3$, $SD=0.7$). Similarly, the dimension of personal partnership practice ($M=4.4$, $SD=0.4$) and partnership and supportive leadership ($M=4.3$, $SD=0.3$) also had a very high level. These findings indicated that PLC in cluster primary schools of excellence (CPSE) in the Kota Setar district was very high.

Table 3. Level of plc practices in CPSE

Dimension	Mean	SD	Level
Sharing values and vision	4.3	0.7	Very high
Partnership and supportive leadership	4.3	0.3	Very high
Collective learning and application	4.3	0.3	Very high
Supportive leadership	4.4	0.4	Very high
Personal partnership practice	4.3	0.4	Very high

4.2. Inferential statistic analysis

Pearson correlation analysis showed that the distributive leadership practices have a significant positive relationship to PLC practice with a correlation coefficient value of $r=.716$, $p=.000$, as shown in Table 4. As such, the distributive leadership of headmasters has a strong relationship to PLC practices. Multiple regression analysis showed that the predictor variable (distributive leadership) was included in the regression model at $p<.05$. This case indicated that distributive leadership was a predictor factor to PLC practice with a value of $R^2=.60$. A value of R^2 at .60 indicated that the predictor variable (distributive leadership) significantly affects PLC practices, 60% ($r=.77$), as shown in Table 5. In conclusion, distributive leadership was one of the factors contributing to the PLC practices, with a contribution of 60% to the variance change in the PLC practices [$F(4,157)=59.85$, $p<.05$].

Table 4. Pearson correlation values between headmasters' distributive leadership and plc practices

		PLC
Distributive leadership	Pearson correlation	.716**
	Sig. (2-tailed)	.000
	N	162

Table 5. Regression analysis of headmasters' distributive leadership on plc practices

Variable	R	R ²	Adj. R ²	Standard error	df	F	Sig.
Distributive leadership	.77	.60	.59	.422	4.157	59.85	.00

Based on dimensional distributive leadership, four dimensions are predictors of PLC practice. The dimensions are setting and sharing school's mission, vision and goals ($\beta=.16$, $p<.05$), school culture ($\beta=.17$, $p<.05$), shared responsibility ($\beta=.18$, $p<.05$), and leadership practices ($\beta=.49$, $p<.05$) when included in the regression model on $p<.05$. This case meant that all four dimensions became predictive or influential factors

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on the variables of the PLC [$F(4,157) = 59.85, p < .05$]. The findings of the study found that the dimensions of setting and sharing school's mission, vision, and goals had a small but significant influence ($\beta = .16, p < .05$), as well as school culture ($\beta = .17, p < .05$) and shared responsibility ($\beta = .18, p < .05$). In contrast, the dimension of leadership practices ($\beta = .49, p < .05$) had a moderate and significant effect or influence. These results are shown in Table 6.

Table 6. Multiple regression analysis of distributive leadership dimension on plc practices

Variables	B	β	T value	Sig.
Constant	.69		2.93	.04
Setting and sharing school's vision, mission and goals	.13	.16	2.50	.01
School culture	.08	.17	3.26	.00
Shared responsibility	.14	.18	2.76	.01
Leadership practices	.48	.49	8.05	.00

The regression equations involved are as (1):

$$\text{PLC practices} = .69 + .13X_1 + .08X_2 + .14X_3 + .48X_4 \quad (1)$$

Where:

X_1 =setting and sharing school's vision, mission and goals; X_2 =school culture

X_3 =shared responsibility; X_4 =leadership practices

5. DISCUSSION

The leadership style practiced by school administrators influenced the level of professional learning community (PLC) practice of teachers in the school. The study findings showed that the headmasters' level of distributive leadership in the cluster primary schools of excellence (CPSE) was very high. This result indicated that headteachers in the CPSE have practiced distributive leadership in their respective schools on a large scale. The findings also show that principals practice the following four dimensions of distributive leadership: i) Setting and sharing the school's vision, mission and goals; ii) Shared responsibility; iii) School culture; and iv) Leadership practices. The findings of this study support the results of previous studies [2], [18], which also found that distributive leadership has been implemented and practiced in most schools in Malaysia.

The findings of this study are also in line with the results of a survey by Yusoff, Don, and Ismail [38], which found distributive leadership and its dimensions were at a high level. Furthermore, the study by Jose and Musa [39] found that the distributive leadership of school administrators has a significant influence on work commitment among teachers. School administrators must practice the distributive leadership dimensions to increase teacher commitment to the maximum level [31]. This statement is in line with the intention of MEDP 2013-2025, which introduced distributive leadership in the 2nd wave (2016-2020) for school administrators to become mentors, facilitators, developers, and examples of best practices in schools to be emulated by teachers [1]. This situation will create a conducive and safe school environment for teachers to show extraordinary commitment to carrying out their duties, roles, and responsibilities. School administrators' and teachers' understanding of the concepts and dimensions of distributive leadership will further facilitate the process of acceptance and implementation of these leadership practices.

However, the distributive leadership was associated with PLC practices in this study, which is still new in the current study. Findings indicated that distributive leadership has a moderately strong and significant relationship with PLC practices. This situation shows that PLC practice will increase when regularly practiced the distributive leadership style. Hipp and Huffman [40] have studied the role of principals in developing PLC in schools using the Hord Model. The study's findings showed that the principal's leadership practices were the primary key to school reform holistically. School principals with a high level of distributive leadership are found to be more effective in implementing the vision, mission, and goals of the school as well as able to implement the sharing of best practices in the success of school programs towards realizing student excellence, besides sharing a vision and empowering and engaging teachers in decision making [7], [28].

The findings of this study are in line with previous studies [8], [41], which found that principal support influences the practice of PLC. Studies on PLC practices in secondary schools in Malaysia for the dimensions of shared and supportive leadership showed that principals have: i) Provided support and guidance; ii) Shared power and authority; iii) Given a wide range of decision making; iv) Been responsible

for decisions made. In addition, the researchers found that most teachers understand the concept of distributive leadership that they should share aspects of leadership with administrators. Principal support has demonstrated the ability of principals and administrators to guide and support other teachers to become influential teaching leaders and share best teaching practices with other fellow teachers [17], [26].

In conclusion, distributive leadership and PLC practices that emphasize a collaborative culture can encourage school administrators and teachers to interact and collaborate. This situation can provide a space for teachers to share new experiences and knowledge, solve student learning problems together and help each other improve student achievement. In addition, the practice of power-sharing between administrators and teachers can strengthen the relationship between school administrators and teachers [21], [22]. The opportunity to contribute ideas among teachers can unearth their talents and potential in implementing PLC. Leaders who take care of the needs of these teachers can engender a sense of being valued and, in turn, increase their commitment to conducting classroom teaching and learning more effectively [20], [42].

6. CONCLUSION

The leadership factor is an essential element in shaping the practice level of teachers' PLC in a school. The study results found that the four dimensions of distributive leadership of headmasters, namely the dimensions of setting and sharing school's mission, vision and goals, school culture, shared responsibility, and leadership practices influenced the teachers' PLC practice. Therefore, school administrators must ensure that the school's mission, vision, and goals to be achieved are clear and understood by all school community members. When all school members have a clear understanding of the school's vision, mission, and goals, they will work together towards the success of all school activities carried out and have a sense of belonging together. This case will be able to reduce conflicts and disagreements among school members. As a result, teachers will be more proactive in carrying out their duties and improve the PLC practice to realize school excellence.

Distributive leadership and PLC practices that emphasize a collaborative culture can also encourage school administrators and teachers to interact and collaborate. This situation can enable teachers to share new experiences and knowledge, solve student learning problems together and help each other improve student achievement. Apart from that, the findings of this study have also provided awareness to school leaders, namely principals and headmasters, about the importance of distributive leadership style that impacts the practice of PLC among teachers. When the level of PLC practice of teachers increases, it can contribute to academic success holistically to realize the mission and vision of the school.

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