



Exploring Teachers' Comprehension of Professional Learning Communities in Schools: A Case Study

Noor Rasidah Binti Kasbi¹, Mohd Yusoff Bin Mohd Nor², Jamalul Lail Abdul Wahab³

^{1,2,3}Universiti Kebangsaan Malaysia, Bangi, Malaysia

(Received: 27 October 2023

Revised: 22 November

Accepted: 26 December)

KEYWORDS

Professional Learning Community; Professional Learning Community Issues; Teacher Professional Development

ABSTRACT:

This qualitative research aimed to explore pertaining to teachers' comprehension of Professional Learning Communities (PLC) within school settings. It serves as a crucial precursor to another study examining the effectiveness of Professional Development Programs (PPD) in fostering impactful PLC practices. This endeavor holds significance in furnishing empirical evidence that stakeholders can utilize to grasp a segment of the current state of teachers within the national education system. Employing a case study approach facilitated by interview techniques, data were gathered from 40 participants selected via purposive sampling, comprising both secondary and primary school teachers across 12 states and 2 federal territories in Malaysia. The interview transcripts were transcribed and analyzed using Nvivo 12 plus software. Initial open coding and structured coding, was conducted to derive categories and themes. Additionally, content analysis was employed to discern patterns among the identified categories across the participant cohort. The analysis revealed four overarching themes and 16 sub-themes, highlighting various understanding issues faced by teachers regarding PLC. These findings offer valuable insight into the complexities of implementing PLC practices and emphasize the importance of fostering a deeper understanding among teachers. In addition, the findings of this case study underscore the need for targeted interventions and support mechanisms to increase the effectiveness of PLC initiatives and ultimately improve teaching and learning outcomes in schools.

1. INTRODUCTION

The challenges of education in the 21st century which are volatile, uncertain, complex and ambiguity (VUCA) (Chai & Kong 2017; Taylor 2020), require all teachers to become lifelong learners. This is to ensure they continue to be relevant in providing students who meet global needs. This is because previous studies have found that teacher quality is the most dominant factor in influencing student learning at school (Hanushek & Rivkin 2006; Hattie 2003; Jensen, 2012; McKinsey & Company, 2007; Wang, 2015 in Pang 2016). Therefore, global education experts such as Kuh et al. (2008), Reeves (2010) McLaughlin & Talbert (1993) Newmann & Wehlage (1995), Fullan (2001), Hord (1997), McLaughlin & Talbert (2001) and Senge (2000) suggest the use of PLC in fulfilling this desire. This is because the effectiveness of PLC has been empirically proven over the past 3 decades in making continuous improvements to the education system in schools. Evidence from previous studies shows that there are improvements in student achievement and teacher

teaching quality at the early preschool level (Cherrington & Thornton 2015; Cheung et al. 2018; Damjanovic & Blank 2018; Keung et al. 2019; Thornton & Cherrington (2019). Other evidence shows that the improvement also occurs at the primary and secondary school level up to the tertiary level (Brown et al. 2018; Kuh et al. 2008a). In addition, evidence of its effectiveness is not only limited to student achievement and teacher quality (Blase & Kirby 2010; Borko 2004; Goddard et.al 2007; Vandenberghe & Kelchtermans 2002; Hord 1998; Fullan et al. 2004; Darling-Hammond, 2010 ; Hord, 2009; Louis & Marks, 1998; McLaughlin & Talbert 2010; Newmann & Wehlage, 1995; Thiessen & Anderson 1999; Dufour 2011; Fullan 2010; Chen et al. 2016; Drago-Severson 2016) individually and collectively (Morrissey, 2000) only, but also on the culture in the organization (Ackerman 2011; Becenti 2009; Bryk & Schneider 2002; Grippen 2007; Louis et al. 2010; Moore 2010; Supovitz et al. 2010; Mullen & Schunk 2010), performance (Marzano 2003) and school effectiveness (Song and Choi (2017) as well as the education system (Philpott & Oates 2017). This causes some researchers consider it as



a great and powerful strategy (Chen et al 2016) in improving schools. However, the effort to make it embedded in the school culture has various challenges until it becomes an ongoing issue discussed at the global level (OECD 2015). Therefore, this study was conducted to explore one of the issues related to the PLC, especially at the local level. This aims to understand the extent to which the issue exists in schools, especially from the aspect of teachers' understanding of PLC.

Issues Related To Teacher Understanding on School PLC

Literature review on PLC at global level show that, issues related to teachers' understanding of school PLCs have been discovered for a long time (Barlow 2008) over the past three decades Anthony Id (2021). However, research on this issue at the local level is still limited. Furthermore, Anthony Idi et al (2021) found that empirical studies related to PLC itself are admittedly still lacking compared to western countries. This point is proven through the analysis of studies related to PLC in Malaysia between 2010 and 2020 conducted by him and his colleagues. According to Anthony Idi et al (2021), most studies conducted at the local level tend to use a quantitative approach, for example the study conducted by Chua et al. (2020), Hassan et al. (2019) Rafisah et al (2017) and Saad et al. (2017). This causes the problems related to PLC in schools still not understood from a broader and deeper perspective. The implication is that, it continues to be a question reported in the findings of past researchers. In fact, this matter has an impact on its implementation at school. This is explained through the evidence of Ahmad Marzuki et al. (2015), Hassan et al. (2019), Kin & Omar (2021), Saad et al. (2017) and Zuraidah Abdullah (2009). Evidence from Zuraidah Abdullah's study in 2009 show that the implementation of PLC in daily secondary schools is still in its infancy. While in 2011, the MoE officially launched PLC as one of the initiatives to develop the professionalism of teachers in schools. As of 2017, Saad et al. (2017) reported, its implementation has been widespread in schools in Malaysia. Nevertheless, studies by researchers at the local level such as those carried out by Ahmad Marzuki et al. in 2015 and Hassan et al. in 2019 found that this PLC concept is still new for the teacher community in Malaysia. While after a decade of its implementation, Kin & Omar (2021) reported, it has still not shown any progress, i.e. it is still at an early stage. This evidence shows that, an exploratory study is very

necessary to understand the phenomenon that occurs can be understood from a broader and deeper perspective, especially related to teachers' understanding of PLC. This effort is important to provide meaningful information to interested parties so that appropriate action can be taken to update the existing strategy. This is to enable PLC to be part of the new work culture in schools in Malaysia. In terms of definition, PLC has various definitions that have been given by previous researchers. Among those researchers are Bolam et al (2005), DuFour (2003, 2004), DuFour et al (2006), Feger & Arruda (2008), Huffman & Hipp (2003), McREL (2003), Welsh Government (2011) and Wenger (1991). This causes it to not have a fixed definition. Nevertheless, based on the analysis done on the definition given by them, there are six keywords that make up the main components of PLC. The component consists of collaboration between organizational members, inquiry, focusing on specific matters, improving student learning, improving the learner results and is done continuously. This component is actually in line with the definition of PLC agreed by other education experts such as Hargreaves & Fullan, (2012), Hord (1997) and McLaughlin & Talbert (2006). However, there are additions to the PLC component to make it more impactful. The PLC component is using a learning cycle that involves identifying problems by collecting data, making reflections and generating new ideas as well as adapting and updating existing teaching practices (McLaughlin, 1992; McLaughlin and Talbert, 2006; Vescio et al, 2007). Therefore this component is one of the items that will be seen in this study.

2. METHODOLOGY

This study this study is a needs study that uses qualitative approach as a case study and the case study focuses on issues related to teachers' understanding of PLC. While the unit of analysis chosen is the experience of getting expose about PLC, PLC according to the teacher's understanding and the teacher's feedback on their understanding. A total of 40 teachers were selected using purposive sampling at involving secondary and primary school teachers from 12 states and 2 Federal Territories in Malaysia. Interview techniques are used to collect data based on an interview protocol. The protocol was built by the researcher based on the research objectives and research questions as shown in Table 1.



Table 1: Interview Protocol

Objective	Research Question	The Question
Exploring the existence of PLC-related issues in schools from the perspective of teachers' understanding,	To what extent do the issues related to PLC in schools exist from the aspect of teachers' understanding	Can you share your experience of getting exposure about PLC?
		Base on your experience before, what did you understand about PLC?
		Based on all the forms of disclosure received, can you response to your understanding to implement PLC?

After the data was collected, the data was converted from audio to text form and then documented into interview transcripts. Next, the data was analyzed using Nvivo 12 software. Through the software, Open coding and structured coding were performed before deriving categories and themes. Content analysis was also done to see data patterns between the participants involve. Data is analyzed using thematic analysis and content analysis and presented in the form of narratives, Tables and Figures.

3. FINDING AND DISCUSSION

The data analysis made for this section is to find out the extent to which issues related to teachers' understanding

of PLC exist. The results show that there are 4 themes and 17 sub-themes that emerge related to the issue of teachers' understanding of the school's PLC. The theme consists of teacher's experience in receiving exposure about PLC, PLC according to the teacher's understanding, participants' feedback on their understanding of implementing PLC and causes of constraints in understanding. Under the first theme, two subthemes appear, while under the second theme, there are 9 categories appear. The third and fourth themes each produce three subthemes. Descriptions related to themes and sub-themes and these categories will be discussed in the next section

The screenshot displays the Nvivo 12 interface. On the left, a 'Codes' list shows a hierarchical structure: 'RQ1 a ISSUES OF TEACHER'S UNDERSTANDING OF PLC' is expanded, showing sub-codes like 'a. TEACHER'S EXPERIENCE IN RECEIVING EXPOSURE ABOUT PLC', 'b. PLC ACCORDING TO THE TEACHER'S UNDERSTANDING', 'c. PARTICIPANTS' FEEDBACK ON THE UNDERSTANDING OF IMPLEMENTING PLC', and 'd. CAUSES OF CONSTRAINTS IN UNDERSTANDING'. The main area shows a table of these codes with columns for Name, Files, References, Created On, Created By, Modified On, and Modified By.

Name	Files	References	Created On	Created By	Modified On	Modified By
RQ1a ISSUES RELATED TO SCHOOL PLC ASPECTS OF TEACHERS' UNDERSTANDING OF PLC	29	289	2/16/2024 6:08	1	2/16/2024 5:31 AM	1
a. TEACHER'S EXPERIENCE IN RECEIVING EXPOSURE ABOUT PLC	26	67	2/16/2024 6:08	1	2/16/2024 5:42 AM	1
a.1 PSAR TEACHERS START GETTING EXPOSURE ABOUT PLC	8	13	2/16/2024 6:08	1	2/16/2024 6:04 AM	1
a.2 DISCLOSURE SOURCES ABOUT PLC	22	84	2/16/2024 6:08	1	2/16/2024 6:02 AM	1
b. PLC ACCORDING TO THE TEACHER'S UNDERSTANDING	31	51	2/16/2024 6:08	1	2/16/2024 5:52 AM	1
b.1 IMPROVING STUDENT LEARNING	16	19	2/16/2024 6:08	1	2/16/2024 10:28 AM	1
b.2 COLLABORATION	19	21	2/16/2024 7:34	1	2/16/2024 10:28 AM	1
b.3 IMPROVING LEARNER RESULTS	18	25	2/16/2024 6:08	1	2/16/2024 10:28 AM	1
b.4 DISCUSS AND SHARE INFORMATION OR IDEA	11	13	2/16/2024 6:08	1	2/16/2024 10:28 AM	1
b.5 PLC COLLABORATION TOOLS	2	2	2/16/2024 6:08	1	2/16/2024 10:28 AM	1
b.6 INQUIRY	1	1	2/16/2024 6:29	1	2/16/2024 10:28 AM	1
b.7 LEARNING CYCLE	2	2	2/16/2024 6:29	1	2/16/2024 10:28 AM	1
b.8 REFLECTION	5	6	2/16/2024 6:53	1	2/16/2024 10:28 AM	1
b.9 CLASS OBSERVATION	13	13	2/16/2024 8:51	1	2/16/2024 10:28 AM	1
c. PARTICIPANTS' FEEDBACK ON THE UNDERSTANDING OF IMPLEMENTING PLC	23	53	2/16/2024 6:08	1	2/16/2024 5:53 AM	1
c.1 CONFUSE	6	6	2/16/2024 6:08	1	2/16/2024 5:54 AM	1
c.2 DO NOT UNDERSTAND	9	14	2/16/2024 6:08	1	2/16/2024 5:55 AM	1
c.3 UNCLEAR	18	30	2/16/2024 6:08	1	2/16/2024 5:54 AM	1
d. CAUSES OF CONSTRAINTS IN UNDERSTANDING	28	83	2/16/2024 6:08	1	2/16/2024 5:55 AM	1
d.1 LACK OF DISCLOSURE GIVEN TO TEACHERS	18	56	2/16/2024 6:08	1	2/16/2024 5:56 AM	1
d.2 LESS EFFECTIVE EXPOSURE	6	15	2/16/2024 6:08	1	2/16/2024 5:57 AM	1
d.3 NO INTERNAL SCHOOL DISCLOSURE	7	12	2/16/2024 6:08	1	2/16/2024 5:57 AM	1

Figure 1 Coding, theme, subtheme and category of issue



Teacher's Experience in Receiving Exposure about Plc

Based on the first theme which is teacher's experience in receiving exposure about PLC there are 2 sub-themes that appear which consist of a year teachers start getting

exposure about PLC. While the second sub-theme is disclosure sources about PLC. Content analysis was performed for both sub-themes to find out more specifically the participants and years of exposure to PLC. The result shown in Table 2.

Table 2: Cross-Case Analysis using a matrix of study participants first receiving exposure to PLC

Participant	Year of first receiving exposure									Reference line
	2011	2012	2013	2014	2015	2016	2017	2018	2019	
PK1SKSL								▲		18
PK2SKSL				▲						22
PK3SMJH						▲				28
PK4SMTG						▼				33
PK5SMKD	♠									48
PK6SMSB							◀			40
PK7SMM							♥			32 & 41
PK8SMJH								▲		49
PK9SMPK						▼				81
PK10MSK						▶				41
PK11SMM								▶▼		29 & 25
PK12SMNS							┃			21
PK13SMJH							▲			20
PK14SMPP								▲		41
PK15SMKEL								▲		32
PK16SMPH									●	32
PK17SMKEL							▼			28
PK18SMJH							▲			38
PK19SKPK								▼		25
PK20SMPJ							♣			63
PK21SMM							▲			56
PK22SKM								▶		37
PK23SKKD								◀		24
PK24SMNS					┃					70
PK25MLB					▲					39
PK26SKTG							┃			36
PK27SMTG					▲					45
PK28KV KEL							┃			67
PK29SMKEL						▶				65
PK30 SKSB								▶◀		58
PK31SMSB		♠								43
PK32SMPP				▲						42
PK33SMPH								▼		53
PK34SMPH						▶				24
PK35SMPJ						▼				83
PK36SMPK							▲			26
PK37SMPK							—			30 & 82
PK38SMPK						▲				7 & 8
PK39SMPK							▲			30 & 55
PK40SMJH							┃			30 & 34
JUMLAH	1	1	0	2	3	8	14	10	1	40



Indicator:

Symbol	Huraian	Frequency	Total
►	Internal school disclosure by PGB	5	31
▼	Internal school disclosure by GPK	7	
◄	Internal school disclosure by GKMP	3	
▲	Internal school disclosure by teacher	15	
•	Self reading using pendrive and handout	1	
—	External school disclosure by PPD (SIP+)	1	6
I	External school disclosure by PPD (SISC+)	5	
♠	External school disclosure by KPM	2	4
♣	External school disclosure by JPN	1	
♥	External school disclosure by Agency (Petronas)	1	
	Total frequency	41	41

Year Teachers Start Getting Exposure about PLC

From the aspect of the year of exposure about PLC received by teachers, the results of the content analysis carried out are shown in Figure 2. Based on the graph shown in the Figure, the pattern of increasing the number of participants receiving data exposure is understood. The highest number of participants was in 2017 which was 14 people. This point is in line with the question that emerged from the findings of Hassan et al's (2018) study where they found that the concept of PLC was still new for teachers in Malaysia. This is due to the disclosure of

the PLC concept being given relatively late in schools even though it has been launched since 2011. This matter gives meaning to the existing KPM delivery system which is responsible for delivering the information channeled to schools. The efficiency of this system is very important because of it has become one of the system aspirations mentioned in Malaysian Education Development Plan 2013-2025. Therefore, new solutions need to be found to teach teachers who have the understanding and skills to implement PLC in schools for the sake of students in Malaysia.

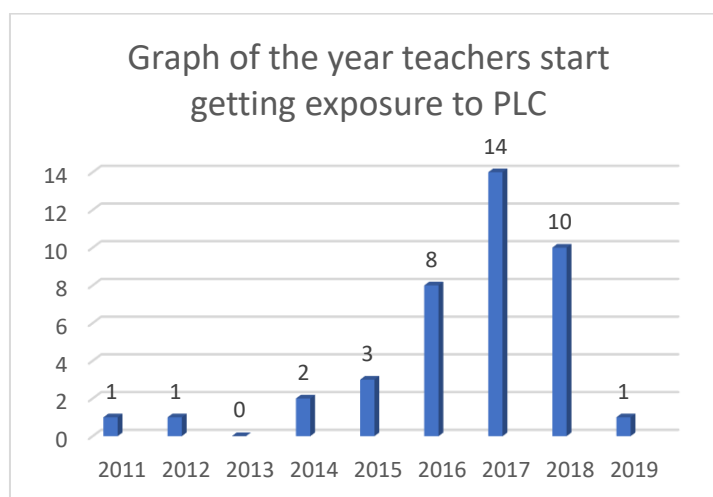


Figure 2. Year teacher start getting exposure about PLC

Disclosure Sources about PLC

Based on the graph shown in the diagram, the number of study participants who received the most exposure came from disclosure at school, which is a total of 31 people. While the rest receive disclosure from Districts Office, State Departments, Ministry of Education and private agencies. This shows that the source of disclosure in the school is the most for teachers to understand the concept of PLC and implement it correctly. This means that

school disclosure is needed sufficiently and effectively to build the ability of teachers to implement PLC with their colleagues to improve student achievement. Therefore, proper and continuous support such as PLC experts, needs to be given to schools to build teachers ability to perform the true PLC. Accordingly, an action plan to build the school's capacity needs to be held by stakeholders to ensure that this issue of understanding can be resolved.



Graph of the number of participants getting exposure by sources

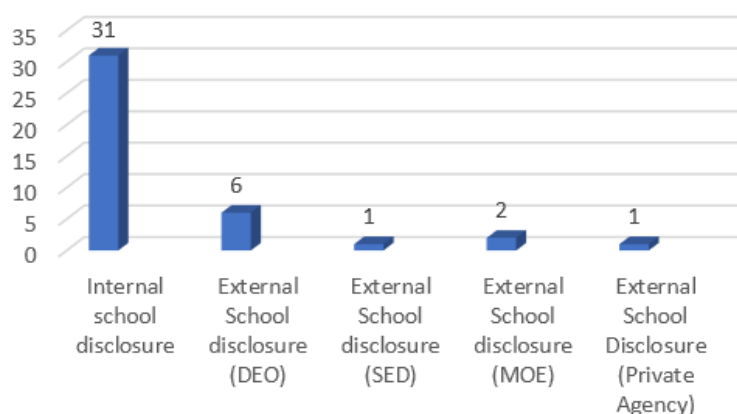


Figure 3: the number of participants getting exposure by sources

PLC according To the Teacher's Understanding

The thematic analysis and content analysis carried out resulted in the second theme which is PLC according to the teachers' understanding. Under this theme 9 categories as listed in Table 3. The subtheme consists of the main components of PLC as agreed by past researchers who pioneered PLC. The components are improving student learning (1), collaboration (2), improving learning outcomes (3) and inquiry (6). Nevertheless, there are additional components of PLC suggested by educational experts such as Hargreaves & Fullan, (2012), Hord (1997) and McLaughlin & Talbert (2006). The component is the learning cycle (7) under which reflection (8) and classroom observation (9) are

also included. Apart from that, based on the interviews, there are other categories mentioned by the participants which are discussion components and information or idea sharing (4) and PLC collaborative tools (5).

The results of the analysis in table 3 show that there is one participant who is PK11SMM from the state of Melaka who understands PLC based on the six components which are components (1), (2), (3), (7), (8) and (9). While the other 3 participants namely PK37 SMPK, PK20 SMPJ and PK2SKSL explained PLC based on the 4 main components of PLC.

Table 3: Hasil analisis kandungan tentang PLC menurut kefahaman guru

Peserta Kajian	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
PK1SKSL									
PK2SKSL	■	■					■		■
PK3SMJH		■	■						■
PK4SMTG	■	■							
PK5SMKD									
PK6SMSB	■								
PK7SMM	■								■
PK8SMJH									
PK9SMPK	■		■						
PK10MSK	■	■							
PK11SMM	■	■	■				■	■	■
PK12SMNS			■	■					



PK13SMJH	■	■	■	■					
PK14SMPP									
PK15SMKEL		■	■	■					
PK16SMPH	■			■				■	■
PK17SMKEL									
PK18SMJH				■	■				
PK19SKPK	■								
PK20SMPJ	■	■	■						■
PK21SMM			■					■	■
PK22SKM	■								
PK23SKKD			■						
PK24SMNS	■								
PK25SMLB	■	■							
PK26SKTG		■	■	■					■
PK27SMTG									
PK28KV KEL		■	■						■
PK29SMKEL									
PK30 SKSB		■	■	■					
PK31SMSB		■	■					■	■
PK32SMPP			■	■					
PK33SMPH		■	■	■	■				■
PK34SMPH		■		■					
PK35SMPJ									
PK36SMPK		■	■					■	■
PK37SMPK	■	■	■			■			
PK38SMPK	■	■							■
PK39SMPK									
PK40SMJH		■	■						
TOTAL	16	19	18	11	2	1	2	5	13

Indicator

Symbol	Description
(1)	Improving student learning
(2)	Collaboration
(3)	Improving learner results
(4)	Discussion & share info and idea
(5)	Plc collaborative tools
(6)	Inquiry
(7)	Learning cycle
(8)	Reflection



(9)

class observation

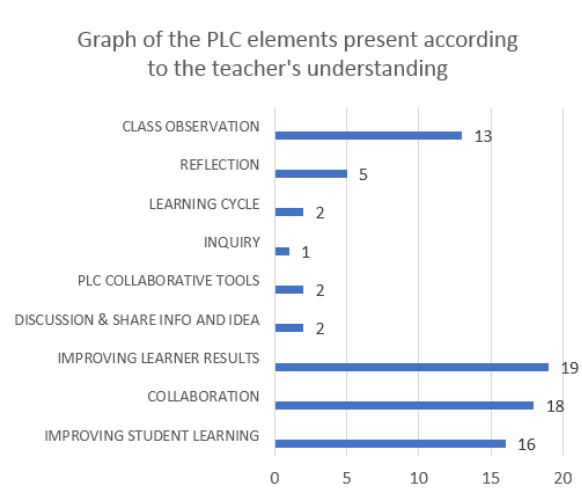


Figure 1 Graph of the PLC elements present according to the teacher's understanding

In addition, based on the graph in Figure 4, the results show that the components that are mentioned at least 13 times in explaining PLC are the components of improving student learning, collaboration, improving learner results and classroom observation. A component of PLC that is important and mentioned by experts but very little mentioned by participants is the inquiry component. This inquiry component is actually a component that if implemented can make PLC have a high impact. This is because it not only involves identifying problems using the collected data, but also requires teachers to make the best reflections and interventions and teachers also need to update teaching practices using the approach. The following is an example of a quote for each category stated by the participants when they explained PLC based on their understanding.

Interview excerpts from participants under the category of improving student learning and collaboration are as follows: It's more about cooperation between teachers.. cooperation between teachers to bring..together to develop students.. TB/PK10 SMSK /IsKef_MeKef_ImStud/359-360

The following quotes are under the category of improving learner result. The excerpt is as below:

Student problems and how to repair the teacher's way. Maybe the teacher has wrong teaching involving students who don't understand. Maybe this teacher is teaching something wrong...so we know this PLC is for improving teaching time, teaching methods or how to overcome student weaknesses to give PDPC the quality of teachers.

TB/PK16 SMPH/ IsKef_MeKef_ImLeR/162-167

The passage below is under the category of reflection and classroom observation:

As far as I understand, the PLC works in a group then we make each other when we have done an activity in learning and PDP, we make it in, there is a reprimand. If we are like our fellow committee members he will observe us and there are also other subjects who can observe and he will feel reprimanded in learning in PdP is what I understand TB/PK31 SMSB/ IsKef_MeKef_Ref/

The following excerpts that are under the category of discussion and sharing information and ideas:

This PLC is a process of exchanging information, it is a learning coach between peers, sometimes our experience is different, the way we teach is different, our approach is different so we discuss and exchange information TB/ PK12 SMNS / IsKef_MeKef_Dis /

I don't know much about the details, but usually people always conclude that this PLC is a discussion between teachers and teachers

TB/ PK13 SMJH / IsKef_MeKef_Dis /

The following excerpts fall under the category of PLC collaborative tools:

In the current PLC, he has 4 parts. The first one we look at what he has, there are 4 forms that. Learning walk ar. learning walk we pay attention to the learning environment. After that we have, peer coaching ok then we have mentor mentee.., TB/ PK18 SMJH / IsKef_MeKef_Tools/



Participants' Feedback on the Understanding of Implementing PLC

The thematic analysis also shows that three sub-themes emerged under the theme of the participants' feedback on the understanding of implementing PLC. Among the sub-themes are lack of clarity about PLC, not understanding about PLC and confused. While the results of content analysis across cases are shown in Table 4 below. Based on that Table, the frequency of participants who gave unclear feedback was the highest which was 18 times. While those who do not understand PLC have a frequency of nine times. Next, as many as three times the participants expressed confusion about PLC.

The high feedback from participants about PLCs that are lack of clarity and do not understand PLCs makes it possible that the implementation carried out has a big obstacle to be implemented correctly. While based on the study of Zuraidah (2009) and Ahmad Marzuki et al (2015) also found that teachers are confused about the concept of PLC. This matter needs to be given serious attention if the stakeholders have a high intention to make PLC as one of the school's work culture. This is due to the success of a change process is greatly influenced by the teacher's built capacity. While experts in the field of change state that the definition of building capacity also includes understanding and skills. Therefore, in the context of this study, it also covers the

understanding and skills of teachers to implement PLC correctly along with its collaborative tools. If these basic things are ignored, the effort to cultivate the culture of PLC in schools, will take longer or fail to show the impact it should. This point has been stated by previous researchers who pioneered PLC such as DuFour (1998) and also educational change experts such as Fullan (2006). That feedback also shows that there is a phenomenon that occurs and needs to be understood by the stakeholders. Without insight into what is happening at the grassroots level of the education system, it will lead to a waste of investment. While the waste is not only cost, energy but also the teenage years of children under the national education system. Continuous feedback needs to be done, to monitor the problems faced by teachers in schools, especially in the context of this study, which is related to PLC. This is because, based on the previous findings, most of the teachers are exposed about PLC from the internal school disclosure. However, the findings in this section show that the disclosure is lack of clarity has the highest frequency mentioned by the participants which is 18 times and is followed by feedback that is not understood which is 9 times the frequency. This proves that the work to support teachers to improve their ability needs to get feedback about its effectiveness. This feedback needs to be obtained so that the MOE's investment in various initiatives to make school PLC practices successful does not go to waste.

Table 4 Theme and subtheme for participant feedback on the understanding of implem, enting PLC

Theme	Subtheme	Frequency	Participant
Participant feedback on the understanding of implementing PLC	Lack of Clarity	18	PK1SKSL, PK2SKSL, PK5SMKD, PK11SMM, PK13SMJH, PK16SMPH, PK22SKM, PK23SKKD, PK24SMNS PK25SMLB, PK26SKTG, PK28KVKEL, PK30 SKSB, PK31SMSB, PK32SMPP PK33SMPH, PK34SMPH PK39SMPK, PK40SMJH
	Do Not understand	9	PK5SMKD PK7SMM PK14SMPP PK16SMPH PK18SMJH PK22SKM PK25SMLB PK31SMSB PK33SMPH
	Confuse	3	PK13SMJH PK16SMPH PK26SKTG

Interview excerpts from some of the participants that do not understand are shown below:

We weren't briefed about PLC directly, I mean in detail, right? So what we have to do is listen... There is no workshop, so he doesn't know, he doesn't understand what to do. So when told to do it, it's a problem. Do what? he doesn't know....And what else is the reason there are

so many PLCs, right? Many kinds. He should show which types can be made. Because we don't have a briefing on that, right? TB/PK22 SKM / IsKef_MBKef_TFah/55-56, 214-215, 226-227

**The following is a quote related to participants who experienced Lack of clarity**

After that, the second is that there are teachers who still lack of clarity PLC, PLC techniques. TB/ PK30 SKSB / IsKef_MBKef_TFah/299

Next is a quote for participants who are confused about PLC:

In fact, this PLC, if you follow the existing rules, we are used to doing it at school, just rename it.

TB/ PK30 SKSB / IsKef_MBKef_Keli/300

First, one of the people who attended the PLC course gave a LADAP. then, even at that time it felt like confusion.

TB/ PK1 SKSL / IsKef_MBKef_Keli/20

Causes of Constraints in Understanding The fourth theme, which is the cause of constraints in understanding, was identified through a thematic analysis that highlighted three sub-themes. The sub-themes consist of lack of disclosure given to teachers, less effective disclosure and no internal school disclosure given. Table 5 shows the list of participants who stated that. A total of 21 times the frequency of the sub-theme of lack of disclosure given to teachers was repeated by participants. It is the most frequent cause of teachers not understanding PLC. While the next cause is disclosure that is less effective with a frequency of 9 times. While the third sub-theme is that there is no improvement about PLC made by the school with the frequency of participants mentioning it as many as 7 times. Descriptions related to each subtheme will be made in the next section.

Table 1 Theme and Subtheme for Causes Of Constraints In Understanding

Theme	SubThema	Frequency	Participant
Causes Of Constraints In Understanding	Lack Of Disclosure Given To Teachers	21	PK13SMJH, PK15SMKEL, PK12SKSL, PK25LB, PK26SKTG, PK28KVKEL, PK29SMKEL, PK30SKSB, PK31SMSB, PK11SMM, PK33SMPH, PK16SMPH, PK17SMKEL, PK21SMM, PK22SKM, PK34SMPH, PK4SMTG, PK14SMPP, , PK12SMNS PK12SMNS, PK32SMPP,
	Less Effective Disclosure	9	PK16 SMPH, PK1 SKSL, PK10 SKSK, PK11SMM, PK12SMNS, PK18SMJH, PK2SKSL, PK27SMTG, PK5SMKD
	No Internal School Disclosure	7	PK4SMTG PK16 SMPH PK17SMKEL PK21SMM PK22SKM PK34SMPH, PK31SMSB

Lack of Disclosure Given To Teachers

The first sub-theme under the theme of the cause of teachers' or study participants' understanding through this study, which is the lack of exposure given to teachers, was stated by study participants from various states. This can be known by looking at the code given to the study participants. This means that this constraint exists in many states in Malaysia. This proves that attention needs to be given and support to the school is given to the school sufficiently so that teachers get the right understanding to implement PLC.

Next, there are six categories obtained from the sub-theme of lack of improvement given to teachers. The categorization is guidance by DEO limited to certain subjects and teachers, the exposure given is not comprehensive and in-depth and the explanation is brief, no specific disclosure is made officially and there is no repetition of disclosure.

Through the PPD officer's guidance category which is limited to certain teachers and subjects, the following is an excerpt from the interview.

Maybe there is (DEO holds a course) but maybe I'm not the one who is sent to do the course.

TB/PK13 SMJH/IsKef_PunKek_PenKuKes_Bim/202

The following is an excerpt for the non-exhaustive and in-depth disclosure category We are people in Sabah, the exposure to PLC may be there but not comprehensive TB/PK31SMSB/IsKef_PunKek_PenKuKes_TSel/177-178 so far my school has done it. but I don't have a broad picture because I can't get an explanation about his steps. TB/ PK1SKSL / IsKef_PunKek_PenKuKes_TSel/30-31 not in detail. Ok, it's just, we were told, we just fill out the form he has.that's it. So it's like we make a lesson plan



in that class TB/PK18 SMKJOH /
IsKef_PunKek_PenKuKes_TSel /33-34

The following is an excerpt under the category of a brief description.

Gap in the meeting.... there is a special time (for PLC), but only for a moment, LADAP time. It feels like only 1 time TB/PK11 SMK /
IsKef_PunKek_PenKuKes_MaSing/31,138 In the meeting, in 10 minutes (explanation about PLC) TB/PK33 SMPH/
IsKef_PunKek_PenKuKes_MaSing/128

No Internal School Disclosure

The second sub-theme under the cause of constraints on teachers' understanding is the lack of exposure in school. The following is a quote related to the lack of exposure at the school level. In the early days, we didn't have enough information about PLC, what it actually is, what its purpose is. After we explore, after PPD to go through SU SKPLM, we read it ourselves, we can understand that it is actually for the committee and generally for the school...SU SKPLM he only posts (for upgrading) TB/PK4 SMKTG/ IsKef_PunKek_ Tpen_BacS/ 213-215, 237

The following is an excerpt of the conversation under the category no specific exposure been made officially.

We are not disclosed, do not know (want to run PLC). I have been at the dock for a long time, indeed we have not formally disclosed this PLC. from A to Z, what is this PLC actually like, no (there is none). We just got the PLC command to do this like this like this, that's all. This means that LDP related to PLC is not direct. TB/PK14 SMKPP/ IsKef_PunKek_TPen /300-303

Less Effective Disclosure

There are five categories resulting from the thematic analysis carried out under this subtheme. The five categories are individuals who went to the PLC course lacking confidence to deliver input, less effective input, clear explanations but not able to apply, less effective delivery.

This point is clearly shown through the quotes mentioned below that individuals who went to the PLC course lacked confidence to deliver input:

I am not sure who went to the course. GPK or the GKMP like that. But he came back and he wanted to explain, he himself didn't understand. TB/ PK16 SMKPH / IsKef_PunKek_KuBer_KYak /46-47

I was exposed to this plc by a colleague (school level) who had gone to the course. It means that the message to

me is still not clear...Last time there were many teachers who still didn't fully understand because it was delivered at the school level, so the skilled teachers left. So our knowledge about PLC is not clear and we are given an example, follow the example. TB/ PK2 SKSL / IsKef_PunKek_KuBer_PenKuJe /11-12,103-1-5

4. CONCLUSION

This exploratory study has answered the set research question and also achieved its objectives. There are 4 themes along with 16 sub-themes emerged as findings of this study related to the issue of understanding about school PLC. Based on the themes, sub-themes and categories obtained clearly show that teachers' understanding of PLC needs to be improved so that they can understand the true concept of PLC and how to use collaborative tools. Constraints on this understanding cause its implementation to have no impact. This causes the implementation level to not show any progress as previously reported in literature. Furthermore, disclosure at the school level, which has various constraints, does not allow the capacity of teachers to be increased to implement PLC. Therefore, based on this empirical study, it is hoped to be able to provide information to stakeholders to organize an action plan to provide a sustainable support system to build the capacity of teachers to implement PLC in the future through ongoing expert guidance services.

REFERENCES

- [1]. Ackerman, R., and Goldsmith, M. (2011). Metacognitive regulation of text learning: On screen versus on paper. *Journal of Experimental Psychology: Applied*, 17(1), 18–32. doi:10.1037/a0022086.
- [2]. National Academies of Sciences, Engineering, and Medicine. 2018. *How People Learn II: Learners, Contexts, and Cultures*. Washington, DC: The National Academies Press. <https://doi.org/10.17226/24783>.
- [3]. Ahmad Marzuki Mohamad, Zairus Norsiah Azahar, Azhar Muhammad & Wan Hassan Wan Embong. 2015. *Komuniti Pembelajaran Profesional: Aplikasi Dalam Kalangan Komuniti Smka Di Negeri Johor*. *International Journal of Islamic Studies and Arabic Language Education*, 2(1), pp11-22
- [4]. Becenti, C, J. (2009). *Is there a relationship between the level of professional learning*. Tesis Doktor Falsafah. USA: Arizona State University.



- [5]. Bryk, A. S., & Schneider, B. (2002). Trust in schools: A core resource for improvement. New York: Russell Sage Foundation.
- [6]. Bolam, R., McMahon, A., Stoll, L., Thomas, S., & Wallace, M. (2005). Creating and sustaining professional learning communities. Research Report No. 637. London, England: General Teaching Council for England, Department for Education and Skills
- [7]. Borko, H. 2004. Professional development and teacher learning: Mapping the terrain. *Educational Researcher* 33(8): 3–15.
- [8]. Brown, Benjamin D.; Horn, Rolanda S.; King, Gwendolyn 2018. The Effective Implementation of Professional Learning Communities. *Alabama Journal of Educational Leadership*, v5 p53-59.
- [9]. Chai, C.S. & Kong, S.-C. 2017. Professional learning for 21st century education. *Journal of Computers in Education* 4(1): 1–4.
- [10]. Cherrington, S. & Thornton, K. 2015. The nature of professional learning communities in New Zealand early childhood education: An exploratory study. *Professional Development in Education* 41(3): 310–328.
- [11]. Chen, P., Lee, C. Di, Lin, H. & Zhang, C.X. 2016. Factors that develop effective professional learning communities in Taiwan. *Asia Pacific Journal of Education* 36(2).
- [12]. Cheung, A., Keung, C., Kwan, P. & Cheung, L. 2018. Teachers' perceptions of the effect of selected leadership practices on pre-primary children's learning in Hong Kong. *Early Child Development and Care Online* Fir.
- [13]. Chua, W.C., Thien, L.M., Lim, S.Y., Tan, C.S. & Teik Ee Guan. 2020. Unveiling the Practices and Challenges of Professional Learning Community in a Malaysian Chinese Secondary School. (<https://us.sagepub.com/en-us/nam/open-access-at-sage> 10(2).
- [14]. Damjanovic, V. & Blank, J. 2018. Building a professional learning community: Teachers' documentation of and reflections on preschoolers' work. *Early Childhood Education Journal* 46(5): 567–575.
- [15]. Darling-Hammond, L. (2010). The flat world and education. New York, NY: Teachers College, Columbia University
- [16]. Drago-Severson, E. 2016. Teaching, learning and leading in today's complex world: reaching new heights with a developmental approach. *International Journal of Leadership in Education* 19(1): 56–86.
- [17]. DuFour R. 2004. What is a professional learning community? *Educ Leadersh.*;61(8):6–11
- [18]. DuFour, R., Eaker, R., & DuFour, R. (2005). On common ground: The power of professional learning communities. Bloomington, In: national Education Service.
- [19]. DuFour, R., Dufour, R., Eaker, R., & Many, T. (2006). Learning by doing: A handbook for professional learning communities at work. Bloomington, IN: Solution Tree Press
- [20]. DuFour, R. (2011). We Need More Time!. PLCs at Work Institute DuFour, DuFour, Eaker. Lecture conducted from Solution Tree
- [21]. Feger S, Arruda E (2008) Professional learning communities: Key themes from the literature. Providence, RI: The Education Alliance, Brown University. Available from: http://www.lab.brown.edu/pubs/pd/PBS_PLC_Lit_Review.pdf
- [22]. Fullan, M. (2001). Leading in a culture of change. San Francisco: Jossey-Bass.
- [23]. Fullan. Michael, Bertani, A. & Quinn, J. 2004. New Lessons for Districtwide Reform. Association for Supervision and Curriculum Development.
- [24]. Fullan, M. 2010. The role of the district in tri level reform. *International Encyclopedia of Education*, hlm.
- [25]. Goddard, Y. L., Goddard, R. D., & Tschannen-Moran, M. (2007). 2007. A theoretical and empirical investigation of teacher collaboration for school improvement and student achievement in public elementary schools. *Teachers College Record* 109(4): 877–896.
- [26]. Grippen, M.A. 2008. From lethargy to leadership: The effect of a teacher-driven professional learning community as change agent for improving staff morale and school culture. *Dissertation Abstracts International Section A: Humanities and Social Sciences*.
- [27]. Hanushek, E.A. & Rivkin, S.G. 2006. Teacher quality. In E. A. Hanushek, & F. Welch (Eds.), *Handbook of the Economics of Education*, 2, (pp. 1051–1078). Amsterdam, North Holland: Elsevier. *Handbook of the Economics of Education*, 2, hlm. 1051–1078. Elsevier: Amsterdam, North Holland.
- [28]. Hargreaves, A. & Fullan, M. 2013. The Power of Professional Capital. JSD www.learningforward.org.
- [29]. Hattie, J. 2003. Teachers Make a Difference: What is the research evidence? *Educational Research. Proceedings of the ACER Research Conference*, hlm. . Melbourne, Australia.
- [30]. Hassan, R., Ahmad, J. & Boon, Y. 2018. Professional Learning Community in Malaysia.



- International Journal of Engineering & Technology 7(3.30): 433.
- [31]. Hord SM. Professional learning communities: What are they and why are they important? *Issues about Chang.* 1997;6(1):1–8
- [32]. Hord, S. M. (1998). Creating a professional learning community: Cottonwood Creek School. *Issues about Change*, 6(2). Retrieved from <http://files.eric.ed.gov/fulltext/ED424685.pdf>
- [33]. Hord, S. M. (2009). Professional learning communities: Educators work together toward a shared purpose-improved student learning. *Journal of Staff Development*, 30(1). 40-43
- [34]. Hipp & Huffinan (2003). Professional Learning Communities: Assessment development-effects. *Kertas dibentangkan dalam the Annual Conference of the International Congress for School Effectiveness and Improvement.* Sydney, Australia, January. Dicapai pada 29 Jan 2015 dari <http://files.eric.ed.gov/fulltext/ED482255.pdf>
- [35]. Huffman, J.B., Olivier, D.F., Wang, T., Chen, P., Hairon, S. & Pang, N. 2016. Global conceptualization of the professional learning community process: transitioning from country perspectives to international commonalities. *International Journal of Leadership in Education*.
- [36]. Jensen B. 2012. Catching up: Learning from the best school systems in East Asia.
- [37]. Keung, C.P.C., Yin, H., Tam, W.W.Y., Chai, C.S. & Ng, C.K.K. 2019. Kindergarten teachers' perceptions of whole-child development: The roles of leadership practices and professional learning communities. *Educational Management Administration and Leadership*.
- [38]. Kin, T.M. & Omar Abdull Kareem. 2021. An Analysis on the Implementation of Professional Learning Communities in Malaysian Secondary Schools. *Asian Journal of University Education* 17(1).
- [39]. Kuh, G.D., Cruce, T.M., Shoup, R., Kinzie, J. & Gonyea, R.M. 2008. Unmasking the effects of student engagement on first-year college grades and persistence. *Journal of Higher Education* 79(5): 540–563.
- [40]. Louis, K. S., & Marks, H. (1998). Does professional community affect the classroom? Teachers' work and student experiences in restructuring schools. *American Journal of Education*, 106(4), 532-575. <http://dx.doi.org/10.1086/444197>
- [41]. Louis, K.S., Dretzke, B. & Wahlstrom, K. (2010) How does leadership affect student achievement? Results from a national US survey, *School Effectiveness and School Improvement*, 21:3, 315-336
- [42]. Marzano, R.J., Waters, T. & McNulty, A. 2003. The 21 Responsibilities of the School Leader. *School Leadership that Works: From Research to Results*.
- [43]. McKinsey & Company. (2007). How the world's best-performing school systems come out on top. Retrieved from <http://mckinseysociety.com/how-the-worlds-best-performing-schools-come-out-on-top/>
- [44]. McLaughlin, T.T. (1992) Citizenship, Diversity and Education: a philosophical perspective, *Journal of Moral Education*, 21:3, 235-250
- [45]. McLaughlin MW & Talbert JE. 1993. Contexts that matter for teaching and learning: strategic opportunities for meeting the nation's educational goals. Washington, DC;
- [46]. McLaughlin, M. W., & Talbert, J. E. (2001). Professional communities and the work of high school teaching. Chicago, IL: The University of Chicago Press.
- [47]. McLaughlin, M. W., & Talbert, J. E. (2006). Building school-based teacher learning communities: Professional strategies to improve student achievement. The series on school reform. New York, NY: Teachers College Press.
- [48]. McLaughlin, M. W., & Talbert, J. E. (2010). Professional learning communities: Building blocks for school culture and student learning. *Voices in Urban Education (VUE)*, 35-45
- [49]. McREL. 2003. Sustaining school improvement: Professional learning community.
- [50]. Morrissey, M. S. (2000) Professional Learning Communities: An Ongoing Exploration. Austin, Texas: Southwest Educational Development Laboratory.
- [51]. Moore, K. 2010. The Three-Part Harmony of Adult Learning, Critical Thinking, and Decision-Making. *Journal of Adult Education*, v39 n1 p1-10
- [52]. Mullen, C.A. & Schunk, D.H. 2010. A View of Professional Learning Communities Through Three Frames: Leadership, Organization, and Culture. *McGill Journal of Education* 45(2): 185–203.
- [53]. Newmann FM, Wehlage GG. Successful school restructuring: A report to the public and educators. Madison, WI; 1995
- [54]. OECD. 2015. Pisa 2015 Draft Collaborative Problem Solving Framework March 2013. Oecd.
- [55]. Philpott, C. & Oates, C. 2017. Professional learning communities as drivers of educational change: The case of learning rounds. *Journal of Educational Change*.



- [56]. Rafisah Osman, F.M. Jaafar, & H.Ismail, 2017. Amalan Komuniti Pembelajaran Profesional: Tinjauan Di sekolah Prstasi Cemerlang, Sederhana dan Rendah. Jurnal Penyelidikan Pendidikan Guru 11: 76–89.
- [57]. Reeves, D.B. 2010. Transforming Professional Development Into Student Result. ASCD: USA.
- [58]. Saad, K.A., Walsh, B., Mallaburn, A. & Brundrett, M. 2017. Exploring the Implementation of a Professional Learning Communities in Malaysian'S Schools. International Journal of Education Psychology and Counseling 2(5): 1–18.
- [59]. Senge, P., Cambron-McCabe, N., Lucas, T., Smith, B., Dutton, J., & Kleiner, A. (2000) Schools that learn. A fifth discipline fieldbook for educators, parents, and everyone who cares about education, New York: Doubleday/Currency
- [60]. Supovitz, Jonathan, Philip Sirinides, and Henry May. 2010. "How Principals and Peers Influence Teaching and Learning." Educational Administration Quarterly 46 (1): 31–56.
- [61]. Taylor, B. 2020. Design Thinking PLCs: Revolutionize Teacher Collaboration. NewSchool Innovation Consulting: Carlifornia USA.
- [62]. Thiessen, D., & Anderson, S. E. (1999). Transforming learning communities: Getting in the habit of change in Ohio schools-The cross-case study of 12 transforming learning communities. Toronto: Ontario Institute for Studies in Education of the University of Toronto
- [63]. Vijayadevar, S., Thornton, K. & Cherrington, S. 2019. Professional learning communities: Enhancing collaborative leadership in Singapore early childhood settings. Contemporary Issues in Early Childhood.
- [64]. Vandenberghe, R. & Kelchtermans, G. 2002. Leraren die leren om professioneel te blijven leren: Kanttekeningen over context [Teachers learning to keep learning professionally: Reflections on context]. Pedagogische Studiën 79: 339–351.
- [65]. Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. Teaching and Teacher Education, 24(1), 80e91.
- [66]. Wang, T. (2015). Contrived collegiality versus genuine collegiality: Demstifying professional learning communities in Chinese schools. Compare: A Journal of Comparative and International Education, 45(6), 908–930
- [67]. Welsh Government 2011. National Assembly for Wales Commission: The Welsh Government's Legislative Programme 2011 – 2016. Paper number: 11/048
- [68]. Wenger, E. (2000). Communities of Practice. New York, Cambridge University Press.
- [69]. Zuraidah A. Pembentukan komuniti pembelajaran profesional:Kajian terhadap sekolah menengah di Malaysia. ManajPendidikanNo02/Th/Oktober/2009.