



## **Disentangling the Toing and Froing of Professional Learning Community Implementation by Reconnecting Educational Policy with School Culture**

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Professional Learning Community (PLC) is embedded in one of the Malaysian educational policies with the aim of improving teachers' effectiveness. However, the robust empirical evidence upon this matter is scarce, especially in terms of the relationship between school culture and PLC. Therefore, a correlational design study conducted to examine the relationships between the school culture dimensions (Collaboration, Collegiality, Emphasis on Learning, Professional Value, Sharing Planning, Transformational Leadership) and PLC. A randomized controlled trial cluster involving 612 teachers has been conducted. The Partial Least Squares-Structural Equation Modeling (PLS-SEM) using SmartPLS version 3 was applied to analyze the data. The result from SEM path analysis shows that only three constructs have significant influences on PLC, which are Professional Value ( $\beta:0.045$ ); Sharing Planning ( $\beta:0.071$ ), and Transformational Leadership ( $\beta:0.040$ ). This study has gone some way towards enhancing the understanding of the importance of school culture in promoting teachers' professional development through PLC.

**Keywords:** educational policy, teachers professional development, educational management, professional learning community, school culture

### **INTRODUCTION**

The self-sustaining and the emphasis on students' outcomes are well-known as among the most influential and significant factors in developing a positive school culture.

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Accordingly, school culture has been thoroughly studied by numerous previous scholars, and it has been evidenced that it could influence the process of teaching and learning in schools (Kelley, 2018; Ford, 2019). This concept is frequently being connected to the Professional Learning Community (PLC) as a government policy that has been implemented to enhance teachers' professionalism and the quality of teaching and learning (Hassan, Ahmad & Boon, 2019; Ismail, Abdullah & Mustapha, 2019). The ever-evolving education system requires state of the art research that can balance the demands by policymakers and the requirements of educational practitioners (Ro, 2020). The education system is essentially operated on the basis of teaching and learning as well as teachers' professionalism (Dodillet, Lundin, & Kruger, 2019).

Some studies discussed the challenging faced by the school members to empower PLC. Insufficient scheduling, unsupportive leadership from administrators, an unfavourable accountability system, and a lack of teacher collaboration in culture were cited by instructors as impediments to PLC implementation (Zhang et al., 2017). Other difficulties include teachers' overburdened workloads and a lack of a full understanding of the concept and practise of PLC (Hairon & Tan, 2017). Furthermore, the administrators presented inadequate financial power, passive teachers, an unattractive accountability framework, and an external resource crisis as barriers to PLC success. These aspects are related to the concept of school climate. The harmonious school climate may affect the collaborative works among members, students' performance, conducive school environment and may develop sustainable community engagement among stake holders. Furthermore, the successful of PLC will encourage a good practice of mentoring culture among teachers (Jafar et al., 2021). For supporting the significant of studying PLC, there are some reports which proved that the active implementation of PLC among school member affected the personality, attitude and organizational behavior (Alwi et al., 2021) and promoting successful integration among multicultural members in the school community (Munardji et al., 2020). The current situation in education either in the higher educational institution or at the school level requires educators to work together in formulating the effective teaching strategies. For example, the development of digital applications requires more skilled teachers to share their expertise with the less competent teachers to improve the quality of their teaching. As such, PLCs play an important role for teachers to share their creativity and critical thinking to produce the best way in teaching (Mustapha et, al (2021). However, the challenging of practicing a good PLC which related to school issue needs a depth exploration from researchers. The dominants domains of school culture which contribute to PLC practice in school should be explored. The finding of the research will present the new knowledge to develop a better model of PLC that embedded the aspects of school culture.

By recognizing this most dominant factors, stakeholders could identify the best methods to empower it for the sake of promoting sustainable PLC implementation. This consideration has led this study to use a quantitative approach based on PLS-SEM analysis to determine the dominant dimension in a school culture that could influence the PLC. The PLS-SEM provides easy-to-interpret diagrams to support the main objective of this study. Furthermore, this study divides the school culture into several

dimensions, namely Collaboration, Collegiality, Emphasize on Learning, Professional Value, Sharing Planning, and Transformational Leadership. Educational capabilities require empirical data to facilitate teachers' use of existing resources. Nevertheless, educational resources such as finance, human capital, and facilities should be used wisely as they are limited and controlled. Therefore, by providing empirical knowledge in the lens of academic and practice, this study could be vital guidance for optimal, efficient, and effective use of educational resources.

### **Problem Statement**

The issue of teachers' professionalism has been debated since decades ago. This is due to its nebulous effectiveness of the programs and tools to promote it provided by the previous policymakers. In a similar vein, it is also believed that PLC is one of the educational policies that has confused teachers because of the various terms used in it. Besides, it creates unnecessary burdens and uncomfortable feelings especially when they are unfamiliar with the new terms used. The rebranding of the terms that usually have similar meanings always happens in the education system. Consequently, this existing practice has delayed the process of enhancing teachers' professionalism. This practice needs to be properly revised to create positive impacts on teachers. Thus, by choosing appropriate dimensions to investigate, the possibility to provide further information in reinforcing teachers' professionalism will be higher. Likewise, it has been proved that creating a positive school culture will significantly facilitate the process of education transformation, teacher empowerment, school performance, and professional development in schools (Balkar, 2015; Zhu, Devos, & Li, 2011). The same concept is also applied to negative school culture known as Toxic School or Sick School (Kaplan & Owings, 2013; Lunenberg & Orstein, 2008).

The school itself is considered as learning community (Hoy & Miskel, 2013). In other words, all school activities are taking place in a form of learning culture. Hence, the effective implementation of PLC could enhance teachers' performance, students' performance, and teaching professionalism (Chichibu, 2013; Dufour & Mattos, 2013; Pektas, 2014). However, in Malaysian context the current reality commences that the In-Service Training Policy (LADAP) as a part of PLC is yet to be achieved (Abdul Rahman Idris, Ahmad, Hussin, Ghavifekr & Ibrahim, 2014). Some factors had been explored to identify their contribution to the PLC among the educators such as social media (Goodyear et al., 2019; Luo et al., 2020; Mingsiritham et al., 2020), the psychological attributes (Owen, 2016; Tang et al., 2018; Wright et al., 2019) dan the impact to their competencies (Prenger et al., 2019; Urbani, 2020). However, there are some issues evolve while discussing the school culture and the practice of PLC in school. The teachers showed that they faced on stress and tension when doing PLC (Schaap et al., 2019). The studies by Sjoer and Meirink, 2016 and Yan and Yang, (2019) proved that the practice of PLC was complicated and needed much support from the school leaders. The school culture which cultivated by leaders also play the important role to ensure the successful of PLC (Voelkel, 2019). In additions, there is a lack of study which explore the important domain of school culture that influence the PLC. Therefore, the elements of school culture should be explored to identify the most

important aspects which contribute to the PLC practice among the school teachers (Yeol,2020)

### **Literature Review**

#### **Professional Learning Community (PLC)**

Professional Learning Community (PLC) refer to an environment where individuals are always learning and responsive to one another. Meanwhile, the PLC aims to develop a sustainable learning culture. In other words, the learning culture occurs when teachers, students, and the whole school community are learning together. Professional learning community also refers to the efforts of committed school leaders and educators who work collaboratively and continuously with the community to achieve better student performance (Hord, 2004; DuFour & Eaker, 2002). However, the process to develop a successful PLC practice is not an easy task. There are some obstacles faced by the teachers and school leaders to start and maintain the process such as planning the strategy, setting task, provide the ample space dan gaining cooperation from the school members (Sjoer & Meirink, 2016). Furthermore, Stoll et al (2006) mentions that process of changing idea and getting the critical process of developing idea among community members is something crucial. This situation may scratch the relationship among school members if the all the members do not open their mind and ready be to be criticized. So that, the school leaders play an important role to stabilize the situation when they realize that the process of changing idea will occur inharmonious situation. Horn and Kane (2012) also argue that the cultivation of knowledge sharing in school should be focused to strengthen the PLC.

#### **School Culture**

School culture is an interaction between school staff that engages their personality, social, and professional values (Cavanagh, 1997). It is made up of laws, traditions, norms, and responses to everything that happens in a school such as how administration staffs or teachers act, what they wear, what they say, as well as how they feel about their work and students (Cavanagh, 1997; Deal & Peterson, 2012). In sum, the school culture can be interpreted as the qualities or characteristics of the school environment related to the norms, goals, interpersonal relationships, teaching, learning, leadership, and organizational structure. A balanced and positive school culture could help the development of learning for the young generation especially students. Moreover, it could also promote the production of students, families, and educators who are able to work together in achieving respective school visions, missions, and aspirations (Cavanagh, 1997; Cohen, 2007). In this study, the school culture is defined as a combination of six elements professional values, emphasis on learning, collaboration, transformational leadership, and collegiality (Cavanagh, 1997). The concept of each element is explained below. However, the prominent elements of schools' culture should be explored to identify which factors explain a strong contribution to the successful of PLC among the school teachers. The organizational environment includes not only the landscape of a school, but also the components of school learning resources, student

relations, communication-collaboration, decision-making and instructional innovation (Don, et al, 2021).

### **Collaboration**

Collaboration is the interaction among teachers within the organization. This includes the participation and contribution in meetings, engagement in dialogues, collaboration on assignments, sharing information, discussing teaching strategies, approving assessments, as well as building an understanding of student management (Cavanagh, 1997). All of these interactions will result in fulfilling the organizational needs. Besides, the involvement of all school members in sharing their ideas in the decision-making process, planning, or finding solutions to problems in particular aspects of teaching and learning are believed to be crucial. Therefore, teachers and school leaders must work together and collaborate in achieving their shared visions, missions, and values. Similarly, the focus should be on improving learning pedagogy and student achievement. Undoubtedly, teachers need to accept the fact that they are entrusted with the responsibility to increase student growth (Cavanagh, 1997; DuFour & Eaker, 2008). In this sense, the concept of collaboration should be referred to as the practice of helping each other and the interaction process between teachers and the schools.

In our view, collaboration among the teachers during PLC is a powerful strategy to enhance their learning process. The process of changing ideas among them give an opportunity to identify the problems, then stimulate the to look for the solution. The common practice of collaboration among the teaching during PLC can be seen such as observing the teaching practice or doing team teaching (Little, 2002). As a result, Mohd Fairuz Jafar et al., (2017) explains that peer observation of teaching is a strong contributor to develop teacher's efficacy and it relates to the vicarious experience concept in Bandura Self Efficacy Theory. However, due to scheduling problems, these activities are frequently difficult to organize (Little,2002).

### **Collegiality**

Collegiality refers to a work culture that encourages solidarity, cooperation, mutual assistance, mutual respect, and advice among members based on professionalism. This collegiality sense has to exist in teachers whereby an atmosphere of harmony and unity should be maintained at all times (Cavanagh & Dellar, 1996; Cavanagh, 1997). Also, teachers should avoid negative elements such as favoritism, bias, cronyism, slander, and malice in their interactions with other school members. The value of solidarity and accountability must be maintained within an organization, where no one should be doing the work alone. Teachers always need supports from their peers to fulfill or complete certain tasks. Thus, the feeling of collegiality must be fully embraced (Cavanagh, 1997).

Respect and trust are the affective component to build a sustainable PLC. These two elements play an important role to encourage a good relationship for learning among colleagues. As we understand that the adult learner tend to practice the interactive learning among them (Cranton, 2006; Dirkx, 2006; Mezirow, 2000; Yorks & Marsick, 2000). In our opinion, the PLC group members develop the interactive atmosphere to facilitate their learning process. Therefore, the greater level of trust is essential when

they are sharing their opinion with other teachers about their teaching practice (Sergiovanni, 1994). However, the issue evolves while some of the teachers does not engage in cycles of inquiry and knowledge-building when they feel criticized or put down for not being good enough (Timperley, 2011).

### **Emphasis on Learning**

The Emphasis on Learning highlights the role of schools as learning centers, not just for students but also for teachers. The concept of effective teaching and learning does not solely rely on the way teachers teach, but they should think of other aspects to achieve satisfactory results. The choice of pedagogy should be appropriate to the age, level of understanding, and skills of the students so that they can actively participate in the learning process. Besides, the effective teaching is influenced by the quality of the teaching delivery, the appropriateness of the teaching level, the incentives, and the variation of students (Cavanagh, 1997; Rusni Mohd Noor, 2005). These elements emphasize the application of effective values by considering the school as a learning community (Cavanagh, 1997). Thus, the emphasis on learning caters to the involvement of teachers' learning, be it inside or outside the classroom settings.

### **Professional Value**

Professional values refer to the teachers' attention to the implementation of pedagogy and effective teaching practices to students. The philosophy behind professional values is that all students are capable of learning by considering it as a developmental process, evaluating student creativity, and appreciating the various levels of student ability (Cavanagh, 1997). Teachers with professional values also emphasize the importance of education, commitment to providing various teaching skills that suit up with the current trends, eagerness to develop more teaching methods and always prepared for future challenges. They also constantly learn to adapt to the ever-changing education environments and demands. Meanwhile, professionals are teachers whose characteristics are structured based on knowledge and they constantly find new meanings to enhance the effectiveness of their peers (Cavanagh, 1997; Carpenter, 2009; Hord, 2004). Consequently, when all teachers and school leaders share the same goals, visions, values and mission, mutual understanding will be created, and the teachers' role in ensuring fair education accessibility for all students will be appreciated. In conclusion, it can be assumed that teacher professional value is a teacher's teaching ability and positive behaviors.

### **Sharing Planning**

Sharing Planning is how teachers plan and build a shared vision together. By having this plan in place, the process will be more structured. An active role in sharing the plan will make school programs effective. Having said that, teachers are eventually playing a role as decision-makers in the school (Cavanagh, 1997). In line with the role of schools to support adult learning, sharing planning is seen as an important factor in the improvement of PLC-based schools in Malaysia. However, close collaboration, democratic participation, as well as consensus in developing a conducive environment and school culture seem to be scarce and yet to be successfully achieved. The concept of

sharing power and authority might be difficult to be fully accepted by school leaders and teachers. This is making sense as it has always been accepted that principals or headmasters have full power, wisdom, and competence (Hord, 2004; Lloyd, 2012).

### **Transformational Leadership**

Sharing power and providing school development process are always related to teachers' potential and commitment. Transformational leadership is therefore referring to the ability and strength in interpersonal relationships to convince others to work hard towards common goals, skills, visions, motives, and values (Cavanagh, 1997; Burns, 1978). It also constantly supports the school's non-bureaucratic programs, encourages members to accept leadership, supports teachers, promotes professional growth, shows respect for teachers' authority, and builds personal commitment towards school success. Moreover, the effective process of transformational leadership involves two-way influences, focusing on the common goals using a variety of methods. Transformational leadership also aims to increase the moral values and motivations of teachers to the extent that they can think about what can be contributed to their organization (Cavanagh, 1997; Burns, 1978). Besides, this type of leadership is also believed to be one of the characteristics of a charismatic leader who is willing to sacrifice for the sake of the organization and is optimistic about the vision and mission to be achieved. Overall engagement such as emotion, intellect, and morale between school leaders and teachers will encourage them to build capabilities beyond the normal range. Transformational leadership also acts as a catalyst for change (Cavanagh, 1997; Bass & Avolio, 1990). Leader in school responsibility to practice his position as a supervisor in the management of the teaching and learning process in the classroom (Kasa, et al., 2020).

### **METHOD**

This study has adopted the positivistic paradigm whereby the hypotheses were developed and tested concerning the identified previous theory. Furthermore, a deductive approach was used as the study moved from theory to data (Saunders, 2009). This correlational design study implemented a cross-sectional survey method as one-shot data collection from a large and dispersed population. It is believed to be more appropriate especially for new or un-researched matters or issues (Babbie, 2007). Thus, this provides descriptive, in-depth, and explanatory information on the issues under investigation (Cohen et al., 2007). This design also involved a specific procedure within the process, starting from collecting the data, analyzing the data, and writing the research report (Creswell, 2011). Furthermore, this type of research design has been selected after a depth consideration of the previous scholars' views. Most of them mentioned that the cross-sectional research was quite popular in the field of education due to three main factors, namely the ability to investigate almost all issues and themes, efficiently as well as time and money efficiency (McMillan, 2012; McMillan & Schumacher, 2006). Besides, one of the advantages of this design is the data can be collected directly from the sample to obtain the required information (Creswell, 2011). Thus, researchers only need to select a portion from a large population as a sample (Ibrahim, 2010). A large and generalizable sample has also led this study to utilize this

approach comprehensively (Cohen, 2007). The philosophical view, approach used, and design of this study are illustrated in Figure 1.

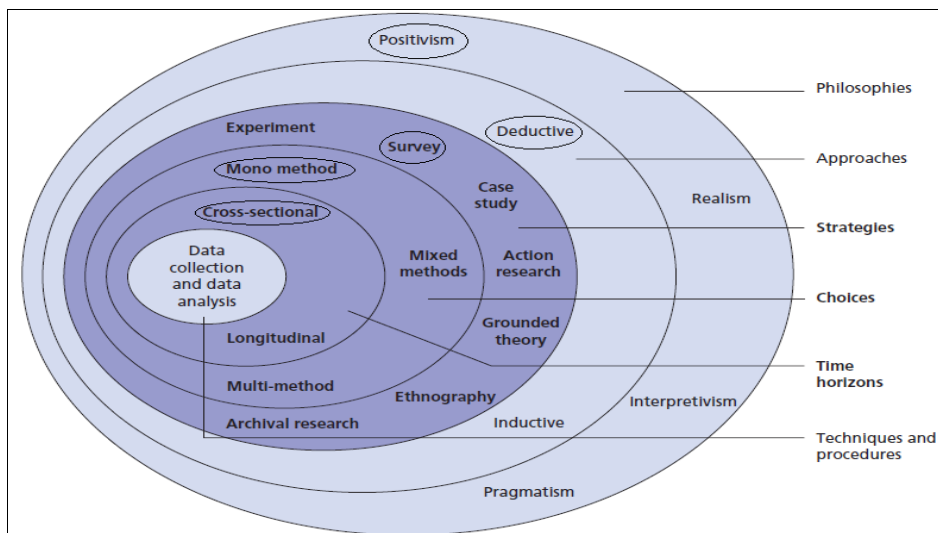


Figure 1

Research onion

Source: (Mark Saunders, Philip Lewis & Adrian Thornhill 2009)

Hypothesis testing is performed to answer the research questions. The questionnaire is used as the research instrument in this study due to several privileges such as time-efficient, financially effective, and easy to administer. (McMillan, 2012; McMillan & Schumacher, 2006). Thus, a set of questionnaires has been modified and adapted from the previous studies for the purpose of data collection.

### Sampling Procedure

A systematic procedure was carried out by the researcher in conducting this study. The first step was done to obtain permission from the original researcher of school culture and PLC studies. In the second step, the back-to-back translation of the questionnaire was performed by several credible translators from UUM Language Center. The third step involved the submission of the questionnaire to a total number of 10 experts for the evaluation process. The Average Consensus Percentage (ACP) is used in identifying expert consensus on the validity and reliability of the questionnaire. In the fourth step, the researcher obtained permission from the Educational Planning and Research Division (EPRD), Ministry of Education (MOE), and Education State Department (Kedah) to further conduct this study. Finally, the fifth step caters to the questionnaire distributions to schools that have been selected through systematic random sampling. The randomized procedure was done based on the subsequent draw; a systematic selection of 1, 5, and 10 to determine the final unit of the sample.



### Instrumentation

After a thorough literature review, this study has decided to use the School Cultural Elements Questionnaire (SCEQ) from a previous study conducted by Cavanagh (1997). The questionnaire consists of 42 items to measure 6 key factors. These factors include (i) professional value, (ii) collaboration, (iii) collegiality, (iv) sharing planning, (v) transformational leadership, and (vi) emphasis on learning. For the PLC survey, this study used the Professional Learning Community Assessment (PLC-A) (Olivier, Hipp & Huffman, 2010). In this questionnaire, there are 51 items under five main factors, namely (i) transformational leadership support and sharing, (ii) value and vision sharing, (iii) collective and application learning, (iv) situational support, and (v) private practice sharing. However, both questionnaires have undergone a modification process to fit the educational context in Malaysia.

### Demographic

Out of 612 teachers, the number of male teachers is 149 (24.3%) and female teachers are 463 (75.7%). Ninety respondents (14.9%) in this study are between the age range of 21-30, 239 (39.1%) are between 31-40, 210 (34.3%) are between 41-50 and 72 (11.8%) are among 51 years old or above. In terms of academic qualifications, 146 respondents (23.9%) obtained a certificate/diploma, 419 (68.5%) have a bachelor's degree, and 47 (7.7%) have a Master's degree. Furthermore, 37 (6%) respondents have 1-3 years of experience, followed by 108 (17.6%) for 4-8 years, and 467 (76.3%) for 8 years and above. Table 1 displays the profiles of respondents.

Table 1  
Profile respondent

	Category	Frequency	Percentage %
Gender	Male	149	24.3%
	Female	463	75.7%
Age	21-30 Years	91	14.9%
	31-40 Years	239	39.1%
	41-50 Years	210	34.3%
	51 Years above	72	11.8%
Academic Qualification	Diploma	146	23.9%
	Degree	419	68.5%
	Master	47	7.7%
	Ph.D	0	0%
Experience	1-3 Years	37	6.0%
	4-8 Years	108	17.6%
	8 Years above	467	76.3%
	Total	612	

**FINDINGS AND DISCUSSION**

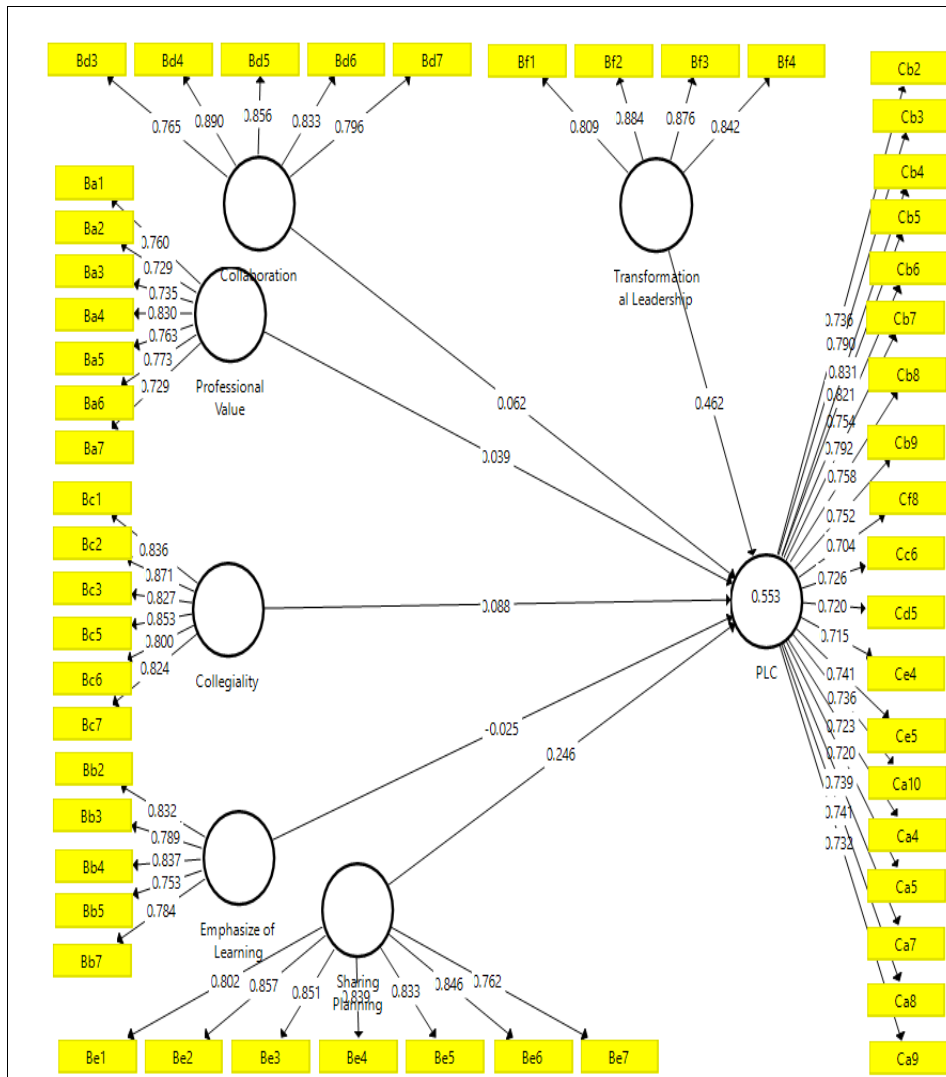


Figure 2  
Assessment model analysis result

Figure 2 shows the results of the assessment model analysis. Six dimensions were analyzed based on the measurement model, namely internal consistency, reliability of indicators based on external loading values, convergence validity, and discriminant validity.

**Internal Consistency**

Table 2  
Summary of cronbach’s alpha analysis and composite reliability analysis

Dimensions	Cronbach's Alpha	Composite Reliability	AVE
Collaboration	0.886	0.916	0.687
Collegiality	0.913	0.933	0.639
Emphasize of Learning	0.859	0.898	0.698
Professional Value	0.878	0.906	0.578
Sharing Planning	0.923	0.938	0.685
Transformational Leadership	0.875	0.914	0.728
PLC	0.957	0.961	0.562

Table 2 shows the internal consistency rating based on Cronbach alpha values and composite reliability. The results of the analysis showed that Cronbach alpha values for five indicated constructs with one variable (PLC) were between 0.859 to 0.957. Next, the composite reliability coefficient was used to ascertain the internal consistency reliability of measurement items. The interpretation of internal consistency reliability using the composite reliability coefficient is based on the rule of thumb provided by Bagozzi and Yi (1988) and Hair et al. (2010). These scholars agreed that the suggested value for the composite reliability coefficient should be at least 0.70. As shown in Table 3, the composite reliability coefficients of each latent construct are in the range from 0.898 to 0.961. As each latent construct exceeded the minimum acceptable level, the internal consistency reliability of the items used in this study was deemed to be adequate (Bagozzi & Yi, 1988; Hair et al., 2010).

Table 3  
Fornell-Larcker criterion

	Charismatic	Consideration	Intellectual Stimulation	Job Satisfaction	Motivation Inspiration
Charismatic	0.79				
Consideration	0.79	0.74			
Intellectual Stimulation	0.53	0.78	0.82		
Job Satisfaction	0.62	0.61	0.36	0.77	
Motivation Inspiration	0.38	0.45	0.38	0.37	0.74

The discriminant validity was ascertained using Average Variance Extracted (AVE) as suggested by Fornell and Larcker (1981). This was achieved by comparing the correlations among the latent constructs with the square roots of AVE (Fornell & Larcker, 1981). In achieving adequate discriminant validity, Fornell and Larcker further suggested that the square root of the AVE should be greater than the correlations among latent constructs. As indicated in Table 4, the correlations among the latent constructs were compared with the square root of the AVEs (values in boldface). The square roots of the AVEs were all greater than the correlations among latent constructs, indicating adequate discriminant validity.

Table 4  
Loading, average variance extracted (AVE)

Dimensions	Items	Loading
Collaboration	Bd3	0.765
	Bd4	0.89
	Bd5	0.856
	Bd6	0.833
	Bd7	0.796
Emphasize of Learning	Bb2	0.832
	Bb3	0.789
	Bb4	0.837
	Bb5	0.753
	Bb7	0.784
Collegiality	Bc1	0.836
	Bc2	0.871
	Bc3	0.827
	Bc5	0.853
	Bc6	0.8
	Bc7	0.824
	Ba1	0.76
Professional Value	Ba2	0.729
	Ba3	0.735
	Ba4	0.83
	Ba5	0.763
	Ba6	0.773
	Ba7	0.729
	Sharing Planning	Be1
Be2		0.857
Be3		0.851
Be4		0.839
Be5		0.833
Be6		0.846
Be7		0.762
Transformational Leadership	Bf1	0.809
	Bf2	0.884
	Bf3	0.876
	Bf4	0.842
PLC	Ca10	0.736
	Ca4	0.723
	Ca5	0.72
	Ca7	0.739
	Ca8	0.741
	Ca9	0.732
	Cb2	0.736
	Cb3	0.79
	Cb4	0.831
	Cb5	0.821
	Cb6	0.754
	Cb7	0.792
	Cb8	0.758
	Cb9	0.752
	Cc6	0.726
Cd5	0.72	
Ce4	0.715	
Ce5	0.741	
Cf8	0.704	

The outer loadings of each construct were examined according to the individual item for the reliability assessment in this study. This analysis has been proved to be more accurate in the previous studies (Hair, Hult, Ringle, & Sarstedt, 2017; Hulland, 1999). In light of this, only items with loadings of 0.50 and above should be retained (Barclay, Thompson, & Higgins, 1995). However, to secure reliability, this study only used the items with loadings between 0.704 and 0.89 (see Table 5).

Table 5  
Heterotrait-Monotrait (HTMT)

	Collaboration	Collegiality	Emphasize of Learning	PLC	Professional Value	Sharing Planning
Collaboration						
Collegiality	0.712					
Emphasize of Learning	0.695	0.788				
PLC	0.543	0.532	0.48			
Professional Value	0.615	0.747	0.816	0.468		
Sharing Planning	0.699	0.672	0.667	0.668	0.638	
Transformational Leadership	0.546	0.509	0.471	0.748	0.433	0.68

Table 5 shows the results of the Heterotrait-Monotrait Criteria (HTMT). The correlation value between constructs is less than 1.00. This shows that all constructs differ from each other (Hair et al., 2017).

### Structural Model Assessment

The results of the structural model analysis are shown in Figure 3. This is to support the criteria of measurement model evaluation using the PLS-SEM analysis with the assistance of Smart-PLS 3.0 software.

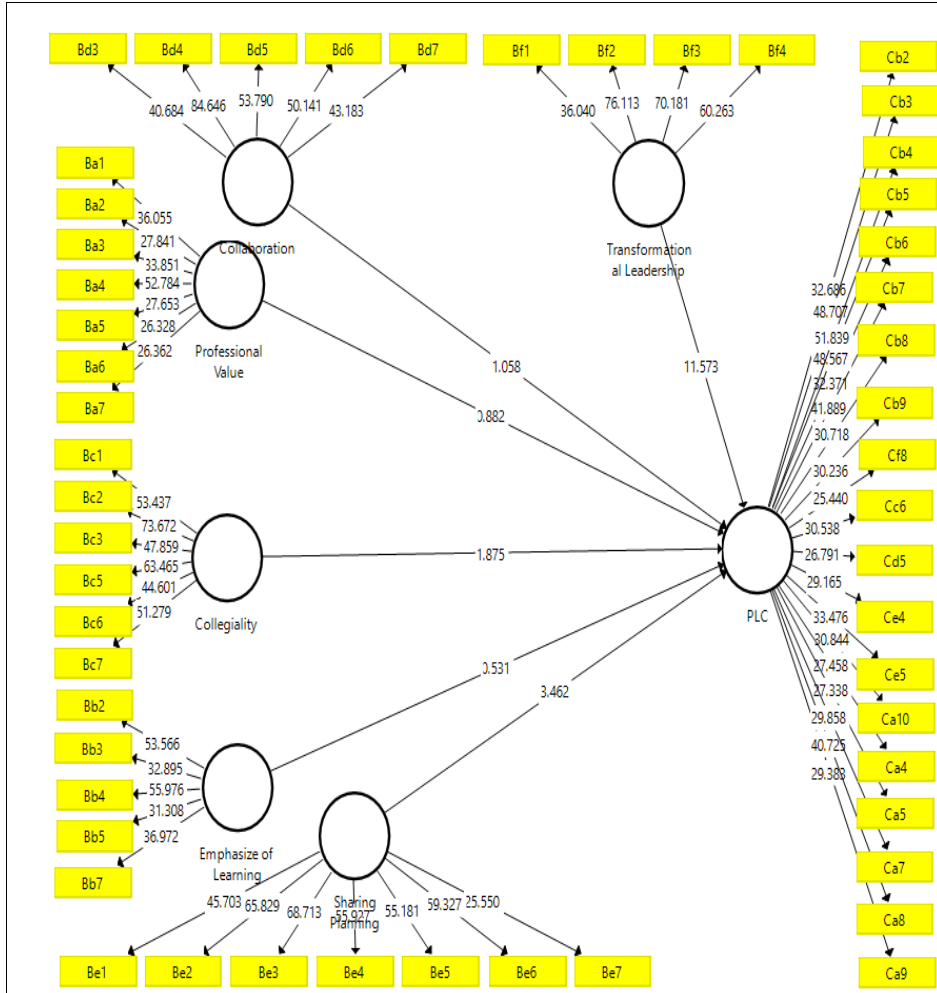


Figure 3  
Analysis of the model hypotheses

Table 6  
Assessment of significant relationships

Hypothesis	Relationship	Beta	t-Value	P Values	Results
Ho1	Collaboration -> PLC	0.059	1.058	0.29	Not Significant
Ho2	Collegiality -> PLC	0.047	1.875	0.061	Not Significant
Ho3	Emphasize of Learning-> PLC	0.047	0.531	0.596	Not Significant
Ho4	Professional Value -> PLC	0.045	0.882	0.378	Not Significant
Ho5	Sharing Planning -> PLC	0.071	3.462	0.001	Significant
Ho6	Transformational Leadership -> PLC	0.04	11.573	0.000	Significant

By referring to Table 7, the two-tailed test revealed that there are significant relationships from the constructs of Sharing Planning and Transformational Leadership to PLC at a significance level of 0.05,  $p < 0.05$ , and  $T > 1.96$  (Imam & Hengky, 2015). However, the relationship from constructs of Collaboration, Collegiality, Emphasize of Learning and Professional Value to PLC was not significant. In details, the results of all coefficient of assessment shows that (i) Collaboration towards PLC ( $\beta=0.059$ ,  $t = 1.058$ ,  $p < 0.05$ ), (ii) Collegiality towards PLC ( $\beta=0.047$ ,  $t = 1.875$ ,  $p < 0.05$ ), (iii) Emphasize of Learning towards PLC ( $\beta= 0.047$ ,  $t= 0.531$ ,  $p < 0.05$ ), (iv) Professional Value towards PLC ( $\beta = 0.045$ ,  $t=0.882$ ,  $p < 0.05$ ), (v) Sharing Planning towards PLC ( $\beta=0.071$ ,  $t = 3.462$ ,  $p < 0.05$ ), and (vi) Transformational Leadership towards PLC ( $\beta=0.04$ ,  $t = 11.573$ ,  $p < 0.05$ ). As shown in Figure 2, the  $R^2$  of the research model is 55.3%, which explains the capability of three sets of exogenous latent variables (Collaboration, Collegiality, Emphasize of Learning, Professional Values, Sharing Planning, and transformational Leadership) to collectively explain the variance in PLC. Falk and Miller (1992) proposed an  $R^2$  value of 0.10 as a minimum acceptable level. Per this recommendation, it can be said that the endogenous latent variable had an acceptable level of predictive accuracy.

Sharing planning element is one of the significant aspects which contributes to PLC. We believe that the sharing planning becomes the most influential element because this aspect may provide the best opportunity to the members in PLC group to present their teaching plan from the induction set until the ending of their teaching plan. The group members may analyze cooperatively to identify the strength and the weakness of the teaching plan. The teachers may do correction and improve their teaching pedagogy and assessment based on the input which they obtain from the sharing process during PLCs' meeting to achieve the targeted learning outcomes.

Based on the result, we believe that the concept of sharing planning is understood by the teachers. They may work collaboratively as a mission to fulfil their organization goal. This concept aligns with the idea by Andrews and Lewis, (2004) and Lieberman (2000) that the degree to which the teachers accept the school vision and its operational process has been found to have direct effect on the successful of PLC. However, this interpretation contrasts with Huffman and Hipp (2003) that mentions the sharing planning element only effective at the internalization or planning phase in PLC. At the planning phase, the school vision and mission probably get consideration by the teachers. Thus, at the implementation phase, the students' achievement gains more attention to be achieved by the teachers. So, during this phase, the discussion during PLC session will more focus on how to improve students' quality rather than talking about school vision.

Transformational leadership is the second factor which significantly contribute to the successful of PLC among the teacher based on our finding. When we refer to the practice during PLC, we found that the process of stimulating the construction of PLC focused on behaviors such as mutual consultation, information exchange, and collective decision making may be the most promising method to bring about improvements in teaching practices. This aspect much relates to the application of transformational

leadership in the school context. This finding suggests that school administrators have a much greater opportunity to develop professional learning communities in their schools via sharing the value, mission, vision, organizational plan, less-bureaucratic practice and improve the quality of interpersonal relationship among school community.

#### **SUMMARY AND SUGGESTION FOR FUTURE RESEARCH**

Reconnecting educational policy to school culture is crucial since PLC has become part of the educational policies in Malaysia. Teachers can contribute their capability and expertise beyond the classroom by participating in school-supportive educational policies (Derrington & Anderson, 2020). The implications of this study on school culture can be derived from many aspects. Culture can be divided into two aspects, namely latent and manifest (Schein, 2010). Thus, from the perspective of latent components, school staffs need to understand the meaning of the hidden curriculum. By understanding this, the organizational culture that shapes the school transformation will be more organized and make more changes in positive directions. The implication of PLC in this study also promotes the transition towards a more conducive school culture. This is due to a concept of PLC itself that is seen as a group of teachers and school leaders who continuously explore, share and act based on their learning experiences. As the main aim of the PLC is to enhance the effectiveness and professionalism of teachers, their continuous learning will also benefit students' learning environment by providing a better quality of education.

In conclusion, school culture has a positive impact on the PLC as can be seen in sharing planning and transformation leadership. This study provides a novelty to the body of knowledge to understand which are the dominant and significant factor contribute to the PLC practice among the teacher. However, several other constructs produced an unexpected result. Therefore, this requires further investigations such as implementation of technology using SMART-APPS, to explore and determine other possible factors that could possibly affect the PLC implementation. We also suggest for the future research to use mix method approach to explore in depth the factors which may contribute to the PLC practice.

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