Exploring Secondary School Principals' Experiences and Leadership Practices in Building Professional Learning Communities: A Case Study in Klang, Malaysia

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Abstract: A study showed Malaysian students were unable to achieve the minimum standards in Mathematics and Science subjects, prompting the need for educational reformation. With this, educators need to inculcate Professional Learning Community (PLC) to enhance the teaching quality. This study explores secondary school principals' PLC practices and experiences to improve student achievement in Klang, Malaysia. The qualitative case study was conducted using randomly selected two secondary school principals in Klang. The interview session comprised four interview questions and was conducted via an online platform. The results showed two common PLC practices which are annual meetings and observation. The challenges faced by school principals to implement PLC were time factors, lack of budget, and teacher attitudes. The factors hindering students' learning achievement were family background, lack of focus on education, and teachers' resistance to change. The roles of principals to curb these issues were collecting data on students' learning achievement, equipping teachers with knowledge and resources, being good role models, and building relationships with parents. This study highlighted that school principal 1 has shown unique ideas and approaches in improving students' learning achievement compared to school principal 2. The study suggests using descriptive analysis using more than one group of participants.

Keywords: *Challenges in building PLC, Klang school principals' practices, major roles of school principals, Professional Learning Community, secondary students' learning achievement.*

Introduction

The principal plays a crucial role in having a significant impact on students' learning achievement and building PLCs that offer an effective learning environment in schools. A study revealed almost 20% of Malaysian students failed the International Mathematics and Science Study (TIMSS) conducted in 2007 (Sukor et al., 2010). Over the years, Malaysia continued to show a declining trend, whereby Malaysia ranked 26th out of 45 countries in 2013 and was subpar again in 2014 to 52nd position out of 65 participating countries (Wong, S. L., & Wong, S. L., 2019). This shows Malaysian students were not able to achieve the minimum standard in Mathematics and Science subjects worldwide. These reforms the Ministry of Education (MoE) to offset change in the education system. The implementation of the 21st-century teaching and learning process fosters to prepare students to meet the demand of Education 4.0 (Kin & Kareem, 2021). However, there are numerous issues highlighted to offset changes in the education system, for instance, high administrative tasks for teachers, poor budget management skills, and lack of parental support in schools (Good, 2008). The authors suggested that the education department make policies to curb these issues as well as bring awareness to society about the importance of students' learning achievement.

One of the intervention programs conducted by Oliver in 2015 was, the Interstate School Leaders Licensure Consortium (ISLLC) program to meet the needs of professional development of staff and principals at Fullerton. The findings showed an increase in instructional leadership skills and instilled the desire to become a future principal among teachers and assistant principals (Oliver, 2005). Since then, there has been an emphasis on professional development models in school which includes collaborative work focused on the school community. Schools started using the Professional Learning Community (PLC) as an initiative to enhance the teaching and learning quality at schools. PLC creates an opportunity for

teachers to share opinions, experiences, and knowledge besides developing a sense of shared value as well as increasing the dedication and efficacy of teachers in performing responsibility at schools (Hassan et al., 2018). The stakeholders had spent numerous years developing the policy of PLC. Initially, PLC showed only a little success rate in improving students' academic performance (Cárdenas López, 2012). A recent study investigated the practices of PLC among Malaysian secondary school staff and rated it as quite good (Kin & Kareem, 2021). The authors have provided useful insights, however, underscoring the need to conduct similar studies using qualitative research design, therefore highlighting the existing research gap. Furthermore, another study has also noted utilizing school principals' perspectives on the practices and challenges in implementing PLC at Malaysian schools (Chua et al., 2020).

Since the school principal has a key role in accomplishing the mission and vision of educational goals nationwide in Malaysia, they lead the process of implementing PLC among staff at school. A study has proven school principals require several skills to manage school curricula effectively such as leadership skills, well-experienced teaching, and quality administrative skills (Shahadan & Oliver, 2016). On the other hand, the school reforming process evolves rapidly, thus, school principals must promote PLC to increase student achievement. Many argue that principals have to focus on the improvement of the learning achievement of students compared to office tasks, despite this issue, the role of the principal as a leader is said to be an ongoing effort (Good, 2008).

In summary, the purpose of this research is to study the experiences and leadership practices of secondary school principals in building PLC to improve student's learning achievement in Klang, Malaysia. Previous studies have discussed the methods of secondary school principals to enlighten staff about PLC practices at school (Zhang & Koshmanova, 2021). However, few focused on their issues in building PLC at school. Thus, the new ideas discussed in this research are the challenges faced by principals in implementing PLC.

Research Objectives

The two research objectives of this research are stated below.

1. To explore secondary school principals' Professional Learning Community (PLC) practices for secondary school students' achievement, Klang, Malaysia.

2. To find out secondary school principals' experiences to improve the student's achievement at secondary schools, in Klang, Malaysia.

Research Questions

Based on the research objectives, two research questions are developed.

1. What are secondary school principals' Professional Learning Community (PLC) practices for secondary school students' achievement, in Klang, Malaysia?

2. What are secondary school principals' experiences to improve secondary school students' achievement, in Klang, Malaysia?

Literature Review

PLC Practices at Secondary Schools

The concept of PLC was established three decades ago in the Western educational policy (Admiraal et al., 2021). PLC is viewed as the collaborative work done among teachers or educators to enhance the teaching and learning process that can potentially improve students' academic achievement (Kin & Kareem, 2021). PLC is also an effective program that improves teachers' professional development which is the key to achieving quality student outcomes (Gore & Rosser, 2022). Studies have indicated that PLC is vital in creating and sharing knowledge among teachers to deliver the best teaching and learning practices evaluated by school principals (Ismail et al., 2020). Further studies confirm that the school principal plays a crucial role in leading the school towards common goals and is capable of influencing their actions through decision-making (Jambo & Hongde, 2020). With this, school principals who can practice PLC at school are known for their clear goals to encourage teachers to work collaboratively and have shared instructional leadership which encourages teachers to be future leaders (Antinluoma et al., 2021).

Evidence confirms that PLC improves students' achievement and school effectiveness. Many studies find that the common PLC practice is the ongoing professional collaboration among teachers (Admiraal et al., 2021; Gore & Rosser, 2022; Ismail et al., 2020). A study by (Kin and Kareem (2021) used the term 'external support' as the main dimension of PLC. This collaboration learning emphasizes the sharing of teachers' previous or current with others like teaching aids and worksheets (Admiraal et al., 2021). Besides that, the ongoing collaboration also enhances the collegial ties of teachers across borders (Gore & Rosser, 2022). Nevertheless, PLC provides the opportunity for teachers to improve themselves in their teaching pedagogy as constructive criticism plays a role in the process of knowledge sharing. Based on the qualitative and quantitative analysis, findings showed that the school principals developed professional learning development through training courses, and implemented teacher's collaborative practices by grouping teachers according to common roles to share their views (Antinluoma et al., 2021).

On the other hand, Dutch school principals also reflected common PLC practices at their secondary school, concerning having the same vision so that all teachers work collaboratively towards the aim, promoting professional learning opportunities through workshops and masterclasses and interventions to strengthen leadership among school leaders which helped improved PLC at school (Admiraal et al., 2021). This contradiction may be due to the different geographical settings of an educational culture that shows a community focuses on teachers' collaboration and the other more towards principals' leadership style. Zhang and Koshmanova (2021) conducted a study about Chinese school principals' experiences and leadership practices in building a Professional Learning Community (PLC) for student achievement in China. Based on principals' perception of PLC, 'it' is an effective tool to communicate with colleagues about school improvement methods and promotes educational core values to maintain sustainable growth of the school. To do this, principals can encourage educational core values and Junzi leadership style as a framework towards PLC. Thus, it is clear that different countries practice distinct PLC practices. However, there is a lack of studies concerning secondary school teachers' PLC practices from the school principal's perspective using qualitative methods (Chua et al., 2020; Kin & Kareem, 2021).

Challenges to Improve Student Learning Achievement

On the contrary, Kin and Kareem (2021) conceptualized that one of the challenges found in conducting PLC at government schools is that, government schools are centralized, thus, teachers have less autonomy to make decisions and are not allowed to make choices. Some teachers also fear the new challenges or changes in PLC besides having too many administrative tasks (Kin & Kareem, 2021). Similarly, research was conducted at Chinese secondary schools, the challenges faced by principals to implement PLC were teachers' lack of teamwork skills since they were not ready to share opinions with others, the PLC process was not implemented continuously due to the heavy workload of teachers and negative feedback on students who are not engaging with teachers (Chua et al., 2020). These findings acknowledged that the school principal plays a crucial role as a leader which is the most important factor for PLC effectiveness. Despite, the various types of schools, teachers commonly want them to be involved in the decision-making process, consequently, teachers will be more responsible for the actions developed by them.

Besides that, school principals in China focus on students' exam marks, rather than concentrating on PLC among teachers which alerts the Chinese Education system to prepare students for the future (Zhang & Koshmanova, 2021). The findings also showed there were three challenges faced by school principals to improve students' achievement students with the top scores only were able to join college and parents' high expectations stressed the school management to focus on students' results(Zhang & Koshmanova, 2021). The results contrast in other countries, for instance, in Malaysia, teachers are very much focused on the revision of the students which pressures them with more workload, thus, teachers are unable to be actively engaged with PLC activities at school (Abdullah & Ghani, 2014). This showed that there was room for improvement in the level of implementation of PLC at Malaysian secondary schools as well.

Methodology

Research Design

Qualitative research intends to find out the challenges of school principals to increase students' academic achievement and the implementations of PLC practices which helped increase students' performance. Qualitative research was emphasized on the discovery and description of the objectives and focussed on extracting and analyzing the ideas of school principals. The qualitative research design was conducted for this research which comprises four interview questions to study the experiences and leadership practices of secondary school principals to build PLC to improve students' learning achievement.

Sampling Techniques

The population for this study was two secondary government school principals from Klang, Malaysia. Random sampling method was used in this research since all schools have started implementing PLC based on the background of this study. It is important to note that the researchers had no prior relationships or contact with any of the participants in this study.

Instruments

Only one instrument was used in this study which is interview questions. This instrument was taken and adapted from Zhang and Koshmanova, 2021 article. According to Castillo-Montoya (2016), there are several stages in developing the interview questions for the participants, as well as addressing the research objectives. Firstly, the interview questions were adopted by existing research paper ensuring it is in line with the research objectives. This alignment focuses on the suitability of interview questions for the study (Castillo-Montoya, 2016). The research instruments were validated by a senior lecturer. This is to ensure that the interview questions enhance the reliability of the results. The interview questions consisted of four questions, one research objective will have two interview questions. Hence, there were four interview questions formulated in this study to address the two research objectives. The interview questions are stated below.

1. What are the existing PLC practices of secondary school principals to improve students' achievement in Malaysia?

2. What are the challenges faced by secondary school principals in implementing PLC to improve students' achievement in Malaysia?

3. What are the challenges faced by secondary school principals to improve students' achievement in Malaysia?

4. What are the major roles of secondary school principals in improving the quality of teaching and learning for student achievement in Malaysia?

Data Collection Procedure

First, two secondary schools were selected randomly around the Klang area which comprises two government schools only. Permission was asked from each principal to meet the objectives of this research via WhatsApp. To ensure ethical consideration, the participants were informed that the data collected would be confidential and used for research purposes only before the interview session. The principals agreed to be interviewed, they granted permission based on their leisure periods. Once permission was obtained, the researchers sent the interview questions to the participants. Later, based on the appointment given by principals, the researchers conducted one-on-one interview sessions individually via an online platform (Zoom Meeting) for easy access to record video audio, and email.

Data Analysis Procedure

The data analysis procedure begins with the transcription of the participants' audio into texts. The recorded video verbatim was converted into written text and this step is crucial for an easy readability of the data collected. The data analysis comprised the preparation and organizing of data. The interviewed answers were read thoroughly to decode, condense, synthesize, and interpret the data. Using the thematic coding similar themes were identified to categorize in labels and tags. Based on the codes, the identified topics were organized into similar and broader categories. The findings of the study were presented in narrative texts in Findings. The interview data were condensed into themes through a process of decoding to answer the research questions.

Findings

Practices of Professional Learning Community

Research Question 1: What are secondary school principals' Professional Learning Community (PLC) practices for secondary school students' achievement, in Klang, Malaysia?

Interview Question 1: What are the existing PLC practices of secondary school principals to improve students' achievement in Malaysia?

Aimed to answer the first research question, the two principals' answers were merged into themes according to the practices of PLC in secondary schools. The themes are:

    1. Annual meetings

    2. Observation

Therefore, the themes are presented with specific actions in Table 1.

Table 1. Themes of Practices of PLC of Principals in Secondary Schools, Klang, Malaysia with Specific Actions

Themes	Specific Actions
1. Annual Meetings	i. Latihan Dalaman Perkhidmatan, LADAP (In-Service Training)
	ii. Peer teaching for early birds at school
	iii. Trust system between Management Leaders Team (MLT) and teachers
2. Observation	i. Supervision for new teachers
	ii. Small-scale research

Table 1 shows school principals' two major practices of PLC explored in this study. Both principals conveyed identical results which is to conduct an annual meeting to discuss the programs or activities to be conducted to support PLC. This highlighted the collaboration of teachers working together to carry out PLC programs at school that benefit the students' learning achievement (Khasawneh et al., 2023). Basically, at the beginning of every school session, teachers have a separate meeting led by the school principal to list down the PLC activities to be conducted in the respective year.

To begin with, LADAP is a collaborative work between common subject teachers where they discuss the different teaching approaches that suit a group of students for a particular subject. This result is evident in a previous study in which teachers who participated in LADAP (teachers training program) were able to implement technology-based

teaching aids in the classroom which potentially stimulates students' language learning (Haron et al., 2019). Peer teaching is another approach where two teachers are appointed each day to coach early bird students at school. Besides that, small-scale research is conducted to collect data about students' improvement for a specific teaching method conducted by a teacher under the principal's supervision to determine the most effective teaching method for them.

Lastly, the trust system between MLT and teachers to discuss the obstacles in the teaching and learning process and discover the strategies to curb the issues. Yet, trust is also an important factor that leads to improvement, a lack of trust between the principal and teachers is viewed as a poor management system, and the teachers are not aligned with the shared school goals failing to achieve the minimum target of students learning (Ehren et al., 2020). To compare the two principals' perceptions, the School Principal 1 (SP1) has conducted more activities than the School Principal 2 (SP2) to support PLC. A supportive school principal emphasizes teachers to ensure these activities as an ongoing effort throughout the years. It seems to imply that school principals play a crucial role in supporting, nurturing, and facilitating the cooperative learning method (Khasawneh et al., 2023). Therefore, the selected quotes from the School Principals (SP) are included to support the findings below.

SP1: "*We used to have LADAP, a sharing session program.*" "*We also have observation, where senior teachers observe the junior teachers*" "*Students who come early to school, around 6.45 have peer teaching with two teachers at school*"

SP2: "*The PLC practices with MLT and teachers help the principal to know the problems and the solutions are worked out through suggestions and views from all teachers*"

Interview Question 2: What are the challenges faced by secondary school principals in implementing PLC to improve students' achievement in Malaysia?

The findings about the challenges to implementing PLC at schools by principals are merged into three major themes. The themes are shown below

      1. Time factor

      2. Lack of budget

      3. Difficult to adapt to new changes

Table 2. Themes of Challenges to Implementing PLC in Secondary Schools, Klang, Malaysia with Specific Examples

Themes	Specific Examples
1. Time factor	i. Teachers need to work over-time
	ii. Traffic jam
2. Lack of budget	i. The school needs to prepare lunch for teachers during the training period
	ii. Resources
3. Attitude	i. Difficult to adapt to new changes

Table 2 shows the three major themes of the challenges in implementing PLC at schools. Teachers work in groups to share ideas and opinions about the different teaching methods that enhance the learning improvement of students as stated in the first interview question. Teachers must stay overtime to accomplish these tasks. Besides that, Klang is a busy area and people often get caught in traffic jams, thus, it is difficult for some teachers to arrive earlier than usual time for work. Moreover, the school must prepare lunch for teachers who participate in PLC programs conducted during the weekends since they are not rewarded with an extra salary. On the other hand, schools lack the budget to purchase the latest technology resources that aid the PLC programs, for instance, LCDs and smartboards. Lastly, it is difficult for teachers to adapt to the new changes in the school environment, however, by looking at the positive outcomes of PLC, teachers take some time to adapt to the new system. Similarly, SP1 faces more challenges in implementing PLC than SP2 probably due to the poor financial management in SP1's school. Besides that, it is also possible that SP2 manages the budget effectively, perhaps by having fewer teachers or by receiving funds from parent associations at school. Hence, I suggest future studies delve into the demographic aspects of schools as a factor in the challenges of implementing PLC. Below are the selected quotes to support the findings.

SP1: "*…. sometimes it consumes a lot of time, that teachers must stay back after school hours to discuss with HODs regarding students' issues. Besides that, the school must spend more money on teachers' food during LADAP on Saturdays. …. sometimes we do not have enough resources to conduct the various activities for PLC, for example, LCD and smartboards to enhance students' performance.*"

SP2: "*Time factor. For schools in the city or town and the teachers stay far faced traffic jams.*"

Challenges to Improve Student Learning Achievement.

Research Question 2: What are secondary school principals' experiences to improve secondary school students' achievement, in Klang, Malaysia?

Interview Question 3: What are the challenges faced by secondary school principals to improve students' achievement in Malaysia?

To answer research question 2, the challenges faced by school principals to improve student's learning achievement emerged into three major themes.

1. Students' family background

2. Students focus on education

3. Teachers' difficulty in adapting to new learning methods

Table 3. Themes of Challenges of Secondary School Principals to Improve Students Learning Achievement with Examples

Themes		Examples
1. Students' family background	i.	Social factor
	ii.	Economy factor
	iii.	Financial factor
2. Students focus on education	i.	Influence of social media
3. Teachers' difficulty in adapting to new learning methods	i.	Lack of knowledge of technology usage
	ii.	New teaching method during the Covid-19 pandemic (online classes)

Table 3 shows the three major findings of challenges faced by school principals to improve the academic performance of students. School principals should be familiar with the student's learning challenges so that they can specifically develop appropriate PLC programs that tailor students' educational needs. Besides that, this question helps principals design future PLC programs by providing a clear perspective of students' specific learning challenges. First, students come from different socio-economic statuses which impacts their education. Nevertheless, students from poor family backgrounds show a negative academic performance in exams. These students have obstacles to participating in PLC programs at school and staying focused on their studies. With this principals should consider providing training for teachers to be motivators to encourage those who struggle academically. Second, students pay greater attention to social media rather than to studies. This often depletes students' time in education which eventually reduces the learning achievement of students from Klang, Malaysia. Besides students, school principals also face challenges in adapting teachers to new learning environments. Some teachers struggle to implement technology in the teaching and learning process, especially during the COVID-19 pandemic. The selected quotes from participants regarding challenges are below.

SP1: "*We can say students come from different backgrounds and this itself gives us challenges. The new challenge is that students have other things to focus on rather than education. Besides that, I also faced the challenge of introducing new teaching methods among teachers during the Covid-19 pandemic.*"

SP2: "*Students' family background, their home environment, their mindset, and what they think of education are the main challenges in the children.*"

Interview Question 4: What are the major roles of secondary school principals to improve the quality of teaching and learning for student achievement in Malaysia?

The findings revealed that principals play few roles, as shown in Table 4

Table 4. Secondary School Principals' Major Roles to Improve Student Learning with Category

Themes		Category
1. Head role	i.	Collecting data about students' learning achievements frequently
	ii.	Enhancing teachers' quality by equipping them with knowledge and resources
	iii.	Be a good role model
	iv.	Build relationships with parents.

Table 4 shows the different roles of secondary school principals in enhancing the learning quality of students in Klang, Selangor. First, principals need to collect data to evaluate the cause of students' low learning achievement. Besides that, principals have a key role in equipping teachers with adequate knowledge and tools to improve the quality of the teaching and learning process. Next, principals must build a good relationship with parents to help monitor students' behavior at home. Lastly, principals must be good role models to other teachers to inspire and keep them motivated to work dedicatedly at work. Focussing on the roles of school principals provides a better understanding of sustaining students' performance through PLC programs. A current study suggested school principals adopt a supportive leadership style that can create a positive school culture despite just focusing on the management theories (Tajasom & Ariffin Ahmad, 2011). Therefore, the selected quotes to support the findings are below.

SP1: "*In terms of improving something, we need to look at the data first because the data shows the root cause of students' low achievement, besides equip teachers with knowledge and tools and be a good role model*."

SP2: "*…enhancing teachers' quality for a quality teaching & learning process. In addition, we also collaborate with Parent Teacher Association to build a strong bonding to help the school to achieve its vision.*"

The quotes from two secondary school principals from Klang, Malaysia support the comprehensive discussion about the experiences and practices of PLC in the next section. Thus, school principals are recommended to promote annual meetings and observations to build PLC at schools and improve students' learning achievement.

Discussion

Main Findings

The major findings are divided into two categories known as practices of PLC and challenges to improve students learning achievement in secondary schools in Klang, Malaysia. First, secondary school principals in Klang have various practices to implement PLC activities which emerged into two main findings: annual meetings and observation. Each school principal has unique ways of conducting meetings and observation. For example, School Principal 1 (SP) mentioned teachers have meetings through the LADAP program to exchange experiences about teaching methods in the classroom. Besides that, two teachers each day come early to school to coach the early bird students to improve their learning. On the other hand, SP1 also observes the school environment through the supervision of junior teachers and conducts mini-research to collect data about the issues in students' low performance in exams. Meanwhile, School Principal 2 (SP2) conduct meeting between MLT and teachers to work collaboratively to discuss students' learning improvement and think critically to find solutions for problems that benefit students learning achievement. With this, SP1 is a creative leader because she has unique methods and works systematically to implement PLC at School 1 (S1) compared to SP 2 who conducts meetings only to discuss issues and solutions which is commonly done in every school. The lack of strong perspectives on PLC at SP2 may contribute to the distinct background or experience exposed to PLC. Indicating an urge to enrich Klang secondary school principals' understanding of the concepts of PLC to mitigate students' learning problems.

The new ideas discussed in this project were the challenges to implement PLC which creates space for future research. Based on both school principals SP1 and SP2, the time factor was a major issue in building PLC since teachers must gather after working hours and some teachers were not able to join PLC programs due to heavy traffic jams. Moreover, SP1 must spend money for teachers' food during PLC programs on weekends, hence, the schools had to conduct limited activities in building PLC. Resources are vital to have efficient PLC sessions at schools. School 1 (S1) has inadequate resources that aid PLC programs, for instance, LCD and smartboard. Suggesting to the educational department to prioritize adequate resource allocation to support PLC at secondary schools in Klang, Malaysia. Lastly, teachers at S1 take time to adapt to the new changes in school programs. Hence, it can be concluded that SP1 faces more challenges compared to SP2 since School 2 (S2) conducts meetings mostly through online platforms, therefore, they do not require a budget for lunch as compared with S1. Besides that, S1 teachers are more dedicated to PLC programs because they are trying to adapt to the new changes in PLC as mentioned by SP1.

Second, this study realized the challenges to improving students' learning achievement in Klang, Malaysia. The findings have mentioned students' backgrounds who are from poor socio-economic status and pose low learning achievement from both secondary schools. Students nowadays are also exposed to social media which has reduced their attention towards education. Besides students, SP1 has mentioned teachers also caused challenges because of the lack of knowledge on the importance of technology usage in lesson plans, especially during the COVID-19 pandemic. Based on interview question 3, SP1 shares her opinion about challenges in improving students' learning achievement focused on students' and teachers' points of view. However, SP2 shares his opinion based on students' perceptions. It can be seen that SP1 has a broad view of the challenges in improving students' academic performance. This study recommends that SP2 identify more challenges from other perspectives, especially teachers.

Due to the challenges stated above, school principals are responsible for curbing these issues. SP1 and SP2 keep track of students' learning achievements by collecting data frequently to improve the quality of the teaching-learning process. SP1 also prepares resources for teachers that aid the teaching and learning process besides updating teachers on knowledge. SP1 also possesses the skills to be a good role model. Policymakers should develop training programs for school principals focusing on their leadership skills to have a strong mental and ethical character that has a long-lasting impact on teachers. Meanwhile, SP2 associates with parents through Parent Teachers Meeting (PTM) to help achieve students' vision. In short, both school principals have an awareness of their key roles in improving students learning achievement.

Comparison with Prior Studies

Practices of Professional Learning Community (PLC)

The findings of the study have led to several important insights. Based on the findings, Klang school principals carry out small-scale research to observe students' learning achievement. This finding is compatible with previous research by Admiraal et al. (2021), that Dutch school teachers research to investigate the effectiveness of PLC programs, for example, one of the schools in the Netherlands has a learning lab for teachers to work collaboratively as a part of PLC program (Admiraal et al., 2021). Besides research, school principals also observe junior teachers to improve their teaching and learning process by detailing mistakes in classroom management. This finding is similar to Chinese schools in China where school principals have frequent classroom observation which motivates teachers to be committed to work (Zhang & Koshmanova, 2021).

Klang school teachers work collaboratively to emphasize co-teaching for students who arrive early to school which can be seen among Finland teachers to promote collaborative practices by encouraging peers or co-workers to exchange ideas and guide each other to develop professional development (Antinluoma et al., 2021). However, Kin and Kareem (2021) denied that Malaysian government teachers have less autonomy in the decision-making process regarding students' learning achievement because government schools are centralized. A study evident that grade K-5 students from rural schools in Ohio have learning disabilities in mathematics, hence teachers of the PLC members were allowed to select topics that had a significant effect on the students' learning (Heale & Twycross, 2018). In this study, school principals have open discussions with teachers to decide on PLC programs. Lastly, schools in China, provide high salaries to teachers who are involved in PLC programs meanwhile Klang school principals only provide lunch for teachers (Zhang & Koshmanova, 2021).

This proves that school principals have different methods of building PLCs at schools in Malaysia and other countries. Similarly, Klang secondary schools, in other countries also face challenges to incorporate PLC efficiently. In China, school principals lack the resources to conduct PLC programs which are similar to this study (Zhang & Koshmanova, 2021). Previous studies in Malaysia also showed that teachers faced difficulties in adapting to new changes (Kin & Kareem, 2021). However, some Dutch principals have prepared separate buildings in schools for teachers to conduct meetings during PLC programs (Admiraal et al., 2021). This recommendation can be followed by school principals in Malaysia to facilitate the PLC program.

Challenges to Improve Student Learning Achievement

The study showed several challenges faced by Klang secondary school principals to increase students' performance. This result is similar to a study conducted in Pakistan that revealed that the usage of social media had a negative impact on students' attitudes as compared with a positive outcome (Abbas et al., 2019). However, private schools in China faced contrast issues, for example, high parents' expectations of school challenged the school principals to have sustained educational growth (Zhang & Koshmanova, 2021). During the COVID-19 pandemic, students had limited access to technology and a lack of concentration on education which eventually reduced students' academic performance in Indonesia (Iqbal & Sohail, 2021). The finding is similar to the study that family background was one of the challenges to improving students' learning achievement in that students from poor family backgrounds struggled to gain knowledge as compared to the wealthy students in government secondary schools in Klang. Thus, a teacher's role cannot be replaced entirely by technology because the presence of an educator is vital to transferring knowledge to students.

With this, school principals have a key role in curriculum management and improving students' learning achievement. According to Shahadan and Oliver (2016), school leaders supervise teachers' teaching and learning processes to enhance teamwork skills among teachers to have effective teaching methods. The benefits of supervision at schools are related to curriculum implementation, preparation of teaching aids, and improving teachers' professionalism (Yunus et al., 2012). School principals also must develop transactional leadership which is different from common leadership skills. Transactional leaders allow team members to get into the decision-making process and eventually motivates teachers and assistant school principals to be a future principal (Tajasom & Ariffin Ahmad, 2011).

Deductive Arguments

Professional Learning Community (PLC) creates a platform for educators to have open discussions, and exchange ideas and experiences to improve the quality of teaching and learning (Hassan et al., 2018). This study provides insights into Klang school principals' behaviors and ideas toward the support of PLC. With this, the gap that arises in this study is filled by identifying the challenges in building PLCs. This study was significant since it provides information about Klang School's PLC practices and challenges to improve students' learning achievement which is in contrast with other countries. School principals have unique methods of implementing PLC, however, the main body is similar to other studies, for instance, annual meetings and supervision.

Furthermore, there are other strategies available aside from these practices PLC. Notably, PLC requires teachers to be involved in the school change process by planning and implementing the change in schools, therefore, principals' 'change

leadership' is vital to influence people to achieve the school goals (Trilaksono et al., 2019). A comprehensive and dynamic framework for the analysis of PLC development was designed by six Dutch secondary school members focussing on activities of Collaboration, Reflection, Feedback, and Experimentation (Huijboom et al., 2021). Despite PLCs' impact on students learning achievements it also potentially improves teacher self-efficacy and teacher job satisfaction (Chan et al., 2020). PLC exhibits teachers' dedication and willingness to motivate while addressing their behavioral problems (Lee et al., 2011).

The challenges in implementing PLC have a significant difference between Klang secondary schools with China and Finland schools. Students' learning achievement in Klang has a relationship with the influence of social media which can be seen in Indonesian schools. Lastly, even though school principals have multiple roles in school management, most scholars agree that supervision is the most vital role to observe and get to know the issues happening at school.

Conclusion

This study explores the practices and experiences of school principals in improving students' learning achievement in Klang, Malaysia. Common practices of PLC at school are annual meetings and observation by the school principal. The challenges to efficiently promoting PLC are time factors, limited budget, and the attitude of the teacher itself. Several challenges to improving students' learning achievement are students' family background, the influence of social media, and the lack of knowledge and resources among teachers. The major roles of a school principal are to conduct small-scale projects to identify room for improvement, equip teachers with knowledge and resources, be an inspiring role model, and build positive relationships with parents.

MOE needs to identify the root cause of challenges in implementing PLC at schools and reflect upon unique approaches to effectively implement PLC without over-tasking teachers. Besides that, MOE must allocate essential budgets to schools or conduct training programs to increase the quality of teachers' professional development.

Recommendations

This study explored the challenges of building PLC at secondary schools in Klang, Malaysia. Therefore, future research to use descriptive qualitative analysis by interviewing more than one group of participants (principal, teacher, student, and parent). The study also suggests that future research explores intervention programs to overcome the challenges of implementing PLC efficiently at schools. Furthermore, future scholars can investigate the effectiveness of PLC activities on students learning achievement using various dimensions such as principal leadership, teacher collaboration, resources, and time allocation. Next, secondary school principals in Klang can develop a management team comprising Assistant Principals, the Head of Department (HOD), and mentors to efficiently implement supervision at schools. Besides that, SP2 can create more opportunities for teachers to collaborate and enhance PLC programs at school referring to SP1's practices of PLC.

Limitations

There are two limitations to this study. First, the researchers were not able to get many participants because school principals had busy schedules. Second, was not able to get a one-on-one interview session with one of the participants.

Ethics statement

Not applicable

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

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Both authors listed have made a substantial, direct, and intellectual contribution to the work and approved it for publication.

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