Lesson Study: Cultivation of Professional Learning Community (Plc) at a Selected Teacher Education Institute (Ipg) in Malaysia

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ABSTRACT

Professional Learning Community (PLC) is a platform that is recognizable to the development of professionalism among educators as well as the aspects of teaching and learning of educators. A professional learning community, or PLC, is a group of educators that meets regularly and continuously, shares expertise, and works collaboratively to improve teaching skills and the academic performance of students. Therefore, an initiative has been taken by the Institute of Teacher Education Malaysia (IPGM) to cultivate PLC among teacher educators in all 27 IPGs in Malaysia in 2021. About the same effort was made early 2011 but for some reasons the effort was discontinued. There were more than twenty tools available within PLC. One of the collaborative tools recommended for its application is Lesson Study (LS). LS is seen as a collaborative tool that focuses on student learning and is implemented collaboratively. A study was conducted by applying LS in the Teaching and Learning process (TnL) at Raja Melewar Teacher Education Institute to student teachers in the Post -Education Diploma Program (PDPP) for Philosophy and Educational Development in Malaysia (EDUP2072) course. The students involved are students majoring in History and Teaching English as Second Language (TESL). A total of two cycles were implemented and the results of each cycle were shared with fellow teacher educators and given improvements before the implementation of the second cycle. Observations were carried out during the TnL process by seven fellow teacher educators as well as one expert. A reflection session was held immediately after the end of each TnL and discussed the TnL processes focusing on the students’ learning. The results of the study found that: i. LS can provide an impact on student learning towards better understanding and clarity, ii. Collaboration between teacher educators can produce a healthy culture in the organization and iii. Cultivation of LS among teacher educators can promote the cultivation of PLC in Teacher Education Institutes in Malaysia. Overall LS and PLC should be given focus by all instructional leaders in Teacher Education Institutes and The Institute of Teacher Education Malaysia (IPGM) as a culture and in an effort to develop the professionalism of teacher educators.
Introduction

Professional Learning Community (PLC) is an idea that needs to be cultivated in an effort to strengthen the professionalism of educators and student learning. The vision and mission of the Institute of Teacher Education Malaysia (IPGM) explains the direction of IPGM as a leader in teacher education excellence and to produce competent and educator-souled teachers. How can the vision and mission be translated into practice and work for IPGM? Thus, IPGM's initiative in empowering PLC is a decision parallel to IPGM's vision and mission. PLC was introduced in 2010 and 2011 in the IPGs. However, only in 2019 PLC was reintroduced and in 2021 a large-scale initiative was taken to re-mobilize PLC among teachers, school leaders, IPG lecturers and education management officers throughout Malaysia. This effort is expected to last and continuously cultivated. PLC is also expected to be as way of working among teacher educators at large. Therefore the purpose of this paper is to explain how PLC through collaborative tools Learning Study - LS (Lesson Study) is practiced as one of the efforts to cultivate PLC in IPGs.

Professional Learning Community (PLC)

The Theory of Action Teacher Leadership Conceptual Model (York-Barr and Duke, 2004), explains that educator/teacher leadership influences collaboration in teams to improve teaching and learning practices with the goal of improving student learning outcomes. Educator/teacher leadership is supported by elements such as professional discourse, sharing of resource materials and time to perform tasks. All these elements are present in PLC (DuFour et. Al., 2016) and accordingly the empowerment of PLC will be able to realize the culture of PLC. In an effort to empower PLC, an organization needs to reduce bureaucracy that greatly restricts the culture of learning organizations. The organizational culture of learning is in alignment with the PLC where learning collaboratively among employees in the organization is encouraged. The practice of working in silos is prohibited and each individual in the organization has a common vision and mission, that is focusing on student learning, sharing best practices or deprivatization of practice and focusing on collaborative practices in many aspects through sessions. dialogue and reflection sessions (Senge et. al., 2012; Smulyan, 2016 and Schap & Bruijn, 2018). PLC is also an effective and democratic model where every member in the organization is given empowerment in discussions related to teaching and learning as well as in the decision-making process (Darling-Hammond et. Al., 2017). Cultivation of PLC effectively impacts student/pupil achievement and has a long-term impact on student/pupil achievement (Darling-Hammond, 2017; DuFour et. Al., 2016 and Hanzieker, 2012).

Lesson Study (LS)

there are five characteristics of LS. First, collaboration amongst educators in TnL. This collaboration will enable educators to exchange ideas to enhance the students’ learning. LS also offers research culture among educators where they can even conduct research collaboratively with other educators. LS will enable educators to know and realize the development of students which can lead to intrinsic motivation for educators. Finally, LS is one of the mechanism to knowledge sharing among educators. Lesson Study (LS) is one of PLC”s collaborative tools that is often employed by teachers, and educators in the teaching and learning process (TnL). LS requires teachers/educators to work collaboratively with other fellow teachers/educators in identifying students’/pupils’ learning issues and finding the best methods to address them gradually. Dialogue and reflective discussions are held among educators/teachers in an open and broad-minded and critical manner. The main focus of LS is observation of students learning in the classroom/lecture room by observers during the teaching sessions. According to DuFour and Marzano (2012), effective teaching ensures that all students/pupils learn at the maximum level. This requires an important responsibility on the part of the educator/teacher who plans the TnL to ensure that the instruction delivery leads to meaningful and effective learning. However, educators/teachers also need to be aware and know that the LS implemented will not necessarily find the best results but educators/teachers need to provide opportunities to improve practice in the team. There is no one teaching strategy that guarantees maximum students’ learning even though the strategy has been conducted in depth study because educators/teachers need to know whether the strategy to be applied meets the needs and context of students (Marzano, 2009). This means that educators/teachers need to be smart and sensitive in determining the strategies to be applied during the TnL process. Therefore, LS planned and implemented by educators/teachers should give priority that students learn and take appropriate action if students do not learn. How can an educator/teacher know whether a student is learning? What can an educator/teacher do when he/she realized that the students are not learning? And what actions an educator/teacher can take when he/she realized the student knows more than what he/she is teaching? The team of observers who are in the classroom or lecture room during the TnL process will provide feedback on whether the student is studying or otherwise. Therefore it is very important for educators/teachers to put LS into practice. LS can be cultivated in schools or educational institutions that cultivate PLC.

Research Methodology

This LS is using the LS cycle which consists of few steps namely: i) Tn L goal setting, ii) lesson plan, iii) teaching and learning, iv) reflection on TnL and v) revise lesson plan (if necessary) (Zanaton, 2017). This study was conducted among students who are doing their Diploma in Education programme at a selected Teacher Education Institute in Malaysia. The course involved is Philosophy and Development of Education in Malaysia (EDUP2072) under the sub-topic Development of the Education System in Malaysia - Before, After and Present. EDUP2072 is a compulsory course for all students under this academic program. As for TESL group, the course is using English as the medium of instruction. This course is divided into two sections namely basic philosophy and philosophy of education and development of education in Malaysia. First and foremost, a discussion among respective
lecturers were done. Three discussion sessions were conducted and finally upon agreement a lesson plan was produced. This particular lesson plan was used during the LS session. The first cycle of LS was implemented History major students and there were seven lecturers who conducted observations during the TnL process together with an appointed field expert. TnL was done online using Google Meet application. It was an hour TnL process. During the TnL process, observers fall into the non-participate observer. Once the TnL process was over, a reflection session was conducted between the lecturers conducting the TnL on that day, other lecturers teaching the EDUP2072 course, field experts and a chairperson to the reflection session. Reflection sessions provide opportunities for each individual involved to provide insights and suggestions to ensure students are learning. The second cycle was implemented by taking into account all the items stated in the first reflection session. Using the same lesson plan with some amendments, Cycle 2 involved TESL major students and TnL was conducted using English as the medium of instruction. Reflection sessions were recorded and verbatim transcripts were generated for Cycle 1 and Cycle 2.

**Findings**

The LS sessions were very fruitful and beneficial for the betterment of the students’ learning as well as the TnL process. The ongoing process of LS has given more opportunities for educators to be more precise with the obstacles faced by the students. Even though the sessions were conducted via online, that did not stop educators from LS to be carried out. The explanation and discussions of the findings of this study were divided into the strength of the LS and improvement as proposed by the observer and the expert.

**Strengths**

1. **Notification on Course Learning Outcomes (CLO) and Topic Learning Outcomes (TLO)**

At the beginning of the lesson, the respective lecturer has well informed all related CLOs and TLOs for the TnL process. This notification is very appropriate as the students are postgraduate students and fully responsible for their own learning. In addition, students can conceptualize the direction of the lecturer’s discussion to the TnL topic of the day. Figure 1 explains this findings:

![Course Learning Outcomes](image)

**Figure 1: Course Learning Outcomes**
The presence of observers and experts as well as other lecturers who teach the same course does not disturb the students. They were given a briefing about the implementation of LS and their roles. All of them has played their roles accordingly. Figure 2 illustrates the atmosphere.

![Figure 2: Observers, Experts and Lecturers During the LS Session](image)

2. Use of Videos and Maps

During the TnL process, a short video on how school and TnL in 1960s were conducted in Malaysia were choosen by the lecturer. The use of this specific video managed to attract students attention as well as understanding the message and relate it to the topic. The video can be used as a basis for discussion among students and several levels of questioning can be formed from the videos shown. The screening of the videos can be considered as ice-breaking among students who have never actually met each other due to the Covid-19 pandemic. Appropriate video screenings and video selection can also reduce “stifness” among students and can engage their focus. It was observed that some students do realized the presence of other lecturers during this TnL. As a result of this situation, some students refused to take part during the discussion.

![Figure 3: Video Usage](image)

It was a brilliant idea for sharing the maps in explaining the topic. The explanation became clearer and easier for the students to comprehend the topic discussed. The TnL process was
guided especially in questions asked. The maps also has given more opportunities for the students to do thinking aloud and sharing opinion.

“...Dr ...I really like the video you are sharing today. I have watched it before but very much for entertainment only. But today when you create questions for us to answer is very interesting.....change my way of watching the movie”

Soo

“My family always watch that movie but I never pay any attention...I was like shock to make the video meaningful for our learning topic”

Hidayah

3. Use of Media

The TnL process become more interesting and meaningful when use of various media being used. It was observed that the students showed more interest and excited to know what will be the next media used. Some of the media used seemed to give the impression of being in the classroom physically. This is very obvious when the lecturer were writing on the screen as if it was a blackboard or white board normally used in the physical classroom. The used of different colors in writing the notes were also an advantage. Another application employed was the breaksouts room session. Students were grouped and they were able to have a closer discussion among them as they never met each other physically. The gorup consists of four people per group. Before embarking into the group, they were clearly given explanation about the task they need to complete. The breakout rooms session were very systematic where students can know the amount of time they still have during the discussion. During the breakout session, The lecturer can monitor the discussions by visiting each discussion rooms. Students can also ask question related to the assigned task. Upon completion of the task, each group were called to share their group discussion on the task. By doing this the students feel free to explain supported by the group members. They were even being able to provide feedback for questions asked by other group members. Besides the task completion, the students were able to communicate very well their ideas. Since they are TESL students,
they were having good English command during the discussion. Some of the messages sent by the students after the TnL session were

“...it was a great learning session Dr”

_Magdalene_

“ I hope to see more creative ways for your next lesson Dr!”

_Siti Badriah_

“I never like History before...but the way you put everything in this lesson really awakened me about our country education development. And the video was very interesting. Even though I have watched the scene before but this time I watched it with full of meaning”

_Nurliyana_

The breakout rooms application as shown in Figure 5.

![Image of breakout rooms](image)

_Figure 5: Group Discussion Activities – Breakout Rooms_

The use of power-point slides that are interesting and can be used by lecturers as support material when giving lectures. The lecturer writes notes and annotations on the power-point slides as shown in Figure 6. The annotations were very meaningful as the students can feel the TnL like real.

“I really appreciate your annotations for the slides Dr”

_Amir_

“...it was different when we see your ppt and we can see your annotation here and there. I can understand your hard work to prepare your teaching materials”

_Yuhannis_

This shows that with the advancement of the technology, LS is very possible to be carried out. Not only the advancement of the technology, but also the skill and knowledge using the
applications is another advantage. In addition creativity also plays its role. The quality of TnL can be improved and finally the students’ learning is enhanced.

Figure 6: Using Power-point with Annotations

4. Rich Description

A rich descriptions of the topics help students’ understanding and confirmation. The ability and competency of the lecturer is obviously portrayed when she can easily explain the topic with examples. The rich description enable students to think and triggered the students’ thinking. Rich description was appropriate with the topic related to the development of education and its history in Malaysia. Online TnL was very challenging especially when the topic was very much on reading. However, the knowledge and experience helps the TnL became interesting.

“Dr....I can tell you that, your description of each important fact brings very meaningful learning to me”

Aida

“moving from not knowing to a more and better understanding of this topic”

Mirha

Figure 7: Lecturer’s Description
SUGGESTIONS FOR IMPROVEMENT

1. Induction Set/Video Screening

Indeed the selection of appropriate videos is placed in the induction set as it creates an element of enthusiasm in the learning process. Video screenings also can grab the attention of students. Furthermore, students were having more than three courses per day via Google Meet (GM). If and only if the TnL is interesting, students will be very focused. The content of this video can be linked to the topic under discussion and not subject to only one particular video. It can be more than one with short duration. Most important aspect is that, the video is clear, relevant and interesting to the students and the teaching. However, it is suggested that some guiding questions be given beforehand about the video so that the students' focus can be directed and the discussion will be more focused. As online TnL required students to enrol in the Google Classroom (GC), all task like the questions and activity can be posted via GC before the TnL takes its place. Taking into consideration of comments given by the observer in the first cycle, questions were given before the video screening. Obviously, before the application of breakout rooms, there were less involvement from the students. The observers did mention about few same students who participated in the discussion.

Figure 8: Video Screening Improvements with Questions

The question and answer activity only involved a few students compared to the video screening stage. The TnL becoming more interesting and meaningful with the correct video screening and also related to the lesson. Observers also mention the needs to alert with good time management so that the video-question and answer ratio becomes more balanced and can be utilized by students. The first cycle has shown a poor time management during the TnL process. Since the TnL process was conducted via online, some measures to be taken into consideration for examples poor connectivity for the students and also making appearance with video on GM.

2. Distribution of Questions

The questions asked were not distributed to all students and focused more on the same students. The observer realized only two to three names frequently called out to respond to the question. For example the questions asked was:
What were the significant differences between pre-colonial, post-colonial and post-independence schools?

Analysing the question asked, it is not a question to be answered within seconds as it required students to do a heavy thinking and reference. The students did not have ample time to answer and the lecturer has moved on to the next question. Therefore more proper plans about questionning to be done before TnL takes place.

Figure 9: Higher Level Questions

3. Level of Questions

Questions posed to students with a Bachelor of History degree are considered low-level. For example the question about difference between National School and National Type School is a fact that is considered simple and easy by the students. Therefore, Table 1 is proposed to show the differences of levels in the education system that should be used by the lecturer as an activity to be completed by students as the basis of discussion or items to be discussed. This table can be distributed to the students before TnL to ensure ample time to complete the table plus discussion. An extensive discussion can be done by using this table. In addition, more students can participate during the discussion.

<table>
<thead>
<tr>
<th>Basis of Discussion</th>
<th>Pre colonization period</th>
<th>Post colonization period</th>
<th>Post Independence period</th>
</tr>
</thead>
<tbody>
<tr>
<td>Curriculum</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teaching staff</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Educational</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 1: Examples of Group Questioning Activities

<table>
<thead>
<tr>
<th>goals</th>
<th>Effect</th>
</tr>
</thead>
</table>

The main reason to prepare question beforehand is to ensure the Higher Order Thinking Skill (HOTS) takes place among the students. HOTS is highly recommended for higher education learning. Some proposed questions related to the topic suggested by the observers and the expert that are at a higher level are as follows:

*Justify the root cause of the Chinese community’s reluctance to accept colonial government control over their education system and the impact of their reluctance as a whole?*

*Provide students’ opinions on national education policies that celebrate the diversity of mediums of instruction for the same curriculum;*

*Discuss the effects of medium language diversity for the same curriculum.*

*Discuss in depth the trend of the Malay community sending their children to Chinese National Type Schools*

Scrutinizing the above mentioned questions, students should be given appropriate amount of time for each questions (especially those that require time to think) that are asked to students. What is most important is the student learning processes besides some generic skills enhanced.

4. Utilization of Tutorials

Tutorials (in asynchronous form) should be planned to delve into the issues that have been discussed in the lecture. Tutorial session is very precious for both students and lecturers for open discussions. Tutorial session is where lecturers will provide opportunities for students to bring about any problem related to the subject and discuss. Topics for discussion and task to be completed during tutorial sessions also can be given to the students beforehand so the tutorial can be fully benefit the students.

SECOND CYCLE OF LESSON STUDY

Some improvements has occurred in the second cycle after the reflection session was held. This has led to some weaknesses that have been overcome.

1. Dispersment of questions gets better. Before the video was screened, several discussion criteria/discussion questions were posed and this drove a more directed discussion after the video screening (Figure 8).
2. Photographs were used more effectively, and Graphic Management was used which also resulted in a more structured and directed discussion.

3. With guidance from the lecturer, students managed to conclude that: 
   “There is no big difference between the education during the colonial period and the post-independence period from the aspects of the use of the different mother tongue”

   There was one student who managed to conclude the topic as:
   
   Standardization of curriculum or streamline curriculum happened only after independence.

   Clearly, the lecturer’s conclusion managed to drive towards that exact conclusion. However, in an online class, it cannot be ascertained that other students are also on the same level of thinking as that particular student.

**CONCLUSION**

PLC is found to be relevant and brings benefits for the students’ learning besides provide opportunities for educators to design their best method of teaching and learning. Educators need to be more creative and flexible in the teaching and learning process as the role of educators has slightly change due to this COVID-19 pandemic. Educators must realize the changes they need to face and take measures to overcome it. Educators role to impart knowledge only to students is no longer practical as students can access knowledge faster and better using the available technology. With this, it is indeed very challenging for educators to ensure the students get what they are not able to obtain from the technology. PLC is one of the mechanism can be used by educators to collaborate with other educators for better ideas and practice. The research revealed that LS as one of the collaborative tools suit the TnL process and to ensure students learning takes place. Meanwhile, cultivation of PLC is a noble effort to realize Malaysia national education aspiration. PLC that has been implemented has been able to provide several perspectives on the culture of PLC in Teacher Education Institute. Cultivation of PLC through the application of collaborative tools LS has yielded good results and some suggestions that need to be given attention to realize the efforts of cultivating PLC. It provide opportunity for educators to work collaboratively not only within the institution but also accross institutions. For example, collaboration between teachers at school with teacher educators at Teacher Education Institute and educators from universities. Provided the ultimate goal is for ensuring student really learn. Integration of ideas from all individuals or institution will enable best teaching executed. The following are the recommendations of the study conducted:

1. Two LS cycles help improve the quality in TnL. Some of the weaknesses identified in the first cycle were corrected through reflection sessions.

2. Input from fellow observers are very important in a reflection session
3. Isolation of lecturers’ work can be reduced. Teaching preparation becomes group work and best practices were also shared.

4. Fellow observers can also train themselves in observation and doing criticism.

5. Lecturers and fellow observers alike learn and get new ideas to implement in their teaching.

6. Content knowledge and pedagogical knowledge can be improved.

7. Collaboration among lecturers of the Teacher Education Institutes can be improved.

8. Teaching is no longer a lonely task but enjoyable and meaningful. Educator is also a learner (Penelope & Michael, 2000)

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