

## TEACHERS' IMPLEMENTATION OF PEER ASSESSMENT STRATEGIES IN MALAYSIAN SCIENCE CLASSROOMS

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**Abstract:** Peer assessment promotes collaboration, communication, independent and reflective thinking. However, implementing peer assessment in an examination-orientated education system is challenging. Teachers' beliefs, capabilities and lack of suitable training limit implementation of these strategies in the classroom. Thus, teachers need professional development programmes to guide them to implement peer assessment. The aim of this study is to investigate how teachers implement selected peer assessment strategies during a Collaborative Professional Development Programme (CPDP). CPDP is an expert-teacher collaboration model. The nature of the CPDP was long-term, collaborative and provided teachers with autonomy. For this study, two primary school science teachers participated. Using classroom observations and interviews, data was elicited about teachers' implementation of certain peer assessment strategies. Using constant comparative analysis, the findings revealed three aspects of teachers' practice that prevented them from successfully implementing the peer assessment strategies: teachers did not sufficiently prepare resources, dominated classroom discourse and were more concerned with the product, not the process. The study implies that implementation of peer assessment strategies through professional development programmes should be more comprehensive to include teachers' technological knowledge and skills, how teachers evoke students' awareness of the process and using problems as teachable moments. Moreover, professional programme developers should consider ways of reducing teachers' tensions between learning and examination when designing professional development programmes.

**Keywords:** *Peer Assessment, Collaborative Professional Development, Science teachers, Primary school*

### INTRODUCTION

Implementing peer assessment in lessons can enhance the quality of teaching and learning as well as student achievement at all levels and in various contexts (Bryant & Carless, 2010; Nortcliffe, 2012; Wanner & Palmer, 2018). Peer assessment, as one of the strategies of formative assessment, helps promote reflective thinking, communication, collaboration, and independent learning (Topping, 2017). However, infusing peer assessment into daily lessons may be challenging for teachers operating in an examination-orientated education system (Thanh-Phan & Renshaw, 2014; Wicking, 2019). These challenges exist because teachers tend to see themselves as knowledge providers and therefore predominantly practice teacher-centered instructional styles (Ahmad & Abd Samad, 2018). Getting these teachers to value and implement peer assessment would be difficult as teachers view peer assessment as an antithesis to their existing practices (Panadero & Brown, 2017).

Efforts to help teachers to implement peer assessment through professional development cannot be fully met with a few targeted workshops on peer assessment (Othman, Md Salleh & Mohd Norani, 2013). Effective professional development on such a complicated endeavor as peer assessment needs to go deep in terms of meaningful content; and teachers need opportunities to try out, collaboratively reflect on, and revise their practices (Wylie, Lyon, & Mavronikolas, 2008; Darling-Hammond, Wei, Andree, Richardson, & Orphanos, 2009). This the premise for the current research. Thus, in this study, a collaborative professional development programme (CPDP), where university lecturers

collaborated with teachers to provide guidance and support as teachers implement peer assessment strategies in their lessons. For this paper, we explored how two primary science teachers' implement peer assessment strategies under the guidance of the CPDP.

## LITERATURE REVIEW

One of the more prominent definitions of peer assessment was given by Topping (1998) as "an arrangement in which individuals consider the amount, level, value, worth, quality, or success of the products or outcomes of learning of peers of similar status" (p. 250). Almost two decades later, Topping (2017, p.2) still claimed that this definition is valid with the addition of "... then learn further by giving elaborated feedback and discussing their judgements with peers to achieve a negotiated agreed outcome". In a nutshell, peer assessment encompasses peers using one another as resources, by sharing ideas and evaluating the work of others, and by providing feedback. Various activities can be proposed as peer assessment strategies, namely, students giving and receiving feedback, correcting errors, questioning thought processes and justifications and critiquing the work of peers (Boud & Falchikov, 2006). When students are involved in these activities, students take an active role in the management of their learning. Peer assessment strategies have elements of self-regulated learning by which students monitor their work using feedback from external sources, primarily peers. This student-led assessment practice is a useful hands-on learning experience and has the potential to affect achievement positively (Wiliam, 2011).

Practicing peer assessment provides teachers the opportunity to learn about how effective their teaching by observing students' understanding of content and skills during the students' dialogical interactions with their peers (Black & Wiliam, 1998). However, the success of implementing peer assessment in the classroom largely depends on teachers. Even though research has shown that peer assessment is useful in improving teaching and learning, teachers are still hesitant to implement these strategies in their classrooms (Koh, Lim & Habib, 2010; Rozi, 2013). There are three main reasons for this hesitation - teachers' beliefs, capabilities, and lack of training.

Firstly, teachers especially in Eastern educational cultures, tend to believe that involving students in the teaching and learning process is akin them abandoning their teaching responsibilities and handing them over to the students (Faizah, 2011). The teachers tend to value their central position in student learning and are concerned if their students are indeed capable of providing accurate, appropriate, and meaningful feedback (Davies, 2000). Secondly, for teachers to successfully implement peer assessment, teachers should have capabilities in developing student interactions (Sluijsmans & Prins, 2006). Primary school teachers are aware that young children are innately curious and out-spoken, but teachers are often mindful of classroom management and thus rarely allow these students to work together with peers. When teachers do indulge in group work, they do so under high restrictions that student interactions are limited. These restrictions by teachers are highly unlikely to foster self-regulated learning in children, which is the fundamental of peer assessment principles (Gillies & Boyle, 2010).

Thirdly, many teachers are not confident to implement peer assessment as they are not adequately trained (Wylie, et al., 2008). Teachers' professional development on assessment reforms is mainly through a cascading model (Dischaba & Mokhele, 2012). Selected teachers undergo specific training that is often situated off-site and for a short period, and then, these teachers return to schools to disseminate the knowledge that they had gain at these trainings. Many research has shown that teachers feel frustrated as they find that the knowledge and skills are usually water-down and they are still unable to implement these assessment strategies in the classroom (Andersson & Palm, 2018; Darling-Hammond et al., 2009). Since substantial changes in teachers' beliefs and expertise are necessary for teachers to embrace the fundamentals of peer assessment; these cascading model of professional development programmes have minimal impact on teachers' practices.

The core issue is that teachers still need to implement these peer assessment strategies as it is critical for student development (Harris & Brown, 2013). Research has provided various types of strategies that teachers could use to encourage peer assessment in their classrooms (Rolheiser & Ross, 2001; Thomson, 2011). Teachers could have students mark each other work with no answers provided, so peers collaborate and elicit the correct answers from various sources. Teachers could also provide a set of expected criteria and use to comment on the strengths of each other's work and to identify areas for improvement. Blatchford, Kutnick, Baines, and Galtin (2003) recognized the difficulties teachers encountered in trying to introduce these strategies and argued strongly that if it is to be used successfully in classrooms, the introduction of peer assessment strategies should be designed appropriately. The design for professional development should show teachers how to teach students the relevant skills, how to develop organized lessons and tasks, and where to look for if they require support or guidance.

Ideally, professional development programmes should be long term and collaborative. Professional development programmes should have the elements of active teacher learning where teachers are allowed to engage in hands-on practices, provided with interactive feedback and discussions, and collaboration with other colleagues or experts (Andersson & Palm, 2017). Collaboration in professional development can entail the collaboration between teachers and experts, or among teachers (or peers). Gillies and Boyle (2010) compared a collaborative professional development programme involving two groups: collaboration between an expert with teachers and the other, collaboration among colleagues who supported each other. The study found that the group of teachers that had input from an external expert made significantly more changes, and their students showed a higher increment in academic attainment than the group which only used peer support. In light of this, the current study employed the expert-teacher model to encourage teachers to implement peer assessment strategies under the guidance of CPDP.

## METHOD

The study employed a case study research design. Case studies probe the complexities of stakeholders' perceptions and actions in a specific context (Merriam, 1998) and yield insightful data when research is exploratory (Yin, 2003). The research question guiding the study was – How two science teachers implemented peer assessment strategies under the guidance of CPDP?

This paper is part of a more extensive study involving eight science teachers from three Malaysian primary schools. In the more extensive study, the teachers were chosen based on their willingness to participate and showed interest in peer assessment. For this paper, two teachers, Mala, and Yati from the same school were chosen. Their school management was very supportive of their participation in this study, and this allowed for adequate data collection. Mala was the most experienced participating teacher with 13 years. She holds a degree in Science and pursued a postgraduate diploma in Education - *Diploma Pendidikan Lulusan Ijazah* (DPLI) to enter the public school system. Mala taught Year 4 science. She has held positions such as Head of Science and co-curriculum advisor of Mathematics and Science Club. While Yati was chosen as she was very keen to participate to know more about peer assessment, she had only six years of teaching experience and taught Year 1 science.

### *Procedure*

The CPDP was a collaborative professional development programme that focused on long-term commitment (about four months) and with the expert-teacher collaboration model. The experts involved in this study were a postgraduate student and four senior lecturers at the faculty of Education from two public universities. The CPDP was introduced to the participating teachers with a half-day training session. In the training session, teachers were introduced to the principles of peer assessment, overview of strategies to encourage student interactions, and discussions of challenges in implementing these peer assessment strategies. For instance, in strategies to encourage student interactions, teachers were introduced to an assortment of peer assessment strategies. Some of the examples of these strategies were '*Teacher encourages students to listen to peers' responses to questions, or presentations made in class and to ask questions on points that they do not understand*' and '*Teacher ask students to mark each other's work without giving the answers. Teacher then asks the students to collaborate and find the correct answers from available resources*'. These strategies were elicited from literature and modified for the Malaysian context (Andersson & Palm, 2017; Rolheiser & Ross, 2001; Thomson, 2011). The teachers were then led into a discussion about these peer assessment strategies and their concerns regarding the implementation were addressed. When the training was over, the teachers were informed that they would be observed once on their current practice to obtain baseline data. Data elicited from these classroom observations were analysed and the experts recommended ways on how to embed specific peer assessment strategies into these current practices. Author 1 then returns to the teacher to discuss the recommendations put forth by the experts. This aspect of the CPDP was critical because the experts wanted the teachers to be aware that their current practices only require minor modifications, as oppose to a complete revamp, to accommodate for the implementation of peer assessment.

Subsequently, the teachers were asked to create a lesson plan for one of their upcoming lessons and to use peer assessment strategies based on the training and feedback obtained from the experts. The teachers created the lesson plan independently and had the autonomy on when and how they plan to implement the strategy. The lesson plans were forwarded to Author 1. Author 1 communicates with the other experts and they collectively provide suggestions and relevant scaffolds. Generally, alterations to the original lesson plans were minimal and when opportunity to embed peer assessment strategies did arise, the information was communicated to the teachers. The suggestions and scaffolds offered were unique for each lesson plan as it based on the learning outcomes and grade level. The modified lesson plans were given back to the teachers. Author 1 then discusses the recommendation of the experts as well as other

logistics and support that they teacher may require. The teachers had the choice to accept the suggestions or stand their grounds by providing justifications.

The teachers redo their lesson plan based on the suggestion (if they agree). During the implementation of the modified lesson plan, Author 1 does classroom observation and followed by a discussion. The teachers were given the opportunity to reflect on the lesson and to highlight the strengths and areas for improvement for the implementation of that strategy. The process was repeated for 4-6 lessons for 3-4 months for each teacher.

### ***Data Collection techniques***

This study utilized qualitative data collection techniques that included classroom observations and interview sessions. The classroom observations were conducted to gain insights on how teachers implement peer assessment strategies in their lesson based on experts' suggestions and support. Author 1 was a non-participating observer. The lesson was also audio-taped to gain insights of classroom discourse. Interview sessions were done before and after each lesson. They were considered more like conferencing. The former focused on teachers' preparation of the lesson plan, where the Author 1 listened to justifications and offered suggestions (from experts) on how to improve the lesson plan. In the latter, teachers' reflected on their practices and discussed their achievements and shortfalls in implementing the strategies. Some of the questions asked were - *What is your opinion on your lesson?* and *How do you think you want to improve your lesson?*

### ***Data Analysis***

For each teacher, a portfolio was created. The portfolio contained the transcripts of interviews and classroom discourse. Additionally, documents such as worksheets, student presentations and lesson plans were placed into the portfolio in the extensive study. Firstly, the transcripts were read several times, line by line, and analysed to form codes (Birks & Mills, 2011; Creswell, 2012). Codes are formed when data are repeated in several places in the transcripts, where the teacher explicitly does something meaningful or the teacher's practices were relevant to a published article about peer assessment practices. Corroborating evidence from both observations and interviews was used to document and shed light on the codes. Using constant comparative methods, codes that were similar for both teachers were analysed to form three central categories that conceptualized the major findings of this study (Robson, 2002). Three aspects were elicited from the data that prevented the teachers from successfully implementation of the peer assessment strategies were (1) teachers did not sufficiently prepare resources, (2) teachers still dominated classroom discourse, and (3) teachers were more concerned with the product, not the process. Moreover, memos were created to delineate the development of these categories and the inter-relationships between them. Finally, suitable quotes representative of the findings were selected.

### **Findings**

This paper describes two science teachers' implementation of peer assessment strategies during CPDP where teachers received support and suggestions from experts.

#### ***The Plan: Yati***

In the lesson plan, Yati chosen the topic 'Soil' to implement the peer assessment strategy - *'Teacher ask students to mark each other's work without giving the answers. Teacher then asks the students to collaborate and find the correct answers from available resources'*. After discussing with Author 1, she decided to allow her students to work in pairs. She planned to give them some questions about soil. The experts suggested that she provided supplementary resources (YouTube, additional reading materials, and mind maps) rather than just relying on the textbook to help students to discuss with each other. With the additional resources, the experts explained that the students would be able to obtain the answers independently so that they are able to mark their peers' work. The experts advised Yati to scaffold the learning of her students by walking around and help them to discuss their ideas in pairs. She was told to give ample time for the students to mark and discuss their peers' work.

#### ***The Plan: Mala***

Mala usually taught the topic 'Solar system' through chalk-and-talk method. However, with motivation from Author 1, she decided to implement the peer assessment strategy - *Teacher encourages students to listen to peers' responses to questions, or presentations made in class and to ask questions on points that they do not understand'*. Mala divided the topic into subtopics and each subtopic was given to a group of three students. They were asked to prepare a poster presentation and to prepare two questions regarding that subtopic. The experts advised Mala to prepare a rubric. As

students were not familiar with peer assessment strategies, the rubric would explicitly show the criteria for the presentation. She was also advised to provide frequent feedback to her students when they prepared for their poster presentation. She was told to allow extended wait time especially during the Q&A session of the presentation.

### *The Implementation*

Both teachers mentioned that they would not have done group work or grant autonomy to their students if they had not participated in this research. Moreover, they also expressed that the guidance they received from the experts were useful. Both admitted that they usually conducted whole class discussions and played the role of information-provider. Though classroom observations did show more student interactions; however, the teachers' practices were still not up to the mark. Three aspects of practices that were considered unsuccessful were (a) teachers did not sufficiently prepare resources; (b) teachers still dominated classroom discourse; and (c) teachers were more concerned with the product, not the process.

#### *Teachers did not sufficiently prepare resources*

The lesson began with Yati posting some questions on the board about the topic 'Soil' and asked her students to discuss in pairs. The topic 'Soil' was new to these Year 1 students. Yati was told prepare various resources (by the experts); however, Yati had only prepared one video about the topic 'Soil'. As she played the video, she did not highlight the important aspects of the videos. As video viewing is ephemeral, many students were not able to remember the facts about soils.

- 23     Yati     : *Amin, can you read the answers?*  
 24     Amin     : *Clay soil...err...fertilize soil....teacher.*  
 25     Yati     : *Fertilize soil? Did you hear that in the video just now?*  
 26     Amin     : *No teacher....*

(Yati, O4, 23-10-17)

Since, students were not presented with useful resources (as the experts suggested), the students were unable to give feedback to their peers and were unsure on how to proceed with the marking.

When asked, Yati commented that it is difficult to search for resources that are suitable for specific learning outcomes.

*I feel er, example PBM [teaching aids] ...video which are more focused to the subtopic, ... even if we search through internet, sometimes the videos are meant for general view and the videos are also not specific. ...so it is difficult to find materials.*

(Yati, I5, 29-11-17)

When Mala implemented her lesson on the 'Solar System', she told Author 1 that she was not confident with a rubric despite Author 1 stating that she would help her to do so. On the day of the lesson, Mala confessed that she had no time to review their poster presentation or the questions they prepared. Therefore, after a group presentation, the presenting group asked a question.

- 10     Ali       : *Since when solar system existed?*  
 11     The students were all quiet.

(Mala, O2, 8-10-17)

Since the students were quiet, Mala asked the presenting group if they had explained the question in their presentation.

- 13     Mala     : *Did you explain in your presentation earlier?*  
 14     Ali       : *No teacher*  
 15     Mala     : *Hmmm.....You need to ask questions based on your presentation! ok next question please....*

(Mala, O2, 8-10-17)

If Mala had reviewed the questions earlier with the students, she could have provided constructive feedback and students would be able to prepare better quality questions. Finding suitable materials was not a problem for Mala; her issue was with time management.

*'I think resources is not a big problem the only thing is the time for me'*

(Mala, I3, 30-11-17)

***Teachers still dominated classroom discourse***

When Yati introduced the peer assessment strategy, it was told to her that she should allow her students to interact and find answers with their peers. However, since she did not provide relevant materials, her students were unsure of what to discuss, were hesitant to talk and were just waiting for the teacher's answer. This led to Yati taking over control of the classroom discourse and reverted to a teacher-centred Q&A session.

- 17 Yati : Which is the best soil for planting?  
 18 Ss : Garden soil.  
 19 Yati : Puteri, what is the answer in your paper?  
 20 Puteri : Three, teacher

(Yati, O4, 23-10-17)

Similarly, Mala allowed her students to ask each other questions regarding the poster presentation. A student who had just completed their presentation asked a question and one of their peers, Siti answered the question - '*the sunlight can make us blind*'. Immediately, Mala responded as shown in the following excerpt.

- 25 Mala :(Her eyes became big) What?...sunlight can make us blind? Class, sunlight  
 26 can make us blind?! Now we are in the class, there is sunlight...are we getting  
 27 blind?  
 28 Ss : Silent...  
 29 Mala : Who can correct the sentence? I understand what she is saying but the  
 sentence is not correct. Who can correct it?

Even though, Mala did not provide the answer directly to her students but as soon as she realized that the students could not answer that question, she took control of the classroom discourse and provided the answer.

- 32 Farid : We can become blind if we go nearer to the sun.  
 33 Mala : Not go nearer but seeing too long with our naked eyes.

(Mala, O2, 8-10-17)

When question why Mala provided most of the answers, Mala admitted she finds it difficult to change her practices, as it meant losing control of classroom discourse.

*... we stick to our old fashion teaching ... difficult for me to change. Usually when I try to have student centered classroom I will end up giving them everything especially when we questioning I will question more ... but I have never tried students questioning*

(Mala, I6, 30-11-17)

***Teachers were more concerned with the product, not the process***

Even though the experts had always reminded the teachers that implementing these strategies were new ideas for their students as well, and thus, supporting them holistically was important. The teachers were asked to explain their actions explicitly and to pay attention to student autonomy. It was observed that both teachers paid little attention to the process but seem more concerned with the product.

In the case of Yati, she did not fully explain to her students the rationale of why she was encouraging them to interact with each other, but simply explained the procedure.

- 44 Yati : Take out your colour pencil... the red one. Class, now you are going to  
 45 mark your friend's worksheet. If your friend's answer is correct put a  
 46 tick but do not erase the answer written there, do you understand?

(Yati, O4, 23-10-17)

It was observed that her students were also more concerned with their answers and some of them were actually erasing their wrong answers and filling in the correct one. It was not surprising as Yati was more concerned that her students got the correct answers (the product). She did not ask if any of her students got the answer wrong and if so, why did they give that answers (the process). If Yati focused on the process of peer assessment, she would have encouraged her

students to argue and defend their answers. Providing the right answers is very apparent in high-stake examination settings. As such Yati's concerns about obtaining the right answers (the product) were associated with this setting.

*...thinking whether it is going to work for my students or not. What if they do not understand? How are they going to pass the examination? All these questions were running in my head.*  
(Yati, I6, 23-10-17)

Mala introduced the peer assessment strategy that she was going to use. She told her students that they were going to teach her instead, and many of her students were surprised.

13 *Ahmad* : *Teach you? Teacher you must be joking! Students can't teach teacher.*  
14 *Mala* : *Yes you can Ahmad. This time I am going to give you the chance to teach*  
15 *me! All you need to do is a little research.*

Mala told her students that they can find materials for their poster by using various sources.

16 *Mala* : *...you can also do research using internet, newspaper and magazines.*  
17 *Each group need to present in a poster next week.*  
(Mala, O1, 23-9-17)

Mala initiated the lesson with a novel idea of providing autonomy to her students by allowing them to do the presentation and learning through peer interaction. However, she could not successfully implement the strategy as she took control of the classroom discourse. Mala seemed to elicit the correct answers from her students without providing the space for her students to use each other as resources for learning.

46 *Mala* : *Don't know? Your friends already explain in their presentation jus now. I*  
47 *find another person...ok Darus answer...*  
48 *Darus* : *Eclipse*  
49 *Mala* : *Eclipse? No....next person....Sara, you answer*  
(Mala, O2, 8-10-17)

## DISCUSSION

The main thrust of this small scale research was to uncover how the Collaborative Professional Development Programme (CPDP) impacted these teachers' implementation of specific peer assessment strategies. The teachers did make attempts to implement these strategies. For instance, Mala articulated that she would not have implemented these strategies if she had not joined this programme. She allowed her students to take ownership of their learning by giving them the chance to prepare, deliver and assess their peers. Likewise, Yati allowed her students to work in groups and to assess their peers' worksheets. What was observed in both classes was that the entire class became vibrant as students were engaged as active rather than receptive learners. The level of interaction did increase in multiple ways: within groups, between groups, between presenting groups and audience, and between teachers and students. However, there are still some improvements that can be done to further help these teachers with the implementation of these strategies.

Implementing peer assessment has multifaceted demands. In the CPDP, teachers were told what types of teaching aids to use or how to support their students' learning (via feedback). However, the findings showed that teachers require more specific guidance. Teachers should be given training on how to search for relevant videos from the Internet, to edit videos to align with their learning outcomes and to restructure tasks from the Internet to make them more suitable for their grade level and the local context (Elmahdi, Al-Hattami & Fawzi, 2018)). Teachers should be explicitly shown how to provide feedback to their students via Frog VLE. For instance, in Mala's case, she could have asked her students to upload the poster onto the Frog VLE platform and she could have provided her written feedback to them anytime. Therefore, any professional development programmes should take into consideration teachers' technological knowledge and skills, and support teachers with this aspect as they implement the peer assessment strategies.

Teachers' belief that they are the centre of student learning is challenging to revamp. Providing students with autonomy is easier in the Western culture but has shown to receive more resistance in the Eastern educational cultures (Littlewood, 1997; Willis, 2011). Subsequently, even students were reluctant to take responsibility for their learning as expressed by Mala's students "*Teach you? Teacher you must be joking! Students can't teach teacher*". Thus, professional development programmes should highlight to teachers the importance of reinstating the purpose and instructional

strategies of peer assessment (Hung, Chen & Samuelson, 2016). Collaborative professional development programmes should dedicate some resources to explain to the teachers that students have only limited ideas on peer assessment and thus when implementing these strategies teachers should accentuate the rationale for each step of the activity (Ho & Savignon, 2007; Kaufman & Schunn, 2011; Liu & Carless, 2006; Roskams, 1999).

Teachers operating in high-stake examination culture tend to feel accountable for their students' success. When introducing radical changes to their practices, teachers tend to feel the tensions between, allowing students to take autonomy versus preparing them for their examinations. These tensions are real and if teachers are to implement peer assessment practices they need to have the confidence to do so and to overcome any challenges that arise from that (Gillies & Boyle, 2010). CPDP had already considered this, implementing peer assessment strategies require time, effort and perseverance; however, the challenge is that teachers tend to revert to their original practices very quickly and this issue needs to be addressed. Teachers must be taught how to use problems as teaching moments to improve the process. For example, when Mala's students did not prepare the question based on their presentation, Mala could have asked them to think of other questions or enlist the help of their peers. Instead of focusing of the product, teachers should use these problems to enhance the quality of implementation of these peer assessment strategies (Hung & Chen & Samuelson, 2016).

## CONCLUSION

The development of such context-specific versions of peer assessment implementation suitable for Asian settings merits further research. In particular, researching about the development of the content and the learning experiences in professional development programmes – the do's and don'ts – do suggest much more should be done if peer assessment is to be successfully implemented. For example, this study had shown that peripheral aspects such as teachers' technological knowledge and skills, students' awareness of the process and using problems as teachable moments, reducing teachers' tensions between learning and examination need to be considered when designing professional development programmes. It is shown that the limitation of this study was time and thus, guidance and support is needed to engage teachers to conduct effective peer assessment strategies (Andersson, & Palm, 2017). Moreover, every milestone that the teachers achieve should be celebrated. As stated by Andersson and Palm (2018), if teachers have experienced success in these professional development programmes, they are more likely to be committed in implement the peer assessment strategies in the future. Thus, CPDP did help teachers to initiate the implementation of peer assessment strategies; however, there is still room for improvement. These challenges must be acknowledged by relevant stakeholders to ensure more comprehensive outcomes in terms of teachers' implement of peer assessment strategies in their classrooms.

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