Peer Observation Effectiveness by Using Video and Whatsapp Messenger for Learning Improvement

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Abstract. Peer observation is an alternative to supervision in PAUD, where educators can observe each other to develop effective learning. This study aims to determine the effectiveness of using video and WhatsApp messenger in peer observation to improve education. The subjects of this study were 16 educators in early childhood who were determined according to the research objectives. Data was collected by using interview and observation techniques. The study results found that using video and Whatsapp messenger in peer observation was very effective in improving learning. They were making peer observation activities able to continue without having to meet in person. Furthermore, peer observation is more flexible because it could be adjusted according to the conditions and agreement of the educator.

Keywords: video, peer observation, Early childhood education

1   Introduction

Early childhood education (PAUD) is a level of education before primary education as a coaching effort aimed at children from birth to six (Kemendikbud, 2014). PAUD units in Indonesia continue to increase both in urban centers, rural areas, and even throughout the country (Hudori, 2019). Nationally, PAUD units have reached 233,963 spread across 34 provinces in Indonesia, and there are even 7 (seven) PAUD units abroad, namely: 1 in Egypt, 2 in Malaysia, 1 in Myanmar, and 3 in Saudi Arabia. Specifically, in North Sumatra Province, there are 10,840 PAUD units spread over 33 regencies/cities, with details; 2,921 Kindergartens, 1948 Raudatul Atfal (RA), 5,430 Playgroups (KB), 77 Child Care Parks (TPA), and 464 Similar PAUD Units (Kemendikbud, 2020).

PAUD educators are the spearhead of early childhood education and the essential component in maximizing learning outcomes and teaching quality (Darling-Hammond & Youngs, 2002). Thus, PAUD educators must continuously improve their professionalism, especially in implementing the teaching and learning process. Peer observation is one approach that can be used to improve teaching practice. Feedback after observation contributes effectively to the development of reflective teaching (Siddiqui, Jonas-Dwyer & Carr, 2007) and a new strategy to improve the quality of learning and teaching (Hendry and Oliver 2012).

Peer observation and feedback vehicles for instructional improvement (Ridge and Lavigne 2020); on the other hand, advances in information technology also provide many benefits and conveniences for educators in educational programs (Özkan 2019). Peer observation also helps to improve professional development for school principals (Acree et al., 2017) so that its use needs to be maximized. The use of digital media has begun to be carried out among fellow

educators so that they can see colleagues when teaching in other places "virtually" (Zepeda, 2013). New technologies also allow for real-time feedback on teaching and effectively enhance educator change (Weiss et al., 2020).

Video technology offers an opportunity to support educator learning because it can capture the richness and complexity of teaching by encouraging a deliberate examination of classroom practice (Borko, Whitcomb & Liston, 2009). In addition, a video providing greater access to classroom events without compromising on authenticity can provoke cognitive, emotional, and motivational processes (Seidel, Sturmer, Blomberg, Kobarg & Schwindt, 2011).

2 Research Methods

Researchers carried out field research procedures using descriptive data in written or spoken words, observed Behavior, and emerging phenomena. This research was included in a qualitative descriptive study—data collection techniques using interviews, observation, and questionnaires. Meanwhile, the data analysis uses the following steps: data reduction, data collection, data presentation, and conclusion drawing.

3 Result and Discussion

Peer observation is a visit made by educators to peer educators' classes to observe the ongoing learning process in peer educators' courses. By attending, peers help each other develop teaching, overcome weaknesses, share insights, and support each other. The results showed that the observations of fellow educators were carried out online using video recordings and WhatsApp when the covid-19 virus was running effectively. It's just that some technical obstacles become obstacles during the observation. The use of video and WhatsApp Messenger is an alternative as long-distance observation for educators in PAUD units. Using WhatsApp Messenger is more straightforward and relatively easy because it can be used via mobile phones.

The steps for using video and applications that are applied to peer observation are as follows:
a. Pre Observation

Educators and colleagues discuss the focus, instruments, and schedule for peer observation through WhatsApp Messenger (it is recommended that educators have downloaded WhatsApp Messenger on their respective Android phones first).
b. Observation

According to the agreed focus, educators record their learning using a video application, then send the video to fellow educators to observe. Educators who act as observers watch and observe the lessons that have been recorded in the video, write notes on the learning recordings in the video
c. Post-observation

Educators and peers together reflect on videos that have been observed by peers, educators who act as observers provide constructive feedback for learning improvement. The observed educators received input, and peer educators made learning improvements after receiving information and fellow educators.

Observations in the field obtained data that WhatsApp media has several advantages: easy, practical, fast, and saving internet data. Furthermore, WhatsApp can also be accessed only with mobile phones and has various features that can support communication with the help of internet

services. For example, the group menu option is used as a place for educators to discuss. Therefore, Whatsapp is beneficial in communicating activities in distance learning amid current conditions (Ricu Sidiq, 2019).

Research data obtained from interviews with educators involved in peer observation found that peer observation has benefits, namely helping educators identify areas of strength in teaching to increase confidence and strengthen teaching skills and provide specific and unique peer feedback that can be used in teaching. Teaching portfolio as well as increasing collaboration through dialogue with fellow educators. The results also show that educators believe that the feedback obtained from peer educators is constructive. The relationship is collegial and symmetrical. The two educators involved did not find the process strenuous or stressful. Still, they appreciated the feedback as it improved their teaching.

Peer observation in teaching provides opportunities for reflection, improves teaching practice, and promotes supportive teaching relationships between educators. All participants in this study were willing to observe each other and give feedback to enhance learning. In addition, all participants in this study (100%) stated that their feedback was constructive if sharing it with colleagues would help them learn and have different ideas for the next class and activity.

The use of video in the peer observation process also provides many conveniences. Sharing teaching videos with colleagues is done because educators can't observe each other's classes directly, especially during the covid-19 pandemic, which does not allow direct meetings; the use of videos provides the following benefits:

a. Completing the practice of peer observation due to difficulties in scheduling for class observations, making it more flexible in terms of time and place

b. Learning video recordings used in the peer observation process can be repeated if educators want to analyse more in learning practices

c. The introduction of video technology makes it easier for educators to observe their peers' instructions and give or receive instructional support.

d. Easy access to video cameras allows educators to record lessons so that other educators can view them at their own pace at any time.

During video observation, educators begin by observing one another in private. Then they meet to discuss the lessons and commit to making changes in practice. The cycle closes with the educator recording the implementation of this change and sharing the video with colleagues. In this way, video is used as an accountability mechanism to make feedback actionable. Video has the most robust evidence base to influence educator practice and child outcomes positively. Viewing high-quality teaching videos to use as models, discussing self-recorded videos with colleagues, and using self-recorded videos for self-reflection have been shown to change educator interactions and improve children's outcomes.

Videos allow educators to film their classes easily, especially with a smartphone app, and tag specific parts of the video with keywords. The main goal of observation is to learn from experience (Richards and Farrell 2010), which relies on memory and recording information during peer observation. Educators model lessons for colleagues, who then offer feedback and discuss how to incorporate similar teaching strategies into their own.

Based on the results of observations made by researchers on learning planning documents and learning videos and comparing previous conditions, there has been a significant change. Educators make learning improvements according to feedback from fellow educators, more quickly and easily, and flexibly according to the agreement of educators and fellow educators.

4 Conclusion

Based on the research, using video and WhatsApp messenger in the peer observation process received an excellent response from educators because they are more flexible when using them. It's just that several things need to be considered, one of which is the availability of internet data packages and the memory capacity of PAUD educators' cellphones. From the study results, the video-based peer observation process effectively improves learning improvements made by PAUD educators.

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