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THE IMPLEMENTATION OF VIRTUAL PEER MENTORING IN MICRO TEACHING CLASSES

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Abstract
This study aims to explore the implementation of virtual peer mentoring in Micro Teaching classes and to identify common teaching aspects assessed by peer observers. Employing an online observation form and focus group discussion, data were collected to address the research questions. The participants were 59 English language education students enrolled in three classes of Micro Teaching. Every student was assigned to do an observation on their peer teacher and give feedback on their performance. At the end of the semester, nine student teachers, representing the three Micro Teaching classes, were invited to a forum group discussion. The current research findings suggest that peer virtual peer mentoring is perceived positively by the participants. Breakout rooms in the Zoom platform are a useful tool to give them more personal interactions, especially when sharing the result of observation. Even though giving feedback virtually is a challenge for the student teachers, they appear to see the activity as a valuable process. When observing and commenting on their peer teachers, they also do self-evaluation and reflection. Their peer teaching performance is a way to assess their performance. Furthermore, other findings reveal common teaching aspects observed, namely linguistic aspects, pedagogical skills, and communication skills.

Keywords: EFL, mentoring, student teachers, virtual peer mentoring

Introduction
School teachers and university lecturers should possess a number of professional aspects, i.e., pedagogical knowledge, knowledge of the specified content, knowledge of educational psychology, and teaching competencies. According to Presidential regulation number 14/2005 about teachers and lecturers in Indonesia, educators should possess four competencies, i.e., personal, social, pedagogical, and professional. These qualities of competence are interconnected and need to be continuously explored and developed to become professional and qualified educators.

With this in mind, teacher education programs should prepare and equip their student-teachers with sufficient pedagogical knowledge and opportunities for them to increase their teaching competence through hands-on experiences in teaching and school administration. These invaluable experiences will help shape the students in

their ability to cope with various challenges, be it personal challenges (e.g., self-efficacy, motivation, and commitment), or external challenges (e.g., school rules, classroom management).

Unfortunately, hands-on experiences of visiting schools and teaching the students were impossible to be done due to the pandemic era. As a result, all teaching-learning activities were switched to the online setting in a very short time. These abrupt changes gave a tremendous impact on how the teaching-learning activities were conducted. In a very short amount of time, all educators from all levels had to switch from offline to online learning. They were forced to relearn how to teach in the online setting. Due to this so-called disruption, any means of support and guidance for educators and/or student teachers are imperative. Research showed that the existence of a positive support system for student teachers from the education programs and their peers helped them to cope with new situations and would influence their self-efficacy (Tutyandari, 2020).

Such situations of course have become one of the major concerns within the teacher training programs. In Sanata Dharma University, particularly, this concern is in line with one of the strategical issues for research topics, i.e., Transformational Education to Enhance Nation Competitiveness in the Digital Era (*Pendidikan Transformatif Untuk Meningkatkan Daya Saing Bangsa di Era Digital*, p. 10). Therefore, the main focus of this research is to investigate the virtual peer mentoring activities among the student teachers in the Micro Teaching classes by addressing the process of virtual peer mentoring implementation and the identification of teaching aspects commonly assessed by peer observers.

Mentoring is an essential activity to support professional development in various fields, including teacher education, as suggested by prior research. Traditionally, mentoring refers to a guidance program between more experienced and less experienced/new people in the profession (Ragins & Kram, 2007). In the development, mentoring occurring among peers has also been considered an important way to support early career people (Ruegg, 2015). Furthermore, due to the advancement of technology, mentoring is not only implemented in a face-to-face mode but also conducted virtually.

This pandemic has strongly pushed teacher educators in many places, including Indonesia, to facilitate a guidance program for their prospective teachers in an online mode. Reviewing important findings from the previous studies about peer mentoring, it is apparent that further investigations are necessary to be conducted to add more knowledge and practices. Furthermore, not much research on peer mentoring has been explored within Indonesian contexts. Therefore, the current research would like to dig into more information about virtual peer mentoring in the context of EFL student teachers who are undertaking an undergraduate teacher education program in Indonesia.

Literature Review

Teacher preparation

To become a teacher, someone should go through complex pathways where multiple factors are interconnected and interdependent. Not only are academic knowledge and skills required, but also personal and social aspects contribute to the success of this long journey to be a teacher. Gustems-Carnicer (2019), for example, shows the influence of stress among teacher education students and avoidance

coping strategies on their academic achievement. Experiences student teachers have gone through in teacher education may also bring an impact on their self-efficacy as revealed by Clark and Newberry (2019). This investigation emphasizes the important roles of teacher educators and mentor teachers in strengthening student teachers' self-efficacy. Therefore, the process of preparing future teachers matters. Darling-Hammond (2000) strongly suggests that teachers' confidence and success are related to their education. Furthermore, Darling-Hammond (2006) recommends that teacher education should ensure strong coherence among courses, between courses and practices, as well as the relationships between student teachers and teaching practicum supervisors.

Mentoring

Throughout the years, the word "mentoring" has been experiencing a shift in meaning (Mullen & Klimaitis, 2021). The changes are needed to ensure the relevance between the teacher education programs with the current situation in the education world. Mentoring is one of the most important aspects/elements in developing the student teachers' professionalism. According to Ragins and Kram (2007), mentoring was generally defined as one of the learning models in which an expert guided the novice. Nowadays, the meaning of "mentoring" has been expanded. Mentoring is no longer between expert and novice per se. On the contrary, peer mentoring is now considered an important way to develop professionalism, even for experienced teachers. Bressman, Winter, & Efron (2018) reveal that teachers who have been working for several years may suffer from burnout and frustration. Mentoring programs that are adjusted to experienced teachers are considered necessary.

There has been other research related to mentoring, including group mentoring Huizing (2012) identifies several kinds of group mentoring that have emerged from some research, namely peer group, one-to-many, many-to-one, and many-to-many. Furthermore, Ambrosetti (2010) identified some roles of the mentoring processes from the point of view of the mentors and the learners. Some of the roles of a mentor were to build good communication skills, give suggestions and criticism, be a good co-worker, and give good examples. Other than that, a mentor should have the ability to create a supportive atmosphere to ensure the learner's eagerness to explore, learn, and practice. Additionally, best practices of mentoring suggest that to obtain effective mentoring, this activity should be conceptualized and planned well to ensure optimum implementation (Stoeger, Balestrini, & Ziegler, 2020).

Other research on teacher education programs also showed the positive impacts of mentoring on the development of the student teachers' teaching skills (Capan & Bedir, 2019; Cavanagh & King, 2020; Matney, 2018). Dixon et.al (2012) also shared a similar result in that mentoring could strengthen the student teachers' professional development. To be more specific, See et al. (2014) stated that the use of mentoring model between an experienced teacher and a novice teacher has given a significant improvement in the novice teacher's pedagogical and content knowledge.

Peer feedback

Feedback is one of the important components of the learning process. The effects of feedback in learning, be it coming from peers or experts, have always been intriguing to investigate. According to Hattie and Timperley (2007), feedback on someone's understanding or appearance can come from a number of sources, such as parents, experienced teachers, friends, or self-reflection. Wisniewski et. al (2020) reported that feedback affected someone's cognitive and motoric abilities. For example, Ruegg (2015) once investigated the differences between feedback from peers and teachers. The result showed that the feedback coming from peers tends to be less specific compared to feedback coming from teachers. However, the interesting part was that there was that the participants also realized that peer feedback helped them in improving their performance. Gurer (2020) showed a similar research result, i.e., peer feedback was one of the interactive learning models that could strengthen their bond as classmates.

These research results have provided a good portrayal of the positive impacts of feedback in the learning process. Therefore, this research would apply the peer feedback activities in the micro-teaching class.

Virtual Peer Mentoring

Virtual mentoring has been an interesting field to be investigated in some areas, such as leadership, medical school, and teacher education program. Ohlson (2012), for example, claims that virtual leadership mentoring program in which student leaders assist at-risk students has positively influenced three aspects, namely academic achievements, attendance, and school suspensions. Virtual peer mentoring also occurs in the medical field to give support to new students (Merrick, Hodgson, Hagan, & Mbaki, 2021). The findings show positive responses to the program. However, the results also indicate some challenges, such as the inexistence of face-to-face interactions, limited knowledge of geographical and local contexts, and limited use of technology. Reese (2015), based on the mentor's reflections and interviews, suggests some benefits of virtual mentoring, including less demanding than traditional mentoring in terms of time, opportunities to develop leadership skills, as well as self-reflection.

Prior studies have suggested that virtual peer mentoring can be a potential strategy to be implemented in the teacher education program, especially on the stage of teaching practicum. Some best practices of virtual peer mentoring have been identified in the field of engineering faculty, which might be applicable in teacher education. For example, members of the group should share a common goal and similar stage of career; the participants should know each other (Faber, Smith-Orr, Lee, Bodnar, Strong, & McCave, 2017).

Some good practices, benefits, and challenges of virtual peer mentoring have been identified previously (see Faber et al., 2017; Merrick et al., 2021; Reese, 2015). They become the conceptual framework used to prepare the research instruments and analyze the data of the current study.

Method

The researchers employed the qualitative approach in this research to gain some understanding of the phenomenon of peer mentoring in micro-teaching classes. Ary et.al. (2010) emphasized that qualitative research could help

researchers describe and analyze the phenomena, events, social activities, attitudes, trust, perceptions, and thoughts both in individual or group settings. Therefore, by using qualitative research, the research processes focused on the peer mentoring activities in the micro-teaching classes.

Settings and participants

This study took place in three micro-teaching classes in the English Language Education Study Program (ELESP) of Sanata Dharma University, Yogyakarta, Indonesia during the even semester of the 2020/2021 academic year. Fifty-nine students enrolled in the classes were included as the participants. Micro teaching is a four-credit hour course offered to third-year students. The course aims to equip the students with teaching skills so that they are ready for teaching English in real classrooms.

Research instruments and data collection procedures

Data were collected through observation and focus group discussion (FGD). First, an observation sheet was used to gather students' feedback on their peer performance. There were three major teaching aspects in the observation sheet, namely opening, main teaching activity, and closing. The opening part included how the student teachers hooked students' interests and motivate their students to learn. The main teaching activity consisted of material understanding, the use of teaching methods, techniques, and models, the use of learning resources and media, assessment, and language use. The closing part emphasized how the student teachers encouraged their students to reflect on the learning processes. The students filled out the observation sheet twice, namely in the mid-term exam and in the final exam.

Second, the researchers conducted a two-hour video recorded focus group discussion (FGD) with 9 participants on 24 September 2021. The major points of the discussion included students' perceptions of the peer mentoring activities, aspects commonly observed by the students, and challenges faced by the students. The aim of the focus group discussion was to get additional and supportive information related to the implementation of peer mentoring activities.

Data analysis techniques

The data from the observation sheet and focus group discussion were analyzed. First, the results of the focus group discussion were transcribed. Second, the data in the transcript and observation sheet were grouped into categories. The researchers also reduced the data by deleting the information which was not related to the research questions. Lastly, the coded data were corroborated from one source to another source to build a thick description.

Findings and Discussion

This chapter presents the results of the data analysis to address the research questions. As stated previously, this study aims to elaborate on the implementation of virtual peer feedback in micro-teaching classes and to explore the teaching aspects commonly observed by peer observers recorded in the observation forms and interviews with some student teachers. Accordingly, the discussions of the current findings are organized, respectively.

The implementation of virtual peer feedback in micro-teaching class

Procedures of virtual peer feedback

The peer feedback took place in micro-teaching classes. The procedures of the implementation of virtual peer feedback were conducted in three phases, namely preparation, implementation, and evaluation & reflection. First, in the preparation phase, the preservice English teachers learned the aspects that they would observe. The aspects included English language skills, pedagogical skills, and communication skills. The student teachers also familiarized themselves with the given rubric to get clearer pictures of the aspects to be assessed. They discussed the rubrics in small groups so that they got the same understanding of the given rubric.

The next phase is the implementation of virtual peer feedback. The students worked in small groups consisting of 4-6 students. In the groups, each student performed a 30-minute teaching practice. The other students observed and assessed their peer's teaching practice. While observing the teacher, they filled out the online feedback form.

After the students performed the teaching practices, they accessed the feedback given by their peers. They are given some time to ask for and give clarification about the feedback. This phase enabled the students to evaluate and reflect on their teaching performances based on the feedback given by their peers.

Student teachers' perceptions of virtual peer mentoring

The students had experienced virtual peer mentoring for one semester. In the focus group discussion, they articulated their perceptions on the implementation of the peer mentoring program. Based on the data, their perceptions were classified into three major themes, namely benefits, attitudes toward giving feedback, and preferred modes of feedback.

First, the virtual peer mentoring program benefitted the students. The program encouraged them to learn from their peers and improve their teaching performance. The feedback given by their peers encouraged them to reflect on their teaching practice. Vira and Bayu admitted in the focus group discussion:

> *I learned from my friends who performed excellent teaching practice. While observing my friend, I also thought about some ideas that can be implemented in my teaching practice so that I could perform better. (Vira)*
> *I could compare my friends' performance with my performance. I could also reflect on my friends' performance to make my teaching performance better. (Bayu)*

Second, the students articulated their attitudes towards giving feedback. Some students admitted that they felt uneasy giving feedback to their friends. They were afraid that their feedback would influence their friends' final scores. Tia admitted in the focus group discussion:

> *I love giving comments to my friends but I am afraid if my comments will affect their final score. (Tia)*

Lastly, the students also express their opinions about their preferred mode of giving feedback. The students liked spoken feedback better than the written one. The oral feedback directly given to their peers enabled the students to know if their feedback was accepted by their peers. If they needed further clarifications, the students could also give the clarifications as soon as they received the feedback. One of the students said:

> *If the feedback is orally delivered, I can give more detailed feedback. (Joe)*

Teaching aspects commonly observed by student teachers in virtual teaching practice

This section provides the identification results of the teaching aspects that are commonly assessed by the observers towards their peer teacher. As stated previously in the research method section, to address the second research question, the results of the open-ended part of the observation form and focus group discussions. The aspects of peer feedback emerging from the thematic analysis are categorized into two major themes, namely language proficiency, and pedagogical skills. In the discussions, those two key aspects are elaborated into several sub-themes.

Linguistic aspects

Language proficiency appears to frequently occur in the observation sheet as exemplified in the following quotes. There are three common elements mentioned in the observation, namely grammar, and pronunciation.

Grammar

Grammar accuracy is one of the indicators that shows someone's proficiency in the target language. Being proficient in English should be a quality that an English language teacher should have. For example, the following quote comments on a student teacher's spoken language when delivering a lesson. It is interesting to see that the observer does not only underline the error (*we will going. …*) but also provides the correction (*we are going to … or we will …*).

> *There were so many things that need to be improved. First, the grammatical accuracy and vocabulary. For example, Paul said ' We will going...' instead of saying ' We are going to... or We will...", then, for the vocabulary, he was using a lot of Indonesian vocabularies instead of English. (P25)*

Pronunciation

Similarly, pronunciation is another important element that an English language teacher should have. A teacher's accuracy when pronouncing a word is another language element that is assessed by a peer observer as shown in these quotes.

> *In my opinion, he need improve the pronounce by reducing filler. (P91)*
> *I found some wrong pronunciation. (P28)*

> *…maybe the pronunciation. Teacher should pay attention to the pronunciation like "event". (P97)*

Fluency

In addition, speaking fluency has also grabbed a peer observer's attention as indicated in the next quotes. Some student teachers might have experienced speaking difficulties when doing the teaching practicum.

> *The [spoken language] is standard and easily understood but sometimes is not fluent. (P269)*
> *The media is interesting to be seen but the fluency of speaking should be improved. (P275)*

Pedagogical skills

This theme refers to some important aspects related to classroom practices. It is mainly taken from the recorded open-ended observation form.

Teaching-learning activities

Teaching and learning activities are important aspects of the teaching practicum. Peer observers are able to assess the appropriateness and effectiveness of the planned strategies that their peer teachers perform. The following examples show how peer observers see their peers' performance when doing the teaching practicum.

> *It is necessary to shorten some activities so that students do not get bored with activities that are long enough. (P193)*
> *However, I personally believe that the learning plan you developed would fit the asynchronous class better. To avoid chaos in students' collaboration and to follow each student learning pace. (P84)*
> *He should be more able to attract the attention of students to be active in learning or make learning more fun and not boring. (P131)*

Interactions

A teacher should have the ability to build good interactions and communication with students. In this section, there are three aspects of interactions found in the descriptive data. They are eye contact, student-teacher interaction, and student-student interaction.

The first and second quotes describe that the student teachers did not always look at the camera when practicing online teaching. Eye contact is an important aspect of communication that a teacher should be aware of. Looking at someone's eyes is a way to interact with others.

> *She doesn't often see the us at camera but looking down, but her attention is still with us (P275)*
> *I contend and suggest that the teacher needs to keep her eyes on the camera frequently. (P281)*

The other aspects to be assessed by peer observers are the way student teachers engage peer students and how they facilitate student-student interactions as seen in the next quotes.

> *Erika is unable to get her students to be actively involved in learning activities and looks like a teacher centric, so that there should be added some questions or activities that provoke students to dig up information from the material being taught. (P166)*
> *Adding activities that can encourage student-student interactions. (P71)*

Learning materials

A teacher should have the ability to select the right materials for every lesson. Good teaching and learning material should be able to support the attainment of the predetermined goals/objectives of the lesson. Furthermore, it also should suit the students' level. The following example is the feedback that indicates the inappropriateness of the lesson materials.

> *[should] pay more attention to the determined purpose. The video used [in the class] was not suitable for recount texts for senior high school. [should] pay more attention to students' understanding…the difficulty level of the last exercise was high…don't show the key answers to students because it could decrease students' understanding and disturb their concentration. (P.150)*

Teaching media

Another aspect to be assessed is the use of teaching media, which are essential for the teaching and learning processes. Feedback emphasizes the necessity to prepare interesting and engaging visual tools as shown below.

> *What needs to be improved is the learning media. [They] can be made more attractive (PPT) so that students can understand the material more easily and are not bored. (P39)*
> *The utilization of learning sources and media was less varied. (P205).*

Time management

Feedback on time management frequently appears in the observation form. It includes how to manage the whole lesson or specific parts of the teaching and learning processes.

> *Time management is not really good, it is better to reduce theory and increase practice with students so that it is easy to understand for them. (P56)*
> *Time management: if there are students who don't respond then don't wait too long (P58)*

Communication skills

The findings identify some teaching aspects which relate to individual performances. They include enthusiasm, voice, facial expression, confidence, and gestures.

Enthusiasm

It is interesting to find out that in the online mode of teaching and learning activities, the teacher's enthusiasm can also be sensed by some observers.

> *As I have said in the class, I personally feel like your excitement was not as active and positive as usual. (P83)*
> *The excitement of the teacher needs to be improved. I feel like the teacher doesn't give her all energy to the students. This resulted the students to be quite not active and keep silent in some part of the learning process. However, there are still few of students that are still active in the class to help the learning process going out smoothly. I think that is the main thing that needs to be improved by the teacher. (P33)*

Voice

The teacher's voice is also an important element in the teaching and learning processes because it potentially affects the clarity of lesson delivery. This element, which includes pace, volume, and pause, has grabbed some peer observers' attention as revealed in the data.

> *[It] would be better not in a rush when giving an explanation. There were some parts [of the lesson] which [the teacher] read very fast. (P108)*
> *I think everything is good, but sometimes the teacher's voice suddenly becomes small and sometimes it can't be heard. Maybe the volume is turned up even more. (P129)*
> *Before asking the students, the teacher needs to wait for a while so can give the students time to manage the sentences in answering (P275)*

Facial expressions

The way teachers express themselves may influence the class atmosphere including in a virtual meeting. Teachers with a lot of smiles are considered friendly and positively affect the teaching and learning processes.

> *She needs to be more expressive. (P1)*
> *Her facial expressions when teaching was so charming, full of smiles, like no problem at all. (P37)*

Confidence

A good point revealed from the data is about teachers' confidence. Confidence can be observed in some ways including the way someone speaks.

> *Maybe [he] can try trusting himself more, students were enjoying his teaching method so I thought it would be better not to say something like "I'm sorry if it gets boring again" (P60)*

Gestures

A teacher's movement including gestures is also important for a teacher. It can help teachers to emphasize what is being explained.

> *What needs to be improved is gesture, because gesture can be used for students to better understand about the materials and the purpose/ meaning from the teacher instruction. (P40)*

Discussions

As stated earlier, the current research intends to describe the implementation of virtual peer mentoring in Micro teaching classes and to identify common teaching aspects assessed by peer observers. Prior research suggests that peer mentoring is indeed a potential strategy to provide support for student teachers during teaching practicum (Ruegg, 2015). There has been some evidence claiming that mentoring is a key element of a teacher's professional development (Hattie & Timperley, 2007). Both traditional and virtual peer mentoring share similar benefits and challenges for both mentors and mentees.

Mentoring is implemented with the consideration that student teachers need continuous and various support during their formation phase to be professional teachers. Furthermore, mentoring benefits both mentees (e.g., sharing ideas and professional practices) and mentors (e.g., networking and opportunities to reflect) (Hansford & Ehrich, 2005). When the pandemic struck the world, there have been some adjustments in the process of supporting student teachers in conducting teaching practicum, including how to conduct mentoring. Initially, mentors and mentees were sides by side to communicate feedback. After the attack of the pandemic, mentoring in micro-teaching classes should be conducted virtually.

Peer mentoring is believed to have some influence on student teachers' professional development. Prior research has strongly recommended the application of peer mentoring as a strategy to improve both teaching skills and personal aspects (see Dixon et al., 2012, See et al., 2014). Furthermore, peer mentoring turns out to benefit both mentors and mentees. In micro-teaching classes, all student teachers are enrolled in the English language education program and have known each other for a while. Faber et al. (2017) argue that one condition peer mentoring can be more effective is group members should share a common goal; in this study, the participants are those who are prospective English language teachers and have been classmates for about three years. Therefore, peer mentoring appears to be doable in this context.

Furthermore, this study also reveals interesting perspectives of the FGD participants. Even though giving feedback to their peers is not easy for them, they have a positive perception of the activity. Observing and providing feedback to peers can also be used as self-reflection and self-evaluation. In other words, peer mentoring benefits both peer mentors and mentees.

The findings of the present research reveal some common feedback given by peer observers. Student teachers' appearance when conducting the teaching practice

is the focus of observation. The frequently occurring data are categorized into three aspects of teaching: linguistic aspects (such as grammar accuracy and pronunciation), pedagogical skills (such as learning activities and time management), and communication skills (such as eye contact and gestures).

Conclusions

This study explored the implementation of peer mentoring activities in Micro Teaching classes. Based on the findings, the researchers draw two major conclusions. First, the implementation of online peer feedback was carried out in three phases, namely preparation, implementation, and evaluation. The students perceived that during the implementation they learned from their peers' teaching performance. However, some students also felt uneasy to give feedback because they were afraid that the given feedback would influence their friends' scores. The participants also admitted that they preferred oral feedback to written feedback. This mode of giving feedback provides them with ample chances for clarification. Second, in the process of giving feedback, the students paid attention to teaching aspects, namely linguistic skills, pedagogical skills, and communication skills. The feedback could help the students to improve their teaching skills and personal aspects.

Recommendations

As this study only focused on the implementation of online peer mentoring and common feedback given in the peer mentoring activities, future researchers need to scrutinize how the teacher students improve their teaching skills over time due to the feedback given by their peers. It is also crucial to investigate how the students deal with their peers' feedback. To gain in-depth analysis, a case study or narrative inquiry can be employed.

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