

THE CHALLENGE OF PRE-SERVICES TEACHER IN DEVELOPING PEDAGOGY COMPETENCE DURING ONLINE TEACHING

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Abstract

The aim of this research is to find out the challenge of pre-service teachers in developing pedagogy competence during the online teaching and use the information as the need analysis for revising the some of syllabus for the subjects that related to practice teaching preparation at English Department. There are ten indicators proposed by Kemendikbud 2007 about teachers' pedagogy competence and the researchers turn them into twelve questions. All of them are used by the researchers in analyzing the data. Then, the design of this research is qualitative and uses basic interpretative studies as the approach. For the sampling technique, the researchers used purposive criterion sampling because the researchers only took the pre-service teachers that conducted practice teaching in odd semester in 2020/2021 academic years and did online teaching. The researchers got 27 pre-service teachers that fulfilled the criteria from 75. To collect the data, the researchers used Google form because of the covid-19 pandemic. For the data analysis, the researchers four steps; 1) familiarizing and organizing. 2) coding and reducing. 3) interpreting and representing. After analyzing the data, the researchers got three challenges faced by the pre-service teachers; first, they got challenges in activating students' prior knowledge. Second, they got challenge in delivering materials to the students. Third, they also got challenge in assessing students' attitude, knowledge and skills. However, they pre-service teachers got new experience related to embedding technology in teaching. It could not be denied that young generations are very close with the development of technology. Hence, they are so easy to adapt with online teaching nowadays.

Key words: pre-service teachers, online teaching, pedagogy competence

Abstrak

Penelitian ini bertujuan untuk melihat tantangan yang dihadapi oleh guru muda dalam mengembangkan kompetensi pedagogi mereka selama melakukan proses pengajaran daring dan hasil penelitian ini juga digunakan untuk memperbaiki silabus mata kuliah yang mendukung kegiatan praktek mengajar mahasiswa di prodi Pendidikan Bahasa Inggris. Peneliti menggunakan sepuluh indikator yang diambil edaran Kemendikbud 2007 tentang kompetensi seorang guru Bahasa Inggris. Peneliti menurunkan indikator tersebut menjadi dua belas pertanyaan. Lebih lanjut, untuk disain penelitian ini adalah kualitatif dengan menggunakan interpretive studies sebagai pendekatan penelitian. Untuk teknik sampling, peneliti menggunakan purposive criterion sampling yang artinya peneliti mengambil sample berdasarkan tujuan penelitian dengan menggunakan beberapa kriteria yakni hanya guru muda yang mengikuti praktek lapangan pada semester ganjil tahun 2020/2021 dan mengajar secara daring saja yang dijadikan sampel. Dari 75 guru muda, hanya 27 orang yang bisa dijadikan sample penelitian. Kemudian, untuk mengumpulkan data, peneliti menggunakan Google form karena pandemic covid-19 yang membuat kegiatan tatap muka baik untuk penelitian tidak disarankan. Selanjutnya, untuk proses analisa data, peneliti menggunakan tiga langkah yakni; 1) mengenali data dan menyusunnya, 2) menandai data dan mengelompokan data, 3) menginterpretasikan data. Dari hasil data analysis diperoleh tiga temuan terkait tantangan apa saja yang dihadapi guru muda dalam mengembangkan kompetensi pedagogi mereka yakni; 1) tantangan dalam menggali potensi anak terhadap materi yang akan dipelajari, 2) tantangan dalam penyajian materi, 3) tantangan dalam melakukan evalusai hasil belajar. Namun demikian, para guru muda juga mengalami perkembangan terkait dalam penggunaan media dan teknologi dalam pembelajaran. Kita tidak dapat memungkiri bahwa anak muda sangat dekat dengan teknologi, sehingga sangatlah cepat

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mereka beradaptasi dengan teknologi dalam pembelajaran sehingga banyak variasi teknologi dalam pembelajaran yang dapat mereka kembangkan.

Kata kunci: *Guru muda, belajar daring, kompetensi pedagogi*

INTRODUCTION

Education is the process to deliver the knowledge, behavior and skills to the students. During the process of education, there will be some changes happen to the students, such as from unknown to known, misbehavior to behave students and unskill students to skill full students. Usually, the process of education is done at school and there are interactions happen in the school; teachers and students or students and students. The interaction process is done face to face. However, since the early of 2020, the situation of education is change because of the pandemic of covid-19 virus. This virus infects the people when they are doing interaction in crowded situation. As the effect, to avoid the spreading of the virus, every people have to do social distancing. Because of that reason, all of the countries around the world make a new policy about the society interaction during pandemic, such as WFH (work from home) for the employee in the company, and SFH (study from Home) for the process of education. Indonesia also proposes regulation for society interaction during pandemic, including for education. The government in the circular letter of ministry of education (Kemendikbud, Edaran No 15 Tahun 2020, 2020) states that all the schools have to do study from home because of pandemic covid-19. As the matter of fact, all the schools in Indonesia do online teaching and learning. (Sadiku, Adebo, & Musa, February 2018) explain that online teaching is the education which uses internet as the medium of the process. This theory emphasizes that the process of delivering knowledge, skills and attitude is done by using internet. Then, (Nguyen, 2015) adds that online teaching and learning is a kind of distance learning or distance education. This theory proposes that online teaching

and learning changes face to face interaction between teachers and students into digital interaction. Automatically, the teachers have to change their teaching method, teaching strategy and also the instructional media and so forth. This condition is not something easy for the teachers especially for the pre-service teachers at English Department of STKIP PGRI Sumatera Barat. They are still young teachers that still need to improve their teaching competence. Generally, competence refers the success or failure of someone in doing something. It is supported by (Hakim, 2015) who says that competence is the ability of a person to perform a task that is based on the skills, knowledge and attitude in a job or occupation. According the government regulation no 19, year 2005 on National Standards, there are four competencies of teacher; personal, social, professional and pedagogical competence. Personal competence includes personal steady, stable, mature, wise, and as the role model for the students. Then, social competence refers to the ability of the teachers to do social interaction or to be accepted in the environment. After that, professional competence emphasizes on the teachers' mastery dealing with the content of materials and pedagogy competence refers to how to manage the students instructional design evaluation and also developing students' talent or potential. All of the competences are supported one and others. However, for the pre-service teachers who did practice teaching for six months in odd semester of 2020-2021 academic years, developing all the competencies are not easy as our imagination. They need guidelines from lecturers and schools; headmaster and senior teachers. Researchers's informal interview with some students who

conducted practice teaching during online teaching, they faced some challenges in doing practice teaching, exactly in developing pedagogical competence during online teaching. As the matter of fact, this problem also caused by the subjects that support the candidate of teachers when conducted practice teaching: curriculum and materials development, Teaching English as a Foreign Language, language assessment, micro teaching still focuses on offline teaching materials, and as the effect the students are not familiar enough with online teaching. Because of this reason, the researcher will use the result of this research as the need analysis for revising the syllabus of the subjects that related to preparation of practice teaching. The researcher only focused the research on the challenge faced by the pre-service teachers in developing pedagogy competence during online teaching. Actually, (University of Massachusetts (amherst campus), Office of Academic Planning and Assessment, accessed on 2020) has already states the common challenges of online teaching for the teachers; 1) unfamiliarity with the online environment. 2) The capacity to use the medium for interaction because online communication is essentially a space for written communication. 3) Being available to connect with the students. 4) Giving feedback or quick responses. Hopefully, this research gives valuable information for the campus to anticipate the candidate of teachers in minimizing the challenge that related to unfamiliarity with the online environment. Therefore, the researcher needs some theories to solve the problem and the following are the detailed theories.

Previously, it has been discussed about the concept of online teaching in which the teachers teach the students through digital instruments and internet network. However, to get success in doing online teaching, the teachers have to be attention to some principles proposed by

(Sadiku, Adebo, & Musa, February 2018), 1) encouraging students participation, 2) encouraging students cooperation, 3) encouraging active learning, 4) give prompt feedback, 5) emphasize time on task, 6) communicate high expectation, 7) respect different talents and ways of learning. For the principles number one until three are related each other. In doing online teaching and learning, students' participation and cooperation are really crucial because the teachers do not have interaction with the students directly. Some problems can cause the students have low participation or not have good cooperation during online teaching and learning as stated by (Assareh & Bidokht, 2010) who explain some barriers for the learners in doing online learning; financial problem, motivation, assessment of their progress, isolation from peers, inadequate skills and experience on distance learning, and social domain. All of the barriers can decrease students' participation and cooperation, and as the effect they will be passive in doing online learning. After that, the next principle is to give fast feedback or response also becomes the important principles because the students will be unmotivated in online learning if the teachers not give a response to their activities, especially in doing the task. It cannot be denied that online teaching and learning require the students to do many tasks as stated in principle number five. Because of this reason, the teacher must have good communication with the students when they are doing the tasks as stated in principle number six, for example the teachers can response the students by giving praising or check their assignments as soon as possible. It is done to show the teachers' care to the students. The last principle is about the students learning styles and talents. Even though, they do online teaching and learning, the teachers still need to observe about their talent and their learning styles, for example about learning style. There are three kinds of

learning style; audio, video and kinesthetic and teachers must really know their students learning style because it determine the success of teaching and learning process. All of these principles should be implemented by the teachers in doing online teaching and learning.

Then, in conducting online teaching and learning, the teachers should know the types and media to facilitate the activity. Online teaching and learning involves two types as explained in the handbook of (University of Massachussets (amherst campus), Office of Academic Planning and Assessment, accessed on 2020). First, synchronous refers to real time learning or teachers and students are in the same time and place in doing learning activities, For example; live chat, audio and video conferencing, data and application sharing, join viewing of multimedia presentations and online slideshows. Second, asynchronous which refers to the learning process is not doing in the same time, for example; e-mail, newsgroup and bulletin boards, file attachment. To do both of media, teachers must be sure about the internet access of the students. Even though the teachers have prepared the teaching materials, the strategy and also the media very well, the online teaching could not be run well if the network is unstable. So, the crucial point about doing online teaching and learning is about the stability of internet network.

In addition, online teaching and learning has some benefits. It has been explained in handbook of (University of Massachussets (amherst campus), Office of Academic Planning and Assessment, accessed on 2020), they are; 1) online teaching gives a chance for the teachers to do some experiments about new teaching strategies. 2) Providing ideas and techniques to implement in traditional course. The teachers can use email as example of online teaching media to be implemented in face to face course. 3) Expanding to reach of the curriculum. It

means that the teachers can explore the existing curriculum because the access of internet is available. 4) Giving new experience for the teacher because they find the diversity of students in online courses. 5). Comfortable teaching activities because online teaching has flexible time and place.

Meanwhile, all the benefits can be reached if the teachers have pedagogical competence. Previously, the definition of pedagogical competence has been discussed that is the teachers' competence in managing the students. Then, (Syahrial, Asrial, Kurniawan, & Subandiyo, 2019) explain that pedagogic competence is the integration of teachers' pedagogical knowledge and content knowledge into a special form of professional understanding. Pedagogical knowledge and content refer to teaching methodologies and approaches, including the knowledge in teaching and classroom management, assessment, evaluation and development of lesson plan (RPP). The similar idea also comes from (Kemendikbud, 2007) which explains the scope of teachers' pedagogical competence; 1) Understanding the characteristics of the students including physical, moral, social, cultural, emotional and intellectual. This point explains that the teachers must be able to identify students' previous knowledge or experience related to the topic of the lesson. 2) Understanding the learning theories and teaching principles. In this point emphasizes that the teachers must know about the teaching methods or techniques in teaching. 3) Developing the curriculum based on the subject or field. It means that the teachers are hoped to develop the curriculum by choosing the materials and assessment that suitable with the learning target and the characteristics of the students. Then, 4) Conducting the teaching and learning process. This point explains that the teachers must be able to transfer the knowledge by using various

strategies and media. 5) Embedding technology in teaching and learning process. It is clearly stated that the teachers must use technology in teaching and learning process. 6) Facilitating students' potency for self-actualization. The point number six explains that the teachers should be creative in developing various activities that can stimulate students' potential, such as; asking them to make short video related to the topic or record their activities and so forth. 7) Building polite communication with the students. This point emphasizes on developing students attitude to communicate with the teacher or friends. 8) Assessing the students and evaluating the result. It is clearly stated that the teachers must design the instrument that measure the target of learning and evaluate the result. 9) Using the result of assessment for developing teaching and learning activities. This point has relationship with the previous one, in which the teachers do follow up activities related to result of assessment. For example; the teachers can do re-teaching or remedial program. 10) Doing follow up activity to improve the learning quality. The last point explains that the teachers must do some revisions or design new activities as the follow up activities from the weakness found in previous topics. All the points are used to measure whether the

teachers have to develop the pedagogy competence or not.

RESEARCH METHOD

This research uses qualitative approach because it focuses on understanding a phenomenon by focusing on the total picture rather than breaking it down into variables, (Ary, Jacobs, & Sorensen, 2010). Then, the researchers used basic interpretative studies as the approach because it provided descriptive information about the phenomenon and used a variety of ways; interviews, observations and document review to collect the data. The sampling of this research is purposive criterion sampling because it had some criteria to choose the sample. First, the pre-service teachers conducted the practice teaching in odd semester in 2020-2021 academic years and also it was pandemic situation. Second, the pre-service teachers used online teaching during the practice teaching at school. Therefore, from 75 pre-service teachers, only 27 pre-service teachers fulfilled the criteria. The researchers chose interview as the instrument of this research and used structured interview type. Also, the researchers used the theory from (Kemendikbud, 2007) as the indicators of pedagogy competence and turn them into twelve questions and it was stated in the following table.

Table 1. Indicator of Pedagogy Competence

Indicators	Sub Indicator
1. Understanding the characteristics of the students including physical, moral, social, cultural, emotional and intellectual	Students' background knowledge about the material
2. Understanding the learning theories and teaching principles	Teaching strategy in teaching
3. Developing the curriculum based on the subject or field	Developing materials and instruments of assessment
4. Conducting the teaching and learning process	The process of delivering materials and the challenges in delivering material

5. Embedding technology in teaching and learning process	Asking about using technology in teaching
6. Facilitating students' potency for self-actualization	Developing students' academic and non-academic potency
7. Building polite communication with the students	Assessing students attitude in online classroom
8. Assessing the students and evaluating the result	Instrument for assessing attitude, knowledge and skill and the challenges
9. Using the result of assessment for developing teaching and learning activities	The follow up activity after assessing the students.
10. Doing follow up activity to improve the learning quality	The challenge of online teaching and the solution

(Kemendikbud, 2007)

Then, to collect the data, the researchers used Google form because the researchers could not interview the pre-service teachers face to face because covid-19 pandemic. To analyze the data, the researchers used three steps proposed by (Ary, Jacobs, & Sorensen, 2010). They were; 1) familiarizing and organizing. 2) Coding and reducing. 3) Interpreting and representing. For the first step that is familiarizing and organizing, the researchers transcript the data of interview and organized them based on the indicators of pedagogy competence. Because the researchers had used Google form, the data have already organized by the application. Second, coding and reducing. In this step, the researchers read and re-read the data and code the data which were similar or different answers. Finally, for the last step, the researchers interpreted the data that have been classified based on the theory and reported the result.

FINDINGS AND DISCUSSION

The process of data collection is done by interviewing the pre-service teachers. The total of pre-service teachers that conducted practice teaching during odd semester in 2020/2021 academic years

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and also in pandemic covid-19 were 75. Because this research only focuses on pre-service teachers that did online teaching, the researchers only got 27 pre-service teachers who did online teaching. The researchers got this sample based on the interview with them and they answered that they did online teaching for 3 until 6 months. This answered used by the researchers to determine the sample of this research. After getting the sample, the researchers interviewed them about the challenges faced by the pre-service teachers in developing pedagogy competence. There were 12 questions that researchers used to answer the research question. After getting the data of interview, the researchers also got the transcription of the interview and analyzed them by reading the data based on the indicators. After that, the researchers coded the data for similar and different answer. Finally, the researchers interpreted the result. The following is the detailed explanation about the result of data analysis.

The researchers started to ask about application that they were used for conducting online teaching. There were some applications that have been used; Google classroom, Whatsapp, zoom,

padlet, and e-learning. The next questions focused on the pedagogical process during pandemic. The researchers asked about the students' background knowledge about the materials. In this question, the researcher wants to know whether the pre-service teachers knew about the students' background knowledge before coming to the main material. The result of interview proved that only 7.4% of the pre-service teachers knew about students' background knowledge because they did discussion before beginning to present the material. Meanwhile, 92.6% did not know about it because during online teaching the students had some problems with internet access and as the effect, it was difficult for the pre-service teachers to do interaction with the students. As stated by (Fisher, Frey, & Lapp, 2012), background knowledge can be developed through interaction with people, places, experiences, internet sources, texts and content formally taught. It is clearly stated that the process of interaction as the best way to activate students background knowledge. Even though, texts or internet sources can be used activate students' background knowledge, the access of internet became the obstacle for the students and the teachers. This condition has the impact to the pre-service teachers because they did not get any experiences to activate the students' background knowledge during practice teaching.

Then, the next question is about the strategy used by the pre-service teachers in doing online teaching. During the online teaching, the pre-service teachers faced problems about students' motivation in reading the sources from the teachers and also the students' willingness in doing the task. Because of this condition, some teaching strategies used by the pre-service teachers to motivate students in online teaching and learning. For example, they gave quiz about the material and indirectly the students were forced to read the materials. Then, they also limited the time

to do the quiz and it made the students did the quiz enthusiast and the pre-service teachers said that it was really helpful during online teaching. It is supported by who states that (Ragan, 2009) Giving the due dates and times for doing the assignments is one of the keys to get success in online teaching and learning. This tip can be used as the strategy for the students to force them in joining the online teaching and learning.

Furthermore, dealing with the result of interview about developing curriculum, it was found that the pre-service teachers develop the curriculum by designing teaching materials, such as power point and record the materials in video. Then, they uploaded to you tube and share the link to the students through soma applications. These activities also proved that the pre-service teachers have embedded technology in teaching. In addition, the pre-service teachers also designed the students' work sheet (*Lembar Kerja Peserta Didik*). Based on (Kemendikbud, 2007) the teachers must be able to develop curriculum and it involves understanding curriculum, stating the learning objectives, designing teaching materials based on students' need and creating evaluation instrument. All of these activities have been done by the pre-service teachers during online teaching. Meanwhile, the challenge of this condition related to the way to distribute the materials. Most of the students had limited network. Therefore, the pre-service teachers only used Whatsapp without having direct interaction. However, the pre-service teachers' competence in embedding technology in teaching was increasing significantly because they always used technology in teaching, for example, using online application and video as the teaching media. It became the benefit of online teaching.

Furthermore, the next pedagogy competence that must be developed is related to how the pre-service teachers

conducted the teaching and learning process. The data of interview showed that they designed teaching materials, students' worksheet, and teaching video. Usually, they used Whatsapp to deliver the materials. They were rarely to use Google classroom or zoom in teaching and learning process because the internet network was not good enough. Hence, Whatsapp was chosen because the access was the fastest. They explained the materials by distributing the video and the soft data of teaching materials, then explain it through voice note in Whatsapp or they had chatting in Whatsapp group related to the materials. After that, they gave exercise and the students send it through the teacher's personal Whatsapp. When the school had e-learning, the process of delivering materials was similar. Dealing with this condition, the challenge that faced by the pre-service teachers were related to students' understanding about the materials because they did not do interaction directly in the teaching and learning process. Even though the students did the assignments, but the results were not satisfying. It was based on the data of students' score when the teachers did evaluation. The pre-service teachers also create the instruments for assessing students' knowledge and skills. They made multiple-choice test, essays test, writing test and so forth. However, they could not assess students' speaking competence precisely because the limitation of internet access. The interview data showed that most of the students got low scores and the reason was the students' understanding about the materials. Based on the teacher's interview to the students, it is found that the students had financial problem to buy the internet quota and also sometimes the internet access was worse. These facts always become barriers for students in doing online teaching. It is supported by (Assareh & Bidokht, 2010) in their paper state that the learners' barriers during

online learning are; financial problem, motivation, assessment of their progress, isolation from the peers, inadequate skills and experience in distance learning, affection and social domain. The barriers influence the students understanding about the material and pre-service teachers are challenged to find the other ways in delivering materials.

Moreover, for assessing students' attitude, the pre-service teachers also found some challenges. Actually, there were three aspects that teachers could assess during online teaching; discipline, honesty and participation. However, all of the aspect did not run smoothly. For instance, in assessing students' discipline. The teachers assessed students' discipline in collecting the assignments. However, the students still got excused for the late of submission because the internet access was worse. Meanwhile, for assessing students' honesty in doing the assignment also could not be done because the students' assignments were almost similar. Then, students' participation in classroom discussion were also difficult to assess because some students had problems with financial and internet access. Therefore, the pre-service teachers explained that it was difficult to get an accurate and valid score about students' achievement or attitude during online teaching.

The next point about teachers' pedagogy competence is about developing students' non-academic potential and how to develop learning quality. The pre-service teachers got challenge in developing students' non-academic potential because they did not meet and had interaction with the students. In addition, there was no program from schools for non-academic activities. The last factor that also challenges the pre-service teachers is to do the follow-up activities to improve learning quality. According to the teachers, they only did remedial program to revise the students' scores, but it was still not effective

because the barriers that have been explained above.

Dealing with the data above, the researchers found that the pre-service teachers got some challenges in developing their pedagogy competence. Three main challenges are; how to activate students prior knowledge during online teaching, how to deliver the materials to the students effectively and how to get a valid scores for the students' achievement and attitude. These findings are also similar to the research proposed by (Assareh & Bidokht, 2010) who explained that the teachers found some obstacles during online teaching; lack of adequate knowledge about online teaching and difficulty for doing assessment. However, these problems also caused by the readiness of students and facilities of schools before doing online teaching. The students must have good internet access for doing online learning and it is not only the responsibility of the parents, but it also the responsibility of the government. On the other side, the school must be ready with application, such as e learning of the school to do online teaching. Then, the school must have workshop for the teachers before they do online teaching. So, they are familiar with the environment of online teaching. (University of Massachussets (amherst campus), Office of Academic Planning and Assessment, accessed on 2020) explains that familiarity with the environment; in this case the hard ware and software will help the teachers in online teaching. Even though the pre-service teachers face some challenges, they also get the advantage of online teaching that is a new experience in teaching strategy and media. (University of Massachussets (amherst campus), Office of Academic Planning and Assessment, accessed on 2020) propose the advantages of online teaching; first, offering the opportunity about a new way in teaching. Second, providing idea and techniques to implement in traditional

courses. Third, expanding the reach of curriculum. Four, giving professional satisfaction because the teachers face diversity of students in online teaching. Five, giving instructor convenience because the teachers can choose comfortable places to have the online class.

CONCLUSION AND SUGGESTION

Practice teaching is a program for the students at STKIP PGRI Sumatera Barat to practice their skills and knowledge in real situation at school. At schools, they teach for almost six months. However, the condition of practice teaching is different from the previous time because of covid-19 pandemic. Especially, for 2020-2021 academic year students, they did practice teaching through online teaching. This condition becomes a problem for the pre-service teachers because they faced some problems in developing pedagogy competence. After interviewing the pre-service teachers, it is found that there are some main challenges in developing pedagogy competence; they get challenge to activate students' prior knowledge, delivering materials, and evaluating the students. The results of the research will be used as the need analysis to revise the syllabus of the subjects that related to practice teaching preparation at English Department.

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