TEACHING COMPETENCIES OF UNDERGRADUATE STUDENTS IN EDUCATIONAL PRACTICE PROGRAM AS TEACHER CANDIDATES

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Abstract:

This study aimed to know the quality of undergraduate students' teaching competencies as teacher candidates. The subjects of this study were 54 teachers of 32 vocational schools. The data was obtained from the Educational Practice Program (EPP) in Vocational High School (VHS) using online questionnaires via Google Form. This study used a quantitative descriptive approach with survey research. Data were analyzed using normality tests and product-moment correlation analysis. The results indicated that the undergraduate students' competencies as candidate teachers were more dominant in social competency than personal, pedagogical, and professional competencies. Each competency had a highly strong relationship with others so that there was a significant attachment. Therefore, the undergraduate students as candidate teachers need to develop competencies to improve their quality in EPP.

Abstrak:

Penelitian ini bertujuan untuk mengetahui kualitas kompetensi mengajar mahasiswa sebagai calon guru. Subyek penelitian ini adalah 54 guru dari 32 Sekolah Menengah Kejuruan (SMK). Data diperoleh dari mata pelajaran pada Program Praktek Pendidikan di Sekolah Menengah Kejuruan (SMK) dengan menggunakan angket melalui *Google Form*. Penelitian ini menggunakan pendekatan deskriptif kuantitatif dengan jenis penelitian survey. Data dianalisis menggunakan uji normalitas dan analisis korelasi *product moment*. Hasil penelitian menunjukkan bahwa kompetensi mahasiswa sebagai calon guru lebih dominan pada kompetensi sosial dibandingkan kompetensi kepribadian, pedagogik, dan profesional. Setiap kompetensi memiliki hubungan yang sangat kuat dengan yang lain sehingga terjadi keterikatan yang signifikan. Oleh karena itu, mahasiswa sebagai calon guru perlu meningkatkan kompetensi untuk meningkatkan kualitasnya di EPP.

Keywords:

Competencies, Educational Practice Program, Teacher Candidates

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INTRODUCTION

The quality of education in Indonesia is significantly lagging compared to several other Southeast Asia countries. The quality of teachers and the education system in Indonesia is one reason for Indonesia's low level of education (Masdudi & Mulyani, 2019). Teachers have an essential role in improving learning qualities in schools (Masdudi & Mulyani, 2019). A teacher must meet competencies standards to teach the students in schools so that learning can run effectively. Regulation of the minister of national education No. 16 of 2007 declares some competencies to be mastered by teachers. They are the competency of pedagogical, personality, social, and professional.

Pedagogical competency is understanding and managing students (Sukmawati, 2019). Pedagogic competency consists of seven competencies, i.e., (1) Mastering the characteristics of students, (2) Mastering learning theory and teaching-learning principles, (3) Curriculum development, (4) Educational learning activities, (5) Development of potential students, (6) Communication with students, and (7) Assessment and evaluation. Pedagogic competency increases teacher performance when the value of pedagogical competency is higher (Nurhasni, Matin, Suryadi, Zulaikha, Sugiarto, & Santoso, 2019). The teachers' pedagogic competency will show their ability to organize learning in the classroom. Pedagogical competency is essential because it can determine the success of the learning process, which is directly focused on learning abilities in developing students' potential, planning, implementing, managing students, and evaluating learning.

Pedagogical competency includes the ability of teachers to develop the potential of students and improve the welfare and quality of teachers. The quality of teachers can be seen in the learning achievement that is mastered by students and able to develop their potential. Pedagogical competency is one of the competencies that teachers must master because it can optimize student learning management. However, teachers need to pay attention to the other three competencies to improve their professionalism at work. Therefore, personality, social, and professional competencies must also be considered and mastered.

Personality competency is a personal ability that reflects the maturity of a teacher (Sukmawati, 2019). Personality competency consists of three competencies, i.e., (1) Acting under national religious, legal, social, and cultural norms, (2) Showing an adult and exemplary personality, and (3) Work ethic, high responsibility, a sense of pride in being a candidate of a teacher. A teacher's good personality can provide comfort and positively impact students (Masdudi & Mulyani, 2019).

Social competency is a teacher's ability to communicate, collaborate, and adapt to the surrounding environment. It consists of two competencies, i.e., (1) Being inclusive, objective, and indiscriminate, and (2) Communicating with fellow teacher candidates, staff, parents, students, and the community. The effectiveness and suitability of interacting between people are influenced by social competency (Han & Kemple, 2006).

Professional competency is the quality of teachers based on attitudes, skills, and knowledge that are constantly changing (Carstensen & Klusmann, 2020; Liakopoulou,

2011). Professional competency consists of four competencies, i.e., (1) Mastering material, (2) Material development, (3) Professional development, and (4) Technology utilization. Schipper, Goei, Vries, and Veen (2017) stated that teacher professional growth in the Interconnected Model of Teacher Professional Growth (IMPTG) could be represented as continuous and inevitable teacher learning.

A professional teacher must understand how to teach properly and interact with other people, including students (Siahaan, Saragih, & Purba, 2020). Professional teachers acquire conceptual knowledge based on empirical and theoretical evidence (Narciss, Hammer, Damnik, Kisielski, & Korndle, 2020). Teachers must master the material that will be taught broader and more profound, both curriculum and learning materials (Febriana, Listiani, & Sitompul, 2020). The concept of teacher competencies addresses curriculum assessment, implementation plan, and curriculum standards in a concise time dimension. In this case, teacher competencies need to be discussed deeper on research, field, environmental, and curriculum competencies to develop a teacher (Selvi, 2010). Curriculum competence is the core of teacher professional development to benefit students obtained from the assignments (Narciss, Hammer, Damnik, Kisielski, & Korndle, 2020).

As one of the Teacher Education Institutions (TEI), Yogyakarta State University has an essential role in producing professional teachers who cover those four competencies. The Directorate General of Higher Education of the Republic of Indonesia in 2007 has initiated Yogyakarta State University as one of the TEIs among 20 universities in Indonesia that are eligible to enter into a World Class University (WCU).

The factors for creating active learning are primarily determined by the role of the teacher in the classroom. Slameto (2003) stated there were several things that teachers can do to carry out effective learning, including (1) teachers must use many variations of teaching methods, (2) teachers must be able to foster students' motivation, (3) teachers need to consider the students' differences individually, (4) making teaching plan carefully, (5) teachers must be brave to face their students as well as problems that exist in the teaching process, (6) teachers must create a democratic atmosphere in the classroom, (7) teachers must provide stimulation of the problem to trig the students' critical thinking skills, (8) lessons in school must be linked to real life, (9) giving students the freedom to investigate and observe the existing problems themselves, (10) conducting remedial learning by analyzing the students' difficulty factors. If the above abilities can be applied by a teacher, a dynamic and active class will be created to support effective learning.

Teacher competencies are regulated by Teacher Competency Standard (TCS), which is grouped into three related components according to Suparlan (2008), namely (1) learning management, (2) professional development, and (3) academic authority. These three components will generate seven basic competencies as follows: (1) preparation of learning plans, (2) implementation of interactions in teaching and learning activities, (3) assessment of student learning achievement, (4) implementation of follow-up on achievement results student learning, (5) professional development, (6)

understanding of insights about education, (7) mastery of academic study material following the subject being taught.

Those three components can be learned in professional education courses carried out by a student or candidate of a teacher. One of the professional education courses is microteaching. Teacher competencies significantly impact the learning process and student performance because by having a good competence, teachers can teach according to the needs of their students (Wuttke & Seifried, 2013). Qualified teachers are supported by interrelated competencies and support (Masdudi & Mulyani, 2019).

As teacher candidates, students of Yogyakarta State University, especially the department of Electrical Engineering Educators, must take part in EPP held at several school levels. Based on the 2020 Yogyakarta State University Educational Practice Program (EPP) Implementation Guide book, EPP is a process of observation and apprenticeship carried out by Undergraduate Education Program students to study a learning process and education management in educational institutions. The timing of the EPP implementation is based on the school calendar. The purpose of implementing EPP is to observe, have a practice teaching, and develop student teaching competencies as a teacher candidate. In the implementation of EPP, students are guided by the subject teacher at school and field supervisors. Therefore, the EPP program is also called guided teaching practice. The EPP assessment is carried out by the subject teacher of EPP students at the school.

Based on that explanation, it needs to identify students of teacher candidates, especially in the Electrical Engineering Education department. A good teacher must be identified to get a clear picture of the readiness aspect provided in the future. Nurhasni, Matin, Suryadi, Zulaikha, Sugiarto, and Santoso (2019) conducted a similar study entitled "The Effect of Teacher Competence on Teacher Performance in Vocational School," which indicated a positive effect between pedagogical and professional competencies in teachers' performance. These competencies are essential for a teacher to be a competent teacher.

This study is distinct from another study. The author examined further and discussed the four competencies of prospective teachers in VHS, namely personal, social, pedagogical, and professional competencies. Previous research identified the competencies of teacher candidates from two aspects only so that the identification of teacher candidate competencies was not optimal.

This research aimed to determine undergraduate students' teaching ability as teacher candidates. The objectives were to find out how the overall students' qualities in EPP were reviewed from the four competencies and whether there was a relationship between the four competencies. The study results were expected to provide benefits for students and teachers to develop their responsibilities as good and professional teachers in VHS.

RESEARCH METHOD

This study was survey research to determine the undergraduate students' competencies as teacher candidates in the Educational Practice Program (EPP) in Vocational High Schools (VHS). In educational research, surveys are not solely carried out to collect data or information, such as opinions or attitudes, but also comprehensively describe and explain the relationship between the various variables studied (Ali, 2010). This research was carried out during the Covid-19 pandemic. The research location for EPP activities was determined on a nonprobability basis at Public and Private Vocational Schools in Java and Sumatra, following the range of data collection. The subjects of this study were 54 teachers of 32 vocational schools. The data was obtained from the Educational Practice Program (EPP) in Vocational High School (VHS) in the electrical engineering major using online questionnaires via Google Form. Teacher competency instruments were arranged based on five aspects of each competence, including (1) personal competency, (2) social competency, (3) professional competency and (4) pedagogic competency. The data showed the value of guided teaching, which includes four competencies. The data obtained were analyzed using descriptive analysis techniques and inferential analysis with product moment correlation after the data met the prerequisites for the normality test.

RESULTS AND DISCUSSION

Four aspects in EPP were used to determine the qualities of the undergraduate students as teachers and the correlation between competencies, namely: (a) personality competency, (b) social competency, (c) professional competency, and (d) pedagogical competency. Data from these four aspects can be seen in figure 1.

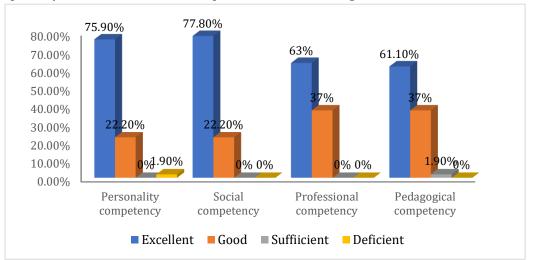


Figure 1. The Data of Teacher Candidate Competencies

Figure 1 showed that the competencies of teacher candidates in every aspect look relatively great, but some of them still had low competency quality. The data was accumulated from each competency indicator used as a reference in achieving the quality of candidate of teachers.

The result indicated that the students' personality competencies were 75.90% in EPP, categorized as "Excellent." However, a small part was still not good. It was caused by those candidate teachers who did not prepare themselves in EPP before teaching. Their sense of responsibility was still low, so they could not guide students well and provide comfort and a positive attitude. Masdudi and Mulyani (2019) stated that the personality of a good teacher must be able to provide comfort and a positive impact for students because they need the example of a teacher. Therefore, teacher candidates strive to apply good personalities, such as discipline, dress neatly, high responsibility, and self-confidence.

Social competency got 77.80% in EPP, also categorized as "Excellent" with the highest score. The social competency of teacher candidates generally had been good. It showed that they had been able to manage the learning and got good cooperation and communication between teachers and students and between fellow teachers. Carstensen and Klusmann (2020) stated that social competency was important for beginning a new teacher's career. Social competency was a generic competence that could make individuals do things effectively and improve teaching and student achievement (Mulder, 2017; Wuttke & Seifried, 2013).

Social competency in Government regulation No. 19 of 2005, in article 28, paragraph 3, was the ability of educators as part of society to communicate and socialize effectively with students, fellow educators, educational staff, parents, and the surrounding community. According to Janawi (2011), social competency includes adapting to work demands and the surrounding environment when carrying out their duties as a teacher.

The professional competency of teacher candidates in EPP got 63% and was categorized as "Excellent." They have carried out their duties and mastered the knowledge well. Rahman (2013) stated that the professional competency of teachers was not only mastering the knowledge and skills to be taught to students, but the attitudes and ways of implementing a job must be done well. Gore, Lloyd, Smith, Bowe, Ellis, and Lubans (2017) stated that a quality teaching framework was practice-based and used in the context of whole lessons. In this case, the teachers can significantly contribute to students regarding professionalism as a teacher in providing an attractive foundation to realize higher-quality teaching.

The result of analyzed data of pedagogical competency was 61.10%, which was also in the "Excellent" category. Pedagogical competency tended to be used as teachers' professional standard. Generally, pedagogical competence can be found concretely through relationships or management and communication in the classroom (Suciu & Mata, 2011). The pedagogical competency was assessed from his/her ability to generate learning in the classroom. Better pedagogical competency was in line with better teachers' mastery in providing learning. It could affect the performance of a teacher in the classroom.

Undergraduate students of EPP in various schools already had good competencies. Social competency was the highest possessed by them. Social competency was very influential on the professionalism of a teacher. The more teachers were good at interacting with their students, and the learning could also run smoothly. In addition, the other three competencies were also essential to make a teacher more professional because these competencies are interrelated. Those competencies could have a positive effect on teacher performance. Saragih, Hidayat, and Tamba (2019) stated that teachers' points of view greatly influence how they interact with others. Teachers must have personality, social, pedagogic, and professional competencies in carrying out their duties.

This study confirmed similar results to previous studies conducted by Masdudi and Mulyani (2019) and Sukmawati (2019). Students' readiness to become good teacher candidates is very important to have four competencies: personal, social, pedagogical, and professional. The relations among the four competencies of candidate of teacher, in general, are shown in table 1.

Competencies		Personal	Social	Professional	Pedagogic
Personal	Pearson Correlation	1	0.81	0.73	0.79
	Sig. (2-tailed)		.0001	.0001	0.0001
	Ν	54	54	54	54
Social	Pearson Correlation	0.81	1	0.86	0.87
	Sig. (2-tailed)	0.0001		0.0001	0.0001
	Ν	54	54	54	54
Professional	Pearson Correlation	0.73	0.86	1	0.87
	Sig. (2-tailed)	0.0001	0.0001		0.0001
	Ν	54	54	54	54
Pedagogic	Pearson Correlation	0.79	0.87	0.87	1
	Sig. (2-tailed)	0.0001	0.000	0.0001	
	N	54	54	54	54

Table 1. The Relation among the Competencies of Teacher Candidates

Table 1 showed that there was a relationship between each competency. Based on a significance value of 0.01 (2-tailed), it was known that each competency has a relationship with others by a value of 0.00 < 0.01. Thus, it means Ha was accepted. It indicated a significant correlation in every aspect of the candidates' teaching competence. The existence of a highly strong relationship in each competency means that teacher candidates who had good pedagogical competency would have good social, personality, and professional competencies. It would certainly affect the professionalism of teacher candidates in the teaching process. Based on the research that Nurhasni, Matin, Suryadi, Zulaikha, Sugiarto, and Santoso (2019) and Supriyatno, Subiyanto, and Tawil (2016) had done, they stated that pedagogical, social, personal, and professional competencies could determine teachers' performance. Bintarti (2017) also thought that the level of competence could positively affect teacher performance.

CONCLUSION

The quality of undergraduate students in the Educational Practice Program (EPP) in Vocational High School (VHS) was in the excellent category. Based on personal, social,

pedagogical, and professional competencies, the electrical engineering education department students were more prominent in social competency. Moreover, in general, the four competencies had a highly strong relationship. Therefore, further studies are needed to take better actions or activities to support students' quality of teacher to be even better.

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