Students’ Pedagogic and Professional Competencies in Teaching Practice Programme

Abstract: The research aims to describe pedagogical and professional competencies of students who enroll at the department of Islamic elementary education at Faculty of Tarbiyah and Teacher Training UIN Imam Bonjol Padang. A mixed method was implemented where the data collected through observation, interviews, questionnaires, and documentation. The results of the study on aspects of pedagogical competence was at the level of very good (82.4%). It was also found that the criteria to master the characteristics of students from the physical, moral, spiritual, social, cultural, emotional, and intellectual aspects were very good (80%), carrying out educational learning was very good (81%), facilitating the development of potential students to actualize various potentials which was very good (83%), communicating effectively, empathically, and politely with 88% of students (very good), and in evaluating and evaluating 80% (very good). While professional competence was with a value of 78.3% (good). Among the mastery of teaching material 78.5% (good), the use of learning media 77.5% (good), as well as contextual material or connecting teaching materials with the daily life of students 79% (good). The study recommended that prospective educators further improve pedagogical and professional competencies, often take part in training activities, practice teaching simulations. For the department of Islamic elementary education should be more professional to guide students during teaching practice programme activities, and lectures, especially in the field of teacher competency development.

Keywords: Pedagogic competency; professional competence; Islamic elementary education.

INTRODUCTION

Equipping the implementation of a good learning process, the government through Permendikbud No. 16 of 2007 has implemented 4 competencies of teachers and lecturers, namely professional, pedagogic, personality and social competences (Hanapi & Nordin, 2014; Long et al., 2014; Prasetio et al., 2017; Rahardja et al., 2018; Tigelaar et al., 2004). Based on these four competencies, pedagogical and professional competencies are competencies that have a dominant influence on learning. Because both of these competencies influence how the teacher plans, implements, and evaluates learning. Thus, the mastery of these two core competencies can represent good learning and expectations (Nabaho et al., 2017; Wang et al., 2013). Professional competency is the
mastery of learning material widely and deeply which includes mastery of the contents of learning curriculum material in schools and the substance that overshadow the curriculum material, as well as adding scientific insight (Cook et al., 2013; Hakim, 2015; Mustafa, 2013). Pedagogic competence is the ability to manage learning. In substance this competence includes the ability to know the characteristics of students, master the theory and principles of learning, develop curriculum, use technology, and conduct learning evaluations (Astuty, 2015; Johnstone & Soares, 2014; Klaassen, 2002; Mirzagitova & Akhmetov, 2015; Morrison et al., 2019; Suciu & Mata, 2011).

Therefore, there needs to be careful preparation, especially in preparing teacher resources. Teachers are required creative and innovative in learning, teachers continue to be trained to develop the subjects of competence that must be achieved, and integrate a variety of skills (soft skills and hard skills) in every lesson (Cachia et al., 2010; Deepa & Seth, 2013; Thurlings et al., 2015). The competencies possessed by each teacher will show the quality of the teacher in teaching (Danner & Pessu, 2013). These competencies are required to be owned by all teachers including prospective teachers, in this case students who take study in the department of education.

Students who take educational study programs as prospective teachers must also understand and master pedagogical competencies and professional competencies (Bakar, 2018; Hakim, 2015; Lauermann & König, 2016; Rahman, 2014). Students of UIN Imam Bonjol, a department of PGMI as prospective teachers, must also have these competencies. Related to learning, the author focuses on the competencies that must be understood and mastered by prospective teachers are pedagogic competence and professional competence. Pedagogical competencies of UIN students Imam Bonjol in the department of Islamic elementary education or well-known as PGMI in Indonesian term were prepared by being given a curriculum review, learning plans and learning evaluation courses. For professional competence, PGMI students are prepared by being given a course in learning strategies. PGMI students based on the curriculum for class 2015 courses that can support pedagogical competence and professional competence include curriculum development courses, learning planning, learning strategies, teaching professionals, teaching microteaching, learning media and learning evaluation that are studied in college in semester 3 (three ), 4 (four), 5 (five), 6 (six) and 7 (seven).

Based on the results of preliminary observations conducted at the Tarbiyah and Teacher Training Faculty, it is known that the students at Islamic elementary education students have received courses related to pedagogic competence and professional competence. The problems that occur, the 2015 class of PGMI students is given curriculum development and learning planning courses which at that time not many schools used the 2013 curriculum, so researchers suspected that the 2015 class of PGMI students did not understand in detail the 2013 curriculum.

It is a necessity to make students have to learn how to implement 2013 curriculum with good teaching. As a teacher candidate student must carry out teaching practices. Teaching practice programme or PPL is a medium for students to apply the basis of the profession. Tarbiyah and Teacher Training Faculty of UIN Imam Bonjol Padang, Field Experience Practices (PPL) were applied in the form of teaching practices and other educational activities in schools. Practical Field Experience conducted by students is one place for students to get a reliable professional experience. By PPL students will be faced with the real conditions of application in scientific fields, such as: teaching ability, social skills, negotiation skills, and other educational managerial abilities. Below is a table of student abilities regarding pedagogical competencies as follows:
Table 1. Student Abilities

| No | Pedagogic Competence Indicators Students | Capability (%) |
|----|-----------------------------------------|----------------|
| 1  | Understanding students                  | 35%            |
| 2  | Ability to plan learning                | 53%            |
| 3  | Ability to carry out educational and dialogical learning | 55% |
| 4  | Ability to evaluate                     | 45%            |
| 5  | Develop the potential of students       | 40%            |

Next regarding professional competency of students, as follows:

Table 2. Professional Competency of Students

| No | Core Competencies | Aspects of | Ability |
|----|-------------------|------------|---------|
| 1  | Mastering material / teaching materials | 1.1. Arranging and mastering teaching materials according to student education level | 60% |
|    |                    | 1.2. Describes and organizes teaching materials systematically according to learning objectives | 55% |
| 2  | Able to use media and teaching resources in learning | 2.1. Creating teaching and learning programs creatively and innovatively | 50% |
|    |                    | 2.2. Using audio visual media in the learning process | 45% |
| 3  | Contextual material / connecting the material with everyday life | 3.1. Delivering material that is relevant to the daily lives of students | 60% |

Based on the description and facts above the author is interested in researching and discussing this matter into an object of research. The reason for choosing the location of the PGMI Department of the Tarbiyah and Teaching Faculty of UIN Imam Bonjol Padang for the place of research was the availability of data needed by researchers and the department had not been conducted research with the same problem.

Based on the description of the background stated above, the author limits the problem: What is the pedagogical and professional competence of the 2015 PGMI Student UIN Imam Bonjol Padang in the implementation of the Field Experience Practice (PPL) in 2018/2019 academic year Field Practice (PPL).

METHOD

The approach used in this research is a mixed approach, namely quantitative and qualitative. This type of research is a descriptive study (Palinkas et al., 2011, 2015; Sandelowski, 2000; Zohrabi, 2013). With the research subject of PPL Tarbiyah Faculty and UIN Teachers. The data source and focus of this study are limited to pedagogical and professional competencies of Madrasah Ibtidaiyah Student Teachers (PGMI) Faculty of Tarbiyah and Teacher Training UIN Imam Bonjol Padang who are conducting PPL (Field Experience Practices).

Data collection techniques can be done by observation (observation), interviews (interviews), questionnaires (questionnaire), documentation, and a combination of the four. Data collection techniques used in this study
is as follows: First, Observation aims to see and photograph phenomena or symptoms that occur in the field. Second, the questionnaire, the purpose of distributing questionnaires is to find complete information about a problem and the respondent without worrying if the respondent gives an answer that is not in accordance with the list of questions. The questionnaire is used to answer and find whether or not there are difficulties students in mastering and running every indicator that is in each pedagogical and professional competency. The form of attitude scale used is a Likert scale. The choice of answers in instruments that use a Likert scale has levels from very positive to very negative. This questionnaire is used to obtain data from the evaluation of learning. The answer choices in the questionnaire are: Very Difficulty (SK) with answer weight 1, Difficulty (K) with answer weight 2, Somewhat Difficulty (AK) with answer weight 3, No Difficulty (TK) with answer weight 4. Third, documentation, aimed at obtaining data directly from research sites, including relevant books, regulations, activity reports, documentary films, relevant data on research.

The procedure for determining these qualifications is as follows.

a. Assessment and scoring criteria:
   4: very good
   3: good
   2: enough
   1: less

b. Calculate the average competency of respondents

\[
\overline{x} = \frac{\sum \text{Nilai kompetensi responden}}{\sum \text{Responden}}
\]

c. Calculate the percentage of all respondents Percentage (%)

\[
\text{Percentage} = \frac{\sum \text{kompetensi rata-rata responden} \times \text{Skor Maksimum}}{\text{Skor Maksimum}} \times 100 \%
\]

d. Classification

1) Menentukan jumlah skor maksimal = jumlah aspek x skor maksimal
2) Menentukan jumlah skor minimal = jumlah aspek x skor minimal
3) Menentukan rentang = skor maksimal - skor minimal
4) Menentukan interval = rentang / banyak kriteria

| Persentase | Criteria |
|------------|----------|
| 81.25 < % \leq 100 | Very Good |
| 62.5 < % \leq 81.25 | Good |
| 43.75 < % \leq 6.5 | Enough |
| 25 < % \leq 43.75 | Leak |

Finally, with data analysis, quantitative data can be interpreted previously in more detail. In this case, the approach used is a descriptive analysis method, which is intended to gather information about the status of existing symptoms. This method is done by first analyzing a subject matter, then drawing it as a conclusion.

RESULT AND DISCUSSION

The process of this research was carried out in public and private Islamic schools, the place where prospective educators of the student of Islamic elementary education at the Faculty of Tarbiyah and Teacher Training at UIN Imam Bonjol Padang implemented PPL. In the process of retrieving data, researchers used questionnaires and documentation. The researcher conducted a study which began with the distribution of questionnaires to each respondent to be filled out by the respondents related to pedagogic competencies and professional competencies. Data collected through questionnaires are used to answer and find the presence or absence of difficulties for prospective educators (PPL students) in mastering and implementing each indicator that is in pedagogic competence and professional competence. While the documentation data is taken from the results of the assessment by the Pamong Teacher and Field Supervisor (DPL). The documentation,
data will be used as a questionnaire data amplifier.

The process of data analysis is carried out to describe the pedagogical and professional competencies of prospective educators, namely the *Madrasah Ibtidaiyah* (PGMI) Teacher Education Student of the Faculty of Tarbiyah and Teacher Training at UIN Imam Bonjol Padang in the implementation of the 2018/2019 Academic Year Field Experience Practice (PPL). Based on the presentation of the percentage data from the pedagogical competencies of the *Madrasah Ibtidaiyah* (PGMI) Teacher Education Students of the Faculty of Tarbiyah and Teacher Training at UIN Imam Bonjol Padang can be categorized very well with a value of 82.4 (A). Furthermore, data collection of criteria for pedagogical and professional competency assessment of PPL students uses a scale determined by the PPL guidebook issued by PPL Technical Implementation Unit (UPT.PPL) UIN Imam Bonjol Padang. The range of values as follows: 80-100 = A, 70-79 = B, 60-69 = C, 50-59 = D, 0-49 = E. As for the description of data on pedagogic competence and professional competence of *Madrasah Ibtidaiyah* Teacher Education Students (PGMI) The Faculties of Tarbiyah and Teacher Training at UIN Imam Bonjol Padang are as follows:

### Table 3. Pedagogic Competencies

| No | Core Competence                                                                 | Aspect                                                                 | Amount of Results |
|----|---------------------------------------------------------------------------------|------------------------------------------------------------------------|-------------------|
| 1  | Mastering the characteristics of students from physical, moral, spiritual, social, cultural, emotional, and intellectual aspects. | 1.1 Understand the characteristics of students related to physical, intellectual, social emotional, moral, spiritual, and socio-cultural backgrounds. | 80 80 |
|    |                                                                                 | 1.2 Identifying potential learners                                      | 81                |
|    |                                                                                 | 1.3 Identifying students' initial abilities                             | 80                |
|    |                                                                                 | 1.4 Identifying learners' difficulties                                  | 80                |
| 2  | Carrying out educational learning                                              | 2.1 Understanding the principles of educational learning design       | 81 81             |
|    |                                                                                 | 2.2 Developing components of learning design                            | 81                |
|    |                                                                                 | 2.3 Developing learning designs that complete, both for activities in the classroom, laboratory, or field | 80                |
|    |                                                                                 | 2.4 Carry out learning that educates in the classroom, in the laboratory, and on the field | 81                |
|    |                                                                                 | 2.5 Using instructional media in accordance with the characteristics of students to achieve learning objectives in full | 81                |
|    |                                                                                 | 2.6 Taking transactional decisions accordingly with a developing situation | 81                |
| 3  | Facilitating the development of potential students to actualize their various potentials. | 3.1 Providing various learning activities to encourage students to achieve optimum | 84 83             |
|    |                                                                                 | 3.2 Provide a variety of learning activities to actualize the potential of students, including their creativity | 82                |
| 4  | Communicate effectively, empathically, and politely with students.              | 4.1 Understanding various effective, empathetic, and polite communication strategies, both verbally and in writing | 86 88             |
|    |                                                                                 | 4.2 Communicating effectively, empathically, and politely with students  | 91                |
| 5  | Conducting an assessment and evaluation of learning processes and outcomes     | 5.1 Understanding the principles of assessment, evaluation, process and learning outcomes | 80 80             |
|    |                                                                                 | 5.2 Determine aspects and learning outcomes that are important to be assessed and evaluated | 80                |

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5.3 Develop assessment and evaluation instruments and learning outcomes 80
5.4 Administering continuous assessment and learning outcomes using various instruments 81
5.5 Analyzing assessment results and learning outcomes for various objectives 80
5.6 Evaluating and learning outcomes 80

Based on the table above, it can be explained that the average mastery of students' characteristics from physical, moral, spiritual, social, cultural, emotional, and intellectual aspects gets a value of 81 (A). The ability to organize learning that educates gets a value of 82 (A). Competence to facilitate the development of the potential of students in order to actualize the various potentials that have got a value of 82 (A). Competence to communicate effectively, empathically, and politely with students getting a score of 89 (A). Furthermore, competence in conducting assessment and evaluation of processes and learning outcomes gets a value of 81 (A).

While the presentation of data on the percentage of professional competence of students of Madrasah Ibtidaiyah (PGMI) Teacher Education Faculty of Tarbiyah and Teacher Training at UIN Imam Bonjol Padang can be categorized as good with a percentage of 78.3%.

Table 4. Professional Competency Analysis

| No | Core Competence | Aspect | Total | Results |
|----|-----------------|--------|-------|---------|
| 1  | Mastering material/teaching material | 1.1 Arranging and mastering teaching materials according to the education level of students | 78 | 78.5 |
|    |                               | 1.2 Describing and organizing teaching materials systematically in accordance with learning objectives | 79 | |
| 2  | Able to use media and sources teaching in learning | 2.1 Creating creative and innovative teaching and learning programs | 78 | 77.5 |
|    |                               | 2.2 Using audio visual media in the learning process | 77 | |
| 3  | Contextual material / connecting the material with everyday life | 3.1 Delivering materials that are relevant to students' daily lives | 79 | 79 |

The process and results of student learning are not determined by the school, the pattern, structure, and content of the curriculum, but most are determined by the competence of the teacher in the process of learning and mentoring. Competent teachers can conduct classroom management, optimizing learning. Through its competencies, it can create a conducive and effective learning atmosphere. Then a teacher cannot be equipped with a variety of competencies and continuously developed.

Based on the author's observation that the PPL PGMI UIN student Imam Bonjol, in general, was able to encourage students to learn. PPL students have also been able to connect the concepts of knowledge taught with the application in the daily lives of students, both as part of family members, the community, and their natural environment. Through this, so as to enable the strengthening, expansion, and application of learning materials properly. As well as learning takes place feels meaningful to his daily life.

Once the importance of learning that touches directly on daily behavior, it also gives a role in the way students learn to solve problems independently. Besides the students are also trained to be able to accept the conditions that arise in the future with various challenges. Solving the problems they face
today is the initial foundation of the process of transforming education well and wisely the problem. In addition to the contextualization of educational material, the indicators that can be mastered by students at PGMI UIN Imam Bonjol Padang students also have indicators that are fully mastered properly, including (1) Understanding the principles of curriculum development, and (2) Arranging administration school.

The results of the pedagogical competency data of teaching practice at PGMI UIN Imam Bonjol students, in this period can be drawn on several aspects assessed namely 1. Aspects of mastery of student characteristics of physical, moral, spiritual, social, cultural, emotional, and intellectual aspects, with ranges grades 75 to 84, 2. Aspects of organizing learning that educate scores between 76 and 84, 3. Aspects of competence facilitate the development of potential students to actualize the various potentials they have, with values between 80-86, 4. Aspects of competence communicate effectively, empathetic, and polite with students, has a value of 81 to 96, 5. Competence organizes assessment and evaluation of learning processes and results, with good grades between 75 and 83. From this data it can be concluded that generally PGL PPL students have fulfilled the fifth aspects of the criteria for assessment of pedagogic competence. This data explains that there is an increase in the five aspects, so that it can be said that the learning process carried out by PPL students can be done effectively and innovatively.

Table 5. Professional Competency Analysis

| NO | Core Competence                                                      | Aspect                                                                 | Amount of Result |
|----|---------------------------------------------------------------------|------------------------------------------------------------------------|------------------|
| 1  | Mastering the characteristics of students from physical, moral,     | 1.1 Understand the characteristics of students related to physical,    | 80               |
|    | spiritual, social, cultural, emotional, and intellectual aspects.    | intellectual, social emotional, moral, spiritual, and socio-cultural   | 80               |
|    |                                                                     | backgrounds.                                                          |                  |
|    |                                                                     | 1.2 Identifying potential learners                                     | 81               |
|    |                                                                     | 1.3 Identifying students 'initial abilities                           | 80               |
|    |                                                                     | 1.4 Identifying learners' difficulties                                 | 80               |
| 2  | Carrying out educational learning                                   | 2.1 Understanding the principles of educational learning design       | 81               |
|    |                                                                     | 2.2 Developing components of learning design                           | 81               |
|    |                                                                     | 2.3 Developing learning designs that complete, both for activities    | 80               |
|    |                                                                     | in the classroom, laboratory, or field                               | 81               |
|    |                                                                     | 2.4 Carry out learning that educates in the classroom, in the         | 81               |
|    |                                                                     | laboratory, and on the field                                         | 81               |
|    |                                                                     | 2.5 Using instructional media in accordance with the characteristics | 81               |
|    |                                                                     | of students to achieve learning objectives in full                    | 81               |
|    |                                                                     | 2.6 Taking transactional decisions accordingly with a developing      | 81               |
|    |                                                                     | situation                                                            |                  |
| 3  | Facilitating the development of potential students to actualize     | 3.1 Providing various learning activities to encourage students       | 84               |
|    | their various potentials.                                           | to achieve optimum                                                   | 83               |
|    |                                                                     | 3.2 Provide a variety of learning activities to actualize the         | 82               |
|    |                                                                     | potential of students, including their creativity.                    |                  |
| 4  | Communicate effectively, empathically, and politely with students.  | 4.1 Understanding various effective, empathetic, and polite            | 86               |
|    |                                                                     | communication strategies, both verbally and in writing                | 88               |
|    |                                                                     | 4.2 Communicating effectively, empathically, and politely with        | 91               |
|    |                                                                     | students                                                              |                  |
| 5  | Conducting assessment and evaluation of learning processes and      | 5.1 Understanding the principles of assessment, evaluation,            | 80               |
|    | outcomes                                                            | process and learning outcomes                                         | 80               |
|    |                                                                     | 5.2 Determine aspects and learning outcomes that are important        | 80               |
|    |                                                                     | to be assessed and evaluated.                                         |                  |
|    |                                                                     | 5.3 Determining assessment procedures and evaluation                  | 80               |
|    |                                                                     | processes and learning outcomes                                       |                  |
Likewise, on professional competence, as illustrated in the data obtained, namely aspects 1) Mastering teaching material or materials; 2) Being able to use media and teaching resources in learning; 3) Contextual material / connecting the material with everyday life. These three aspects get their respective values of 78.5, 77.5 and 79. From this data it can be concluded that professionalism competencies also get good results.

Table 6. Professional Competency Analysis

| No | Core Competence                          | Aspect                                                                 | Amount of Result |
|----|------------------------------------------|------------------------------------------------------------------------|------------------|
| 1  | Mastering material / teaching materials  | 1.1 Arranging and mastering teaching materials according to the education level of students | 78               |
|    |                                          | 1.2 Describing and organizing teaching materials systematically in accordance with learning objectives | 79               |
| 2  | Able to use media and teaching resources in learning | 2.1 Creating creative and innovative teaching and learning programs | 78               |
|    |                                          | 2.2 Using audio visual media in the learning process                   | 77               |
| 3  | Contextual material / connecting the material with everyday life | 3.1 Delivering materials relevant to students' daily lives | 79               |

Based on the recap of pedagogical competency data and professional competence, it can be concluded that the students of Islamic elementary education department at Tarbiyah and Teacher training in UIN Imam Bonjol Padang in implementing Teaching Practice Programme or PPL most have been able to carry out learning well and not found the difficulties in the implementation. This can also be seen from the documentation data, namely the results of the assessment for the tutor teacher and the Field Facilitator Lecturer (DPL), in which most prospective educators get good and perfect grades.

CONCLUSION AND RECOMMENDATION

Based on the results of the study, it is expected that prospective educators can further improve pedagogical and professional competencies which are important capital in carrying out their responsibilities and duties as educators. To further improve teacher competence, prospective educators are expected to actively participate in training, teaching simulations related to the field of teacher competence. It is also hoped that the students of Islamic elementary education department at Tarbiyah and Teacher training in UIN Imam Bonjol Padang will be more skilled in guiding students during lecture activities especially in the field of teacher competency development.

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