Student-Teacher’s Reflective Thinking and Teaching Practice
How Reflective are They?

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ABSTRACT
As a part of instructional cycle, reflecting on the teaching and learning process has been something required to do by student-teacher during their online teaching practice program. Its purpose is to enhance their critical thinking in doing self-evaluation, as well as to conduct better learning activities. This descriptive study is attempted to know how reflective the student-teachers are by analyzing their reflective thinking concept through their reflection practice and how they perceive themselves as reflection practitioners. A total of 105 student-teachers of English Language Education Program Study volunteered to respond a questionnaire and interview to determine the level at which they reflected on their teaching practice. It was found that the respondents (41.56%) were categorized as introductory reflective teacher. Generally, they were interested to develop themselves but did not deeply reflect on their teaching practice. It indicates that their critical thinking in doing self-evaluation is practiced minimally. They were mostly more interested to be assessed by students or peers but felt ambiguity with the feedback value. Most of them were not even aware of how to improve themselves which could effect on their belief as teachers. Some of them used their experience to help them improve, but it was questionable whether they actually did it. This showed that there might be some matters that make them be less confident or have low self-efficacy to be reflective teachers. To strengthen this discussion, a further study is needed to explore what matters they face during their reflection practice.

Keywords: Reflective Thinking, Reflective Practice, Self-Evaluation

1. INTRODUCTION
Based on the Regulation of the Minister of Education and Culture No. 66 of 2013 concerning Educational Assessment Standards, it is defined that self-assessment is an assessment that is carried out by oneself in a reflective way to compare its relative position with the criteria set which aims to assess the competence of attitudes to look within oneself to reveal its advantages and disadvantages during the learning process. The strengths that are found as a result of the implementation of self-assessment are indicators of success in achieving the required competencies, while the weaknesses found will be the goal of improvement (improvement goals) towards achieving competence. This definition is in line with the explanation that self-assessment is a formative assessment process where reflection is carried out and the results are evaluated to understand the quality of teachers’ work and the learning process so that they can find out the strengths and weaknesses of their work and can improve them. In other words, reflection is closely related to self-assessment and is one of the ways in which self-assessment is carried out.

In the context of distance learning that is ongoing during the Covid-19 pandemic, reflections are carried out by the teacher to provide feedback regarding the quality of the learning process and the quality of student assignments [1]. The results of the teacher's reflections provide many positive things. Teachers who explore their professional attitudes through critical reflection can be beneficial for their professional practice and increase student learning outcomes [2]. Reflecting on their teaching results and analyzing what could be improved is a fundamental component of teacher professionalism to provide a better learning process and to improve teacher professional practice. Furthermore, it is explained that this assessment could monitor how far they are able to improve the sustainability of their education in finding different teaching alternatives. It also enables teachers to
better diagnose and understand the context of their classroom and student learning, place their student learning at the heart of the teaching-learning process, develop a rationale for their teaching and take specific, informed actions and make good decisions in the classroom [3]. The results of the practice of reflection can be used as a reference for making changes in order to develop the concept of self-understanding and improve performance in teaching [4] as well as to update the quality of teaching practice and understand its effect on teaching outcomes [5].

When reflective teaching is able to increase professionalism in teaching [6] and has a positive effect on learning outcomes [5], reflective practice can positively influence teacher perceptions [7], especially for student-teacher candidates [8]. They revealed that 94.54% of student-teacher candidates believed that the results of their reflections had an impact on increasing competence in planning and implementing the learning process. If they believe that the results of reflection provide many positive changes to their professionalism, indirectly the practice of reflection they do will also have an impact on students [8,9].

In general, for teachers, reflective teaching practice is very suitable for increasing professionalism because it is flexible, practical, professional, and sustainable [6]. Moreover, the results of self-reflection can produce self-recognized changes in accordance with their beliefs and world views. Here, self-awareness during reflecting is very important. Teachers’ self-awareness during reflective teaching can result in building self-confidence and patience in working with real-world problems [10]. Those who are able to change their perceptions and believe in the results shown, in the end, will also help them increase their self-esteem and competence to solve teaching problems and create new approaches to education [11,2].

Considering the benefits provided to increasing teacher professionalism, reflective teaching has been suggested to be applied, both for teachers and student-teacher candidates as a means of increasing content knowledge, pedagogical knowledge, and / or pedagogical content knowledge [9]. As student-teacher candidates, particularly at Ganesha University of Education, they have been equipped and trained to self-assess through the application of reflective teaching techniques in Microteaching Course. Reflection through a self-assessment form is carried out every time a prospective teacher student finishes practicing teaching, which is then completed with an assessment from his peers. Some do it immediately after teaching through discussion forums, some do it in writing in a form, and some do it in online discussion forums. Thus, it can be assumed that student-teacher candidates have applied reflection teaching techniques to assess themselves in teaching. It is just that their level of understanding in applying it applicatively in real contexts has not been able to be known. Therefore, student-teacher candidates must apply this understanding by participating in Teaching Practice Program (PPL_REAL) in schools.

When taking PPL-REAL virtually, the application of this technique is not directly verified by the tutor or peers due to time constraints. That is, they purely apply it independently every time they teach in class. Here we can find out the categories of reflection carried out by student-teacher candidates, whether the application is only limited to understanding or it is already applicable. Based on these explanations, this study will be conducted to describe the application of reflective teaching techniques as a basis for self-assessment. More specifically, the purpose of this study is to look at the categories of reflection applied by student-teacher candidates as indicators that reflect their perceptions of their reflective teaching techniques.

2. METHOD(S)

This descriptive study aims at classifying student-teachers’ level of reflective thinking practice. This study was conducted in English Language Education Program Study with the total of 105 student-teachers who have passed Microteaching Course and are actively participating in Teaching Practice Program in secondary schools (junior and senior high schools) in Buleleng District. Self-rated questionnaire was conducted as the main instrument to gather the data. The instrument was adopted from the theory of Choy & Oo and Hamilton [14,19]. There would be 33 statements from four reflective indicators to respond. The respondents were asked to scale each statement (scale range of 1 to 5) based on their reality. Interview session was also conducted to obtain the supporting data. The data were classified firstly based on reflective teacher category and analyzed to find out the percentage of each level. The result would show their level of reflective thinking practice which indicated the reflective teacher category. The supporting discussion would be taken based on the 5 scale responses.

3. FINDINGS AND DISCUSSION

Data were analyzed by looking for the percentage of responses to each statement in the questionnaire with a scale of 1 to 5. The statements in the questionnaire were separated based on reflective teacher categories, namely introductory, intermediate, and advanced). The results of the analysis show the level of reflection possessed by student-teacher candidates. This level indicates the student-teachers’ perceptions of the concept of applying reflective teaching techniques. The results of this analysis can be seen in Table 1.
The table above shows that student-teachers are divided into 3 groups based on their level of reflection practice, namely 46% are belonged to the introductory group, 15% are the intermediate group, and 39% are the advanced group. The introductory group is those who already know the concept of reflective teaching techniques, but only in terms of understanding and have not yet reached the implementation stage, only to realize self-discipline in completing obligations. The intermediate group is those who already have an understanding of reflective teaching techniques, but the implementation is based on orders from their superiors and not on their own will. The advanced group is those who already have understanding and are able to carry out reflection optimally of their own accord. This grouping is based on the analysis of reflective thinking seen from their perceptions of the concept of reflective thinking and the concept of reflective implementation. Based on the percentage shown, it can be said that the majority of student-teacher candidates are still introductory reflective teachers. That is, student-teacher candidates prefer to focus on self-discipline in teaching rather than improving the quality of teaching by reflecting.

In relation to the perception indicator of the concept of reflective thinking, based on the aspect of the ability to assess themselves, only 5 students reflected on their teaching performance to make updates. This shows that most of them do not have a strong perception of their reflective practice. About 66 out of 105 students seem to not focus on self-discipline in teaching. There is no thought yet to improve the quality of teaching and learning through reflection. In fact, student-teacher candidates need to motivate themselves to know and start implementing various innovative teaching strategies so that one day they will be able to become good reflective teachers [12].

In addition, it appears that most of them do not fully trust the quality of the feedback given as a reflection material. Based on the interview, they said that they received feedback but did not take action because students only commented on what was in their favor and the supervisor gave something different from their beliefs, so the values were relative.

“I did collect the feedback from students, I was always open for it. I need to know what my students felt. It is quiet important to get it.

Table 1. Percentage of Each Reflective Teacher Category

| Scale | Introductory | Percentage |
|-------|--------------|------------|
| 5     | S2 S4 S7 S11 S13 S16 S19 S22 S25 S28 S31 | 66 %        |
| 4     | 36 40 50 55 43 50 50 35 55 59 57 | 42.45 %     |
| 3     | 3 9 28 14 6 14 16 7 18 3 19 | 10.86 %     |
| 2     | 0 0 0 0 0 0 0 0 | 0.00 %     |
| 1     | 0 0 0 0 0 0 0 0 | 0.00 %     |
| Total |                      | 100.00 %   |

| Scale | Intermediate | Percentage |
|-------|--------------|------------|
| 5     | S3 S5 S8 S12 S14 S17 S20 S23 S26 S29 S32 | 8 %        |
| 4     | 38 21 52 19 11 18 45 14 50 33 40 | 27.85 %     |
| 3     | 47 42 5 46 35 35 37 41 30 37 37 | 33.94 %     |
| 2     | 10 24 0 22 37 36 9 33 7 21 4 | 17.58 %     |
| 1     | 2 8 0 7 12 0 13 1 5 0 | 5.63 %     |
| Total |                      | 100.00 %   |

| Scale | Advanced | Percentage |
|-------|----------|------------|
| 5     | S1 S6 S9 S10 S15 S18 S21 S24 S27 S30 S33 | 5 %        |
| 4     | 38 40 49 43 45 52 43 50 56 52 52 | 43.17 %     |
| 3     | 22 4 18 8 12 7 11 23 33 14 23 | 14.15 %     |
| 2     | 28 0 3 1 1 2 1 4 0 0 2 | 2.64 %     |
| 1     | 12 0 0 0 0 0 0 0 0 0 0 | 1.04 %     |
| Total |                      | 100.00 %   |
But, overall they say that I am doing good. That is why I do not really consider it as my reflection material. Sometimes, they just commented on something that benefits them. For example, they asked me not to give more assignments or no more difficult tasks. The feedback was only for their own shake, not for my future quality.” (ST83, IRT)

“I often discussed the result of my teaching with my supervisor at school, I need it to adjust my knowledge to school’s curriculum, and she talked a lot about what I should do. However, it was something different from what I have learned in my courses. Honestly, I do not know whom I trust, my supervisor or my lecturer. So, I made decision that not all feedback was taken, so I just filtered it out and adjust the ones that relate to my current condition, just to fulfill the requirement.” (ST25, IRT)

These results seem to support that student-teachers realize how important feedback from student and supervisor is, but, at the same time, they feel that feedback is less meaningful for them to learn. When they do not consider the meaning of the feedback given, they will not be able to analyze and articulate the problem [13] to see the effect of their teaching on student performance [14]. This shows that they are not ready (or maybe not yet) to do reflection-on-action.

Regarding to the aspect of the valuation of the learning effectiveness, 48 of them always thought that what they did when teaching was an important indicator that determined the effectiveness of their teaching. 61 students already knew that the quality of learning was determined by the content and context of the material, but they have not linked what and how they taught with the context of learning. They did not feel that what was done during the lesson was an important indicator of the effectiveness of their teaching. This shows that they do not relate their teaching to an increase in performance, whether their teaching performance can improve student learning outcomes or not. Among 105 respondents, only 35 of them were indicated to try to relate what and how they taught with their previous experiences, so that the content and context of the subject matter became one of the things that were considered every time they taught.

This finding supports the previous finding that student-teachers candidates have not considered using feedback from students as material for their reflection. They have not been able to relate what they do in class and how it affects their students’ performance. If students want to review the feedback given, it will not only improve their quality as educators, but also student learning outcomes. Considering students’ feedback in the implementation of learning will actually help improve their critical thinking, because they can more easily assess what they have done in class [15]. Assessment carried out in this way will shape student-teacher candidates to become more reflective slowly and indirectly will help improve the quality of the student’s learning experience [16, 17].

Regarding the findings on the aspect of making judgment, about 35 students felt that their previous experiences could be used as a reference for conducting subsequent teaching. Sometimes they felt they need to relate what they did in learning with previous experiences. Even though sometimes they did not know what to do, at least they were already aware of the problems that have arisen and were waiting for suggestions or orders or assistance to decide the solutions that must be done. If there were no comments, then they were not making improvements.

“Yes of course, when I did consultation with my supervisor and tutor teacher, I would revise the part that was felt less appropriate if I got suggestion. But sometimes, I did not get any suggestion related to my problems. So I just go on without doing any improvement. Yaaa, I felt a bit happy as my work reduced you know. But if I got the same problem, I will use what they told me to do.” (ST6, InRT)

“Yes, it is often. I did not know what to revise. I had less time to consult my teaching practice to my supervisor during this pandemic situation, so I had my tutor teacher only. My tutor teacher often said that what I did was good enough and told me to follow his standard. For the next, yaa I just try to connect it with the past.” (ST83, ART)

The results of this interview show that student-teacher candidates use the feedback given by the tutor teacher and their supervisor only to carry out their obligations. It is very clear that they were only waiting for suggestions from their tutor-teachers and supervisors to meet the learning implementation standards, not to improve their own quality. Teachers who are only waiting for help and need external support and direction will not be intrinsically motivated to improve themselves [14]. However, it would be great if they have been willing to realize how to relate their past to the context of their current teaching.

The aspect of self-awareness in the practice of reflection shows how student-teacher candidates learn to develop professionally through their experiences. Based on the responses, it can be seen that students are aware and know to reflect by using their own experiences in teaching. This result is in line with the previous response which states that student-teacher candidates use their
previous experiences to be integrated into their current teaching context.

“Of course, I did not consider feedback from students. I have once or two times asked my students to give feedback, so I know what to do better. But mostly the feedback was not likely expected. They just said good things or something benefited them, like asking me not to give them assignment. And after that I never take it anymore. I just rely on my supervisor’s.” (S13, IRT)

This shows that they already understand theoretically, but not in practice.

“Never. The others are also busy with their teaching practice, so none of us be the teaching observers. We only focus to do what we have assigned for the class. You know, if we want to know how we do in our teaching, we talk to our tutor and supervisor. They will tell us what wrong was and what to do.” (S72, IRT)

This finding is in line with other studies that the lack of proficiency of student-teachers in reflecting on their teaching skills is caused by a lack of self-awareness in understanding themselves as actors of reflection [20]. Reflecting requires a deep level of knowledge about themselves as teachers, as well as who they are as individuals [20] and critical thinking skills [7]. In addition, learning approaches that are usually practiced during lectures are memorizing and repeating procedures for examination purposes so that it affects their lack of attention to reflect on their teaching [21].

In aspect of long live learning, student-teachers perceived themselves to focus their needs as a priority in developing their teaching skill. They were learning to improve their abilities by openly receiving feedback and believed that past experiences were useful for further teaching improvement. However, it is unfortunate that the previous response slightly shows a different matter. Students’ feedback was not used as a consideration, only based on the guidance of the tutor teacher and supervisor.

The student-teachers built their understanding in reflecting by asking for directions from the tutor teachers and supervisors. They have never had peer-discussions. It means that their understanding building relies on the guidance of the tutor and the supervisor. They have not been able to independently judge how they teach. When students are not able to recognize their own abilities, they will not have access to know their strengths and weaknesses [20]. In other words, they do not yet have an awareness of how to develop their teaching skills.

In using the results of the evaluation of previous learning in the next context, only 16 students already knew that they had to make assumptions about many things based on input from others and used as learning materials. Very few students wanted to make such assumptions based on the feedback given. As stated by Sezer, Being a reflective thinking teacher requires them to be able to make a connection between what they already know and what they need to know [22]. The low level of reflection carried out by student-teachers is preceded by a desire to remain in the "comfort" zone.

“I do not mean that this is my comfort zone. Because my students say that I am doing good, so I do not think to reflect on my teaching anymore. Why should I reflect on something that I have done the best.” (S83, IRT)

Student-teacher candidates perceived that they have carried out the learning process well because they have received positive responses, both from the tutor-teacher or the students. This shows that they do not yet have full awareness and trust to carry out some reflective strategies. Using feedback from students is one strategy that can encourage reflective thinking [20]. Student-teachers who are able to carry out such teaching strategies will become good reflective teachers [23].

Apart from that, the implementation of reflection practice in the learning process is carried out because of the influence of self-belief. Regarding the aspects of self-belief and efficacy, reflective ability is shown by how student-teachers see themselves in relation to their
students and their ability to teach. 28 student-teachers believed that they needed to meet their needs first such as the completeness of teaching materials, teaching preparation, and assessment. Another 28 students found out that their beliefs about themselves influenced their treatment of others. In this case, they believed that doing reflection which was one of the learning cycles could help them improve the quality of themselves and their students. However, it seems that students only understand it in theory because they have not shown their belief in the practice of their reflection yet. This means that they have not fully reflected on the learning that has been carried out.

If student teacher candidates believe how important it is, but their actions show different things, then what it is questionable whether they actually reflected on their teaching practice or not. In general, the responses to the questionnaire and the results of these interviews indicates a mismatch between their perceptions and actions. They see things in a positive light and are still learning to do them, but their actions do not match up. Therefore, direct observation to see how they reflect on their learning needs to be done to clarify the results of related studies.

4. CONCLUSIONS

Based on the results of this study's data analysis, it can be concluded that prospective teacher students actually belong to the introductory reflective teacher. They are still in the stage of self-discipline to complete their teaching assignments. That reflecting on the learning process that has been carried out with the aim of improving yourself is not a priority. This shows that the knowledge gained while taking courses is not really implemented properly.

The suggestions obtained based on the results of this study are (1) providing teaching practice in lectures so that it is more focused on reflective techniques as self-assessment, (2) it needs to be studied more deeply the factors that cause the self-assessment process to be not implemented optimally during the teaching practice program, (3) assistance activities need to be held such as workshops or seminars, and (4) an observation needs to be conducted further study to see how student-teachers reflect on their teaching practice.

AUTHORS’ CONTRIBUTIONS

In the accomplishment of this study, the authors have different roles. The first author mainly contributed in preparing the instrument, collecting the data, analyzing and interpreting the data, and writing the study result. The second author helped in collecting the data, reviewing and revising the data interpretation, and reviewing the content of the article. Although they have different job description, they work together and support each other.

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REFERENCES

[1] S. Naidu, Learning about learning and teaching online, Distance Education 34(1) (2016) 1–3.
[2] M. L. O. Mesa, Reflective teaching: An approach to enrich the English teaching professional practice, HOW 25 (02) (2018) 149-170.
[3] D. D. Kano, D. K., Ayana, G. T. Chali, Practices and challenges on reflective teaching: An investigation of second cycle primary school (5-8) efl teachers’ in south west cluster zone of Oromiya Regional State, International Journal of Sciences: Basic and Applied Research 33(02) (2017) 225-247.
[4] M. Sellars, Teachers and change: The role of reflective practice, Procedia - Social and Behavioral Sciences, vol. 55, 2012, pp. 461 – 469.
[5] P. Mathew, P. Mathew, J. P. Prince, Reflective practices: A means to teacher development, Asia Pacific Journal of Contemproy Education and Communication Technology 3(01) (2017) 126-131.
[6] M. M. Shalabi, M. Sameem, A. M. Almuqati, Reflecting teaching as a practical approach, Journal of Literature, Languages, and Linguistics, vol. 43, 2018, pp. 40-48.
[7] M. L. Slade, T. J. Burnham, S. M. Catalana, T. Waters, The impact of reflective practice on teacher candidates' learning, International Journal for the Scholarship of Teaching and Learning 13(02) (2019) 1-8.
[8] N. M. Ratminingsih, L. P. Artini, N. N. Padmadewi, Incorporating self and peer assessment in reflective teaching practices, International Journal of Instruction 10(04) (2017) 165-184.
[9] U. Toman, Investigation of reflective teaching practice effect on training development skills of the pre-service teachers, Journal of Education and Training Studies 5(06) (2017) 232-239.

[10] M. Saric, B. Steh, Critical reflection in the professional development of teachers: Challenges and possibilities, CEPS Journal 7(03) (2017) 67-85.

[11] M. Zahid, Effect of reflective teaching practice on the performance of prospective teachers, The Turkish Online Journal of Educational Technology 18(01) (2019) 32-43.

[12] A. F. Ball, Towards a theory of generative change in culturally and linguistically complex Classrooms, American Educational Research Journal 46(1) (2009) 45-72.

[13] R. M. Boody, Teacher reflection as teacher change, and teacher change as moral response, Education 128(3) (2008) 498-506.

[14] S. C. Choy, P. S. Oo, Reflective teaching and teaching practices: A precursor for incorporating critical thinking into the classroom, International Journal of Instruction 5(01) (2015) 165-182.

[15] T. Barnhart, E. van Es, Studying teacher noticing: Examining the relationship among pre-service science teachers' ability to attend, analyze and respond to student thinking, Teaching and Teacher Education, vol. 45, 2015, pp. 83-93.

[16] E. B. Perlman, Using visual reflective diaries of school buildings as a tool for empowering students in teacher training, International Journal of Qualitative Methods 15(1) (2016) 1-15.

[17] M. Clara, What is reflection? Looking for clarity in an ambiguous notion, Journal of Teacher Education 66(3) (2015) 261-271.

[18] R. D. Rudd, Defining Critical Thinking. Techniques 82(7) (2007) 46-49.

[19] S. J. Hamilton, Development in reflective thinking. 2005, Online source at http://www.reap.ac.uk/reap07/portals/2/csl/trydy%20banta

[20] S. C. Choy, T. Leong, J. Yim, Reflective thinking among preservice teachers: A Malaysian perspective, Issues in Educational Research 27 (2), (2017) 234-251.

[21] D. S. Sedhu, S. C. Choy, Perceptions of stress among female teachers enrolled in postgraduate programmes in a Malaysian university, TARC International Conference on Learning and Teaching, 2016, pp. 1-4.

[22] R. Sezer, Integration of critical thinking skills into elementary school Teacher Education Courses in Mathematics, Education 128(3) (2008) 349-362.

[23] R. A. Peters, Anchored learning and the development of creative, critical thinking, and lifelong learning skills, Teaching Public Administration 33(3) (2015) 221-240.