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This study concerns how teachers use students' reflections to improve their teaching strategies. The purpose of this study was to explore the role of students' reflections in the learning process, and how the teachers use those reflections to improve teaching strategies. This research used a qualitative approach, and was a case study which involved 17 students from grade nine and two teachers in two different lessons in Sukma Bangsa School. The study was conducted from September 1st, 2016 to October 15th, 2016. The instruments used in this research included students' journals, classroom observations, semi-structured student interviews and semi-structured teacher interviews. Students' journals, teacher interviews and student interviews were used to answer the first research question, while classroom observations and teacher interviews were used to answer the latter. In addition, the data was analyzed using narrative analysis.

The results of the study indicated that the role of students' journals in learning was to know students' points of view and to explore students' needs. The students' points of view included students' feelings, students' difficulties, students' understanding, and students' activities. In addition to students' needs, the students gave some suggestions to the teacher related to the subject, teaching method, facilities, and teachers' attitudes. Equally important, it was found that the ways the teachers improved were by changing their teaching methods and changing their attitudes. Therefore, it was considered that the teachers were able to develop their pedagogical competence and maintain the classroom management relationship. The barrier to teachers' improvement was also discussed. Additionally, the students perceived that how the teacher taught was not really important for them. They remarked that a good relationship with the teacher is more important than a good teaching strategy.

Keywords: *learning journal, students' reflections, teaching strategies, teacher's improvement, pedagogical competence, improving teaching, students' needs.*

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1.INTRODUCTION

1.1 Background of Study

Teachers usually teach and evaluate students' achievements as part of their works. However, they rarely assess the teaching and learning process in their classroom. It is because the teachers assume that the way they teach has met students' needs. In addition, teachers tend to measure the fruitfulness of learning activities by looking at the achievement of students because they consider that the achievement of students reflects their quality of teaching (Jalal et al. 2009). In this case, teachers focus on result-oriented rather than process-oriented approach. Nevertheless, when the students acquire a low achievement in learning, the teacher tends to judge that the students have low ability in learning. They do not consider that the way they teach also give impact to students' achievement. Consequently, teachers need to assess their own teaching continually. One of the reasons is the need for improvement in teaching in their pedagogical competence. One of the ways to assessment what the teachers can do is doing reflection. Richards (1990) stated that the reflection can be retrieved from peer observations, a written account of experiences, self-report, autobiographies, teacher's journal, collaborative diary and video recording.

Basically, in our school, teachers reflect on what they have done and also what students have done in the class as an effort to know what the students know. For instance, teachers do their reflection in an online integrated school information system called SISTO. In this program, teachers are asked to write their reflections of their learning process. In one example of the reflections that I acquired from SISTO it read "students were divided into some groups and then students defined the generic structure of some texts that was given". The example shows that the teacher only reflected on how the learning process happened, what students were doing, and what she was doing in the class. Yet, it is expected that teachers are able to see why the process happens in such a way, how learners feel, why some students do not pay attention in class, and what emotion students are going through during the learning activities. Shuck, et al. (2007) claimed that emotions can have positive effects on learning as well as can block the learning process.

One researcher claimed that most teachers also reflect by confirming to their colleagues about students' misbehavior in the class, and then they will jump to a conclusion that the students misbehave in the class (Ahire 2002). They do not attempt to explore further why the students behave in those ways. As a result, the teachers keep judging that the student was a miserable student in the classroom and the student did not have an opportunity to explain why they misbehaved. This misunderstanding will be continued without any solution. Moreover, based on my experience, when students have a problem and do not feel satisfied in learning activities with one teacher, the students tend to tell their dissatisfaction to another teacher. They expect that the problem will be solved by telling the problem to a teacher. However, it will not solve the problem because the feedback will remain only with that teacher. Meanwhile, the targeted teacher will change nothing because she does not get any feedback neither from the teacher nor the students.

Related to these issues, the problem also appears when some students do not feel satisfied in learning because they could not express their thoughts to the teacher. When this situation happens, the students would only accept everything that the teacher did and the teacher would also think that they made their students agreeable in the class because there was no feedback from the students. In this case, the students should have an opportunity to give feedback about the learning process to the teacher, which can be used by the teacher to improve her teaching. Moreover, when the teacher evaluates students' achievement and students are failing in the learning process, the teacher tends to conclude that the students have low achievement in learning, and yet the teacher should consider that she might have a contribution to student failure as well. Thus, the teacher needs to know how the students perceived the learning activities. Therefore, the teacher may consider that there is something that she is supposed to change in her teaching.

Furthermore, I believe, as a teacher, that we need to improve our teaching that meets students' needs (Levy 2008) because we cannot assume that what we did in teaching can always be accepted by all students. One of ways to meet the students' needs is by asking students' reflections on the learning process. Henceforth, in order to better meet students' needs, I conducted a study that allows students to reflect about the learning processes in the learning journals. Thus, teachers could notice the reflections from the students to see how the students perceive the learning process. This study was conducted to help the teachers improve teaching strategies by using students' reflections. Moreover, I explored how students reflect on the learning process by using learning journals. In addition, by analyzing students'

learning journals, it is expected that the teachers are able to see not only what students understand during learning activities but also what the strengths and weaknesses the learning process has. Additionally, the teachers can also reflect and acquire information about how learners feel toward learning, what content students do not understand, and what the students expect the teachers to do in the learning process.

As a result, I have an opportunity to explore how the teachers can exploit the data for their own assessment in the teaching process and what the teacher could do after knowing students' reflections in order to improve their teaching strategies (Moon 2006). Likewise, if the teachers can improve their teaching strategies that meet students' need, it is considered that they are able to develop their pedagogical competence in teaching.

1.2 Purpose of Study

In order to begin this study, I have to define the purpose of the study that leads this research to be more specific. My issue is about how teachers improve their teaching strategies by using students' journal in the learning process. Moreover, the aim of this study is to explore how students reflect about the learning process and how teachers improve their teaching strategies by considering students' reflections on the learning process.

1.3 Research Questions

In order to focus on my study, I have two research questions that I would answer in my study

- 1. What are the roles of student's reflections in a learning process?
- 2. How does a teacher use those reflections to improve teaching strategies?

2. FROM STUDENTS' REFLECTIONS TOWARD BETTER TEACHING STRATEGIES

2.1 Teacher Competence and Pedagogical Competence

Borich (1977), as cited in Oliver, 1990 defined teacher competence as a complex phenomenon which includes behavior and knowledge. Borich further divided competence into three categories which are knowledge competence, performance competence and consequence competence. Knowledge competence is related to the cognitive understanding that a teacher has to master. In other words, a teacher has to master the content that they want to teach. It is impossible to be a competent teacher without a good cognitive understanding. Moreover, performance competence is associated with the behavior that the teacher applies day by day. The teacher should be able to teach in an appropriate way in order to enhance students' understanding. Meanwhile, consequence competence is defined as the outcome of students' learning. It is clear that the teacher needs to consider students' achievement after the learning process.

Teacher competence must be associated with professional virtue and self-improvement. Being a professional is not just meeting the technical criteria and achieving a high level of competence. But it is also recognized by teachers' care for the students, their passion for the subject knowledge, and their encouragement of students. Teacher competence will not be meaningful unless the fundamentals of belief, attitude and values that the teachers have are affirmed. It is important because they have to understand the rights of every student, believe that every student can learn and achieve the goal of learning, respect the diverse background of each student and have commitment to foster the development of every child (ACTEQ 2003).

Pedagogical competence in teaching can be discerned by teaching strategies. Olsson et al. (2010) stated that the first point that should be developed in education is developing the pedagogical competence. Syahruddin (2013) stated that pedagogical competence means the capacity of a teacher to manage from the process to the evaluation level in a learning process. As Apelgren and Giertz (2010, p.30) described:

Pedagogical competence is the ability and will to regularly apply the attitude, the knowledge, and the skills that promotes the learning of the teacher's students in the best way. This shall be in agreement with the goals that apply and within the framework available and presupposes continuous development of the teacher's own competence and instructional design.

Based on the definition that was proposed by Apelgren & Giertz, there are some key concepts that are included in pedagogical competence described below:

1. Attitude

Apelgren and Giertz (2010) argued that teachers who have an attitude will promote best students' learning. The term of attitude means teacher 'awareness toward their role as a teacher and their responsibility toward their students. Furthermore, they will attempt to give a good environment for their students and will consider choosing the content, the teaching method, examination and evaluation to promote students' learning. In this term, they play the best role in enhancing student outcome.

2. Knowledge

Apelgren and Giertz (2010) stated that in pedagogical competence, teachers need knowledge about the subject, how students learn, teaching methods, the teaching process and the aim of the course. Moreover, they can use their knowledge and apply their skill in the teaching process to promote the students' learning. It is also possible for teachers to learn something new to keep improving their knowledge.

3. Ability

Apelgren and Giertz (2010) stated that teachers who have pedagogical competence will have ability to arrange a planning, to organize the teaching process, to structure the material properly and to adapt the way to teach for particular situation and group of students. They have the ability to recognize the students' learning style and can cover it in the teaching process. They are also well-prepared in teaching.

4. Adapting to the situation

Apelgren and Giertz (2010) indicated that teachers need to have ability to adapt with various situations that they confront in the class. They are capable of handling any kind of situation in order to enhance the best outcome in the learning process. They can easily adjust their teaching if something happens in the learning process. They can also change the way they teach if they get suggestion from others

5. Perseverance

In teaching, teacher needs to be perseverance. As affirmed by Apelgren and Giertz (2010) that teachers need to have ability and willingness to in teach in the best way. They show commitment to teach the best way in the long term, even on the same course. They do not reduce their quality of their teaching even though they teach the same course for several times

6. Continuous development

Apelgren and Giertz (2010) stated that pedagogical competence is not static. The teacher who has ability and willingness always works best to develop the new knowledge, learn from new experience and develop his/her professional in one's subject. Pedagogical competence means continually evaluate their professional teaching to promote student's learning. Teachers attempt to improve their knowledge and teaching style continually.

Moreover Oldsjö (2010, p.44) described the criteria to assess pedagogical competence. The criteria as mentioned below:

- 1. An attitude that furthers student learning
- 2. A scientific approach and attitude to the teaching process
- 3. Broad and appropriate subject knowledge
- 4. Knowledge about how students in higher education learn
- 5. Knowledge about educational goals and the organization and the ability to take them into consideration when planning and teaching.
- 6. Awareness of goals and the framework and the ability to take that into consideration in planning and teaching.
- 7. A holistic view
- 8. The ability to combine and apply knowledge on subject content, learning, teaching and the framework, that is, demonstrating teaching skills.
- 9. Striving for continuous improvement.
- 10. Leadership and organizational ability.
- 11. Cooperation with others both within higher education and in the general public.

Additionally, Olsson et al. (2010) saw that pedagogical competence has a larger concept than teaching skill. Pedagogical competence is a main factor for pedagogical development and quality of teaching in higher education. The teacher who devotes all his attention and desire in teaching will get the beneficent on his teaching career (Apelgren & Giertz,2010). Furthermore Ryegård, (2008), as cited in Olsson et al. 2010, claimed that a qualified teacher will create a good environment for their student

development through planning, performing and evaluating his teaching. Moreover, pedagogical competence can be found in a specific term such as relationship competence or classroom management. (Suciu and Mata 2011). By concerning all of those definition and key concepts that include in pedagogical competence, I want to explore how teachers can develop their pedagogical competence in teaching by using students' reflections.

2.2 Teaching Strategies

2.1.1 The Definition of Teaching Strategies

When teachers teach, they plan and prepare their lesson as the whole process in teaching. On the other word, they have to master the content and the strategies that they will use in order to obtain a good learning outcome. The teachers also need to consider what kind of teaching strategies that they can apply in order to make their students have better understanding. Smilansky (1968,1990), as cited in Perry 2001, described teaching strategy is a way to play with children. The teachers can teach the content of subject in a particular way in order to enhance students' understanding. Moreover, teaching strategy can be defined as a large range of processes how the classroom is arranged and the teachers use resources to facilitate the students in the learning process (OECD 2010). Ultimately, teaching strategies are a whole preparation for teaching which includes teaching method and all of supportive requirements in order to achieve learning objective.

2.1.2 Types of Teaching Strategies

In terms of teaching strategies, there are some types of strategies in teaching that are common for teachers to be done in the learning process. It can be divided into teacher-oriented or student-oriented teaching.

a. Expository strategy

Expository strategy is known as a traditional way in teaching. This strategy emphasizes the role of teacher as the main source of information in the classroom. Ausubel is one of theorist who supports this strategy. He sees that teachers have to provide all of the learning material in final form and present to

students so that students can make connection between what they learn and what they have known (Joyce et al. 2009 as cited in Hannay 2015). Likewise, teachers who use this teaching strategy will take more action rather than students. Usually, they used traditional ways such as do lecturing, provide the note and video, do the presentation with a power point, solve the example of a problem and so on. They also decide the topic in the learning, they explain the subject using their knowledge, and students may accept the information from the teacher's lecture. In this strategy, students seem to be more passive (Martin 2003; Jong et al.1998). Using expository learning can give students overall pictures of the knowledge.

b. Cooperative learning

Cooperative learning provides the chance for students to learn together in group, improve students' communication, and enhance the successful in society. According to Vygotsky "new knowledge and idea develop in a context of discussion and they appear first out there in the extra mental plane" (World Education 2009). Based on the theory, cooperative learning is really recommended applied because students can engage more in learning. Equally, students who have higher achievement can help students who are slower in learning, they can also motivate each other in groups when they have chance to compete with other groups (World Education 2009). Moreover, Watson (1928) as cited in Gillie and Ashman (2003), stated that working in a group is more efficient than working individually in achieving the goal of learning. Students can work collaboratively instead of competitively. In addition, Deutsch (1949a as cited in Gillie and Ashman 2003) argued that working in groups also makes students perceive themselves psychologically interdependent, hence they will provide help, support each other, and give the chance to comtribute. In brief, cooperative students can develop students' understanding as well as student communication in society.

c. Inquiry

Martin and Hansen (2002) defined inquiry as a work of scientists when they study about the nature, propose explanation and give evidence about it. It also includes the sequence of activities where students are questioning, planning explanation, and reviewing what have been known in the experimental theory. In light of teaching, inquiry requires students to be active and critical learning (Chiappetta 1997). Student achievement division (2013) stated that inquiry make students engage in a knowledge building. In this strategy, the role of teachers is as a provocateur where they can give

triggers for students to build their curiosity in learning. Moreover, they have to find a creative way to introduce the idea. Martin and Hansen (2002, p.35) further defined types of inquiry in four ways such as open/full inquiry, guided inquiry, coupled inquiry and structured inquiry. Open inquiry is perceived as student-centered. Students are questioning, planning, investigating and reporting the result by themselves. In guided inquiry, students are helped by a teacher to define questions for investigation. Meanwhile, coupled inquiry is a combination between open inquiry and guided inquiry. In addition, structured inquiry is a directed inquiry where students follow all of the direction from the teacher. Ultimately, inquiry strategy really needs the critical thinking of students.

d. Contextual Teaching learning

Berns and Erickson (2001) defined contextual teaching learning (CTL) as a strategy where teachers correlate the subject content to the real life and they can motivate students to associate their knowledge and its application to their life context. In CTL, students can see how their knowledge and skill in learning have a connection to their life. Furthermore, they take responsible to their own learning. It also leads students to have better understanding. Sears (2003) claimed the purpose of CTL is to help students to become self-regulated learners. In addition, she stated that CTL can hold the proposition that learning can take place everywhere learning. Vygotsky's theory is the proponent to this type of learning in which it proposes the gap between the existing knowledge and what is being learned. In summary, CTL can help students to learn something that can be related to their life

e. Problem based learning

Problem based learning is the learning which the result from working is to understand the problem. In the step of learning, the problem first is confronted at the beginning of the learning process (Barrows and Tamblyn 1980). Moreover, the problem is given after teachers explain some principle and fact. It can be an example of the knowledge or the exercise to apply that knowledge. In addition, Problem based learning suits for student-oriented, but it can also be used in teacher-oriented in which the teacher provides the problem as well as the source for the subject that relevant to the problem. In this case, students can develop their skill to solve the problem, yet they do not have challenge to learn by themselves (Barrows and Tamblyn 1980). In short, problem based learning can be used to develop students' skills in encountering problems.

2.1.3 Factors Influencing Teaching Strategies

There are some factors that influence the implementation of teaching strategies included factors related to teacher, students, environment and the lesson (Balachandran 2015). Those factors will be explained below:

1. Factors relating to teachers

A teacher has an important role in the learning process. The quality of learning can be determined by the quality of teachers in teaching. Norman (1981) stated we should notice that the quality of teachers is essential. They will determine the success of an educational system in the learning process. Balachandran (2015) argued that some factors related to the teacher capability that teachers should have in teaching included the knowledge to use the resources for teaching. In addition, the teachers must have the ability to manage a classroom.

Moreover, the teachers are expected to notice students' learning style. By noticing the learning style of their students, the teachers can easily adjust the way they teach to meet students' needs. Furthermore, their ability to incorporate perceptual style becomes the factor that influences teaching strategies. When the teachers perceive that they have preference to apply a certain strategy, they will be confidence in applying the strategy. Likewise, the teachers are able to manage time in the effort to teach in a certain strategy. The last are teaching experiences as a teacher and the teacher's own experiences in learning. All of those factors are considered as factors that influence teaching strategies.

2. Factors relating to students

In applying teaching strategies, teachers have to deliberate some factors that relate to students. The first factor is class composition. The teachers have to consider the variety of gender and students' ability since one strategy does not fit all students. The second factor is grade level. The certain strategy that works well in a certain grade will not always work well in another grade. The third is the benefit that students acquire for a certain instruction. The fourth factor is students' engagement in the learning, teachers will consider choosing the strategy that allows students to be more engaged in learning and last factor is students' behaviors. By implementing a teaching strategy, teachers expect that they can control students' behaviors appropriately (Balachandran 2015).

3. Factors relating to the lesson

Fostering students' real life experiences is one of factor considered by teachers to choice a teaching strategy. They tend to teach contextual teaching that can give the connection between the real life and the lesson. Moreover, the other factor is the unit of study that a teacher will teach. Likewise, the teachers can use different teaching style for the different subjects (Balachandran 2015).

4. Factors relating to the environment

The last factor that relates to the environment is resources of learning, which support the learning process. The resources are included books, facilities, places, tools and media that are needed in the learning process. In addition to the environment, the associate teacher is also needed to help candidate teachers to decide the changing of their teaching style (Balachandran 2015).

2.1.4 Improving Teaching Strategies As An Implication of Assessment

Walvoord (2004) defined assessment as a systematic collecting data about students' learning which is using time knowledge, expertise and many resources to improve students' learning. Assessment in education is important because it could improve teaching strategies and the learning outcome. As Wiliam (2013) stated assessment is the bridge between teaching and learning. The teachers need to use assessment in teaching because the teachers do not appropriately know what students have learned from the material that the teachers teach though the teachers carefully design and implement the instruction. In light of assessment, there is another term called classroom assessment. In this term, the teachers attempt to discover what students are learning and how well they are learning it (Angelo and Cross 1993).

Additionally, when the teachers plan to use various teaching strategies, they should consider preparing strategies which cover all of student needs and learning style (Carbo, Dunn & Dunn 1986 as cited in Cole 2008) because a different learning style needs more various teaching strategies (Herrman 2008). Moreover, the teachers who really care students' needs will attempt to assess their students' learning styles and have good desire in teaching. Thus, they will acquire a great success with a teaching strategy (Herrman 2008). They will also use some strategies to acquire students' attention in the learning activities. It could be possible for them to use several methods in order to achieve learning

objectives. The attention from students can be retrieved by increasing level of enjoyment in the learning process (Herrman 2008).

Basically, improving teaching strategies have been studied in some ways such as reflective practice in which teachers do self-reflection toward their teaching using reflective questions, video taped lessons and reflective journals (Hale 2010). The other ways to improve teaching are peer teaching and evaluation by their colleagues (Cruickshank and Applegate 1981). Richards (1995) also conducted the research by doing observation and reflection on one's teaching. In this study, I will attempt to propose a way to improve teaching strategies by assessing students' reflections about how they perceive the experience during the learning process. Furthermore, the teachers can see students' opinions and perceptions that can give different perceptive about the learning process (Ahire 2002) and then they can consider which part of teaching that they can change in the next meeting.

2.1.5 Improving Classroom Management Relationships

The main factor to build classroom management relationships is fostering a good teacher-students relationship (Marzano & Marzano 2003). Teachers in middle school who give the warmth emotion and have personal communication with students will help students to maintain their interest in academic and social pursuit, which later can lead them to acquire a good grade and more positive relationship with peers (Hamre and Pianta 2006). Teacher-student relationship as perceived by social support gives positive impact to students' adjustments in school (Cohen & Wills 1985). The students can easily enjoy spending their time in the school.

Equally important, students' perceptions of the teacher connection are the most important factor to support children to grow in their achievement. This perception has been perceived from grade 8th to grade 12th (Gregory & Weinstein 2004). Moreover, Lynch & Cicchetti (1997) claimed that the relationship between the teacher and students is changing from elementary to junior high. Students perceive their relationships with peers are better than the relationship with the teacher. Likewise, the relationship between with the teacher and students in higher school become less personal and more formal.

Brophy (1985), as cited in Hamre and Pianta 2006, argued that teachers perceive themselves as educators and socializers which influence the way the teachers interact with the students. The educators have a tendency to give the bad response to the students who are underachiever, less motivation and

disruptive in the learning process. Meanwhile, the socializers will give the negative response to the student whom they see as a hostile student, aggressive and interpersonally unconnected. In addition, teachers' beliefs also affect how they interact with the students.

On the other hand, Roeser et al. (1998) stated that students perceive the support from the teacher related to the competence, the autonomy and the relationship between teacher and students has influence their motivation, achievement and emotional function. Furthermore, the students in middle school were asked to give their opinion about characteristic of the teacher who cares. The students claimed that a caring teacher is the teacher who is democratic and equal to support students in participation and input, the teacher also expects students' behaviors and performances based on individual differences and abilities. Likewise, the teacher also has a caring attitude and interest in the teaching. Moreover, the teacher gives students a positive feedback instead of a harsh or critical feedback (Wentzel 1998). Students also emphasize that they will be more enjoyed in learning if the teacher can tell a joke during the learning process (Zhou et al. 2015).

The other supportive teacher that was described by students in a high achieving is the teachers who challenge the students, push the students to participate, and express the goal of the learning similar to the students. On the other hand, students who are at the low level expect their teacher to be fair, give them a good treatment, explain the matter clearly and have a good control in the classroom (Daniels & Arapostathis 2005 as cited in Wentzel 2009).

An effective classroom teacher has awareness to meet students' needs. Five high of students' needs and the suggestion for classroom strategies were described by Marzano and Marzano (2003). First, passive students which is parted into two categories as fear relationship and fear failure, the teacher can approach them and avoid giving a critic, but the teacher attempts to give a reward for the students' little success. Second, aggressive students fall into three categories like hostile, oppositional and covert students. In this case, the teacher can make an immediate reward and a consequence contract. The teacher can also give the responsibilities to help other students.

Third, students with the attention problem are divided into two categories, for example, hyperactive and inattentive students. The teacher can help them to manage their behavior, help them in the step of tasks, give a reward and ask them to do peer tutoring. Fourth, perfectionist students whom the teacher can help them to accept their mistakes and have them to tutor their friend. Fifth, socially inept students can be helped by counseling about social behavior. In this study, by letting the students

write freely in the learning journal, the teacher can learn about students' perceptions about learning activities during the class time. In this condition, the main purpose of journals is to improve classroom management relationships.

2.2 Learning Journals and Students' Reflections

Moon (2006) claimed that there are many words that can be used to describe a learning journal, such as a diary, a log or a learning log. It can be used to reflect on an event and show what a person learned from the event. Dowrick (2007, p.4) argued that "A journal consists of observations, insights, memories, impressions and feelings. It may also include plans and analysis". From the previous research, we can assume that a learning journal has various purposes. Bolton (2010) further defined that the journal is a reflection that can be unstructured, and it can be freely written based on one's thoughts. In brief, the learning journal is a tool that can be used for reflection.

Reflection itself has been introduced by Dewey (1933), who stated that reflection is a consequence term of thought which has the sum that can be used in the next term. Moreover, Brockbank and McGill (2007) stated that reflection is a thought, feeling and action considering one's experience. In another explanation Bolton (2010, p.13) claimed that:

Reflection is learning and developing through examining what we think happened on any occasion and how we think others perceived the event and us, opening our practice to scrutiny by others, and studying data and texts from the wider sphere. Reflection is an in-depth consideration of events or situations outside of oneself: solitarily, or with critical support. The reflector attempts to work out what happened, what they thought or felt about it, why, who was involved and when, and what these others might have experienced and thought and felt about it.

Thus, according to Bolton, students can use learning journals to reflect on their impression reflections on activities in the class, their role in the class, and what they learned in the class. It, therefore, allows the students to express their reaction to an experience which is not available in traditional teaching methods. In addition to this purpose of journals, those can be used to reflect both how students learn and what they are learning and it also can record student experience and academic growth (O'Connell and Dyment 2013). In summary, the learning journal is a reflection tool for acquiring the information about what students experienced in the class, what students felt, and what the students acquired during the learning process.

By using learning journals, students attempt to recall and write reflection on what they were doing in the class. It will allow them to learn from their experience (Bolton 2010). In addition, Moon (2004) described that reflection is associated with deep understanding. In acquiring deep learning, the learners develop their understanding by relating the learning material to their previous knowledge. In writing a journal, a learner is given a freedom to write down his/her thoughts which can support them to understand the material that could be something new or reorder what students already knew.

Moreover, the benefit of reading learning journal entries to teachers is that it gives the teachers more sources of information related to student's comprehension and understanding about the material that the students received in daily learning activities. Additionally, students' learning journals often give information about students' misperceptions about a topic that they learn. Furthermore, it also lets teachers know student's feelings during the learning process. As teachers, we usually face many students in one class. In this situation, it is sometimes difficult for us to know a student's difficulties in learning. The journal lets teachers know the problems of each student. The teacher can consider helping students in understanding a topic and facilitate a more interactive and dialogic learning process in the future. Student journals also provide feedback about teacher performance in future teaching (O'Connell and Dyment 2013). For example:

We've gotten some kudos (in addition to well-deserved critical feedback!) in journals that students are often reluctant to share with us in person, or that they deem inappropriate for formal course evaluations (i.e., comments on how we dress, recent haircut, etc.). Through this feedback, educators can adjust their teaching style and techniques to meet the needs of the student during the course of a class as well as for the future (O'Connell and Dyment 2013, p.32)

Other research that was conducted by Rodderick, 1986; Bean and Zulich, 1989; Richert, 1990; Ferro and Lenz, 1992, as cited in Loughran 1996, illustrated that the value of data from the journals describes students' thinking about the teaching, which the teacher can learn from. Equally important, in learning journals, students are encouraged to write honestly and openly about learning experiences. They can comment about the topic, content, the teacher's teaching style, and the process in learning activities. Since a journal is an ungraded task and confidential (Loughran 1996), the right or wrong point of view is minimized. Moreover, by letting students write freely the learning journals, teachers can learn about students' perceptions of learning activities during the class time. In this case, the main purpose of the journals is to maintain the relationship between students and the teacher (Moon 2006).

Correspondingly, learning journals have been used in many studies for various purposes. Most of which examined the kind of usage of the learning journals. For example, the study that was conducted by Park (2003) found that students can engage in the learning process by looking at their learning journals. When the students engage in the learning process they will be prone to understand more, enjoy more and remember all of the material given during the course. O'Connell and Smith (2015) also explored the creativity in using the learning journals. In this study, the researcher wanted to know how creative students are in creating learning journals. The result showed that only a few students have a high level of creativity in creating learning journals. Therefore, the study showed that learning journals are not really appropriated for measuring creativity.

In addition, Al-Balushi and Al-Rawahi (2015) measured self-regulated learning of two groups of students in their quantitative research. The result showed that students who use learning journals have better self-regulation. It means that a learning journal can be effective as a tool for measuring self-regulation in learning. Likewise, Cisero (2006) studied that learning journals can be used to improve the course performance. The study concluded that students who gave good effort doing their assignment and writing learning journals could get benefit in the form of ability to reach higher score and perform well academically. This study proved that learning journal can help students to improve their performance.

There is another study related to the usage of the learning journal, which was conducted by Everett (2013), exploring the learning outcome and benefit from the student experience using the reflective learning journal during the first year. The study concludes that journaling in the first-year seminar can be used to improve the quality of undergraduate experience and success as well as to support the institutional goal. Based on all of those various studies of using learning journals, I consider exploring the usage of the learning journal as well. Most previous studies about learning journals tend to use the content of the learning journal to measure students' ability. However, in my research, I use the learning journals to acquire students' perceptions as a consideration in improving teaching strategies because students can reflect toward their learning in the learning journal, and the students can openly comment on everything that happened in the learning process, thus the teachers can notice the students' needs in the learning process and use those reflections to improve their teaching strategies.

In summary, this chapter provides the information about learning journal and students' reflections. Moreover, it also included pedagogical competence that teachers have if the teachers

improve their teaching. Likewise, my first assumption is that journals can be applied in collecting data on how teacher's teaching strategies work. Second, improving teaching strategy can be done by developing pedagogical competence and classroom management relationships.

3. METHODOLOGY

3.1 Research Design

To determine the method used in this study, I used ontological and epistemological assumptions. The ontological assumption concerned the nature of reality and how it relates to social life. In my study, the ontological assumption is relativism because the truth in this study might be multiple (Killam 2013). Meanwhile, the epistemology assumption concerned how we attain knowledge and how we communicate it with others. In this study, I used subjectivism because reality is individually constructed, and it can be various for different people (Scotland 2012). This research was designed to understand the roles of students' reflections in the learning process and to explore the way the teacher used those reflections to improve teaching strategies.

Considering both the epistemology and the ontology assumptions, a qualitative approach was more appropriate for this study. Wallen and Fraenkel (2001) claimed that in qualitative research, the researchers attempt to understand "the experiences of people in context", and they are also interested to explore and describe the phenomena where people are involved in them. Likewise, the data for qualitative study are derived from the world and actions of people. In addition, the type of study was a case study, which can be defined as a specific method in field research which investigates the phenomena as they occur without any significant intervention from the researcher (Fidel 1984). In this study, I chose two subjects with two different teachers to explore how each teacher could use the learning journal to improve teaching strategies. The subjects were Physics and English. Furthermore, I did observations while the lesson took place, gave the learning journals to students at the end of the learning process, and interviewed the teachers as well as the students.

3.2 Data Gathering

This study was conducted in the Junior High of Sukma Bangsa Pidie School from September 1st,2016 to October 15th, 2016. The participants in this study were one class which included 17 students at grade nine and two teachers. One teacher teaches Physics and the other teaches English. For Physics class, the data were collected twice a week in 80 minutes for each meeting. Meanwhile, in English lesson, I entered the class twice a week, but the duration of time was different. One was 40 minutes, and the

other was 120 minutes. It was based on the school's schedule provided by the principal. The instruments which were used in this study included learning journals filled by students, classroom observation, student interviews and teacher interviews.

I used the learning journals to acquire information from students about their reflections toward learning activities. The learning journal included five questions that students supposed to answer. The questions were: "How do you feel during learning activities? why?". This was asked to explore the students' feelings during the learning process. The second and third questions were "What have you learnt in the class?" and "what is the content that you do not understand yet? why?" These questions were aimed to explore what topic they learned on that day, and which part of the topic that they did not understand ye that might be possible for the teacher to help them.

The fourth question was "What do you do during learning activities?". This question was aimed to explore students thought whether they were actively participating in the learning. The last question was "Any suggestion that you want to tell the teacher?" In this question, the students were freely asked to express their thoughts about everything that they wanted the teacher to do in the future.

The interviews for the teachers and the students were done in four cycles. The teacher interviews were conducted in semi structured-interviews in four themes. The themes were included to explore how the teachers prepared for the class, what they did in their teaching, how they perceived students' reflections, and what they were planning to improve the next meeting by considering students' suggestions from the learning journals. In like manner, the student interviews were done in semi-structured interviews. The student participants for the interviews depended on the learning journals that students wrote. The aim of student interviews was to confirm the information that had been written in the journals. Some students tended to write learning journals in the short explanation. Thus, I needed to ask more about what they intended to tell. Furthermore, all the interviews were recorded by asking the permission from the participants.

Meanwhile, the classroom observations were done for five times for each subject, Physics and English, during the learning process. I used a field note for the observation form. The observations were done to observe students participation and teacher activities, and those observation were compared with what the students wrote in the learning journals. In addition, the aim of doing observations was to observe whether the teachers really taught in the way they planned to do as they told in the previous interview. I also wanted to see whether the teachers improved their teaching based on students' suggestions from the previous learning journals.

Moreover, the data from the learning journals were encoded into categories such as students' feeling, students' understanding and difficulties, students' activities and students' needs. Observation data supported the finding in which I could see the activities of students and teachers as well as further improvement that the teachers did based on the suggestion from the students. Moreover, the data from student interviews were obtained to support the data from the learning journal when the data from the learning journal was unclearly written by the students. In addition, the data from teacher interviews were obtained to see how the teachers saw students' reflections as a consideration in improving their teaching strategies. All of those data were collected in four meetings except observation data. Observations were perpetrated in five times.

In short, the summary of data collection will be displayed in the table below.

Table 1. Summary of data collection

Research question	Data collection	
1. What is the role of student's reflections in the	1. students' journals	
learning process?	2. student interviews	
2. How does the teacher use those reflections to	1. classroom observation	
improve teaching strategies and student-	2. teacher interviews	
teacher relationship?		

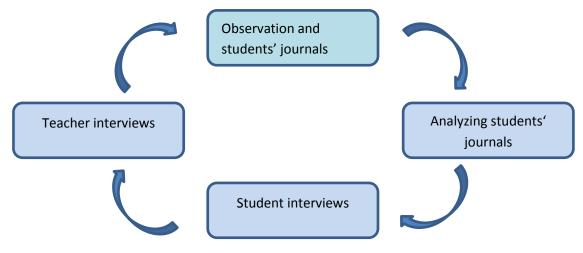
3.3 Data Analysis

This research was begun by doing trial at another grade nine class. I did observation when the learning happened and gave learning journals in the last five minutes of the learning process. Afterwards, I analyzed the data from the learning journals and gave those learning journals to the teacher to be read. Afterwards, I interviewed the teacher to ensure what the teacher would change in the next learning process. When doing piloting, I only acquired a little information from the students. Hence, I decided to interview some students to dig more information in the real research.

In the real research, the learning journals were given to the students in five minutes before the teachers ended the class. After the students fulfilled learning journals, they gave those journals back to me and later I attempted to analyze the content and determine which students that I should interview to

dig more information. After reading the learning journals, I interviewed some students. Furthermore, I met the teachers to show the result of the learning journals. All of the learning journals were read by the teachers and then I interviewed the teachers to acquire the information about how the teachers perceived their teaching, what they think about students' reflections, and what they planned to improve their teaching based on the students' reflections. Furthermore, I used the information from the interviews as the basic to do the observation in the next meeting. After interviewing the teacher, I continued to do the observation to see if the teachers really improved their teaching strategies. I did these activities continually in five meetings to see the improvement in the teaching.

Additionally, I used narrative analysis in analyzing the data. Smith (2000) stated that narrative analysis is concerned with personal experiences. In this case, I analyzed students and teacher experiences. I began analyzing the data from transcribing. I transcribed the data from students' journals and the recorder from the interviews. Afterwards, I continued to encode and categorize the data into the themes. Furthermore, I interpreted the data for further analysis which related to the theories. In conclusion, the cycles of collecting data were displayed in the picture below. The cycles were repetitive for four times which was initiated from the observation and fulfilling students' journals.



Picture 1. Cycle of collecting data

3.4 Ethical Consideration

In doing this study, I considered some ethical considerations. The first was about the permission letter to do the research in the school. I asked a permission letter from the district of the education office and then I gave the letter to the school to acquire the permission from the school. Afterwards, I asked two teachers and students to be the participants in this study by giving inform consent both for the students and the teachers. While doing the research, the name of the students in the learning journals was still written to recognize them to be interviewed. However, in analyzing the real data, all of participants' names were encoded. The name of participants is encoded as student1, student2 and so on, which is based on attendees list. In the light of ethic, the right of participants to participate in this study is really respected. Moreover, the data were written by considering no plagiarism.

4.RESULTS

4.1 Findings and Discussion

This chapter described about the data analysis of the research. The finding would be discussed in the light of the theoretical framework and the previous studies. The findings were considered answering two research questions. The first question was about what the role of students' reflections in the learning process were and the second question was about how the teacher used those reflections to improve teaching strategies. The data were derived from the learning journals, observations, teacher interviews and student interviews. To answer the first research question, I used the data from the learning journals and student interviews. Meanwhile, to answer the latter, I used the data from the observations and the teacher interviews. The data analyses were described into three main themes: 1) understanding students' points of view 2) exploring students' needs and 3) the commitment to improve teaching strategies.

The first and second themes were described in order to answer the first research question, and the third theme was aimed to answer the second research question. In addition, the analyses of the first theme revealed about students' feeling during the learning process, student's understanding and difficulties in the topic that students learned, and students' participation in learning. Meanwhile, the analysis of second theme described about students' need in learning. The last theme was described about the way the teacher improved to meet students' needs. Additionally, the analysis of teacher's barriers to improvement was also discussed. The data below were encoded for each meeting as entry 1 to entry 4 for English class and entry 1a to 4a for Physics class. The name of participants was also encoded as P1 to P17.

4.1.1 Understanding students' points of view

Students' Feelings

The students' learning journals gave the teachers information about how students felt during the learning process (O'Connell and Dyment 2013). The feeling appeared as a cause of the learning process. This finding also confirms the idea of Brockbank and McGill (2007) who stated that the

journal consists of feeling, thought and action based on one' experiences. By noticing students' feelings, the teachers could decide whether or not the strategy that they applied could make students enjoy the learning. If the students told that they had a positive feeling, it might affect their motivation in learning. On the contrary, if the students acquired a negative feeling, the learning process could be restricted (Trigwell et al. 2012). For this reason, the teachers could consider using the same strategy in the future if the students felt enjoyment in learning. Nevertheless, if the students told that they did not enjoy the learning process, the teacher could consider stopping teaching in that way.

Therefore, the first theme that emerged from the journals was about students' feelings during the learning process. The question was *"how did you feel during the learning process? Why?"*. The answers of students were various with the different reasons. Most of the students' feelings were happy and nothing special. The reasons why most students felt happy were different. Learning in group was one of the reasons that made them happy. One student emphasized that she could help her friend when she worked in a group. She could get a good understanding after explaining the content to the others (World Education 2009) and it made her easier to remember the content. Working together really helps the student to acquire a good understanding:

If I learn in group, I can help another, I get a good understanding after explaining it to someone, and it makes me easy to retain the content, moreover I can work together with my friends, and we respect each other (s1, interview 1)

This finding suggested that group working helps students to acquire a good understanding because when the students were able to explain the content to others, definitely, they had already understood the content. Likewise, in Physics class, the students also reflected that they were happy because they could do experiments in the laboratory. They emphasized that they could understand well if they practiced by themselves:

I feel happy because I think I can understand faster if I do an experiment (s2, entry 1a)

The students realized that learning by doing make them easy to understand the content because it made them more engaged in knowledge buildings (Mansen and Hansen 2013). Another reason that most students wrote in their journals was that they could easily understand the content:

I am happy because the content is easy to understand (s5, entry 3a)

When the students could understand the content, they would be happy in learning because they felt their learning was meaningful. Moreover, the important of English as a global language also became a reason for the students to learn. Hence, they have to be able to master English because they saw themselves as part of a world population:

I feel happy because English is fun and it is also a global language, so it is important to master it (interview 1, s13)

I am really happy because English is an important language, it is a world language, because I am as a part of this world, so I have to be able to speak English (s4, entry 4)

The students perceived the subject was important for them. Thus, they would have a good motivation to learn and to understand the subject. When they had their own motivation to learn, the student would enjoy the learning process regardless what strategy the teacher applied. Similarly, the other students felt happy because they really loved learning English. Therefore, they always enjoy when they learn English. One of them has his own motivation to learn English, he wanted to study abroad:

I really love English, [...] cause it is so fun to study English every time, and I never get bored (s4, entry3)

I am happy because I love English "(s16, entry4)[...] when I was a child I had a dream to study abroad especially in Europe and England (interview s16, entry4)

Furthermore, two other students admitted that they like Physics subject. One perceived that she had changed her perception about Physics. Where formerly, she thought that Physics subject was a horrible lesson but now she is interested in learning Physics. The other student thought that he liked Physics subject because he liked any lesson which has calculation and he also has his own motivation to learn Physics:

I am happy because I like Physics, I do not know why, but I just realize that Physics is not really horrible. Now, I really like Physics (s4, entry 2a)

I am happy because I like the lesson having formula (s13, entry 4a), I want to perform well in the lesson and I want to make my parent proud (s13, entry 2a)

The reason of students suggested that if they students loved the subject, they would enjoy learning those subjects. They also have their own motivation to do their best on the subject. It suggested that intrinsic motivation also made students happy in learning. When the students have his own motivation to learn a subject, they will be enthusiastic to learn the subject.

In addition, students also felt happy if they learned something new and the content was applicable in their daily life.

I feel happy because I got new knowledge (s3, entry 3) [...] if there is disaster, I can practice the expression in English (interview s3)

Nothing special, because we only review the previous lesson (s9, entry 3a)

The finding suggested that if the student learned something new and the content was applicable in their life, they would have the curiosity and enthusiasm to learn about it. At the same time, there was a student who felt neutral because the teacher only reviewed the previous lesson. It becomes a consideration for the teacher since she has to review the content when there are students who do not understand yet. However, the teacher also has to consider the students who have understood the content. Thus, the students will not be bored if they learn the same topic. Another student enjoyed the learning because they learned in the multimedia:

I feel happy because the content is easy and I learn in multimedia (s5, entry 2a)

Actually, the multimedia room has an air conditioner that made the room was cool and students could lay down while learning. Thus, this room became a favorite place to learn. The findings support the idea of Balachandran (2015) who suggested that the environment is one of factors that should be consideration to improve teaching strategies. In contrast, one student felt sleepy when they learned in the classroom because of the temperature was hot.

I am sleepy because the classroom is so hot (s3, entry 3a)

The students felt comfortable if the condition was warm. It means that the environment also affected students' feeling in learning and it confirms that the surrounding might give a good and bad impact on students' feelings. Uniquely, the students claimed that teacher's behavior became a factor that made them happy.

My feeling in learning is happy though I am somewhat dizzy, but I enjoy the learning because the teacher is so fun [...] (s1, entry 2a)[...]I do not feel bored with this teacher because sometimes we practice experiment, watching movie, taking note, she is also fair and pay attention to the students.(s1,interview 4a)

I am happy because the topic is quite easy, and the learning process is relaxed and so fun" (s2, entry 2a), the teacher explains the content slowly, relaxed, and when we ask a question, she answers it directly (s2, interview 2a)

The teacher teaches with no temper, I am happy (s5, entry 4a)

The student perceived the teacher who taught in Physics subject was fun and relaxed teacher. Therefore, she would enjoy learning though her condition was not really good. In addition, the students liked to learn with the teacher because the teacher paid attention to all students. Meanwhile, the other student also noted that the teacher taught with no temper. The other reasons why students felt happy were because the teacher taught in fun ways and could make a joke (Zhou et al. 2015) and also treated students equally. Making joke is one of ways to improve positive emotion for students (Thayamani et al. 2013). This finding is in agreement with Hamre and Pianta (2006) findings which showed the warmth communication between a teacher and students can maintain students' interests in learning.

On the other hand, the students also felt bored, confused and sleepy during the learning process. The reasons were because they were not able to understand the lesson, they did not like the lesson and they did not like the way the teacher treat them.

Nothing special, somewhat boring and I also feel sad, because I do not like to study with that teacher, studying with that teacher is not fun at all, there is no joke and everyone keeps silence.(s11, entry 1) [...]The teacher is unfair to us, she only pays attention to the clever student. (informal interview1)

I feel sleepy when I learn English because I do not like English, I do not understand at all, maybe if I am given more vocabularies I will like English, no one gives me vocabularies, I feel so sad. (s15, entry 1)

I feel burdened if the teacher only focuses on the content. (s2, interview 1a)

The students emphasized that they felt bored because the teacher was so rigid in teaching, too focused on the content and did not make fun at all. Moreover, they also emphasized that the teacher was quite unfair in teaching which means that the teacher only paid attention to some particular students. The other student explained that he would feel burdened if the teacher was too focused on the content. The finding indicated that teacher's treatment gives impact to the students' feeling during the learning process.

Likewise, there was a student who felt sad because the student could not perform well when the teacher asked the student to come in front of the class. In another meeting, the student perceived that the teacher did not give the student the chance to participate.

I feel sad because I cannot do what the teacher asks, all of my friends can do it well but me (s15, interview 2)

Nothing special, the teacher does not ask me anything, I am so useless and so embarrassed. (s15, entry 3)

The student really felt sorry for herself and she felt embarrassed because she could not perform well. In the other meeting, she also felt sad because the teacher did not give her the opportunity to practice. In addition, in their journals, some students also mentioned about their health condition. One of them did not actively participate because she felt unwell. Moreover, one student who wrote that he did not have spirit to learn at the moment because he was unwell. However, based on my observation, he looked quite active in the learning process.

I do not feel well because I got flu, I only talk with my friends, and it is really horrible because I have to go to the toilet for several times. (s12,entry 1)

I feel nothing special because I cannot see the whiteboard. I do not have my glasses.(s9, entry3)

It suggested that though the student seems quite active, we could not exactly predict what the students felt at the time. Thus, the journals could help the teacher to notice students' conditions. In brief, besides knowing the students' feelings, the teacher could also notice students' well-beings during the learning process. Hence, the teacher might not judge students if they did not really pay attention to the teacher during the learning process. It might be that some of them were not in a good condition during.

In conclusion, the findings suggested that most students would feel happy when they could understand the content easily, could practice the topic and had their own intrinsic motivation to learn (Ryan & Deci 2000). When the students could understand the content easily they acquired the meaningful of learning so that they felt satisfied toward learning. Additionally, when the students could practice something in their learning, the students would feel happy. It was because the student could easily understand the content and build a new knowledge by practicing (Mansen and Hansen 2013). Equally important, if the student had an intrinsic motivation such as love the subject, they would feel happy and more engaged in the learning process. Moreover, the students would feel happy if the teacher taught in fun way and treated them fair in learning.

On the other hand, a few students felt bored if they could not understand the content, the teacher is too focused on content, there was no joke during the learning process, and the teacher treated them in unequal. The learning environment also became a reason that made the students felt bored. Moreover, the students' well-beings were also the motive that made them did not felt well during the learning process. All of those feelings were mentioned as an effect of the learning process. The teachers can reflect the reason what made those feeling appeared. Thus, the teachers could consider what they would do in the next meeting.

Students' Understandings and Difficulties

The second and the third questions were about "*what have you learned in the class*?" and "*what is the content that you do not understand yet*? *why*?". Both of the questions were aimed to know what the content they had learned and which part of the content they did not understand yet. It confirms the previous work of O'Connell and Dyment (2013) who stated the advantage of learning journals is to know students' understanding. In the first meeting, the topic in English subject was about procedure text. Some of the students perceived that they had understood the topic at that time. Most of the answers were the same and those were relevant to their answers when they claimed that they were happy because they have understood the content.

Thank god, I understand the topic for today, maybe because I am happy to learn about it (s4, entry 1)

Most of the students gave praise to the God when they could understand the lesson. It looked like they were so happy and appreciated for what they got from learning. Moreover, some of them wrote that they had understood the topic on that day. However, they still mentioned the previous content that they did not understand yet.

Asking for repetition because I did not pay attention when the learning process takes place (s6, entry 1)

Advertisement, because it is so difficult to make an advertisement (s8, entry 1)

Actually, they learned those contents in the previous time, but they mentioned it in that time. Because they just have a chance to tell the teacher through learning journals. It means that before using the learning journal, the students do not have the courage to tell the teacher what they do not understand in learning. In addition, there were some students who did not understand the content that the teacher taught at the time. Moreover, some students also confessed that they did not like English lesson because of lacking vocabularies.

I do not understand about procedure text (s9, entry 1)

Everything was so confusing (s11, entry 1)

I do not understand all because I do not have a spirit to learn English, I do not pass my exam, I hate English because I do not know many vocabularies.(s15, entry 1)

The content that I do not understand is knowing the meaning of the paragraph because I do not know many vocabularies (s12, entry1)

It seemed that most students have difficulties in English due to lack of vocabularies and it also became a factor that made them did not like this subject. In the second meeting, most students thought that they had already understood the content but one of them thought that he had no good understanding of doing practice.

I do not understand how to give instruction to people, maybe because I am not really good in English (s2, entry 2)

The student did not seem to have the confidence to learn English. In the third meeting, only four students perceived that they had acquired a good understanding, the other saw that they did not really understand about expressing and responding to the bad news. In this meeting, the teacher taught in a conventional way by using direct instruction. The teacher gave various examples of expressing and regretting to the bad news. The students only took notes and listened to the teacher. Moreover, they passively participated in learning (Martin 2003; Jong et al.1998). It, therefore, made students difficult to understand the topic. Moreover, some students had difficulties with the meaning of word. Although they understood the topic, they would have difficulties to understand the new example due to lack of vocabularies.

In the fourth meeting, most of the students wrote that they had understood the topic about expressing and regretting the bad news. In this meeting, the teacher asked students to do a conversation in front of the class. The students practiced the conversation in pairs after they prepared for 10 minutes and only three students did not perform well. However, a few students still emphasized that the main reason why they did not understand was because they did not know many vocabularies. Meanwhile, in the last observation, the teacher applied problem-based learning by giving the students the themes to create a conversation by themselves. During the learning process, I observed that the students actively participated since they had to make a conversation and practice it in front of the class. Problem-based learning can promote students' skills to solve the problem in the learning process (Barrows and Tamblyn 1980).

On the other hand, the first meeting of Physics class took place in the Physics laboratory. The students and the teacher did the experiment about dynamic electricity. Only a few students understood well about the experiment. Most of them claimed that they had not understood the experiment. They could not string the circuit yet.

I have understood the exercise for theory but I do not really understand about practice, I need a deep explanation about experiment (interview S16, entry1a)

The students emphasized that they did not have a good understanding about the experiment because the teacher did not give much explanation about the experiment. In the second meeting, there were six students who had understood the topic. Meanwhile, five students still stated that they did not understand the topics such as coulomb law, Kirchhoff law and ohm law.

Ohm and Kirchhoff I law because it is difficult to understand. In coulomb law, the way to make the solution is so difficult. (s9, entry 2a)

In the third meeting, only six students understood the content. While the rest of students still did not understand the topic since they mentioned the same topic as they mentioned before such as, coulomb law, Kirchhoff law and ohm law. Furthermore, at the fourth meeting, the teacher continued about Kirchhoff and ohm law on series and parallel circuits. After the lesson took place, the students who understood the topic were quite many. At least nine students said that they had understood the topic. However, the others still had difficulties in that topic. In this meeting, the teacher attempted to follow the students' needs by reviewing the content in order to enhance students' understandings (Levy 2008). The teacher also supervised the students one by one while doing exercise to ensure that all the students understood the content. Further observation on the fifth meeting, the teacher still taught about the same topic at the previous meeting and gave more examples many exercises for the students to be done in order to acquire students' understandings.

The finding suggested students' journals gave the teacher the information about students' understandings and students' difficulties in learning (O'Connell and Dyment 2013). When many students tell that they do not understand one topic, the teacher could consider reviewing instead of continuing the content because the teacher could not hope that the students could elicit a good achievement while the students still told that they did not understand the topic yet. Moreover, the students were more aware of their comprehension. Even though the teacher did not measure students' understandings in the formal evaluation, the students could measure their own ability in their learning.

Students' Activities

The fourth question in the learning journals was about "*what do you do during the learning process*?". The answer to this question was quite prevalent. When the teacher taught using group discussion, some students perceived themselves that they paid attention to the teacher, translated the text given by the teacher in the group, read a procedure text, worked in the group, helped friends in the group, talked each other, and asked questions. They wrote their activities in the journals explicitly.

Paying attention, asking questions and helping friends (s3, entry 1)

Helping each other became one of the activities that students saw important because it looked like they were happy when they could help their friends in learning. Besides the activity, one also reflected that she did not really pay attention but she did day dreaming and did something else during the learning process. Moreover, the other student felt sleepy and paid attention to her friend's explanation in the group. In doing reflection, the students realize whether they were active or not.

Paying attention to friend's explanation (s8, entry 1) Paying attention, talking with my friend, day dreaming and scratching my book (s12, entry1)

In the first meeting, the teacher applied group discussion. It seemed that some students did not actively participate in group discussion. Some of them only hoped the explanation from their friend. In fact, they were expected to discuss each other. However, some of them did not do it because they did not really understand the topic. It was relevant to World Education (2009) suggestion that in cooperative learning, the students with higher achievement can help them who were in low achievement.

In the second meeting, most students told that they were practicing the content directly, paying attention, making a joke with friends, and talking each other.

I practice the content, try to understand and make jokes with friends (s2, entry2)

It seemed that the students were quite active during the learning process. At the time, the teacher applied contextual learning that allowed student to practice the skill of the lesson in their daily life (Berns and Erickson 2001). In the third meeting, many students stated that they only paid attention and took note. Furthermore, they read the conversation with their friend.

During the learning process, I pay attention and read a conversation with my friends (s7, entry 3)

Based on my observation, the students only followed the instruction from the teacher since the teacher used direct instruction at the time. At the time, the teacher asked students to read the conversations from the textbook. When reading the conversation, there was one student who did not get chance to read the conversation though she had handed up for three times. The tone of the student was quite disappointed with the teacher.

I do nothing, *I* only pay attention because the teacher does not give me a chance to read it (*s*11, entry3)

The student stated that the teacher did not give her the chance to practice. Henceforth, she looked sad and disappointed with the teacher. It seemed that the teacher did not realize that she had a blind spot in her teaching. In the fourth meeting, the teacher also applied contextual learning. At the time, the students practice the conversation given by the teacher. All of them practiced the conversation in pairs in front of the class:

We do dialog in front of the class (s5, entry 4)

The students had the same opportunity to practice because they were asked to practice the content in front of the class in pairs. The students looked quite active and enthusiastic to practice the conversation. Hence, most of the students quite enjoyed the learning process. On the other hand, in the first meeting of Physics subject, the students studied in the laboratory. They practiced about dynamic electricity. Yet, some students did not pay attention during the learning process because there was a telescope that made them curious to play with.

I play with a telescope, I see my friend stringing the circuit (s17, entry1a)

Some students were more interested in seeing the telescope rather than doing the experiment. It seemed that they had never seen the telescope before and it was something new to them. Therefore, it made them distracted by the tool. It suggested the teacher should be more aware of the things that can distract students' attentions in learning process. Moreover, there were some students who were really enthusiastic to string the circuit in the experiment.

I try to turn on the lamp, but I fail in the first time, I try until three times and then I succeed making it on (s13, entry 1a)

The students really liked to do the experiment and it made them curious to practice the experiment even though they failed for several times. Some students were challenged to do the experiment using inquiry strategies (Chiappetta 1997). In contrast, one student confessed that she did not actively participate during the learning process. She only paid attention, sometimes she did not, and even she talked each other and day dreaming during the learning.

During the learning process, I pay attention to the teacher, sometimes, I day dreaming, I look outside the class, I look around, that is what I do during the learning process. (s12, entry 1a)

It could be assumed that the student did not like the experiment. Hence, she did not actively participate in learning. Moreover, in the second meeting, the students learned in multimedia room. This room was quite comfortable for learning because I observed that some students just laid down when they were taking notes. In contrary, the students were passive in learning since the teacher only did lecturing. It was relevant with students' journals that they mentioned they only paid attention and took note during the learning process. Furthermore, they mentioned the other activities such as asking questions when they did not understand and also eating during the learning process.

I pay attention, ask question to my friend, and eat something. (s12, entry2a)

Because the learning process seemed quite relaxed, the students could even eat during the learning process. The relaxed condition was good for students to learn. However, the student did not really actively participate in learning. In the third meeting, most of the female students were active in doing their excercises.

paying attention, answering questions from the teacher and helping my friend about the task (s1, entry3a)

In my observation, I saw those female students discussed each other when the teacher gave them the task. Meanwhile, the male students did not pay attention while the teacher explained.

sleeping, sitting, seeing the exercise without spirit (s17, entry3a)

Those students had no spirit because they said that the holiday was so short. It was the first day after having the holiday, thus, they were not ready yet to commence the learning. In addition, in the fourth meeting, the teacher still did lecturing in her teaching. Most students only paid attention, took notes and did the exercise. It made students passively participating in the learning process (Martin 2003). In

summary, the teacher only applied expository strategies except in the first meeting. Thus, the students seemed passive in participating but they never gave a bad comment to the teacher.

Consequently, the finding suggested that the teacher could notice the students' activities during the learning processes even though the teacher could actually know the students' activities only by observing. However, sometimes there were students' activities that the teacher did not realize like in one journal, the student said: "*I sit, do nothing, because the teacher does not call me*". The teacher could notice that she had a blind spot in her teaching. Furthermore, some students honestly mentioned their activities even if they did not participate actively during the learning process.

Moreover, in the last journals, I asked the students to write the benefit of using the learning journals. The students said that they could express their feeling toward the learning process.

I can tell my feeling during the learning process (s14, interview 4)

The students felt better because they could confess their feeling during the learning process. The students expect that the teacher could notice what they felt during the learning process. This present finding to be consistent with Boston (2010), who suggested that learning journal can be used to express students' impressions toward the learning process. Most compelling evidence when I shared the learning journals to the students, one student asked me"

Student: do you give the journal only for English and Physics? Me: yes, Student: why don't you give it for the other subject? Me: why? Do you want to tell something?(informal interview) Student: yes

I did this conversation while I shared the journals for the students during English subject took place. It seemed the student wanted to tell her feeling in the other subjects as well. She really felt better if she could tell her feeling to the teacher. Furthermore, by noticing students' feelings, the teacher could notice that the students enjoyed the learning process. In addition to students' reflections, they could tell the teacher the difficulties and the topic they did not understand yet.

Sometimes, when I do not understand one topic, I am lazy to tell the teacher, but here, I do it. (s16, interview 4)

Actually, the students did not like to tell the teacher the topic they had not understood. However, by using the learning journals, they could tell it freely to the teacher. If the teacher asked students whether

or not they have understood, the students tend not to answer because they will feel ashamed in front of their friends.

Equally important, the teacher also told the benefit of using the learning journals for herself:

I know how students feel during the learning [...] *I notice what the students like and do not like" (interview 4a)*

I can notice the content that they do not understand yet (interview 4)

The teachers could notice not only students' feelings whether they liked or did not like the way the teacher teaches (Loughran 1996), but she could also improve herself based on students' preferences. This finding corroborates the ideas of O'Connell and Dyment (2013), who suggested that the students can freely write the journal, therefore, the teachers can notice students' perceptions toward their teachin and can change the way they teach in the next meeting. In addition, the teacher could notice students' comprehension and which topic the students did not understand yet. Thus, if the teacher had time, she could review the topic in the next meeting. It becomes as an assessment for learning because the teacher could notice what the student learned and how well they learned (Angelo and cross 1993).

Besides the benefit, I also asked the shortage of using the learning journals, one teacher suggested that it would better to give the learning journals not in every meeting because she thought that students would get bored to fill it. The other teacher suggested that the researcher should add more questions for the journals. Nevertheless, I thought students tended not to answer if there were many questions, they would perceive it as a busy work. In the recent study, though the journal contained five questions, they tended to answer it in shortly. Even sometimes, they did not answer it. I, therefore, decided to make only five questions in the study.

4.1.2 Exploring Students' Needs

The other role of reading the journals was one way to explore the students' needs. The students could tell everything in their journals even what they liked and what they did not like. They could also criticize the way the teacher taught. The fifth question in the learning journal was asked to attain students' suggestions for the teacher if there was any. The question was "*any suggestion that you want to tell to the teacher*?" Through this question, the teacher could notice students' needs related to teaching method, subject, facilities and teacher's attitude.

Students' Needs Related to Teaching Method

The theme that the teacher could notice is students' suggestions related to the teaching method. In the light of teaching strategies, it is associated with teacher's capability to master the teaching methods. It is match with Apelgren & Giertz (2010) idea, who stated that teachers need knowledge about teaching method as their pedagogical competence. In the journals, one student asked the teacher to keep doing a group discussion.

I want the teacher often apply group discussion (s1, entry 1)[...] I like if we work together, we can help each other, more understand, and easir to remember (s1, interview 1)

The student liked to learn in a group discussion because she could help her friends (World Education 2009). By doing peer tutoring, she could attain a good understanding and it made her easy to remember the content. Moreover, another student suggested that she wanted the learning process became more fun. She gave the idea that she could feel fun if the teacher taught something related to the daily life (contextual learning) such as expression. Therefore, the student could apply the knowledge in daily conversation with her friends after learning about it.

Hopefully, next time, learning English could be more fun (s, entry 4) [...] I prefer to learn something contextual that I can apply in my daily life" (s4, interview4)

This finding suggested that the student knew the benefit of contextual learning. Thus, students could relate their knowledge in learning to their life (Berns and Erickson 2001). Moreover, one student wanted the teacher to make a game during the learning process.

be better, I want the teacher to make a game(s16, entry4)

I want the teacher to give more game and free time (s11, entry 4a)

One student asked the teacher to make a game and give them free time when they were learning. The student asked a game to make them enjoy and not easy to be bored in learning. For them, free time means that the teacher did not teach anything during the learning process. For this suggestions, the teacher could consider to make a game in learning. However, it is impossible to give free time by doing nothing during the learning process.

In Physics subject, students asked teacher to do many experiments instead of the theories. Actually, in the first meeting, students did an experiment in the laboratory and they wanted the teacher to do more experiment in the next meeting.

I hope next time, we can practice another topic in the laboratory (s8, entry 1a)

[....] deep explanation in experiment (s16, interview 1a)

The students quite enjoyed if they learned in laboratory and practice the experiment by themselves. They could easily understand content when we make practice. Additionally, one student asked the teacher to explain the lesson slowly and repeatedly, because some of them could not catch up all the content easily, it seemed that they realize their capability in understanding the topic.

I want the teacher to explain content slowly to make me easy to understand (s14, entry1a)

The student could not catch up the content well if the teacher explained the content so fast. It should be a consideration for the teachers when they explained the content because the ability of students to understand the content was different. Therefore, the teacher could adjust the way to explain the content slower in order to enhance students' understanding. Moreover, one student added another suggestion on the interview. She wanted the teacher did not mind repeating the explanation of the content for several times if there was a student who did not understand yet.

> I want when one does not understand yet, the teacher will explain again, in fact when there are half of the students in the class does not understand, she keeps continuing (s11, interview2). Sometimes when we ask a question, she does not respond, sometimes, her explanation is only a half (s11, interview4)

This student seemed quite disappointed with the teacher's treatment when the teacher kept continuing to the next content though some students did not understand yet. Sometimes, the student saw that the teacher did not respond well when a student asked something or the teacher only explained in a few explanations. Additionally, the students suggested the teacher to do practice more often like the teacher did in the second meeting. At the time, the teacher asked the students to practice imperative sentence in pairs in front of the class.

I want the teacher to give more conversation like practice or drama (s1, interview 1)

When we practice in front of the class, it makes us more confident. (s10, interview 3)

The students claimed that they could remember the content easier when they practiced instead of listening to the explanation from the teacher. It also could improve their confidence if they practiced in front of the class. This finding suggested that students' confidence can be improved by asking them to practice in front of the class. The teacher also said that most students felt happy because they could practice directly at the time.

Most of the students more like doing direct conversation rather than just writing and reading [...].they are active. They also pay attention when their friends come forward to the class, they are curious what their friend will do[...](teacher1, interview 2)

The teacher had the same perception with the students that they became more enthusiastic in learning when they practiced the lesson. Therefore, teaching method should be a consideration for the teacher to improve teaching strategies.

Student's Needs Related to Subject

In the light of subject, some students asked the teacher to give them more vocabularies in English.

My suggestion in English is that the teacher gives me more vocabularies and more note. (s12, entry 1)

The student faced difficulty in learning because of lack of vocabularies. It seemed that it was the main challenge for teacher to teach in English because many students did not know vocabularies. For Physics subject, the student asked the teacher to give a deep explanation in the experiment.

The teacher is supposed to explain step by step about the experiment, and give deep explanation (s16, interview1a)

It seemed that it could be useless if the students only practice, but they did not know what theory was applied in that practice, what happened, and why things happened in that way. The teacher was supposed to explain it clearly in order to enhance students' comprehension. Moreover, the other student suggested the teacher gave them many examples for the topic.

Be better, please give us many examples in order to understand the content to make us easy to do examination (s16, entry2a)

I want the teacher to give many examples instead of exercise (s7, entry 4a)

When the teacher gave more examples, it would be easier for the student to understand the topic. Furthermore, another student required the teacher to give more examples instead of exercise. It seemed that she felt confused when the teacher gave few examples but gave many exercises. Another student wanted more time to learn because she really loved Physics lesson, thus, she hoped that she could have more time to learn Physics. The student had intrinsic motivation to learn Physics.

I need additional time for Physics and my parent like if I am expert in Physics (s4, entry 4a)

The students who have intrinsic motivation to specific subject will be more engaged in learning. hence, they feel that they need more time to learn a subject. Furthermore, when the parents support their children to be expert in a the subject, it also became an extrinsic motivation for the children to learn.

Students' Suggestions Related to Facilities

Related to the facilities, some students suggested that they wanted to learn in the language laboratory instead of in the classroom.

If learning in the language lab, we can learn while listening music, we can also watch funny videos, learning in the classroom will be boring because we only see the textbook, chair, and the face of my friends that I always see every day (s8, interview 1)

The students thought that learning in the language lab or multimedia was more interesting than learning in the class room. When they learned in the language lab or multimedia, they could ask teacher to show some videos or playing music. Thus, they could enjoy learning more relaxed. Additionally, the students suggested that they wanted to learn in laboratory or multimedia room.

We learn in multimedia because the place is cool (s3, entry 3a)

It was more interesting for them to learn in those places rather than in the classroom. The reason why they liked to study in multimedia because there was an air conditioner there, thus, the temperature was cool and it would make them comfortable to learn. Because the multimedia was quite comfortable for learning, many teachers tend to use the place frequently. Therefore, the surrounding of learning became one factor that the teacher should consider in improving teaching strategies (Balachandran 2015). Meanwhile, in the laboratory, they could do an experiment and see many tools related to Physics lesson. It will make the students to be more curious in learning.

Students' Needs Related to The Teachers' Attitudes

The journals also gave information to the teacher about students' suggestions related to teachers' attitudes which are associated with the students-teacher relationship. In the journals, the student wrote:

I want to learn in relaxed (s3, entry 1) the teacher do not be so focused on content, she is supposed to make a joke (s3, interview 1)

The students requested the teacher to be relaxed in teaching which meant the teacher not supposed to be too focused on the content and if possible, the teacher could tell something fun to make the students not felt bored during the learning process. The students emphasized that they really needed the humor to make them not felt bored (Zhou 2015). Another student stated that actually, he was comfortable to learn with the teacher. However, he gave the suggestion on behalf of his friends' opinions because he stated that his friend wanted the teacher to teach in relaxed, not so focus, no temper and no sarcasm. This student quite cared about his friends. Even though he had already felt comfortable, he also wanted the teacher to make his friend comfortable in the learning process.

My friends said that the teacher is too serious in teaching, so they do not like [...] *they want to learn more relaxed, no temper, no sarcasm when they do not collect the task(s16, interview 4)*

The students felt empathy for his friends and he wanted his friend to enjoy the learning as well. The other students suggested that they wanted the teacher not to have a temper in the learning process.

If teacher teaches with a temper, I will not understand (s12, interview3)

The student perceived that if the teacher taught with temper they would not understand in learning. Basically, the teacher wants students to learn. However, if she notices that students do not learn, maybe she initiates to teach harder, with a temper. When students are afraid in a general level, they do not learn anything but fear, and it made them did not understand the content. Furthermore, despite hoping that learning process would be more fun, some students emphasized that they needed more attention from the teacher, they wanted the teacher paid attention the same as the teacher did to the students who were in high achieving. Besides, one student suggested the demand on fairness whereby the teacher gave the same chance to all students. In this case, the students saw that teacher treated them quite unfair because the teacher only paid attention for some clever students in the classroom.

The teacher is not supposed to be too focused on the clever students, she should pay attention to all of the students in the class (s9, entry 1)

The teacher still does not ask me to come forward, I think she still does not really fair. [...] and I want the teacher to give me more exercise (interview2, s13)

I hope that teacher can give more attention to the student who has low ability like me (*s*13, *entry* 1)

From the comment of students, it seemed that when teaching, the teacher was too focused on some particular students. Subsequently, they thought that the teacher treated them unfairly. Though the teacher had applied a cooperative learning which made some students were quite active in learning, some students did not feel satisfied because the teacher only paid attention to some particular students. Thus, they suggested the teacher to treat them fairly, which means the teacher give them the same chances and pay attention to all students in the class. The students emphasized that they need a caring teacher who cares all of the students in the class and treat them equally (Daniels & Arapostathis 2005, as cited in Wentzel 2009).

On the other hand, the other students who basically actively participated in learning asked the teacher to treat them equal which means that all students attained the same chance to practice the experiment. In my observation, the student had a good chance to do the experiment and was quite active in doing the experiment. However, she gave this suggestion to consider her friend who did not have the chance to try stringing the circuit. At the same time, one student who did not have the opportunity to try the experiment also complained to the teacher because she perceived that the teacher only paid attention to some students.

I hope that all of the students will have the same chance to see, to listen, to try, to touch [...].(s4, entry 1a)

I do not understand the experiment because the teacher only paid attention to some students (s14, entry1a).

In the previous study Daniels & Arapostathis (2005), as cited in Wentzel 2009, stated that only the students in low level ask the teacher to be fair, while the students in low level ask the teacher to give them more challenges. However, the finding showed that the students at a high level also asked the teacher to give the same chance for all the students. Even they give that suggestion as their empathy to consider their friends' opportunity in learning.

Furthermore, one student hoped that the teacher kept being patient when teaching. The student perceived that the teacher never got mad at them although they made noise, the teacher was so patient to confront them.

I hope the teacher always be patient (s9, entry 4a)

The student asked the teacher not to get mad if they made mistakes. If the teacher taught with temper students would feel anxious and they would not understand the content (Thayamani et al. 2013). Another student was quite sensitive in the classroom. He thought that his noisy friend made him disturbed and he wanted the teacher to warn when they make noise.

" I want teacher to warn the students who make noise during the learning process because it will disturb the learning" (s13, entry 1a)

It could be seen that he felt disturbed because of the noise from the other students. Thus, the teacher was supposed to admonish the students who made noise.

The other students expressed their feeling toward the teacher, they perceived that the teacher who taught Physics was so fun, so cheerful, always smile, and paying attention to all the students. Actually, at the time, the teacher told the students a funny story, she was not too focused on the content and she also made a joke that made students laugh. Therefore, the learning process was so cheerful even though the teacher only did lecturing. Likewise, the teacher paid attention to all the students. Moreover, in my observation, I saw that the teacher approached the students one by one to ensure all students understood the content. The teacher even paid attention when students felt sleepy and felt sorry for the student because they could not learn in multimedia room.

I want all of the teachers can be like this teacher, she is very fun. (s1, entry2a) she is so cheerful, always smile, and pay attention to all the students (s1, interview 4a)

I like because the teacher is not focused on learning content, she makes a joke (s2, interview 2)

The students liked to learn in a relaxed way, they could laugh while learning. It seemed that they did not feel bored during the learning process. This finding supported the idea of Hamre and Pianta (2006) that students will be interested in learning if the teacher builds a good communication with them. At last, there were some students who did not give the suggestions. They perceived that they had been

comfortable with the way the teacher taught even though the teacher only applied the conventional method in the learning process.

In summary, the journal gave some information about students' needs which related to teaching method, subject, facilities, and teacher's attitude. Related to teaching strategies, the students wanted the teacher to teach in contextual learning, cooperative learning, giving a game, giving free time, teaching slowly and repeatedly. Furthermore, linked to the subject, the students asked the teacher to give more examples and deep explanation. Moreover, they also wanted to learn in multimedia, laboratory and in the language lab. In addition to teachers' attitudes, they wanted the teacher to teach in a relaxed way, fairer, patiently, and without a temper.

4.1.3 Commitment to Improve Teaching Strategies

In English Class

Learning journals have been used as a tool to see students' reflections. After the students filled the journals, I analyzed the data and asked the teacher to be interviewed. In the interview, I got some points of view of teachers both about teacher preparation for the class and teacher's perception about students' reflections. Moreover, I did the observation to see whether or not the teacher made changing in their teaching strategies. In the preparation, one teacher prepared the content from many resources.

I download a module from the internet and there are contents from the book as well, sometimes, we teach procedure text by giving an example of one recipe. If I make an example about how to make ice cream, it is so complicated, so I make examples like how to make a cup of coffee, how to make a cup of tea. It will be easier for the students to understand because the students are familiar with those things and that is why I make some examples by myself.(T1,interview1)

The teacher used many resources to enrich the example in order to enhance students' understanding. It seemed that the teacher really well-prepared for teaching which means the teacher had developed her ability in pedagogical competence to arrange a planning for teaching (Apelgren & Giertz 2010). The teacher had a good passion to make the students understand the subject. Furthermore, the teacher also considered the level of students' understanding when preparing the content for teaching.

In the class, the level of students understanding is various. If I make all examples are difficult, how about the students in low ability. But if I make easy examples, I consider students in high ability. They will not be challenged in learning. So I made four examples included two in low level and the rest for a higher level. So for those who are low in understanding at least could understand two of examples if they could not catch up all. (T1, interview1)

The ability of students also became a consideration in her teaching preparation. Hence, she provided various examples to cover all of the students' level understanding. She insisted that all of the students had to understand the topic.

In addition, the teacher also explained about teaching method and students' participations in the class, the teacher who taught English subject used cooperative learning in the first meeting. She perceived that some students participated actively by using cooperative learning. Moreover, students who were higher achievement could help students who were low achieving (World Education 2009). However, she saw that some students in low achievement did not participate actively in the group because they were lack of vocabularies so as they only hoped the explanation from their friend. The teacher further told that many students had low motivation in learning English. She also said that she had the obstacle to teach in the class because the students were lack of vocabularies. It was relevant with students' reflections that some of them did not understand well because they did not know many vocabularies.

Additionally, some students wrote that they enjoyed the learning process. But surprisingly, some students gave bad comments to the teacher related to teacher's attitudes. When reading the learning journals, some students wanted the teacher to be fair in treating them and they wanted the teacher to pay attention to them instead of those who were high-achieving. The teacher was quite surprised when the students asked her to be fairer in teaching which means the teacher had to pay attention to all students and gave them the same opportunity in learning. This finding supported the idea of Wentzel (1988) who stated that the students perceived a caring teacher if a teacher could give the equal support in learning.

In contrary, the teacher saw that the students had misunderstood, she considered if she asked the students who were low achieving, it would make them felt ashamed when they could not answer her questions.

The students sometimes misunderstand the teacher. When I ask them to answer a question, they feel ashamed if they cannot answer. Actually, I want them to participate actively in learning, and they should think that teacher pay attention to them as well. But they have the perception that the teacher intentionally wants to make students feel ashamed and it will make them feel down. So, when I do not ask them, they think that I do not pay attention to them (T1, Interview 1)

The teacher claimed that she did not intend to treat the students unfair. In this case, the teacher's perception was contrary to students' perceptions which the students saw that the teacher treated them unfair. For this reason, the journals became a media to notice students' perceptions toward the teacher. This finding was relevant with Moon (2006), who stated that the teacher can notice students' perceptions in learning process using the learning journals.

Moreover, the teacher said that she would make some improvements based on students' needs in the next meeting such as giving students more vocabularies and paying attention to the students who need more help. By noticing the thought from students, the teacher attempted to change her attitude toward the students in order to adapt the situation when there were some students who need more attention (Apelgren & Giertz 2010). Additionally, in the next meeting, she gave the opportunity for the students, who perceived that she was not fair, to answer the question at the first chance. The teacher changed the way she taught. She paid attention to the students who claimed that they were not fairly treated by the teacher. In the second meeting, when the teacher wanted to demonstrate procedure text. She tried to approach those students at first.

how about student15, how about student17, and how about student2?(observation3)

When the teacher asked a question and the student who had high-achieving wanted to answer the question. The teacher attempted to give the opportunity for other students.

this time not for student4, everyone can do it, who others want to answer?(observation3)

The teacher endeavored to call all students especially those who needed more attention. At the time, the perception of the student changed for a moment after the teacher changed her behavior. However, when the teacher did not call the students, again the students' perceptions would change. The students were quite sensitive with teacher's treatment. They felt insecure when they lose the attention of the teacher, this is consistent with attachment theory where the care seeker would be threatened if they lost the figure of attachment (Riley 2010).

In the second interview, the teacher told how she prepared the items for contextual learning before coming to the class.

For the preparation, I bring all of the stuff from my home. I always do this if the content related to daily life, for example when learning about vegetables, I bring some vegetables to the classroom, when I teach about things in the kitchen, I bring all of the things from kitchen, if I do not have any, I will borrow it from my neighbor. Thus, students can see it directly, which is a pitcher and which is a teapot. I do not want students only imagine the thing from the book. (T1,interview I)

She provided all stuff for practicing such as vegetables and the equipment from the kitchen. At the time, the teacher used contextual learning in her teaching. In addition, she gave the reason that contextual learning could enhance students' curiosity to learn.

if we show the things directly, the students will be curious, what the teacher brings, what for, and it will attract them to pay attention (T1, interview 2)

She perceived that the students actively participated when she applied contextual learning. Contextual learning can enhance students' participation and curiosity since the student can practice the knowledge in their real life. Moreover, in the second meeting, one student still perceived that he did not obtain any attention from the teacher even though he already gave suggestion in his previous learning journal.

[...] She still does not pay attention to me,[...] I do not know why. (s13, entry 2)

The student claimed that the teacher still was not fair, because the teacher did not pay attention to him. It seemed that the student is really sensitive with the teacher's treatment, thus he still hoped to get attention from the teacher. On the other hand, one student had changed her perception about teacher's treatment. She perceived that the teacher had changed her behavior in teaching.

Nothing special, but I prefer to learn like this (s11, entry 2)

This student seemed always to compare the learning process from day to day. At the first day, the student complained that the teacher was quite unfair because the teacher only paid attention to some students who were high-achieving. However, in the next meeting, when the teacher applied contextual learning and the teacher also paid attention for most students, the students seemed active to participate in learning. At the time, the student said that she liked the way the teacher taught on that day. She perceived that the teacher has changed her attitude in treating the students. Nonetheless, again, in the third meeting, she did not have a chance to read the example of conversation although she had raised

her hand for three times. Consequently, in her journal, she complained again the way the teacher taught.

In addition, the students also wrote in their journals that they needed more practice, contextual and more vocabularies in learning. Therefore, the teacher attempted to use various methods in applying contextual learning and she led the students to do the conversation in pairs in front of the class. As the result, the students would have the skill to apply the content in their real life and they also knew the connection between the lesson and their daily life (Berns and Erickson 2001). Likewise, the teacher seemed quite not really satisfied with students' reflections. She expected that students would write more detail in their journals. Hence, she could be consistent to do what the students liked and to change if the students did not like.

In the third meeting, the teacher mentioned that

for expressing and responding to the bad news, I look for the content from the book, articles, internet. I search what kind of expression can be used if we get bad news, we can classify to bad news and very bad news[...].I also learn again, because, for my own understanding, it is enough only by reading some books. But for explaining to students, I have to think what kind of method that I should apply to make the students understand (T1, interview 3)

She prepared the content from many resources. Further, she reviewed the content that she wanted to teach and she also considered what kind of method that she should apply to make the students understood. The teacher attempted to develop her knowledge as a consideration to improve her pedagogical competence (Apelgren & Giertz 2010). In the third meeting, the teacher only applied expository strategy by using lecturing method and it made students quite bored in learning because they were quite passive in learning (Martin 2003). Furthermore, the teacher perceived that students had a low motivation in the learning process. Therefore, it became a challenge for her to teach. In addition, the teacher also claimed that the students were not aware of their tasks and only a few of the students attained a good understanding.

I think the students have understood fifty percent, maybe they only understand bad news. However, when I ask them to review again without open book, they cannot answer it (T1, interview3)

Meanwhile, it was somewhat contrary to students' perceptions, where students perceived that the teacher was so rigid in teaching which later made them felt bored in learning. In this case, I supposed

that teacher and students had quite negative perception seeing each other. As a result, it seemed that they blamed each other. Moreover, the teacher told her preparation for the next time.

For next time, I will make dialog in pairs, maybe they can open their book. I will give them 10 minutes to prepare and I will ask them to come in front the class with their pair.[...] I will prepare the content by myself.(T1, interview 3)

In the fourth meeting, the teacher prepared the dialog to be practiced by students in pairs. She told that during the learning activities, she asked students to read some examples from the textbook. Afterward, she divided the students in pairs to make the preparation for several minutes, and then she asked the students to do the presentation in front of the class. Thus, the students were active in learning. In addition to the future plan, the teacher stated that she would give the situation for students and asked the students to make their own conversation. After they made their own conversation, the students would present the conversation in front of the class.

In my last observation, the teacher applied problem-based learning by giving students the situation and asking them to create their own conversation. In this situation, the students were challenged to solve their problem by creating a conversation. Barrows and Tamblyn (1980) stated that problem-based solving can help students develop their thinking to solve a problem. Furthermore, the teacher also gave more vocabularies to fulfill the students' needs because most of the students were lack of vocabularies. During my observation, the teacher always attempted to give some vocabularies related to the topic for the students. Because one of her challenges in acquiring students' understanding in learning English was that the students were lack of vocabularies. Additionally, she reviewed the content about asking for repetition in the second meeting. It was noted as one of the topics that students did not understand yet.

Furthermore, in the journals, some students asked the teacher to teach contextual learning more often to make them easy to understand. The student perceived that it is important to learn something contextual so that the student can apply the skill in her daily life (Berns and Erickson 2001). Moreover, one student asked the teacher to check all of the students' understandings before continuing the content because usually, the teacher would continue the lesson although only some of the students could understand the topic. Based on my observation, the teacher tried to ask the student one by one to ensure whether or not the students had understood the content. Afterwards, she continued to teach the next topic. The other suggestion that the students wanted was the teacher could teach more relaxed which

means the teacher did not be too focused on the content and was supposed to make a joke in the learning process. Zhou (2015) stated that students will enjoy the learning process if the teacher can make humor. However, in her teaching, the teacher still focused on the content.

In conclusion, the teacher had a good commitment and perseverance to improve her teaching strategies by following student's needs such as changing her teaching methods by doing contextual learning, trying to be fairer and more care, giving more vocabularies. She also has good ability to use various strategies in teaching. Moreover, she was also well-prepared in teaching, always tried to keep learning and to do her best in teaching. It means that the teacher has all aspects that are required in pedagogical competence which are attitude, knowledge, ability, adapting to the situation, perseverance and continous development.

In Physics class

The teacher told her preparation before the class began.

Because there is no battery, I prepare power supply, lamps, switchs, and cables for students to string the circuit (T2, interview 1)

The teacher prepared her class by providing the stuff from the laboratory for the experiment. Furthermore, the teacher told her activities in the first meeting from explaining the content to conduct the experiment.

I explain the definition of dynamic electricity, afterwards, I explain about current electricity,[...]I also explain about an open and close circuit, after that I try to string a simple circuit, and then I ask students to string the circuit (T2, interview 1)

The teacher saw that the students were quite active during the learning process, they were enthusiastic to do the experiment. However, few students were distracted by a telescope because the telescope was something new to them. Having a tool which is more interesting and is not related to the content can distract students' attentions to focus to the lesson. In addition to students' reflections, the teacher was surprised that there was a student who said that she did not get a chance to practice. During the learning process, she supposed that all students had understood, because when she asked them to raise a question, no one asked the question. However, the teacher realized that the student was very shy, not confident to ask a question, thus, the teacher will approach the student personally. Moreover, after reading students' journals the teacher also realized that there were many students had not understood yet.

[...] overall, none of them has a good understanding(T2, interview1)

By noticing students' understanding through the journals, the teacher needed to repeat the experiment in the next time because she noticed that many students did not understand the experiment.

[...] first, I will repeat about theory afterwards I will repeat experiment. (T2, interview1)

She planned to do the experiment again and asked some students who did not get a chance in the previous experiment to be more involved in the experiment. In fact, in the next meeting, the teacher only applied conventional strategy by doing lecturing and she did not repeat the experiment instead of continuing the next topic. In addition to students' suggestions, the student asked the teacher to warn the students who made noise during the learning process and she promised would warn them explicitly. However, in fact, she did not warn the student who was disturbing during the learning process. In the other interview, she confessed that she quite hesitated to warn the students because she was afraid that students would get angry with her.

"I do not dare to warn them, I am afraid if I make my voice louder, they will be angry and be offended". (T2, interview 3).

The teacher seemed did not have a good leadership in organizing the student. Hence, she wavered to warn the student when they make noise in the learning process. Basically, as a teacher, she has to be able to organize the classroom effectively in order to provide a good environment for all students.

In the next meeting, the teacher taught Physics in the multimedia room, she told her preparation was only preparing the laptop that actually was not needed in her teaching because she applied conventional method. During the learning process, the teacher told the students a story to motivate them to learn and the students seemed quite happy in learning although they did not actively participate. The teacher also perceived that the content was easy to be understood. Additionally, in the journals, the students did not give any bad comment, thus, she thought that the students did not complain about the learning process and she did not need to change anything in the next meeting. It seemed that the teacher was easy to be satisfied when the students did not give bad comments. The teacher, therefore, thought that she did not need to improve her teaching. In this case, the teacher did not have perseverance as pedagogical competence to develop her teaching continually (Apelgren & Giertz 2010).

In the third meeting, the teacher told her preparation for her teaching, she prepared more questions and exercises for students. In this meeting, female students seemed more active in doing the exercises than male student and they had good spirit because it was the first day of learning after having the holiday. In contrast, male students looked had less spirit to learn because the holiday was too short for them. Moreover, the teacher claimed that one of male students did not pay attention because he needed more attention from the teacher.

If I only pay attention to him, the others will complain (T2, interview 3)

The teacher gave a rejection to pay attention all the time to some particular student, because the others would complain as well. The teacher claimed that she had to pay attention to all students.

In the fourth meeting, she prepared the content and more examples for students since the students asked her to give them more examples. She attempted to enhance students' understanding by giving more examples. Moreover, she claimed that some students were quite active in learning but a few students were not. She also claimed that some students who had low motivation in learning needed more attention from her. In the next meeting, the teacher planned to continue the topic and make a discussion. She would also make a simple experiment and then gave the matter for the students to be discussed and asked students to present it in front of the class.

I will give the material and I will make discussion [...] *and let the students present in front of the class* (T2, *interview 4*)

Actually the teacher planned to do the discussion. In reality, as I observed I saw that she did not alternate her strategy in teaching. She still did lecturing. It seemed that the teacher was quite not consistent in planning and practicing and did not have the perseverance to teach in the best way. Meanwhile, when the students asked for free time and game, the teacher said that she would not follow this suggestion unless the students could pass the examination.

I will not follow all of their requests, they will not obey me. Thus, I challenged them to pass the examination. Afterwards, I will follow it. (T2, interview 3)

The teacher would give free time and a game only if the students could pass the examination. It became an extrinsic motivation for the students to study well. Furthermore, she reviewed the same topic that students mentioned they did not understand yet. She also paid attention to some students who did not focus during the learning process. She perceived that the students behave so, because they need more attention from her.

Based on my observation, from five times I observed her in teaching, only in the first meeting the teacher applied inquiry strategy using experiment method. Meanwhile, in the other meetings, the teacher applied expository strategies which emphasized the role of teacher as the main resource of information (Martin 2003). Nevertheless, the students quite enjoyed learning with the teacher because she did not focus only on the content. In addition, she tried to make jokes with the students in teaching. She also paid attention and checked all students' understandings one by one to ensure that all students had understood the content. Moreover, the teacher always did not mind repeating the explanation even only if one student did not understand. The way she treated students made the students enjoy the learning process. The finding suggested that the teacher was a caring teacher that made student like to learn with. This was why the students liked to study with her even though she only taught in a conventional way.

In summary, the teacher had improved the way she taught by following the suggestions from students such as, giving more examples, paying attention to all of the students, reviewing the material when needed. However, the teacher did not change the teaching method as the students suggested. She keep doing lecturing during the meeting and she did not have perseverance to teach in the best way. Considering pedagogical competence, the teacher already had some aspects that are required in pedagogical competence which are attitude, knowledge, ability, and adapting the situation. Nonetheless, the teacher need to have perseverence and continuous development to develop her teaching from time to time.

The finding showed that both of the teachers had attempted to improve as well as to assess their teaching. The first teacher did a significant improvement in both teaching methods and in the way she maintained her attitude toward the students. However, sometimes, she went back to her previous attitude whereby she only paid attention to some particular students. It seemed that the teacher might need time to change her attitude permanently to care all of the students. Meanwhile, the latter teacher did some improvements in teaching but not teaching methods because the most prevailing method that she used was only the conventional method. However, she was good in the way she treated the students liked studying with her because the students perceived her as a caring teacher.

Furthermore, when the first teacher taught in a conventional method such as lecturing, she got bad comments from the students because the students remarked that the teacher was so rigid in teaching and there was no laugh or jokes. However, when the latter applied the conventional method, the students told it was fine, because the teacher taught them in a fun way and the teacher treated them fairly. Hence, students perceived that the relationship between the teacher and student was more important upon teaching method. However, it would be better if the teacher could apply a good strategy and had a good relationship with them as well.

4.1.4 Teachers' Barriers to Improvement

Besides improving teaching strategies, the teachers also had some obstacles that made them not easy to improve. When one student asked the teacher to be firm to the students who were disturbing in the class, the teacher said that she would be more firm to those students. Nonetheless, in the other interview, she remarked that she could not be firm because she was afraid that if she warned the students firmly, the student would be angry with her.

I do not dare to warn them, *I* am afraid if *I* make my voice louder, they will be angry and be offended. (T2, interview 3)

Oldsjö (2010) stated one of the criteria to assess pedagogical competence is the leadership and organizational ability to manage a classroom. In this case, the leadership ability of the teacher to manage a classroom was still low. Therefore, the teacher could not manage all of the students in a good way because she afraid that she would get a bad comment from students. In addition, the reason why the teacher did not improve her teaching was because the teacher was easy to be satisfied with the students' comments. If the students did not give bad comments, she thought that she did not need to improve. Meanwhile, the other teacher had a different challenge. When students asked her to teach in fun and relaxed, she could not do it at the time. It seemed that the teacher was not used to making humor in teaching although Zhou, et al. (2015) stated the students will enjoy if the teacher can make jokes in learning. In addition, she might need time to change her attitude toward students when she attempted to be attentive to all of the students.

In summary, I conclude the role of students' reflections on learning as a tool for knowing students' points of view and to explore students' needs. Equally important, the ways of the teacher to

improve based on students' needs were by changing their teaching methods and changing their behavior. By following students' suggections, the teachers, actually, had develop their pedagogical competence and maintaining classroom management relationships.

5.CONCLUSION AND IMPLICATIONS

This study was conducted to explore the role of students' reflections on learning and the way teachers improve teaching strategies using those reflections. The finding suggested that students' reflections can be used to understand the students' points of view, which mean that the teacher could notice students' feelings, students' understandings and students' activities in the learning process. It was in lined with Boston (2010) finding which suggested that the learning journal can be used to notice students' impressions, students' roles and students' understanding in the learning process. Furthermore, the findings suggested that the students felt happy because of some reasons which related to the content, teaching method, and teachers' attitudes. Related to the subject, the students could understand the content easily and they had their own intrinsic motivation to learn the subject.

Correspondingly, teaching methods, such as doing practice using contextual learning strategy, became another reason that made the students felt happy. Teacher's attitudes also made students happy in learning. For instance, the teacher treated them fairly and the teacher taught them in fun ways. On the other hand, the students felt bored if they could not understand the topic, the learning process was too rigid, and the teacher treated the students unfairly. In addition to understanding students' points of view, the teacher could notice what kind of teaching strategies that students like and dislike. The teacher might consider using the same teaching strategy in the future if the students liked those teaching strategies. Meanwhile, the teacher could consider modifying the way she teaches if the students did not like it. Moreover, the teacher could identify the content that students did not understand yet. The teacher, therefore, could review the content if possible. The teacher could also notice the activities of students during the learning process.

Furthermore, the role of students' reflections was to explore the students' needs. This finding was in agreement with Everett (2013), who found that the learning journals can be used to discover students' needs. The students gave different suggestions about the learning process for different teachers. The suggestions related to the subject, teaching methods, facilities, and the teacher's attitudes. For one teacher, the students asked her to teach them in a contextual, cooperative, relaxed, fairer way and more caring for them. The students also asked the teacher to teach in a multimedia room. Under

those circumstances, the teacher attempted to fulfill students' needs by teaching them using contextual learning, being more caring and treating them fairer. Likewise, the teacher also attempted to fulfill academic' needs like giving more vocabularies. However, the teacher was still not relaxed in her teaching. As a consequence, when the teacher followed the students' needs, the students would enjoy the learning process. Yet, when the teacher forgot to teach them fairly, some students would not be satisfied in learning even though the teacher taught using a good strategy.

Meanwhile, for the other teacher, the students also asked her to teach in contextual learning. However, the teacher only taught in a conventional way. Unpredictably, the students still felt satisfied because they perceived that the teacher was a caring teacher, teaching them fairly (Wentzel 1988), and more relaxed in teaching. Nevertheless, the teacher still did some minor changing to fulfill students' needs such as giving more examples, teaching slower and trying to review the content. At the same time, the teachers also had some obstacles to improve teaching strategies. One teacher only used the conventional teacher strategy. It seemed that the teacher did not get used to with various teaching methods. Moreover, she did not have good leadership skill in organizing students. Hence, she felt worried to warn the student who made noise in the class. Meanwhile, the other teacher did not teach in a relaxed way because she was not getting used to making a joke in teaching.

Additionally, the ways teacher improve their teaching using students' reflections were by changing the teaching methods, and changing the teachers' attitudes. When the teacher could fulfill students' suggestions, it was considered that the teachers were able to develop their pedagogical competence and maintain the classroom management relationship. In contrast, when the teacher could not fulfill the students' needs, it could be considered that there were some aspects of pedagogical competence that the teacher could not develop yet. In conclusion, the teacher could use learning journals to improve teaching strategies. Nonetheless, the willingness of the teacher to improve the teaching strategy is still needed. If not, the teacher will easily feel satisfied when the teacher does not acquire a bad comment from the students. Additionally, we notice that teaching strategies are important in learning. However, in this study, students perceived that how the teacher taught was not really important for them. They remarked that a good relationship with the teacher was more important than a good relationship with the teacher. Yet, as a teacher, we have to realize that we need to develop our teaching strategies as well.

Furthermore, the result of this study may give the impact on the teacher in the school and teacher education. For the teachers, they can consider applying learning journals in their teaching in order to notice students' points of view and to meet students' needs. Moreover, the teachers can use students' journals to improve their teaching strategies. For teacher education, the faculty may consider teaching teachers not only about teaching methods but also how to build a good relationship between teachers and students. Since teaching is not only about a technical thing but it is also about treating students as a human. Likewise, in the future research, the researcher can consider making a longitudinal study about improving teacher-students relationship through students' reflections. The limitation of this study is the time to collect the data. The study about improvement should be made in the long time period because it is not easy for teachers to change in the short time. Moreover, after doing the research, I started to understand that not all of changing that the teachers made can be considered as an improvement since not all the students' suggestions can be counted to improve the learning process. Thus, some changing that the teacher made is only to follow the students' suggestions and perhaps does not give better impact in the teaching.

REFERENCES

- ACTEQ, (2003). Toward A Learning Process, The Teacher Competencies Framework And The Continuing The Development of Teachers, ACTEQ
- Ahire, S. S. (2002). Reflective teaching: Exploring our own classroom practice. *Global Online Electronic International Interdisciplinary Research Journal*. V(2), pp.282-288
- Al-Rawahi, M.N., and Al-Balushi, S.M., (2015). The Effect of Reflective Science Journal Writing on Students' Self-Regulated Learning Strategies. *International Journal of Environmental & Science Education*, 10 (3), pp. 367-379
- Apelgren, K., Ryegård, A., and Olsson, T., (2010). A Swedish Perspective On Pedagogical Competence. Division for Development of Teaching and Learning: Uppsala University
- Apelgren, K., and Giertz, B., (2010). Pedagogical Competence–A Key to Pedagogical Development and Quality in Higher Education. Pedagogical Competence, pp 25. in Apelgren, K., Ryegård, A., and Olsson, T., (2010). A Swedish Perspective On Pedagogical Competence. Division for Development of Teaching and Learning: Uppsala University
- Angelo, T. A., and Cross, K. P.,(1993). *Classroom assessment techniques: A handbookfor college teachers.* San Francisco: Jossey-Bass.
- Balachandran, T. (2015). Why Teachers Teach the Way They Do: Factors Influencing the Perceptual Teaching Styles of Teacher Candidates in Math Education. (Master thesis, University of Toronto)
- Barbara, E., W., (2004) Assessment Clear and Simple: A Practical Guide for Institutions, Departments and General Education .pp. 2-3. John Wiley & Sons
- Barrows, H., and Tamblyn, R., (1980). *Problem-based learning, An approach to medical education*, Springer Publishing Company: New York
- Berns, R. G., and Erickson, P. M., (2001). Contextual Teaching and Learning: Preparing Students for the New Economy. *The Highlight Zone: Research@ Work No. 5.*
- Bolton, G., (2010). *Reflective practice writing and professional development (3rd edition)*, Los Angeles, London, New Delhi, Singapore and Washington DC: Sage
- Brockbank, A., and McGill, I., (2007). *Facilitating Reflective Learning in Higher Education (Second Edition)*. London: Society for Research into Higher Education and Open University Press

- Chiappetta. E.,(1997). Inquiry-Based Science strategies and techniques for encouraging inquiry in the classroom. *The science teacher* pp.22-26
- Cisero, C. A., (2006). Did Reflective Journal Writing Improve Course Performance? *.Heldref Publications* 54 (2), pp. 231-236
- Cohen, S., and Wills, T. A., (1985). Stress, social support, and the buff ering hypothesis. *Psychological Bulletin*, 98, pp. 310-357.
- Cole, R.W., (2008) Educating everybody's children: diverse teaching strategies for diverse Revised. and expanded 2nd ed. Alexandria, Virginia USA : ASCD
- Cruickshank and Applegate, (1981). Reflective teaching as astrategy for teacher growth, educational leadership. *College of education, The Ohio State University of Columbus*, pp. 553-554
- Dewey, J. (1933). *How We Think: A Restatement of the Relation of Reflective Thinking You the Educative Process.* DC Heath and Company.
- Dowrick, S., (2007). Creative journal writing: the art and heart of reflection. Australia: Allen & Unwin
- Everett, M.C., (2013). Reflective Journal Writing and the First-Year Experience *International Journal* of *Teaching and Learning in Higher Education*, 25(2), pp. 213-222
- Fidel, R., (1984). The case study method: a case study. *Library and Information Science Research*, *6*(3), pp. 273-288.
- Gillies. R., and Ashman. A., (2003). *Cooperative learning : the social and intellectual outcomes of learning in groups*, RoutledgeFalmer, London
- Gregory, A., and Weinstein, R. S. (2004). Connection and regulation at home and in school: Predicting growth in achievement for adolescents. *Journal of Adolescent Research*, 19, pp. 405–427
- Hale, N., (2010). Reflecting on Teaching and Learning to Improve Instruction, Utah Valley University
- Hamre, B. K., and Pianta, R. C.,(2006). Student-teacher relationships. In: Bear G.C., and Minke K.M., (2006). *Children's needs III: Development, prevention, and intervention*. National Association of School Psychologists; Washington, DC, pp. 59–71.
- Hannay, Diane M., (2015). *Effects of Direct Instruction of Literary Text Elements with Story Mapping on Reading Comprehension*. Master of Education Applied Research Projects.Paper 1.
- Herrman, J.W., (2008). *Creative Teaching Strategies for the Nurse Educator*. Philadelphia : Davis Company

- Jalal, F., Samani, M., Chang, M.C., Stevenson, R., Ragatz, A. and Negara, S.D. (2009). *Teacher Certification in Indonesia: A Strategy for Quality Teacher Improvement*. Jakarta: Ministry of National Education
- Killam, L.A. (2013). Research terminology simplified. Paradigms, Axiology, Ontology, Epistemology and Methodology. Sudbury, ON: Author
- Levy, H. M., (2008). Meeting the needs of all students through differentiated instruction: Helping every child reach and exceed standards. *The Clearing House: A Journal of Educational Strategies, Issues and Ideas*, 81(4), pp.161-164.
- Loughran, J., (1996). *Developing Reflective Practice: Learning about Teaching and Learning through Modelling*. London and Washington D.C : Falmer Press
- Lynch, M., and Cicchetti, D. (1997). Children's relationships with adults and peers: An examination of elementary and junior high school students. *Journal of School Psychology*, *35*(1), pp. 81-99.
- Mackenzie, N. and Knipe, S. (2006). Research dilemmas: Paradigms, methods and methodology. *Issues In Educational Research*, 16(2), pp. 193-205
- Maheshwari, V. K., (2013). Expository teaching a direct instructional strategy. Philosophical commentary on issues of today. Retrieved from http://www.vkmaheshwari.com/WP/?p=928
- Martin, D. J. (2003). *Elementary science methods: A constructivist approach (3rd ed.)*. Belmont, CA: Thomson-Wadsworth.
- Martin-Hansen, L. (2002). Defining inquiry. The science teacher, 69(2), pp. 34-37
- Marzano, R. J., and Marzano, J. S., (2003). The key to classroom management. *Educational Leadership* 61 (1), pp. 163-167
- Moon, J., (2004). A Handbook of Reflective and Experiential Learning. London: Routledge Falmer
- Moon, J.,(2006). Learning Journals A handbook for reflective practice and professional development (2nd edition). London and New York: Routledge taylor anf francis group
- O'Connell, Timothy S., and Dyment, Janet E., (2013). *Theory Into Practice Unlocking the Power and the Potential of Reflective Journals*. Charlotte, NC: Information Age Publishing, Inc
- O'Connell,T.S., Dyment,J.E., and Smith, H.A.,(2015). Students' Appropriation, Rejection and Perceptions of Creativity in Reflective Journals. *International Journal of Teaching and Learning in Higher Education*, 27(1), pp.1-13

- OECD, (2010). *Mathematics Teaching and Learning Strategies in PISA*. OECD member countries: OECD publishing
- Oldsjö, F., (2010). Some Thoughts from a Pedagogical Expert. *Pedagogical Competence*, pp. 41. in Apelgren, K., Ryegård, A., and Olsson, T., (2010). *A Swedish Perspective On Pedagogical Competence. Division for Development of Teaching and Learning*: Uppsala University
- Oliver, B., (1990). Defining Competence: The Case of Teaching. *Journal Of Teaching In Physical Education*, vol 9, pp. 184-188
- Olson, J., and Johnson, C. S. (2012). Implementing journal writing in grade 8, Academic Research International, Part-II: *Social Sciences and Humanities*, 3 (3), pp. 191-197
- Park, C.,(2003). Engaging Students in the Learning Process: the learning journal. *Journal of Geography in Higher Education* 27(2), pp. 183-199
- Perry, J.P., (2001) *Outdoor Play: Teaching Strategies with Young Children*. New York and London: Teachers College Press
- Richards, J. C. (1995). Towards reflective teaching. English Teachers Journal-Israel, pp.59-63.
- Roeser, R., Eccles, J., and Sameroff, A. (1998). Academic and emotional functioning in early adolescence: Longitudinal relations, patterns, and prediction by experience in middle school. *Development and Psychopathology*, 10, pp. 321–352.
- Ryan, R. M., and Deci, E. L. (2000). Intrinsic and extrinsic motivations: Classic definitions and new directions. *Contemporary educational psychology*, 25(1), pp. 54-67.
- Scotland, J., (2012). Exploring the Philosophical Underpinnings of Research: Relating Ontology and Epistemology to Methodology and Methods of the Scientific, Interpretive, and Critical Research Paradigms. *English Language Teaching* 5 (9),pp. 9-16.
- Shuck, B., Albornoz, C., and Winberg, M. (2007). Emotions and their effect on adult learning: A constructivist perspective. In S. M. Nielsen & M. S. Plakhotnik (Eds.), Proceedings of the Sixth Annual College of Education Research Conference: Urban and International Education Section pp. 108-113
- Smith, C. P., (2000). Content analysis and narrative analysis. *Handbook of research methods in social and personality psychology*, pp. 313-335.

Student Achievement Division, (2013). Capacity building series - inquiry based. Ontario

- Suciu, A. I., and Mata, L.,(2011). Pedagogical Competences The Key to Efficient Education, *International Online Journal of Educational Sciences*, 3(2), pp. 411-423
- Syahruddin, Ernawati, A., and Ede, M. N, (2013). Teachers' Pedagogical Competence in School-Based Management. *Journal of Education and Learning*. 7 (4) pp. 213-218.
- Jong, T. D., Joolingen, W. V., Swaak, J., Veermans, K., Limbach, R., et al. (1998). Self-directed learning in simulation-based discovery environments. *Journal of Computer Assisted Learning*, Wiley 14 (3), pp.235-246.
- Trigwell, K., Ellis, R. A., and Han, F. (2012). Relations between students' approaches to learning, experienced emotions and outcomes of learning. *Studies in Higher Education*, 37 (7), pp. 811-824.
- Wallen, N. E., and Fraenkel, J. R. (2001). *Educational research: A guide to the process*. 2nd ed. Lawrence Erlbaum Associates
- Walvoord, B. E. (2004). Assessment clear and simple. A practical Guide for institutions Departments and general education.
- Wentzel, K. R. (1998). Social Relationships and Motivation In Middle School: The Role of Parents, Teachers, and Peers. *Journal of Educational Psychology*, 90, pp. 202–209.
- Wentzel, K. R. (2009). Students' relationships with teachers as motivational contexts. In Wentzel, K. R., and Wigfield, A., (Eds.), *Handbook of motivation at school* (pp. 301-322). Mahwah, NJ: LEA.
- Wiliam, D., (2013) Assessment: The Bridge between Teaching and Learning, *Voices from the Middle*, 2(2) pp.15-20
- World Education, (2009). *Cooperative learning theory and practice*, school for life program USAID, Cambodia
- Thayamani, N. E, Fathima M. P and Mohan, S. (2013). Role of Emotion in Learning Process, International Journal Of Scientific Research vol 2 pp.119-121
- Zhou, C., Lund, B., and Chemi, T., (2015). Comparative Study Of Students' Perceptions Of Humour In Learning Creative Design Between China And Denmark. *Dealing with Emotions*, pp. 99-119

APPENDICES



INFORMED CONSENT

Dear Participants,

You are being asked to take part in a research study. Before you decide to participate in this study, it is important that you understand why the research is being done and what it will involve. Please read the following information carefully. Please ask the researchers if there is anything that is not clear or if you need more information.

Principal Investigators

Fajriah Master Student University of Tampere, School of Education Email: Fajriahs@gmail.com Tel. +62 813 1123 5717

Research topic and short description of the research

Topic: Learning journal: improving teaching strategies through students reflection The purpose of this research is to explore what is the role of student reflection in learning process, to describe how the teacher use students' reflection to improve teaching strategies

Description of participants

The selection and recruitment of participants are based on the particular criteria. The participants will be students and their teacher. The data collection includes classroom observation, learning journals and interview

Confidentiality

Your responses and comments to this interview will be anonymous. Every effort will be made by the researchers to preserve your confidentiality including the following:

- 1. Assigning code names that will be used on all research notes and documents.
- 2. Keeping notes, interview transcriptions, and any other identifying participant information in the personal possession of the researchers.

Participant data will be kept confidential except in cases where the researchers is legally obligated to report specific incidents. These incidents include, but may not be limited to, incidents of abuse and suicide risk.

Contact Information

If you have questions at any time about this study, or you experience adverse effects as the result of participating in this study, you may contact the researchers whose contact information is provided on the first page. If you have questions regarding your rights as a research participant, or if problems arise which you do not feel you can discuss with the Primary Investigators, please contact the supervisors of this research project. Also, you may refer to Ethical guidelines in the University of Tampere: http://www.uta.fi/english/research/ethics/guidelines/index.html

This informed letter has been sent to the teacher and the students in Indonesian languange

This is the permission letter from the district authority



MY LEARNING JOURNAL



Name :
1. How do you feel during learning activities? Why?
2. What have you learnt in the class? Please explain!
3. What is the content that you do not understand yet? Why?
4. What do you do during learning activities?
5. Any suggestion that you want to tell to the teacher?



Observation form

Class Participant	3
Date	
Time	:
Topic	;

Time	Observated items			
	Students' Activities	Students' Activities Teachers' activities		
		6		
,				



Research protocol

Topic : Learning journal : Improving teaching strategies through students reflection

Purpose of the research :

- 1. What is the role of student's reflections in learning process?
- 2. How does teacher use those reflections to improve teaching strategies?

This study will be conducted in Sukma Bangsa Pidie School. the participants for this study are students and a teacher. The researcher will observe classroom activities in one class and ask students to fulfill a learning journal in last minutes of the learning activities. Afterward, I will analyze the data for research data analysis. And I will give raw data for the teacher to be analyzed by the teacher. Furthermore, I will interview the teacher to explore what the teacher will do in next meeting considering the reflection from the students.

Teacher's interview

Theme 1. Preparation	1. How is your preparation for your class?
Theme 2. What teacher has done in classroom activities	 What did you do in the class? What do you think about your teaching strategies that you have applied? How students participate in the classroom?
Theme 3. How teacher think about students' reflection	5. How is the student reflect about classroom activities?6. what do you think about your student's reflection?7. Do you satisfy to your students' reflection?
Theme 4.What will teacher do next	 8. Do you think that you want to change something in your next teaching? 9. What will you do to improve your teaching strategies based on those reflection?