UNIVERSITY OF TAMPERE

STUDENTS' PARTICIPATION IN LOCAL LANGUAGE LEARNING THROUGH THE JIGSAW-BASED COOPERATIVE LEARNING METHOD

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March 2017

University of Tampere Faculty of Education ANNISA ARIS TANTYA and SITI SARAYULIS: Students' Participation in Local Language Learning through the Jigsaw-Based Cooperative Learning Method Master's thesis in Education, 57 pages, 14 pages of appendices March 2017

The purpose of the study was to investigate students' participation in local language learning through the jigsaw based cooperative learning method.

The research was carried out in the elementary school of Sukma Bangsa Lhokseumawe with the fifth grade students of local language learning. Observing 25 students' activities, interactions (teacher-student, student-student), and learning journals, which were written by students based on their experience, were the main sources in gathering the data. The results revealed that applying the jigsaw based cooperative learning method produced significant development in students' learning activities. Based on the observations, it could be seen that the teacher successfully implemented the jigsaw method. There were better progressions day by day in students' personal and social skills; working cooperatively, mastering the materials, acquiring knowledge, giving opinions, knowing each other, respecting each other, helping each other, and encouraging each other.

In summary, students' participation is enhanced by using the jigsaw method; jigsaw method characterized by constructing different groups, giving different subtopic in the group, requiring the students to separate from home group into the expert group. After that, the student in expert group should return to the home group and teach their peers in the home group. A better atmosphere in the classroom is successfully created. Notwithstanding, the challenges cannot be denied. Based on the learning journals, students being fussy, bossy, impatient, unconvinced by others' explanations about the essence of learning materials, and time constraints became the main problems, which disturbed the implementation of the jigsaw method. In spite of it all, the teacher as facilitator succeeded in managing the obstacles that appeared during applying the jigsaw method by introducing students to jigsaw method procedures, giving intervention to avoid unexpected events, and confirming the explanation at the end of the learning process, and hence the learning purpose could be achieved.

Key words: jigsaw, cooperative learning, local language, Acehnese, student participation, students' personal and social skills, elementary school.

ACKNOWLEDGEMENT

All praise to ALLAH SWT, God Almighty, and Merciful, who has given the writers full strength to complete the thesis entitled "Students' Participation in Local Language Learning through Jigsaw-Based Cooperative Learning Method". Peace upon the prophet Muhammad SAW who has brought the Islamic norms and values from darkness to the brightness of the entire world. We would like to express our special thanks to our family, especially for our beloved parents (Hasyim Syahbana and Laily Fadhlun; H. Hasanuddin H. Usman and Hj. Ainol Mardhiah H. Yusuf) who inspire and for being a source of motivation

Additionally, we would like to express our special thanks of gratitude and appreciation to the following scholarship sponsorship, Mr. Surya Paloh, Prof. Komaruddin Hidayat, and Ms. Lestari L. Moerdijat. We also would like to thank to Mr. Ahmad Baedowi as the director of education Sukma Bangsa and our local tutors helped in completing the thesis, Ms. Evi Siregar, Mr. Fuad Fachruddin, P.hD., Mr. Samsir Alam, M.Ed., Prof. Khoiruddin Bashori, Ms. Titik Farwati, Ms. Poppy S. Winanti P.hD, Prof. Drs. H. Ratno Lukito, M.A., D.C.L., Mr. Dr. Samsu Rizal Panggabean, and Ms. Satia Prihatni Zen, MA for their advices, information, knowledge, and support during this course.

Furthermore, our great appreciation for our supervisor, Prof. Eero Ropo, Ph.D and Pekka Räihä Ph.D for their guidance, advice, and assistance during our research. We are also thanks to Julie Rajala, Niina Nyyssölä, and Markus Huhtamäki who supported us in writing thesis process.

The last but not least, a special thanks goes to Birlander members who shared many ideas and helped us at any stage in the research.

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1. INTRODUCTION

1.1 BACKGROUND OF THE STUDY

Language is the most important skill in order to conduct better communication with others. Language has a pivotal role in human's life and it is developed through interaction with others. It starts from infancy. A mother often talks to her child even while she is pregnant. In addition, when the child is born, the mother communicates with the child by using language. The first language that children obtain is called mother tongue or mother language (Buhmann & Trudell, 2008). Mother language that parents acquaint their children with is usually a local language of their region.

Learning local languages is one of the manifestations to entrench students' appreciation for regional culture. According to Wildan (2010), the function of local language is as a medium of instruction in family and society. Tsui and Tollefson in Desai (2013) said that utilizing language and culture as the medium of instruction is the greatest tool in retaining and regenerating it. Following this, according to Vygotsky's theory in Oakley (2004), culture has a crucial role in constructing knowledge. Constructing knowledge by culture could be learnt through songs, languages, and plays. Vygotsky also describes that culture might influence broader understanding for children in some contexts (Miller, 2011).

In Indonesia, there are many languages, which are typical of the provinces. One of the local languages in Indonesia is Acehnese, and mostly people in Aceh use Acehnese. Akbar et al. in Zulfadli (2014) revealed that Acehnese is a mother tongue of about 71% of the population in Aceh. In line with Yusuf (2009), about 2.5 million people in Aceh speak Acehnese language. In Aceh, there are different dialects of the Acehnese languages based on the districts where Acehnese people live, namely Aceh Utara dialect , Pidie dialect, Aceh Barat dialect, and Aceh Besar dialect. In addition, there are also two minority languages in Aceh; Jamee and Gayo. Every district has a different dialect that is unique to the area. For example, "what" in Aceh Utara dialect and Pidie dialect is "peu (/p ∂ /)". However, the pronunciation of both is different. The accent of "peu (/p ∂ /)" in Aceh Utara dialect is "pu (/pu/)" and Pidie dialect is "peu (/p ∂ /)". Moreover, using Indonesian in

daily conversations, which is occurred in local communities nowadays, challenges parents to make their children use Acehnese to communicate.

However, nowadays the existence of local language in Aceh is diminishing. Acehnese people, especially the younger generations prefer to use Indonesian in their daily life, specifically in urban areas such as Banda Aceh (Alamsyah et al. in Pillai &Yusuf, 2012).Based on language mapping in the province of Aceh, local languages in Aceh are beginning to extinct, particularly the Devayan language in Banyak Island (Santoso, 2017). It is also possibly happened in other regions in Aceh, if Acehnese people do not conserve their local languages from now on. The domination of Indonesian language in daily life is one of factors that reduce the use of Acehnese language.

Families with Acehnese monocultural backgrounds do not let their children speak Acehnese. Additionally, parents hesitate to teach children to speak the local language, because they assume that their children will have difficulties to understand the learning content in schools, which is delivered in Indonesian.

Additionally, based on pre-observations in the local language classes in the Elementary School of Sukma Bangsa Lhokseumawe, students only sit, listen, and do the tasks which were given by the teacher. From fifty students at the fifth grade, only 36% of the students (18 students) actively participated in learning the local language.

Based on pre-interview with some parents in elementary school of Sukma Bangsa, they said that they accustomed their children to speak Indonesian as a language of instruction since their children were babies. They prefer to accustom their children to speak Indonesian in order to avoid children use a kind of impolite words in Acehnese. For instance, 'you' in Acehnese language has three varieties "droeneuh", "gata", and "kah". The first two words are the polite words in Acehnese and are used when speaking with someone who is older than speakers are. Otherwise, "Kah" is an impolite word or a little bit rough word, which is usually used by people with their fellow friends or younger than they are.

Additionally, the teachers in elementary school who teach Acehnese language were not originally from a local language education. They can only speak Acehnese in daily life. Moreover, there is no obligation in curriculum to determine Acehnese subject as a compulsory subject. In other words, implementation of Acehnese as a subject is optional. Commonly, using a traditional method is also a reason that affects students' refusal to give their attention to this subject. This fact creates a passive and an uninteresting classroom condition. Consequently, the learning process turns into an activity that reduces students' motivation to learn Acehnese language. Lack of motivation to participate in the local language learning creates an unsupported environment. Students hesitate to participate actively during local language learning processes. However, if students participate actively in each learning activity, they will share some new information, learn better, and gain a better understanding (Wade in Abdullah et al., 2012). In line with Petress in Al-Kandari (2012) who said that, students give their best performance when they are actively involved in learning activities.

Furthermore, Slavin and Sahran in Sonwane (2011) stated that teaching method is one of the challenging topics of educational area. Therefore, an innovative and a creative teaching method are needed, in order to attract students' enthusiasm to be actively involved in the learning process. A cooperative learning is one way to create student-centred learning and encourage students' involvement in learning processes. One method, which is included in cooperative leaning, is the jigsaw method. Mengduo and Xiaoling (2010) found that students' enthusiasm and participation could be promoted through a jigsaw method. It was a useful technique for students who are learning in language class. The jigsaw method is considered effective in increasing student's confidence to speak. When students work together in a group discussion, they present better involvement, express a complex level of discussion, reduce the interruption when someone speaks, and offer important contributions. (Webb & Farivar in Gillies, 2006).

Based on Kazdan in Souvignier and Kronenberg (2007), using a cooperative method enhances social interactions among students in elementary school. When students are given a chance to construct thoughtful ideas by working with others, they develop an understanding of a purpose of groups and help others by giving information. According to Payne and Whittaker in Mohammadjani and Tonkaboni (2015), involving students through study in groups and discussions is important to give students opportunities for actively participating in the learning process. This treatment proved that cooperative learning acquaints learners to be an emphatic person by working with others and help each other. Classmates are often more sensitive than teachers of what other students cannot understand, able to converge the students' attention to the problem, and provide clarification in their way (Gillies, 2006). As a result, student-centred classes can be created through students' participate actively and work cooperatively.

Participation in the classroom does not only mean answering questions and making comments, but also asking more questions, and specifically responding to other students' talk in class (McPherson, 2007). Establishing active participation in each course is not a simple task for every teacher. The behaviour and traits created by teachers and classmates influence students' learning (Bolkan & Goodboy, 2009; Mustapha, 2010). Teachers should consider many things to create an active class and attract students to contribute actively in the classroom.

Therefore, we decided to use jigsaw method in order to explore more whether this method will involve students in learning the local language. We proposed that the teacher uses the jigsaw method to create a better atmosphere in the classroom. Additionally, the teacher can recognize the challenges in implementing jigsaw method and their solutions through this research.

In the next chapter, we discuss the theory and previous studies about the jigsaw method as one of cooperative learning methods, students' participation, and language acquisition. Then, chapter three explains the method that we used for gathering and analyzing the data in this study. Furthermore, chapter four will discuss the results that we found in this study. Finally, in the last chapter, we present the conclusions and the implications of this study.

1.2 RESEARCH QUESTIONS

- 1.2.1 How does the jigsaw method work in order to enhance students' participation in local language learning in the fifth grade?
- 1.2.2 What are the challenges in implementing jigsaw method, and does the teacher solve the challenges?

2. JIGSAW BASED COOPERATIVE LEARNING ENHANCES STUDENTS' PARTICIPATION IN LOCAL LANGUAGE LEARNING

This chapter will discuss theories and previous studies that were chosen for the study. The discussion will focus on a cooperative learning in general, jigsaw method in particular, students' participations in the learning process, and language acquisition in education. Additionally, the concepts, procedures, and advantages of the jigsaw will be explained in this chapter.

2.1 COOPERATIVE LEARNING

At the beginning of the twentieth century, the Johns Hopkins University began to focus on a cooperative learning, concerning small group learning and helping each other to achieve group aims (O'Leary & Griggs, 2010; Karacop & Doymus, 2013). This method is characterized by students working in 4-5 member groups, in which the members gain the acknowledgement based on the learning of the entire members (Slavin, 2008). An arrangement of cooperative learning encourages demonstrative teaching in elementary and secondary schools. Learning processes will be more interactive when cooperative learning is applied in a classroom. According to Steven and Slavin in Souvignier and Kronenberger (2007), cooperative learning is possible and efficient to use from the first day of school. According to Fawcet and Garton (2005), cooperative learning shows advancements, not only in students' achievements, but also in students' social interactions in elementary school.

Cooperative learning adjusts students to understand and share information with others in order to gain a good achievement. A research by Johns Hopkins University proves that cooperative learning encouraged students' achievements, if students are committed to learning objectives. The appreciation, which is achieved by groups, was not based on a single group product. However, it was because of the individual learning of all group members (Slavin, 2008). Based on Adams (2013), students work better in gaining knowledge and social ability by associating cooperation and individual liability. Cooperative learning helps students to conduct their social skill, they rehearse to respect others opinions and express their opinions. Indirectly it will embed students' responsibility in terms of tasks and obligations in groups. In line with the researches above, Hossain et al. (2014) revealed when working in small groups, students acquire a better academic achievement, regardless of ability levels, learning styles, ethnics, and gender. The cooperative learning itself helps increase students' performances, communication skills, and values.

Slavin in Dollard and Mahoney (2010) stated that the purpose of cooperative learning is to utilize students' passion, action, and inspiration independently. Studying in groups encourages students become more autonomous to figure out a material that they want to accomplish. Learning is not only getting the information from teachers or parents, but students can also learn from their colleagues. They find the problem and try to solve it together in groups. According to Grineski in O'Leary and Griggs (2010) through a cooperative learning, all students engaged in the learning process such as thinking, learning, and enjoying progress with colleagues. Cooperative learning is applied in order to construct a meaningful learning and gain a better thinking skill (Leng et al., 2013). The research found when students work cooperatively, they can build a better understanding and good achievements. In reference to this finding, we agree that cooperative learning will help students to participate actively and involve themselves independently in the classroom.

In order to engage students in learning, five elements must be presented in a cooperative classroom (Johnson & Johnson in Tran, 2016). According to Roger and Johnson in Rusman (2013), the elements of cooperative learning are positive interdependence, individual and group accountability, interpersonal and small group skills, face-to-face interaction, and group processing. According to Gillies et al. (2008), in conducting positive interdependence, every student should contribute actively in the group to achieve the learning group goal, such as mastering the essence of material, interrupting politely, giving opinion, and following teacher's instruction. According to Sahin (2011), individual and group accountability is related to students' self-awareness to take a responsibility in order to accomplish group achievements, which rely on all members of groups, such as to complete a task on time, write a result, pay attention and make eye contact with others, and initiate to talk. According to Jolliffe (2007), interpersonal and small group skills did not come naturally to students' way of thinking, but through interacting with others (nurture). Students learn how to communicate, respect each other, resolve problem, and motivate the groups from teammates. When doing face-to-face interaction, every member in the group should support and encourage each other to achieve learning goals in completing a task (Ashman & Gillies, 2003). Additionally, Sahin (2011) said that a group processing is a reflection of a group process, which is

done by every member, such as reflecting on group sessions and presenting the results. Based on the five basic elements of cooperative learning, researchers agree that these elements is as a guideline in gaining the data when doing observation during courses.

2.2 JIGSAW AS A COOPERATIVE LEARNING METHOD

Hossain in Azmin (2016) stated that there are several types of cooperative learning methods; those were included the Student Teams-Achievement Division (STAD), Teams-Games-Tournaments (TGT), Cooperative Integrated Reading and Composition (CIRC), Team Accelerated Instruction (TAI), and the jigsaw method.

2.2.1 A concept of the jigsaw method

Forming a jigsaw method in a classroom avoids problems that occur in the learning process. This method is proven diminishing a competition and increasing cooperation (Doymus et al., 2010). In order to minimize the competition, according to Aronson (as cited in Souvignier & Kronenberger, 2007), the jigsaw method provides a cooperative learning environment, which fosters learner activities, joint acquisitions of contents and mutual explanations. Aronson and colleagues firstly applied the jigsaw classroom in 1971 in Austin, Texas. They invented the jigsaw method to reduce a racialism problem (segregation). By applying this method, they tried to merge white youngsters, African-American youngsters, and Hispanic youngsters in one class (Aronson, 2000).

As mentioned by Richards and Rodgers (2000), groups in cooperative learning are permitted to equal and unequal ability. By applying the jigsaw method, it is expected that students' social skills will improve despite of their different ethnics, languages, and abilities. In forming cooperative learning groups, heterogeneous abilities in one group will conduct an equal understanding about materials. The jigsaw method constrains students to discuss and share basic information that they had before. At the end of the learning, a teacher has an important role to polish students' achievements in order to enrich the knowledge towards the content of the material. In line with Kelly (2005), diverse ability groups make more comprehensive group conditions and produce the broadest perspectives and thoughts. Each group member who has unequal ability in learning will get advantages. According to Felder and Brent (2007), studying with heterogeneous abilities in one group will benefit each individual. Those who have a weak ability in learning can learn from students with a high ability while those who have a strong ability in learning will acquire the lesson content because they teach and guide others. Huang et al. (2014) revealed that forming cooperative

learning groups by mixing students with have high and low abilities is proven advancing effectiveness of learning and encouraging students' social skills. Heterogeneous group members conduct a deeper and a better learning process. Studying with different students creates new ideas and understandings. These findings are in line with the research findings of Rasuli et al. (2011); Mohammadjani and Tonkaboni (2015).

Therefore, when forming the home groups, the teacher plays a role to distribute and choose each member of the groups to avoid social discrepancy. If the teacher lets students choose their members, they will most probably choose the same gender or the same ability for their own group. This causes unfairness to other students who have low ability in learning.

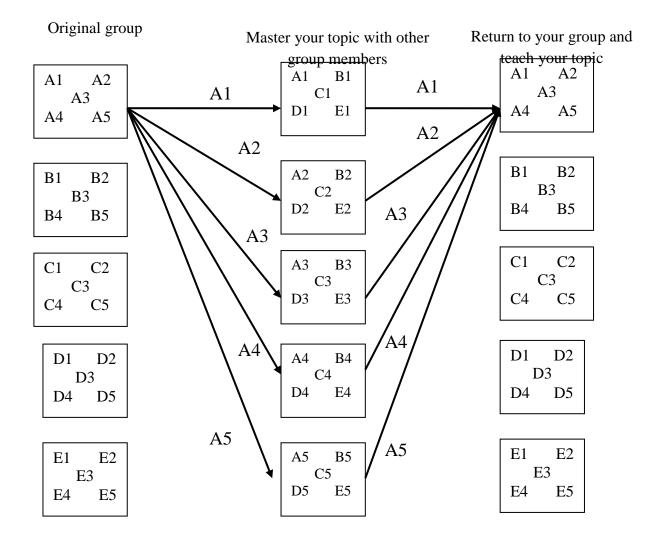
When creating home groups, teachers distinguish some factors related to the gender and culture (Sahin, 2011). However, some researchers did not find differences in achievement between male and female when forming jigsaw method (Njoroge & Githua, 2013; Peklaj, 2003; Petersen et al., 1991). In a cooperative condition, there was an equalizing effect; over time, there were no significance differences between female and male group members in achievement, verbal participation, perceived leadership, and status. The results are consistent with a proposition that group composition in terms of sex is not a significant influence on outcomes of cooperative efforts (Petersen, 1991). Contrary to previous studies, our study does not intend to explore students' achievements after learning with jigsaw method. This study does not see the different genders when forming the groups, but distinguishes the members according to their abilities in local language learning. The groups will consist of students with mixed abilities according to their skills in the local language subject.

2.2.2 The jigsaw method procedures

According to Azmin (2015):

The procedures of applying jigsaw are; the teacher introduces a topic and subtopics. Then, students are divided into 'home' groups, where they are each given a different subtopic in the group. The next step requires the students to separate from their 'home' groups into the 'expert' groups where these students focus on one subtopic, researching and discussing it. Therefore, the students become experts on the subtopic that they have been assigned. Following their discussion, the students from all of the 'expert' groups must return to the 'home' groups and teach their peers based on their findings and discussions. In the end, all members of the 'home' groups will have learnt from each expert group discussion and will have the beneficial from each other. (p. 92)

FIGURE 1. The Procedure of the Jigsaw Method



The procedures of applying the jigsaw method are seen in graph 1. Through this method, learners have a same opportunity to participate in learning activities and a same responsibility in accomplishing assignments. The jigsaw method accustoms the learners to collaborate and cooperate with others. Additionally, this method can successfully reduce students' reluctance to participate actively in the classroom activities and automatically conducts student-centred classes. However, teachers' role as facilitator is undeniable when applying the jigsaw method. The teacher should help the students in gaining an essence of materials and control the learning process in order to achieve the learning goals by becoming involved in each student's activity. According to Holliday (as cited in Mengduo and Xiaoling, 2010):

The group's work in the expert groups and the home groups need to be assessed to ensure that everyone participated. This assessment evaluates the cooperation of the students while working in these small groups. The assessment takes the form of self-evaluation and teacher evaluation. Evaluation forms need to be created to evaluate the cooperation of the students while working in-group. (p.119)

2.2.3 The advantages of the jigsaw method

The jigsaw method emphasizes cooperative learning by providing students with an opportunity to help and encourage each other to increase a comprehension of materials. In line with Vygotsky's theories, which focused on utilizing an environment into learning processes, includes people, cultures, and experiences in order to enhance students' cognitive development. Students acquire the knowledge through an interaction with people around them and then they internalize the knowledge individually. According to Vygotsky in Doolittle (1997), internalization covers filtering new knowledge based on previous knowledge, and then incorporates it into students' way of thinking. The learning process itself is a process of gaining the essence of the materials, which need students' way of thinking to make it. Vygotsky in Oakley (2004) also said that a social interaction between children and adults around them is one way to build a complex thinking. An outcome of their learning process is a result from their interaction with others, parents, peers, and teachers.

In the jigsaw method, every student works in-group to achieve a group goal. They are more actively involved in gaining and mastering a learning content (Doymus et al., 2010). Therefore, students may not be only as passive receivers, who sit, listen, and accept the information from a teacher in learning processes without making any effort to be an active learner. The teacher is only as a facilitator who guides them, if they were stuck in the learning process. Teachers should give the students an opportunity to participate and facilitate them using a precise guidance in order to achieve learning goals in an active class.

In order to achieve better group aims, the teachers arranged students with various levels of abilities into one group. Thus, expert students can help others in understanding a material. Vygotsky in Oakley (2004) said that a support and a guidance by experienced others is needed to increase students' achievement. The experienced others, which is called scaffold, provides a crucial role in increasing students' level of capability. It will help students move from their actual level to their potential level.

The previous study by Azmin (2016) proved that the jigsaw method is successful promoting students' performance rather than traditional method. The study also produces positive views from students after using the jigsaw method in the classroom. In line with Dollar and Mahoney (2010), applying the jigsaw method admits students in having a big opportunity to participate. Maceiras et al. (2011) in their study showed that students gained a deeper understanding and more participating in a group discussion rather than only listened to teachers' explanations. Students are also enjoying the learning activity and feeling more helpful during learning with the jigsaw method. Even though, some of students were still doubt about the accuracy of the information from their teammates. Therefore, at the end of the courses, the teacher as a facilitator gives a completion of a whole material. Not only expert teammates, but also the teacher becomes scaffoldings in this activity to help students in gaining a better knowledge. According to Marhamah and Mulyadi (2013):

The jigsaw method also provides a way to help students become active in the classroom. When students are worried or sometimes even afraid to participate, they will miss the information, which is needed to understand the material. However, in the jigsaw method, students allow to work with one another and the knowledge. By involving students actively in the learning activities will increase their listening, speaking, cooperating, reflecting, and problem-solving skills. (p.711)

Additionally, Mengduo and Xiaoling (2010) found that the jigsaw method increases learners' motivation, activeness, and interest in learning English effectively. This finding is in line with Yoruk (2016); Yapici (2016), which found benefits of applying the jigsaw method are not only increasing students' achievement but also gaining a better motivation, enthusiasm, and activeness.

2.3 STUDENTS' PARTICIPATION IN THE LEARNING PROCESS

Every student has to do well and take an active role in his or her learning process. It can be done through student's participation by seeking the information independently, analyzing the information, and asking questions if they get difficulties in the learning process. When students speak in class, teachers consider that students are ready to ask a question, answer the question, give comments, and play a part in a class discussion. However, when students do not speak and participate in these ways, teachers consider that the students are lazy, unprepared, passive, or/and uninvolved students (Vandrick, 2000). There are many reasons why students do not speak out in the classroom. Therefore, when determining the technique and the method of teaching, teachers need to consider whether the method is an appropriate method to be applied and encourages confidence levels for students to speak more or not. This part will talk about the importance of the participation in the learning process, the factors which influence participation, and how to increase students' participation in the discussion process.

2.3.1 The importance of participation in the learning process

Participation is an important element to learn. Based on social constructivism, learning occurs when students are actively engaged in the learning process and work in collaboration with other students to accomplish the group aims (Alanazy in Leng et al., 2013). According to Cohen in Tayebinik and Puteh (2013) students should be actively engaged in the learning process in order to enhance the quality of teaching. It has been proved that students learn better and get more information when they actively participate. Classroom participation can increase students' motivation to take responsibility in learning, encourage students' readiness in class, increase students' confidence level in communicating with others, and create critical thinking.

The national Oracy project recognized that one way of improving learning could be through participation and discussion with others. When learners discuss with others, it can help learners in understanding, and then learners can appreciate new meaning and understanding by stating it into words. Through group discussion, every learner can assess the new knowledge and consider it in a different situation as they argue with others. Verbalizing all of the thinking provides a basic idea for learners to think deeply in their own thoughts, as Vygotsky said that thinking is an internal personal discussion. (Kelly, 2005) However, when the participation does not occur in a class, it will affect the students' motivation to learn and students' general attitudes towards the course. (Cieniewicz in Thien, 2008)

Lave and Wenger in Yun and Kim (2014) believe that learning should be established in social participation and interaction, which would play roles in developing learners' ability in learning. The Russian constructivist psychologist, Lev Vygotsky, in Jordan et al. (2008) emphasizes that learners' reasoning and understanding can be awoken with a social participation. He also claims that thinking and meaning are constructed through language. Individuals' ideas are shared with others through a language. This participation in language is internalized as an individual thought. Therefore, a social communication develops into internalized thinking (Vygotsky in Oakley, 2004).

Vygotsky socio-constructivism theory was used as a basis for obtaining a concept of students' participation in a local language through the jigsaw method in elementary school at the fifth grade. The theory was useful in evaluating the working of the jigsaw method during the learning activities observation and students' opinions that were expressed in the learning journal.

2.3.2 Factors influencing the students' participation in the process of learning

During the learning process, there are many factors influencing the students' hesitation to speak out. According to Vandrick (2000), some of the reasons are related to students' personal characteristics, classroom dynamics, and students' background. Additionally, Abdullah (2012) states some factors that influence students' participation are; the personality of the students, the skills of the instructor, the perception of classmates, and the size of classroom.

Students' Personality

The personality of students is one of the supporting factors causing students to be engaged actively during the learning process. Students who have low motivation tend to be shy to speak and give opinions in class activities. Students can also become passive in the learning process because of self-limitations (Mustapha, 2010). The first of the self-limitations is *cannot focus during the lecture or learning time* (Abdullah, 2012). Students who cannot focus during the learning process tend to have difficulties in performing. When the teacher is delivering the material, students prefer to do something else that is unrelated to the class activities. *Fear of offense and failing to show their intelligence* also happen as a trigger to do not actively interact in the learning process (Mustapha, 2010). Students feel that they will act in the wrong way and make silly mistakes, even though they have a good understanding of the material. They think that is better for them to stay calm and keep the answer to themselves. Another typical of the factor above is *fear that the lecturers will criticize their answers and confusion is occurring among students* (Abdullah, 2012). Students are reluctant to give opinions or comments in the learning process, because the teacher will criticize the opinion.

When the teacher asks students to confirm the idea advocated by students, students tend to be confused and lose the idea. The next factor is *low levels of self-confidence* (Rocca, 2010). The level of students' self-confidence will affect their courage to speak in front of a class. A student who feels capable enough and trust with her/his skills will be brave in expressing their capability, whereas students with low level of self-confidence tend to be shy and hesitate to perform. Another factor is *lack of preparation* (Tesfaye, 2015). One factor which characterizes students' readiness to study is when students give responses and are motivated to be involved in the classroom. A final factor is that students' moods and emotional states influence their motivation to participate in the learning process. This situation can be seen when students showed their positive emotions in the classroom, for instance interacting well with fellow students and the teacher.

On the other hand, better participation can be shown if a student has a high self-efficacy. Self-efficacy is related to displaying more curiosity and discovering the inner urge. Thus, if self-efficacy is high, it will enhance students' confidence levels and they will become more active and speak more in the classroom. They will show a greater interest to learn and know more by asking questions, giving opinions, and discussing the topics in the classroom.

Classroom Dynamics

According to Vandrick (2000), classroom dynamics is characterised by students' full participation and happens when all students are actively involved in the learning process. A teacher who is able to conduct a well-managed classroom dynamic will be able to create a good interaction between students and the teacher, and among students. Providing opportunities to all students to speak up in learning is a supporting factor that enables students to be engaged actively. A teacher is not supposed to pay attention to some certain dominant students. Lack of opportunity to give questions or comments causes students to be reluctant to participate. Therefore, a teacher needs to give an equal chance to each student to contribute in the learning process.

Students' Background

According to Tesfaye (2015), students' academic backgrounds influence levels of participation during class activities. Based on a situation in a classroom, students with Acehnese as the first language show a better involvement in Acehnese subject rather than students with Indonesian as the first language. In line with Vandrick's findings (2000), the reason that influences students to hesitate to participate in a class, which has a certain language as the medium of instruction, is that the language is not their first language. Naturally, students who are not able to speak Acehnese as

their first language will be nervous to speak out. Even though they believe that their opinions are correct, some students will be silent and act as receivers in the group process.

The Power and Skills of Teachers

The power and skills of teachers become an important factor to attract students' participation in the learning process. According to Rocca (2010), teachers give a contribution to increase students' levels of participation. Students also believe that teachers influence their involvement in a classroom based on the way the teacher communicates with them (Fritshner in Rocca, 2010).

A teacher has to lead his/her learners to encourage learners' performances and qualities of learning. During the learning process, teachers are able to use their power in delivering the material. She/he ought to have teaching ability in line with her/his competency, proficiency, and experience. A good skill in delivering materials that is shown by a teacher makes students believe in the teacher's quality. Students will trust and appreciate, and even obey anything the teacher says. When students and teachers have a good relationship, students will be more comfortable to share, communicate, and participate during the learning process.

In enhancing students' willingness to participate, the teacher has to appreciate a student who gained a good result by giving a reward. A teacher may give applause to her/his students in order to increase students' motivation to be involved in the learning activities. Teachers need to give students an opportunity to express their thoughts to conduct a good interaction during the learning process.

Essentially, having powers in teaching is really needed. A teacher who uses these powers during the learning process is a creative and critical teacher. Therefore, the skills and power of teachers will influence students' involvement during the courses. A teacher, who manages when and how the power can be applied effectively, is a teacher who can educate and teach the students to reach a better achievement and participation.

The Personality of Classmates

However, not only teachers, but also classmates also have a crucial factor to influence the level of students' participation. Students prefer to participate in-group or in the classroom if they are in a group which has the same thought with them. Positive traits, such as giving applause, support, and encouragement, which are shown by peers, will be helpful to promote students' engagement during the learning process. When their classmates give the encouragement, students will feel more relax in sharing their ideas (Mustapha, 2010). A good relationship among students will result in better

atmosphere when sharing with others during class activities. Whereas, students who tend to silent and have low social relationship with classmates will be more passive in the learning process.

Environmental Factor

The environmental factor such as the size of classroom also affects students' motivation to engage during the learning process. According to Abdullah et al. (2012), the size and seating positions in the classroom affect increasing students' involvement during the learning process. Students are interested in studying in a room equipped with an air condition, pictures on the wall, and a wide room. Additionally, based on Rocca (2010) the seating arrangements also influence students' participation. Seating positions in a wider and more comfortable room will encourage passive students to become active during the learning process.

2.4 LANGUAGE ACQUISITION

Language has a pivotal role in human's life. Language is developed through interaction with other people. According to Chomsky, language exists innately. Someone is able to be familiar with language because he or she has the capacity of it. On the other hand, Skinner stated that children learn language when hearing it is spoken (Jordan, Carlile & Stack, 2008). According to Bransford et al. (2000):

...young children have rich opportunities for learning because they can use context to figure out what someone must mean by various sentence structures and words. Unless she was being tested by tricky experimenters, for example, the child discussed above could determine the general meanings of "apple," "eat," and "throw." Similarly, if a mother says "Get your shirt" while pointing to the only loose object (a shirt) on the rug, the child begins to understand the meaning of "get" and "shirt." (p.94)

In their daily life, children did not think intricately. They think what they saw and they speak what they heard. Mc Namara in Bransford et al. (2000) stated that child's habit in comprehending others speaking uses meaning as an indication to language rather than uses language as an indication to meaning.

Environment influences children in learning language. For instance, an Acehnese child who lives in Aceh uses Acehnese as her/his first language (L1) and Indonesian as the second language (L2). She or he acquires Acehnese from parent in home and Indonesian from schools. According to Jordan, Carlile, and Stack (2008) the home is the place that facilitates children providing a rich linguistic environment and promotes their improvement of a verbal communication. Parents play

roles in their children language development. Language is also gained from school environments. Students acquire language when a teacher is explaining materials, discussing and peer talking that involving the whole class or small groups, reading, writing, listening to the teacher or each other (Cohen et al. 2004).

2.4.1 The local languages in Aceh

There are differences among local languages in Aceh, which is why Acehnese people did not use the same language in each region. The local languages used in the Province of Aceh are Aceh Utara dialect, Pidie dialect, Aceh Barat dialect, Aceh Besar dialect, Jamee, and Gayo. (Zulfadli, 2014). Aceh Utara dialect is used for Acehnese people from northern Aceh. The dialect is the easiest dialect that is usually used by people who want to learn the Acehnese language. Pidie dialect is used among people who stay in Pidie. Aceh Barat dialect is used among Acehnese people who stay in Western Aceh. Aceh Besar dialect is mostly used in Greater Aceh and around Banda Aceh. Jamee is used in southern Aceh and Gayo is used in central Aceh. The differences among dialects in the Province of Aceh can be seen in the table 1 below.

The Local Languages	Domain
Aceh Utara dialect	 Is used by Acehnese people from northern Aceh such as Bireuen, Aceh Utara and Aceh Timur. Mostly is used in Acehnese textbooks for students as local content subject. Mostly is used as a subject of research on the Acehnese language. Preferred to be used by Acehnese people of different north Aceh dialect in communication in Banda Aceh, the capital city of the province. The reference for non-Acehnese people who want to learn the Acehnese language. Generally is used by West Acehnese in the Aceh Barat region when communicating with people from non-West Acehnese background.
Pidie dialect	Being used among people in Pidie district or those who have moved to Banda Aceh.
Aceh Barat	Being used among people in West Aceh and among the people of this dialect

TABLE 1. The Local Languages in Aceh (Zulfadli, 2014)

The Local Languages	Domain
dialect	who live in Banda Aceh.
Aceh Besar	Being used among people in Greater Aceh and around Banda Aceh outskirts
dialect	where the Aceh Besar community lives.
Jamee	Mostly is used in Aceh Selatan areas and within the community, family members of Jamee origin who have moved to Banda Aceh.
Gayo language	Is used among people of Gayo in Aceh Tengah, or students of Gayo language background who live in Banda Aceh. It is also used as a language of oral cultural expression and written works in Aceh Tengah.

2.4.2 The importance of the local language

Even though every region in Aceh has various local languages, however according to Congress Aceh Civilization (2015), students only need to learn the certain language in their region. Students are unnecessary to speak all languages fluently. On the other hand, parents tend to accustom their children to speak Indonesian rather than Acehnese. This tendency affects the first language acquisition. (Muhammad, 2013). The environment exposed too much with Indonesian language (friends, teachers, school, books, movies, and so on). Therefore, the children think that Indonesian is simpler than Acehnese, which is why they are faster and easier to speak Indonesian rather than Acehnese. L2 is more dominant than L1. The fact is Indonesian as a medium of instruction in Aceh is causing that some parents not to accustom their children to speak Acehnese more. Commonly, parents, who live in city, using Indonesian as a medium of instruction when talking to their children and using Acehnese with their spouse.

The significant role who should establish heritage language is parents. Guardado in Park (2013) said parents should support children's heritage of language and culture maintenance, because they have the pivotal role. It can be done through using the first language in daily conversations, discussion about one topic, or sharing each other to acquire new information clearly. Li in Alhussein and Milian (2013) said that increasing new vocabulary and expressing children's opinion could be clearly done through using the first language when talking. Portes and Hao also said in Park (2013) that using heritage language during interaction with their children in home environment can create big possibility to next generations in preserving children heritage language. The cultural identity cannot to be instantly created; it needs school, community, and family who conserve it. This in line with Park (2013) state that through schools, families, parents, and ethnic

communities are the cultural identity can be protected and expanded, it cannot be automatically established. Especially, mothers are the people, who often stay beside their children, have important part in accustoming students in language practice.

Horbatsch (2008) stated that mothers are the main point in children's first language learning, who more participated, involved, and committed rather than fathers. Using the first language at home proved that literacy development in school could be increased. Additionally, their academic development has positive influence. Shin (as cited in Al Hussein & Millian, 2000) resulted children's literacy development in school can be developed through practicing the first language at home, and it can also promote on students' academic growth.

2.4.3 Students' participation in learning local language using cooperative learning method

Learner autonomy in language learning is needed. It can be started by giving the chance for students to be actively participating. Teachers should also create a meaningful and pleasant class to attract students' attention in the language learning process. Yildirim (2012) said that an autonomous learning environment could be created through giving small responsibilities to students and increasing level of responsibility slowly. Additionally, guidance and encouragement are needed in language learning, and teachers require creating valuable, attractive, and fun ways in delivering material during the language learning process.

Besides, supportive environment, which children can be experienced language learning, is necessary. Huttenloncer in Bransford et al. (2000) said that language should be practiced perpetually and active process and not only passively listened or observed by watching television. Additionally, Mc Groarty as cited in Chern (2002) said, "Academic and language learning require that students have opportunities to comprehend what they hear and read as well as express themselves in meaningful tasks" (p. 153). Giving the learners a meaningful role by using cooperative learning method in local language will be more helpful accustoming them increasing their capability in order to acquire the language rather than using traditional method. Teachers are as facilitator instead of the main speaker in the learning process. They have to guide students to be independence learners. Table 2 showed some differences between cooperative language learning and traditional language teaching. Based on Johnson & Johnson (1991); Nunan (1989) as cited in Zhang (2010) most interactions in the learning process during cooperative learning are characterized with communicative language teaching. Both of the researchers give highlight to the interaction and communication between students and students-teachers.

TABLE 2. The Comparisons of Cooperative Language Learning and Traditional Language Teaching (Johnson & Johson; Nunan in Zhang, 2010. p.82)

	Traditional Language Teaching	Cooperative Language Learning
Independence	None or negative	Positive
Learner roles	Passive receiver and performer	Active participator, autonomous learners
Teacher roles	The centre of the classroom, Controller of teaching pace and direction, judge of students' right or wrong, the major source of assistance, feedback, reinforcement and support.	Organizer and counsellor of group work, facilitator of the communication tasks, intervener to teach collaborative skills.
Types of activities	Knowledge recall and review, phrasal or sentence pattern practice, role play, translation, listening etc.	Any instructional activity, mainly group work to engage learners in communication, involving processes like information sharing, negotiation of meaning and interaction.
Interaction	Some talking among students, mainly teacher-student interaction	Intense interaction among students, a few teacher-student interaction
Materials	Complete set of materials for each student.	Materials are arranged according to purpose of lesson. Usually one group shares a complete set of materials.
Room arrangement	Separate desks or students placed in pairs.	Collaborative small groups
Student expectations	Take a major part in evaluating own progress and the quality of own efforts toward learning. Be a winner or loser.	All members in some way contribute to success of group. The one who makes progress is the winner.
Teacher-student relationship	Superior-inferior or equal	Cooperating and equal

3. METHODOLOGY

As mentioned before, the research questions of the research are 1) how does the jigsaw-based cooperative learning method work in order to enhance students' participation in local language learning in the fifth grade?; and 2) what are the challenges in implementing the jigsaw method, and does the teacher solve the challenges? In order to answer the research questions, in this chapter the methods, which have been chosen for the study, is introduced. We also describe the way to analyze the data. This section discusses the research design, data gathering, data analysis, and ethical consideration based on the study.

3.1 RESEARCH DESIGN

In order to achieve the research purpose, we used a qualitative analysis. This focused on a singular case of phenomenon to gain better understanding of the process. According to (Merriam, 2009) a case study is an intensive, delineate, and analyze of a single phenomenon, the social unit, or an entity entirely and descriptively. It allowed having more description and explanation about what was happened on the student' activities and students' participation during the learning process, which were gathered through observations. In addition, we used learning journal to analyze learning opinion on the jigsaw method. We observed the participants in one class of fifth grade during the class activities and gave three open-ended questions as a learning journal in the last of two class activities. To compile the results of the learning journal, we also did the interview for seeking the deeper information about the use of the jigsaw method in order to enhance students' participation.

3.2 PRELIMINARY RESEACH

Before we decided to choose the fifth grade as the objects of research, firstly we did a trial in the lower grade to see what students' mother tongue is actually used. We collected students' basic data from the school and the local language teacher. We found that 90% of the first, the second, and the third grade students were Acehnese. In the beginning, we thought it would be more challenging to

apply the jigsaw in the lower grade that has Acehnese as their mother tongue. However, when we asked what actually their mother tongue in their environment is, almost all of them said that Indonesian is their mother tongue. This was not our main problem actually to choose them become our participants. We need students who use Acehnese as their mother tongue. As a result, we could not do the research in these classes. Thus, we changed our subject of research into higher grade. We chose the fifth grade, which is consisted of two classes; Malahayati and Malikussaleh class. There are 25 students in each class. We decided Malahayati class as the piloting class and Malikussaleh class as the subject of research. We did the piloting in Malahayati class in order to make changes our instrument more understandable based on students' perception. Additionally, the purpose of piloting is to acquire the precise final results and answer the research questions.

Before applying the jigsaw method in the classroom, we share the exact procedures of the jigsaw method with the teacher. Additionally we arranged an observation form as our guideline in observing students' activities and learning journals in order to examine students' perception towards the jigsaw method during classes.

After doing the piloting, we found that there were some changing in main focuses of observation forms and the question of learning journals. Based on our reflection and evaluation, we also considered to observe not only students' activities, but also teacher's activities when using the jigsaw method in the classroom. We evaluated the observation form to the teacher and students according to the exact procedures of the jigsaw method and the basic of cooperative learning. Finally, we communicated with the headmaster to do the real research in the local language class at Malikussaleh class.

3.3 THE OBJECT OF THE RESEARCH

The objects of the research were 25 students at fifth grade in the elementary school of Sukma Bangsa Lhokseumawe, which is consisted of 16 girls and 9 boys.

3.4 DATA GATHERING

The preliminary data of the students was gained from students' personal data, which is documented by schools' administrations. The data showed that even though almost 90% students are Acehnese, but they are not capable enough of speaking Acehnese.

Based on preliminary observations in Malahayati class, we found that 17 students of 25 students participated actively in learning Acehnese. Whereas, in Malikussaleh class, there are only 15 students of 25 students participated actively in learning Acehnese. Because of the passive students occurred more in Malikussaleh class, we decided this class as the object of our study. We also expect that the implementation of the jigsaw method can also apply in Malahayati class.

In gathering the data, the researchers acted only as observers. The participants' perspective (*emic*) is the way the researchers gather the data (Merriam, 2009). In gathering the data, the information integrated from multiple sources, namely observation, learning journal, and interview. For enhancing the accuracy of the research among the different sources, the triangulation was made. As stated by Creswell (2012), "triangulation is a process of corroborating evidence from different individuals (e.g., a principal and a student), types of data (e.g., observational field notes and interviews), or methods of data collection (e.g., documents and interviews) in descriptions and themes in qualitative research." By doing this way, it encourages us developing a report that is both credible and accurate. (p.259)

The data collection tools were observation forms and learning journal. The observation focused on students' interaction (teacher – students, students- students) in local language learning by using the jigsaw method. School policies determine local language class; it is 35 minutes/hour every week. The observation held in the learning process for four courses from September to October 2016. We arranged a guideline in order to specify the context of observation. In addition, we used the video and audio recorder to help us in gathering the data.

Learning journal was used as the media for student to write their experience after learning local language by using the jigsaw method. The learning journals were given to students every two meeting. For the first learning journal, researchers asked students to answer three open-ended questions:

- 1. How do you like studying in local language during these weeks?
- 2. What are the benefits or ease that you got when studying in local language learning?
- 3. What were the challenges or problems that you had when studying local language learning?

For the second learning journal, the students only wrote their experience after studying by using jigsaw method freely. However, in the second learning journal, the researchers did not obtain enough data to answer the research question.

The last stage gathering the data was interview. Based on students' learning experience that students wrote in the learning journal, we interviewed 25 students to collect more information to answer the research questions. We did not have specific guideline during interview. In other words, interview as the way to make students' writing in learning journal properly.

Below is the research instruments and data collection techniques used in the research. **TABLE 3.** The Research Instrument and Data Collection

No.	Instruments	Data	Usage
1.	Observation	Field note and form	- Observe students and teacher activities
	guidelines		- Jigsaw progress
2.	Learning journal	Learning journal	- Examine students' opinion after applied
		transcript	jigsaw
3.	In-depth interview	Interview transcript	- Explore deeper information

3.5 DATA ANALYSIS

We observed the learning process in the local language class for four times. The local language class is once in a week for 35 minutes/course. To ensure that teachers did the learning process based on jigsaw method rules, we also made the observation form for the teacher. In the first class, the teacher was still awkward in applying jigsaw method. Within 35 minutes, the teacher still could not manage time well, thus in the first day she spent almost 60 minutes for applying this method. In the second day, the teacher changed the way in managing the time. She managed the timeline in order to make the learning process manageable. The jigsaw method could complete for more than 35 minutes, the class was more manageable than the first course. In the third and the fourth meeting, the teacher and students were already familiar with this method. Thus, she could manage the class well and the jigsaw method worked properly in 35 minutes. We observed the teacher and students' activities during applying the jigsaw method and found that students' participation was enhanced by using the jigsaw method in local language learning. Students, who previously did not involve in studying local language, became active students. They were more initiating to talk, courageous in presenting the result, talkative with others in giving opinion, encouraging each other, helping each other in understanding, and working together to achieve the group goal. Obstacles that hindered the implementation of the jigsaw method were also occurred. Based on the learning journal, conflict in the group was happened in the learning process, which was affected by some students who were stubborn, fussy, too fast explaining, impatient, and uncooperative (disturbing others). These factors became an obstacle, which also challenged every student in their team to do their best to solve the problems.

Answering the first research question, we used observation as our instrument. We did the observation by using observation form that already piloted before. In every course, we did the

observation during the learning process. There are five basic elements of cooperative learning which used as reference to conduct observation form in our research; 1) positive independence, 2) face to face interaction, 3) individual accountability and personal responsibility, 4) social skill, and 5) group processing (Johnson, 1991). According to our piloting, we found only three basic elements that were included in our observation. The first basic was cooperative work; some activities were associated with sharing resources, encouraging each other's effort to achieve, reflecting on the group session, and discussing the hand out were the main domain to be observed. The second was respecting each other; some activities were associated with interrupting politely, paying attention and making eye contact, following teacher's instruction, and the last was individual accountability; some activities were related to write the result, master the essence of the material, stay in the group, complete the task on time, resolve the problem constructively, initiate to talk, present the result, and give opinion.

The solution for answering the second research question during four courses, we offered learning journal for all students in the fifth grade in every two classes. The students should fill the learning journal based on their experience when applying the jigsaw method in the learning process. Additionally, we also explored more information from them by interview. Later on, we examined whether the students become interested in studying Acehnese subject based on advantages or disadvantages of applying the jigsaw method in the learning process.

We analyzed observation results, students' opinion in the learning journal, and the students' interview result section by section after applying the jigsaw method in the classroom. After that, we coded and categorized the data based on our finding. Based on (Merriam, 2009) the researchers in qualitative research build toward theory from observations and intuitive understandings gathered from the field research. Information or data, which was collected through interviews, observations, or documents, was merged and classified into larger themes as the researcher decided before doing the research from the particular to the general.

3.6 ETHICAL CONSIDERATIONS

The participants in this research were the fifth grade students in elementary of Sukma Bangsa Lhokseumawe. We chose them as participants deliberately. Because of the students are still underage, we needed an approval from their parents. Therefore, we decided to make the permission letter and gave it to their parents. They were informed that their children' activities, an interview session and learning journal, would be entirely confidential. The parent only should give a signature on the permission letter and gave it back to us. In gathering the data, we would respect for children dignity, being objective in writing the data, avoiding harm, and respecting students' privacy. We were also consistent to avoid plagiarism when writing the result.

4. FINDINGS AND DISCUSSION

This part focuses on the findings and discussions that have been gotten based on the research result. Finding parts explain the processes, which have been done by the teacher and students, when using the jigsaw method in the learning process during four meetings. While discussion part converses about the theories that found in order to answer the research question.

4.1 TEACHER-STUDENT ACTIVITIES DURING THE APPLICATION OF JIGSAW-BASED COOPERATIVE LEARNING METHOD

The first day applying the jigsaw method, the teacher and students still needed to adapt with this teaching method. Basically, the jigsaw method is not a new method for the teacher. In theory, the teacher knew how the learning process is conducted by using the jigsaw method. However, in practical, she never uses this method, which caused she was seeming unfamiliar and awkward when the first implementation of the jigsaw method. Consequently, in the first day, the teacher spent about 60 minutes and was unable to maximize an hour lesson (35 minutes) to apply the whole of the jigsaw procedures in learning local language. Yet, the last step in applying the jigsaw method could not be achieved.

In the second day, she learned from yesterday that she had to manage time well in completing the jigsaw procedure and achieving learning goals. Even though she was unable to finish the class in 35 minutes, but the good progression appeared in the second day. She divided and limited the time for every jigsaw step. Additionally, students more manageable and did not look awkward. Better progression is seen in the third and the fourth day, there was no obstacle occurred in the learning process. The teacher and students were already adaptable and familiar with the activities conducted in every meeting. She occupied 35 minutes to accomplish learning outcome by applying the jigsaw method in local language subject for the last two days.

The implementation of the jigsaw method in the learning process did not occur accidentally, the teacher made a good preparation to create successful learning. Previously, she arranged the lesson plan, provided materials, and managed time to achieve learning outcomes by using the jigsaw method in an hour per meeting. In line with the previous studies that structuring the activities before starting the learning process is needed to promote effective cooperation.

4.1.1 The jigsaw steps in the learning process

At the beginning of the learning process, the teacher did apperception and told about the material for today. Then the teacher formed the "home groups", consisted of five members in the one group, mixed in different genders and abilities. The teacher divided the number (one to five) of each student in every group. Then the teacher formed another group, "expert group" which consisted of the same number of members. Students got number one will be gathered in the same group as group one, students got number two will be gathered in the same group as group two, and so son. However, teacher asked students to remember the previous group (the home group), because later they will return to their home group.

In the expert group, each group was given different paragraphs based on their groups in order. Group one would discuss about paragraph one, group two would discuss about paragraph two, and so on. Then, the teacher gave each group a piece of paper to be discussed. After having the handout, the teacher instructed students to discuss it in their "expert group". The assignment in the handout was to make a summary about each paragraph that was found. Teacher asked students to read the material and gave them instruction about the assignment.

Before starting the discussion, the teacher exemplified the way to make a summary from the material, then she limited the time for discussion process in the expert group.

"You only have 10 minutes for discussion. After finished the discussion, please remember and comprehend your discussion result, because later on you may not look at your book. Additionally, you should notice your paragraph"

During the discussion process, the teacher was walking around to each group, facilitating students and ensuring that every group understood how to finish the task. In the last discussion time, the teacher ensured whose groups finished the task by asking the readiness of each group.

T: "For the group, who has finished the task, when I called your group, please answer by saying "ready Miss".
T: "group 2"
S: "Ready miss" and so on to five group.

Afterward, the time was over and she asked every group to collect the discussion result.

"If you comprehended the material, please collect your book to me, then return to your home group, tell the result to your teammate. Please tell them the summary of your own paragraph"

Students returned to the home group and the teacher instructed them to share their information from the "expert group" to the "home group".

"You should tell your friends in your team the essence of the story. Please write it in this paper (while raising the empty paper)"

Five minutes before finishing the class, the teacher used the rest time for presenting the result. Only some students presented the result. Whereas, the others listened to their friends' explanation, thus they can compile each others' explanation.

Table 4 below showed the main aspect of the implementation of the jigsaw method and the way the teacher enhances students' participation during the implementation of the jigsaw method in the local language learning class.

Aspect	Description
Grouping jigsaw (home) group	- Constructing jigsaw (home) group
Grouping expert group	 Constructing students' jigsaw group – expert group Allotting students the material Discussing the material Mastering the material
Team report	- When returning to jigsaw (home) group, student who is expert in her/his own topic ought to teach his/her group members.

TABLE 4. The Main Aspect of the Implementation of the Jigsaw Method

Aspect	Description
Assessment and evaluation	- The main role of teacher is as facilitator to examine students' activities in the expert and jigsaw group. Such as; encouraging students to participate actively, assisting students in understanding the material if students become confuse and nobody in the team can help and ascertaining the jigsaw steps work correctly.

Table 5 Described teacher's role at the end of the implementation of the jigsaw method in order to ensure students' participation in learning local language subject.

TABLE 5. The Evaluation	Stage of the	Implementation	of the Jigsaw Method
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Process	Description
Groups' processing evaluation	Examining students' activities in the jigsaw and expert group and groups' processing.
Experience progress evaluation	Examining the students' advancement in the expert and jigsaw group

4.1.2 Students' participation during the application of the jigsaw method

Students' participation in the expert group

1. Cooperative Work

During the learning process, the teacher facilitated students by visiting every group and explaining the instruction in order to help them understand the instructions. Students discussed each other about the materials, shared the information about the difficult words, and shared the essence of the materials. During the discussion, the teacher was looking around to visit each group for checking the discussion progress and helping them if they need some helps.

Some students still relied on the teacher in the first day. It can be seen when they found the difficult words, they asked the teacher about it.

However, they started to work independently in the next day by thinking together about the essence of the handout. They continued to discuss each other without teacher's involvement, thus when one of the members stuck, he/she asked to his/her friends in their own group.

F: "What is 'geuyu'?" *I*: "'Geuyu' is ordering someone to do something"

They thought together and shared ideas with friends in order to accomplish the team goals. Based on the observation, the jigsaw method was proven that students were helping and teaching each other, acquiring more knowledge and learning experience in groups, and discussing the learning material among students better than their experience in the traditional method. The same findings showed by Kilic (2008), Maceiras (2011), Maden (2011), Sahin (2011), Tran and Lewis (2012), and Marhamah and Mulyadi (2013).

The adjustment to work together in the same group for one month would help teams face the problem. They learnt better from the problems they faced, and increased students' social skills. Mostly students reported that they were getting closer with other friends. They established friendship and developed the network with other teammates. Students felt more relax, comfortable, and free to share the resources, ideas, and information with their teammates. This finding is consistent with the research by Sachs et al. (2003), Artut and Tarim (2007), Doymus(2010), Marhamah and Muyadi (2013), and Al shammari (2015), which proved that students discussed the topics in-depth when studying in groups and being more focus, comfortable to ask questions and free to give opinions with team rather than with teacher.

The successful participation in the jigsaw method can be advanced through face-to-face interaction. Every group member was responsible for groups' success. They had an equal opportunity to give opinion in the learning process in order to reach the groups' goals. This agreed with Gömleksiz (2007), Mengduo and Xiaoling (2010), Oludipe and Awokoy (2010), and Adams (2013).

The result showed that one or two members in every expert group helped others who have low abilities in understanding the material. They also compiled each other's understanding about the material and were waiting others writing. They would not continue discussion while one of them was still writing the essence of the material. *F*: "'Beuluwah' is wide, is not it?" *I*: "Yes. What is the meaning of 'beuluwahkubu'"? *F*: "Expanded grave"

(They continue to discuss and write)

A: "What is 'beuluwah',,,,is it wide?" I: "Ehmmm, it is" A: "I, please write its essence" F: "Like we did yesterday" I: "Neu' is 'you', is not it?" F: "No, it is 'I', 'you'" I: "May not use 'kamu' to Allah, but 'engkau' to Allah. F: "Being obedient toto?" I: "Being obedient to religion rules"

Working with the expert colleagues in the jigsaw method could develop other students' interesting to study and make them playing an active part in the learning process through discussion. At Vygotsky's point said that scaffolding is conducted in this activity. Students who had more knowledge stimulate other students' thinking. They were able to accomplish some problems, complete tasks, and acquire new ideas during the learning activities without assisting. This study agreed with Wang (2007).

The beneficial for expert students to teach others in the expert group would increase a deeper understanding about the material and they did not feel bored to study because they were busy in persuading others in the discussion to achieve the learning outcomes. The expert students felt very energetic and active when teaching others in the group. Those finding concurred with Mengduo and Xiaoling (2010) and Maceiras et al. (2011).

Even though, the expert friend in the team became as helper when discussing the material, the teacher should also ascertain that the information was acceptable and all students in team were involved actively, because when students returned to the home group, they had to teach their part to the teammates based on their understanding. This result is in line with Maceiras et al. (2011) which indicated that carefully monitoring by the teacher is emphasized in the jigsaw method. The teacher examined students' progress and ensured all students being active in the discussion. Teaching others and producing valid discussion result were the focuses that teacher should be considered in monitoring students' progress in the expert group.

During the discussion process, the teacher also reminded students their responsibility when returning to their home groups; explaining the essence of the materials to their teammate. Thus, the students were not only writing the essence of the material in their book, but also they should master it. Additionally, students supported each other to achieve the learning outcome can be seen in the last five minutes before the teacher asked them to collect the discussion result.

D : "Please say something L!" F: "What next"? I: "And believe in Allah and malaikat-malaikat Allah" F: "Wait up, wait up!" R: "Believe that...." I: "Believe that Allah and Malaikat is always by our side" R: "Have you finished it?" I: "I have" F: "Just it".

2. Respecting Each Other

In respecting each other's point, every student followed teacher's instruction. This can be seen when the teacher circulated them into groups in the first day. They only moved if their names was called by teacher and whose name which was not called yet, only sat nicely and waited for teacher's instruction. When the teacher asked them to discuss in the expert group and return to the home group, they did it. However, in the second day until the fourth day, only some of them listen to teacher's instruction what they should do in their jigsaw and expert group, because they had already known about it. While the teacher was giving the instruction, students tend to discuss the material in their group. The most of students paid their attention to their friends' explanations from the first day to the fourth day, but only some of them who were making eye contact with others during the discussion process. Besides, most of them often interrupted each other's explanations in polite ways.

N: "The first paragraph" I: "Wait up, wait up, I made mistake") (N is waiting for I. After I finished, then N continues her explanation) The learning journal and interview results proved that students started to respect one another and become empathy to their teammates by helping them during the four courses. The jigsaw method is a good tool for increasing a better relationship and constructing trust among students who have different cultures and ethnic backgrounds. This result is in line with Artut and Tarim (2007), Gömleksiz (2007), Dollard and Mahoney (2010), Mahdikhani et al. (2016), and Yapici (2016).

3. Individual Accountability

All students in the expert group wrote the result of their discussion on their books and stayed in the groups. Most of them were able to complete their task on time, except in the fourth day, two students came late. When others started to discuss, they were still playing outside the classroom. Therefore, they could not complete the task on time. Fortunately, the teammates helped them in understanding the essence of the material.

I: "Therefore,,, please use therefore,,,

(Suddenly, the student who disobeys the rules comes. He disturbed their focus during discussion process)

I: "Do not tell him our discussion result" A: "Nobody asked for coming late" H: "Please do not do that, it is a pity" S: "Please, do not do such bad attitude" (H explains the result of discussion to S)

Initiating to talk appeared moderately in the local language learning. When applying the jigsaw method passive students became actively involved. Giving opinion in the expert group appeared repeatedly. They have to share their opinion in order to acquaint the essence of the materials. Therefore, they should master the material before going back to the home group from the first day to the fourth day. Yet, the expert students who could speak Acehnese fluently and Acehnese as their mother tongue could be seen more speak up rather than the students who were rarely speak Acehnese and Acehnese as not their mother tongue. They were able to give their opinions more active and compile each other's explanations or appreciate other's opinions directly, thus using the jigsaw method in the local language learning embedded social skill and personal skill.

Using the jigsaw method in the local language subject proved that students' willingness to participate is increased. More than 50% of participants stated that they preferred to study in-group than individually. The tendency of students to be passive decreased because the jigsaw method itself obligated students to speak more during the class activities.

On the other hand in the last of the discussion process, there was a student who wrote the essence of the material in their hand or being dishonest. However, the teammates who saw her or him doing cheating solved this problem constructively by suggesting him/her to do not do that forbidden work.

N: What are you doing? Do you write the discussion result on your hand?")
(S only laughing)
N: "Please, erase it"
S: "I just want to remember it, after that I am going to erase it."

On the next day, Fa kept being dishonest in the learning process by placing a cheat sheet in his pocket, but Ft prohibited the cheating.

Ft : "Please, give the paper back to the teacher" *Fa* : "I gave it back already" *Ft* : "No, you lied. Miss, *Fa* being dishonest" *Fa* : "Halaaaaaaah"(Looked annoyed)

The jigsaw method indicated that the students' activeness in the learning can be increased. It produced students to be more active and enthusiastic in the learning process. The studies, which have the same result with this finding are Barret (2005), Ward and Lee (2005), Artut and Tarim (2007), Sahin (2010), Maden (2011), Mengduo and Xiaoling (2010), and Sabbah (2016). Additionally, a few students also felt more confident to participate during the learning process and become actively involved than their previous courses. This finding is also consistent with Artut and Tarim (2007), Akinbobola (2009), Marhamah and Mulyadi (2013), Al-Salkhi (2015), Yoruk (2016), and Azmin (2016).

Students' participation in the home group

1. Cooperative Work

After getting new information from the "expert group", students returned to their home group. In this group, students received the information and completed their understanding about the whole texts from their teammate's explanations. In the expert groups, students had responsibility to share information, which they got before to their teammate.

They completed the tasks on time and stayed in the groups. Initiating to talk also can be seen when the students asked their friends who was as an explanatory to share information loudly and clearly.

> (AR's voice too low, thus R asked AR to up her voice) R: "Please up your voice". (AR's voice still low, R asked AR again to up her voice, therefore R feel little bit angry with R while grumbling "too low your voice")

Nevertheless, for the students who use Indonesian as their mother tongue quietly difficult in sharing their resource to others. This factor had an effect on conflict in the group.

IN: "We go to school every day, except on Sunday. We study mathematic on Monday...."
F: "IN please hurry up......
(Their teammates merely listen and write N's explanation. Then continue to the second paragraph. Unexpectedly, F mock IN, resulted in conflict in the group, because IN forgot the material which is should be explained)

However, students were allowed to check and revise their discussion results when reflecting on the group session, but this was rarely happened. They had only strict time, about 15 minutes, to share the resources and reflect on the group session. Reflecting in the group session could be seen in the third day and the fourth day, because in the last two days, mostly students managed the time well when sharing the resources, thus they could utilize extra time for reflection overall materials. Additionally, the reflection was not only done in-group, but also inter-groups where when other friends were presenting the result of the discussions, others who had no complete result could add more. Alike in the expert group, students tend to encourage each other's effort to achieve in the home group. Even though, in the first day this factor still could not be found. However, in the second until the last day, these processes can be observed. C persuades R to tell her part CS: "Please, hurry up, what is the explanation for the paragraph 4, 5 minutes left" R: "Please, be patient..." CR: "Just tell it" R: "What?" H: "Please be hurry R, the time will run out"

2. Respecting Each Other

Interrupting each other appeared dominantly. The frequency of interruption can be listened repeatedly if some of them left when writing the material or could not listen the teammate's explanation. This factor can be identified for four days in implementation of the jigsaw method.

IF helps her teammate/ R in understanding the material by repeating the meaning and the essence of text IF: "By preserve it" R: "Pardon me?" IF: "We should throw the trash into trash bin" R: "Pardon me, we......"(R interrupts politely) IF: "We should throw the trash into trash bin." (In repeat once again)

Following teacher's instructions also was a factor that could be recognized in expert groups from the first day to the fourth day. Although in the third day and the fourth day, some students slightly ignored teachers' instruction to listen, when the teacher delivered the instructions for assignment in the expert group. This factor was happened because some of them were memorable the instruction of the jigsaw procedures, thus they directly started to share the information to their teammate without listening to teacher's instruction.

One of primary points in the discussion process was paying attention to the explanation. This factor existed in this group from the first day to the fourth day. They paid attention to their friends' information, but without making eye contact with them. They tended to write their discussion result on their book rather than making eye contact with others.

3. Individual Accountability

In the first day, some of the students were unable to master their material, because when in the expert group some of them still being confuse about the jigsaw's instructions. In the second day to the fourth day, the students shared their resources to their teammate in the home group fluently.

However, there was one student in the third day who could not master her material, because she did not attend the class in the first two days.

In addition, we found that students who rarely speak Acehnese and their local language are not Acehnese, was looked difficult when sharing the resources. He/she made their teammate little bit confuse about her explanation, this effected on conflict in the group.

> (They persuade her to explain her part, but she forgot it, thus her teammate left blank space for her explanation. At the same time, a couple of group members started to be in conflict more, however their friend arbitrated them). A: "Please stop it, no need to be always in conflict!" N: "Studying IPS" (they listen to their friend's suggestion and continue to share information) A: "No need to write it all" N: "We should write it all, if we do not write it, there is no point in my paragraph" *F*: "Just it, no need to write" (look annoyed) A: "Please hurry up IN" *F*: "Just live it blank" (look annoyed) N: "I don't want to be responsible for this part, too much blank explanation." (looked annoyed) *IN: "F always said "just left it"..."just left it"..."just left it" (also look annoyed) F*: "*I* do not know what I should write, you do not explain anything." (Looked annoyed to IN).

Presenting the result and collecting the discussion result was the last step in the jigsaw where the teacher could employ this time for evaluating the learning process. It did not accomplish in the first day because there was not enough time. However, in the second day to the fourth day, it can be done. In the first presentation on the second day, the teacher demonstrated how to present in the good way to the first student, and then the rest of the students were able to do it independently.

"Assalamu'alaikum.. I am from group 4. I want to present our discussion result..."

In this stage, the students were really need the compliment and applause to omit their nervous. When a student was presenting the result, others were listening and paying attention to someone's presentation, then after presenting the result, if their friend delivered uncompleted information, they could add more to complete it. The teacher could do this way to assure that the rest of the students were sitting and listening to the learning process. Moreover, the teacher as the gatekeeper who handled the learning process should appreciate what students' said. The teacher used her reward power in attracting students to be brave in delivering the presentation. The teacher nodded her head as the agreement, asked others to clap their hand as praising for students before and after presenting the result, and did not give sarcasm feedback if students delivered less precise information.

Therefore, students' self-confidence, self-esteem, and eagerness in the learning process can be increased. This agreed with Mengduo and Xiaoling (2010) and Rocca (2010) who said that students need the applause and compliment in jigsaw activities to enhance their self-esteem, enthusiasm, and self-confidence.

In addition, correctness information should be considered. Both, peer and teacher correction, are still needed. Before closing the learning process, the teacher used her coercive power to confirm and affirm what had been learnt for today in a good way without judging students' mistake. This is consistent with Mengduo and Xiaoling (2010) which stated that teacher and peers require correcting the students' mistakes by giving positive feedback without humiliating. Therefore, students can learn from their mistake and make it as a positive experience.

In this group, every student had the special topic to share to her/his teammate. Each student presented her/his own topic, while others were listening and allowing interrupting politely by asking questions for clarification. This step emphasized students mastering the content and being confidence in teaching others in order to relieve their stage fright and respect others' opinion. Thus, they got the different information in a short time. The study revealed that students were faster in mastering the content that has been taught. They were easier to gain and understand the materials because they got mates' help in order to enhance their understanding and retention. This finding was in line with Doymus et al. (2010), Sahin (2011), Adams (2013), Tran (2014), and Alshammari (2015). The findings indicated that teaching by using the jigsaw method constructed a better understanding level and greater progress in mastering the course content that a lot of material from the expert team could be covered in a short period of time when they returned to their jigsaw team.

According to chart 1 below, the result showed better participation day by day in "Home Group" and "Expert Group." In expert group can be seen that only the students who have high ability in Acehnese explained and talked more often than the students with low ability. In each expert group, some students with high ability in Acehnese were more prominent than students with low ability in Acehnese. However, in this activity, students formed scaffolding with high ability to students with low ability. Each member with high ability helped his or her friends by giving the understanding toward the learning content. Therefore, when they returned to their home groups, mostly students with low ability in Acehnese were able to contribute and interpret the discussion result from their previous groups very well. The significant gap can be seen on the chart, students involved more in the home group than in the expert group. Passive students involved during the learning process, students who have low ability in Acehnese learned from the expert one and the

students who have high ability in Acehnese got the deeper understanding about the content of the materials.

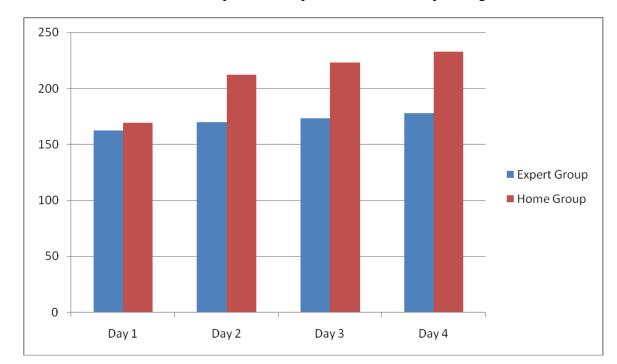


FIGURE 2. The Students' Participation in Expert and Home Group during Four Courses

4.1.3 Summary of progression in implementing the jigsaw method during the courses

Clearly, cooperative work, respect one another (student-student, teacher-student), and individual accountability were the main points to make students feel free to participate in the learning process, and those components were helpful in achieving the learning goal. In the jigsaw method, the teacher should give students opportunity to participate actively. However, the teacher had to interact with students and help them if they got difficulties. She should move around the class and see the students' development in the discussion process by visiting each group. Concisely, the teacher was to be a designer in acquiring students' intellectual experience. Agreed with Fritschner (2000) who stated about closer proximity between the teacher and students is the significance in increasing students' participation in the learning processes. When applying the jigsaw method in the learning process, the teacher used the legitimate power and played the main role as a facilitator or coach for students in getting their intellectual experience. For instance, arranging the group, choosing learning material, providing supporting environment, supervising students' work in group, assisting them, and mediating if there are problems (such as the meaning of new vocabulary). The teacher also played an important role at the end of the course and needed to affirm the information that students got. Granted with Mengduo and Xiaoling(2010), Marhamah and Mulyadi(2013), Summers (2006), Walker and Crogan(1998).

The result also indicated that students played their role as an independent learner during the learning process. The jigsaw method was successful in decreasing the domination of teacher's role as the one and only informant in the classroom. Students were more attractive and comfortable to learn with team rather than their teachers. They supported each other in gaining the learning outcomes.

Regardless of the findings above, some factors were also found in motivating students to participate in the learning process. Friends' personality, such as kind, friendly, manageable, good attitude, and funny peers, was the most frequent factors in enhancing students' involvement in groups. It has been proved that 28 students stated that their good teammates improved their willingness to speak up in the learning activities. This finding's proponents are Mustapha (2010) and Mustapha et al. (2010). Additionally, all students stated that they preferred to study in a room equipped with air condition, many pictures on the wall, and wider room rather than the room that they were commonly used. They could move freely by sitting on the floor and more interest to study in the cooler room, even though sometimes a couple of students felt cold during the learning process. This finding is contrary with Rocca (2010) and Abdullah et al. (2012) which revealed that

environmental factors such as size of classroom and seating positions in the class were not so clearly affect their participation. The result showed that students failed to involve actively in the wider room, Gleason in Rocca (2010) stated that the wider room tends to obstruct communication among students.

4.2 STUDENTS' PERSPECTIVES TOWARDS THE JIGSAW METHOD

For the learning journal, researchers asked students to answer three open-ended questions. The questionnaire included students' opinion about (1) how do you like studying in local language learning during these weeks? (2) what are the benefits or ease that you got when studying local language learning? (3) what were the challenges or problems that you had when studying local language learning?

The study found many benefits when applying the jigsaw method in the local language subject at fifth grade of elementary school. Based on the students' opinion, the data from the questionnaire were analyzed by deriving themes and categorizing it into benefits and challenges found during the application of the jigsaw method. Even though could not be denied that every teaching method has the weaknesses and challenges when applying in the learning activities.

Table 6 below summarized the common themes found in students' opinion from the learning journal. In reference to the questions, all students (N=25) in the class interest to study Acehnese using the jigsaw method.

Types of Opinion	Theme	Description	Example of Categories
		better than traditional way	I prefer to study by using the new method rather than common method, because we made some groups and had a discussion.
Benefits	Teamwork	respect each other	My expert group members listened to me so well, they gave their opinion. We respected each other.
		getting closer with friends	We knew more about friends' character who's never talking to
	Self fulfilment	more confident	Jigsaw method increases my confidence to learn local language.

TABLE 6. Summary of Themes I	Derived from the Learning Journal
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Types of Opinion	Theme	Description	Example of Categories
		passive peer involved	quite students involved to speak more and share their opinion
	Teacher's responsibility	teacher help students if they confused	If we confused, teacher will explain more until I really understand.
	Content	easier to gain and understand the material	it was easier to understand the material
	acquisition	faster in mastering the content	My knowledge increased faster, the information that I god advanced.
	Teamwork	did not respect each other	Couple of members in my second group (home group) was unmanageable, they acted whatever they want.
Challenges	Self fulfilment	having no responsibility	Few friends forgot their parts. Sometimes they forgot because of the longer explanation.
	Time consuming	shortage time	The shortage time was challenging us to discuss the material. We learn in a hurry.

According to the derived themes, it can be seen that most students reported that they got the more benefits than the challenges when studying by using the jigsaw method. Overall, the students reported that the jigsaw method attracted them to study Acehnese.

I am glad to learn by using jigsaw method, I can learn with friends.

We cooperate with home group and expert group, explain my opinion to my colleagues, and finally present the result in front of the class. If we confused with the material, the teacher helps.

Using jigsaw method, all of us will be more enthusiastic to learn and collaborate.

The results of interview indicated that some students prefer to change the group member each day, in order to avoid being bored and know more each other. Even though they also reported that they still enjoyed the learning process with the same group in every meeting. Some students expressed their interesting towards the jigsaw method by stating that the jigsaw method helped them increasing their teamwork and relationship among them. From 25 participants, 21 students stated that they could discuss each other and thinking together when the jigsaw method was applied.

We learnt from others and visited others group to share.

We discussed and conversed with others then getting the knowledge simultaneously.

We shared the information in order to reduce the complexity in learning. I cannot speak Acehnese before, but after learnt and shared I now little by little to speak Acehnese, it is because of Jigsaw.

It will be better if we change the group to know more about other friends, but I enjoyed this group, they help me so much to understand the content

Some students said that they prefer to study in-group rather than individually.

We were rarely studying in-group whereas I prefer to study in-group because we can learn together.

I enjoyed studying with others, we had a joke as well, we are not learning alone.

According to the students' opinion, they enjoyed the class and preferred to study in "training room"; the room equipped with proper light and air condition, no chairs, and wide room, rather than the room that they were commonly used.

It was a pleasure to study in the training room because it has air condition. I prefer to study by sitting on the floor, I can move freely.

It was more exciting learning in training room. I am glad to see the wall, it has many pictures.

The challenge that mostly appeared was conflict in-group. Fewer students stated that their teammates were fussy, stubborn, bossy, impatient, unmanageable, and talkative. A few of students forgot the material so often, disturbed others, and disrespected each other.

Some members in expert group were fussy...

My jigsaw members were very stubborn. If I gave opinion, they will argue. Therefore, I prefer to join in my expert group. They want to listen to my suggestion. A friend in my group was very awful, I shout loudly and almost voiceless because of him.

There is friend who was uncooperative; he will not respect others' opinion.

Based on the findings, some students said that their teammates did not have responsibility in the learning process. Some students did not follow others' instruction even from the teacher. These problems tended to make the group troublesome. In line with Walker and Crogan (1998), Souvignier and Kronenberger (2007), Dollard and Mahoney (2010), Tran and Lewis (2012), and Adams (2013), which found that students were not feel happy in jigsaw class because their group talked too much and never stayed on the task, tended to have no responsibility in groups. Their study also revealed that their teammates were uncooperative and irresponsible. Besides that, the group activities were constructing the misbehaviour, such as students diminished their work ingroup.

Those problems absolutely affected the process and resulted of the group discussion. A few students were unmanageable during the learning process and did not complete their own task. In this case, many students felt disturbed by the existence of destructive students. Miscommunication was also frequently happened in the discussion process. However, when students had conflict with their colleagues, the teacher prevented it by intervening to reduce the unexpected action and diminish the clash; the teacher gave the suggestion to avoid fighting, focus on accomplishing their own task, and work cooperatively to complete the task on time. At any time when there was conflict in the group which students could not solve, they asked for the teacher's help. For solving this kind of problems, the teacher asked them to consider that 'the group goals will be not completely achieved if one of the members cannot finish the task'. By considering that statement, they worked cooperatively in persuading others who were stubborn in the group. Indeed, in this case, the teacher used her coercive power, but this was an effective way to accustom students aware of their responsibility as students and educate them to be problem solvers.

Another challenge was the uncooperative student who was making noise in the group during the discussion process. This was influenced by using similar groups for four meetings. Some students felt comfortable with the same group and successfully built a good group relationship. However, some of them abused this chance to show negative behaviour, such as teasing or mocking others in the group; for instance; D enjoyed disturbing N. D believed that his action was not a messy behaviour, otherwise for his friend (N), who was as an object of disturbance, was annoyed towards his attitude. When students had conflict with their colleagues, the teacher was intervening to make the situation better without unexpected responses from students. Some students preferred to change the group member in order to avoid being bored and be more familiar with each other. Nevertheless, a few students felt extremely unhappy when staying with the same group because her/his teammates were often being angry when having discussion. In line with Tran and Lewis (2012), the findings indicate that some students dislike permanent groups. This study applied the same group in each meeting. Even though most of the students agreed to stay in the same group, some students preferred to change the group members.

Some students also complained that the time was too short to finish the task. Additionally most of the students agreed that they spent too much time looking for the meaning of the contents and moving from the expert group to the home group. They were studying and doing the exercise in a hurry. There was not enough time for discussing the essence of the material. The big challenge was found in this case was the shortage of time. This finding is in line with Artut and Tarim (2007), Rocca (2010), Maceiras (2011), and Adams (2013). Most of the participants stated that the time when applying the jigsaw in the classroom was so limited. Some students complained that the time was too short to finish the task and discuss in groups.

The terrible thing when studying is the limited time, we discuss, write, read in a hurry.

The limitation of the time made the teacher and students work hard to manage their time. The teacher often reminded the time for students, but for a few students, the reminder disturbed their concentration on the discussion process.

Some friends said that they may not spend a lot of time to speak and write, because the teacher reminds of the time; for instance "one minute left" teacher said. My colleagues will angry.

Some of the troubles that students faced in the classroom were solved by the teacher's responsibility to make the learning process run well. After three-four meetings, the teacher and students managed their time well and proved that day by day the application of the jigsaw gets more punctual. The teacher divided time carefully for every segment of the implementation of the jigsaw method. Teachers started to give more time for students in discussing rather than explaining the subject that will be taught. This finding was consistent with Bean and Peterson and McDaniel's finding in Rocca (2010) that teachers should give "wait time" to students to have extra time for elaborating their answers before making any explanation. However, this study is in contrast to Sahin's findings (2011) which indicated that jigsaw classes save more time than non-jigsaw classes.

According to Aronson, there are 10 steps which should be done by the teacher when implementing the jigsaw method. Before students and the teacher get used to this method, the teacher can manage the short time (35 minutes) by dividing jigsaw procedures into two segments. The first day of implementation, the teacher can do 6 steps of the jigsaw steps, such as arranging jigsaw group and expert group, and then students discuss the same material in jigsaw group. In the next lesson, the teacher can do the rest of the jigsaw steps; the teacher asks students to return to their jigsaw group, share the information, and present the result. The teacher can do this to make students familiar using the jigsaw method in the learning process. Thus, after they adapt to this new method, it can be successfully implemented even in 35 minutes. Clearly, teacher's capability in managing the time influences the process of implementation the jigsaw method.

The absent students also resulted in the learning process not running smoothly. The groups who had absent members, did not get the whole information in-group. It was consistent with Dollard and Mahoney (2010) which found that if students are absent, it is difficult for them to catch up and be a productive member of a group. Nonetheless, it was handled by the teacher's method, which asked other groups' opinions or an additional explanation for the unfilled part from other groups. Teacher asked other students to present the whole results and complete the blank parts for those who did not complete it yet.

According to the observation, at the beginning of jigsaw class heard that a few students felt doubtful with the information they got from their teammates. They felt hesitate whether the content of their teammates information was true or untrue, especially for information who was shared by students who did not use Acehnese language as their mother tongue. This was happened also in the study by Maceiras et al. (2010) which indicated some students were unsure and uncertain about the quality and quantity of the material that they had received verbally from their classmates which caused the majority of students worried whether the information was satisfactory enough or not. In this case, the teacher played her role as an expert to help students in solving their problems. The teacher used her knowledge of content to affirm the information, which was gotten from the students. The teacher helped every group who has terrible getting the essence of the task. She confirmed the validity of the information that students got and students agreed with the teacher explanation because they knew that the teacher is more expertise than they are. In spite of this, after discussing the result with the teammates and the teacher, the group completed each other and solved their "doubtful" problem.

4.3 SUMMARY OF THE FACED CHALLENGES AND THE SOLUTIONS

There is no doubt that after applying the jigsaw method in the classroom, some barriers during the learning process were happened. The result showed that a few of students forgot the material. Some students disturbed others and disrespected each other. A few students were unmanageable during the learning process and did not complete their own task. In dealing with these problems, the teacher did intervention to reduce unexpected actions. The teacher gave the suggestion to students in order to avoid fighting, focus on accomplishing students' task, and work cooperatively to complete the task.

Students also mentioned that the time was too short to finish the task. Mostly students agreed that they spent too much time to do the activities demanded while applying the jigsaw method in the classroom. Even though the students had difficulties in managing their time at the first time, however day by day students and teacher began to manage the time due to the duration of learning process. The teacher kept rearranges the time each day systematically and structurally in order to conduct efficient learning processes to accomplish all of the procedures of the jigsaw method.

The teacher had responsibility to solve some problems that appeared in the classroom in order to achieve the learning objective. Another problem that was happened was the strict time in the curriculum for learning local language subject, thus to overcome this situation, teacher ought to manage the time well till the implementation of the jigsaw gets more punctual. Additionally, in the current time of applying the jigsaw method, some students were uncertain toward the information which is delivered by their teammates, particularly if the student who shared the information could not speak Acehnese fluently. Therefore, for accomplishing this kind of obstacle, the teacher used her authority to be as an expert to help the student. In spite of it, teacher still played her role as the guidance who monitor the learning process and facilitate them as facilitator.

5. CONCLUSIONS, IMPLICATIONS, AND SUGGESTIONS FOR FURTHER RESEARCH

This section presents the conclusions and implications in reference to the finding of this study. Suggestions for future research are also recommended.

5.1 CONCLUSIONS

Based on the findings and deep exploration in the discussion, the jigsaw method enhanced students' participation in local language learning. According to the observations and learning journals, which were conducted in the learning activities, students showed better progression day by day. However, although this method was not a strange method, but still in the first implementation of this method there were some obstructions.

After studying with the same group members in four meetings, some students preferred to change the group rather than staying in the same group. They were more joyful to communicate with others and develop their relationship among members in jigsaw groups. Mostly students were glad to study in-group rather than independently. The room environments also influenced the positive atmosphere in the learning activities. Students enjoyed the wider room that was equipped with good facilities.

Students reported that conflict in groups was happened during the classes. They stated that a small number of teammates were uncooperative and hesitant to participate in the group. To deal with this kind of situation, the teacher prevented the conflict among students by walking around the classroom and impeding the groups who have conflict by giving suggestion.

Additionally, the shortage of time also hindered students to participate entirely. The limitation of time resulted in the rapidness of activities which were done by students. However, the teacher and the students were able to adapt and manage the time precisely in order to achieve the jigsaw methods procedures completely.

Some challenges were found in the implementation of the jigsaw method. Based on the result of the research can be concluded that the basic problem was originally coming from the students and the teacher. The member of the groups, which were chosen randomly, caused the clash among the students and argued each other. Students felt uncomfortable working with their unclosed friends. Additionally, the unfamiliarity towards the jigsaw method by the teachers caused the rising of problems in the learning process.

In spite of those challenges, there was prevention to avoid the problems. The teacher should familiarize with the method that will be taught in each course beforehand. Additionally, in creating the group, the teacher needs to choose match members of each student by considering the students' character, not only on cognitive levels but also on students' needs and suitability.

5.2 IMPLICATIONS

Using the jigsaw method in the learning process resulted in an active interaction between teacherstudents and among students. Providing an equal opportunity to engage in learning the local language for every student produced an active class where there was no student being shy and worry to participate in the learning process. The result showed that using the jigsaw method encouraged students' teamwork and interest in learning. Students discussed and thought together in order to achieve the team goals. Besides that, peer support could be seen frequently and reduced competition, enhanced the teamwork among students, and enabled better understanding through discussion with others.

In this case, cooperative learning worked to enhance students' participation in the classroom. Even though at the first time the teacher had difficulties to manage the time in an hour lesson, however finally the teacher organized the time by limiting the time for each activity in order to accomplish the jigsaw procedures and achieve the learning outcomes. Every student had a chance to participate actively and became a responsible student as the source of information. Thus, all students were engaged in the learning processes. There was only a few of students was passive during the learning activities.

Additionally, the jigsaw method could improve teachers' teaching quality by acquiring new experience either from the theory or in practice. The jigsaw method accustomed the teacher to conduct student-centred learning. Moreover, the jigsaw method could be implemented not only in local language subject, but also in other subjects. Teachers could use this method as a tool to help students master the material better. Students tended to learn more from peers. They worked together, shared with others, and conducted a good teamwork. As a conclusion, the jigsaw method successfully helped teachers and students in the learning activities.

5.3 LIMITATIONS OF THE RESEARCH

The limitations of the study are:

1. The limitation time to do the research.

We need more time, not only two months, but perhaps more than two months. Because in participation process, every student needs to build trust among them, seeks the reason why they should participate, learns how to provide opportunity and influence their teammate, and works collaboratively to achieve the group goals.

2. The limitation of the participants

Having a plenty of participants might make the researchers could not get adequate data in gaining the information about the research.

3. The limitation usage of the jigsaw method

Only three elements of cooperative learning method can be found in the students' activities during the implementation of the jigsaw method from five elements of cooperative learning method.

5.4 SUGGESTIONS FOR FURTHER RESEARCH

Based on the conclusion and implications mentioned previously, there are some suggestions for further research:

- 1. A study focused on students' achievement to examine how far the jigsaw method learning affect students' academic achievement should be carried out.
- 2. The future research should be conducted considering the group member in every course. Group members should be changed in every two meetings.
- The future research should be done in other schools in other countries that have local language in order to determine how the jigsaw method embeds students' admiration for their own local language.
- 4. A comparative study should be conducted on students' performance and participation between using the jigsaw method and conventional teaching methods.
- 5. Teachers need to determine precise strategies for elementary school students in order to attract them to become actively involved in learning activities.

REFERENCES

Abdullah, M. Y., Bakar, N. R. A., & Mahbob, M. H. (2012). Student's Participation in Classroom: What Motivates them to Speak up?. *Procedia-Social and Behavioral Sciences*, *51*, 516-522.

Adams, F.H. (2013). Using Jigsaw Technique as an Effective Way of Promoting cooperative Learning AmongPromary Six Pupils in Fijai. *International Journal of Education and Practice*, 1(6), 64-74.

Akello, D.L., Timmerman, G.,&Namusisi, S. (2016). Teaching reading and writing in local language using the child-centred pedagogy in Uganda. *Language and Education*, *30*(3), 252-266.

Akinbobola, A. O. (2009). Enhancing students' attitude towards Nigerian senior secondary school physics through the use of cooperative, competitive and individualistic learning strategies. *Australian Journal of Teacher Education (Online)*, 34(1), 1-9.

Al-Salkhi, M. J. (2015). The effectiveness of jigsaw strategy on the achievement and learning motivation of the 7th primary grade students in the Islamic education. *International Journal of Humanities and Social Science*, 5(4), 111-118.

Alhussein, M., & Milian, M. (2004). Saudi Parents' Attitudes Towards Their Children Learning English as a Second Language in the United States (Doctoral dissertation, MA thesis).

AlKandari, N. (2012). Students' communication and positive outcomes in college classrooms. Education, 133(1), 19-30.

Alshammari, N. M. (2015). *Effects of Cooperative Learning on Academic Performance of College Students in Saudi Arabia* (Doctoral dissertation, State University of New York at Fredonia).

Aronson, E. (2000). The Jigsaw Classroom. Retrieved from https://www.jigsaw.org/

Artut, P. D., & Tarim, K. (2007). The effectiveness of jigsaw II on prospective elementary school teachers. *Asia- Pacific Journal of Teacher Education*, 35(2), 129-141.

Ashman, A.,&Gillies, R. (Eds.). (2003). *Cooperative learning: The social and intellectual outcomes of learning in groups*. Routledge.

Azmin, N. H. (2016). Effect of the Jigsaw-Based Cooperative Learning Method on Student Performance in the General Certificate of Education Advanced-Level Psychology: An Exploratory Brunei Case Study. *International Education Studies*, *9*(1), 91-106.

Barrett, T. (2005).Effects of cooperative learning on the performance of sixth-grade.Physical Education Students. Journal of Teaching in Physical Education, 24(1), 88–102.

Bolkan, S.,&Goodboy, A. K. (2009). Transformational leadership in the classroom: Fostering student learning, student participation, and teacher credibility. *Journal of Instructional Psychology*, *36*(4), 296-307

Bransford, J. D., Brown, A. L., & Cocking, R. R. (2000). How people learn.

Bühmann, D.,&Trudell, B. (2008). Mother tongue matters: Local language as a key to effective learning. *France: UNESCO*.

Chern, C. L. (2002). Implementing cooperative learning in EFL teaching: Process and effects (Doctoral dissertation, National Taiwan Normal University).

Chumak-Horbatsch, R. (2008). Early bilingualism: children of immigrants in an English-language childcare center. *Psychology of Language and Communication*, *12*(1), 3-27.

Cohen, L., Manion, L. and Morrison, K. (2004) *A Guide to Teaching Practice* (5th edn). London: Routledge Falmer.

Creswell, J. W. (2012). Educational research: Planning, conducting, and evaluating quantitative and qualitative research . Boston: Edwards Brothers.

Desai, Z. (2013). Local languages: Good for the informal marketplace but not for the formal classroom?.*Education as Change*, *17*(2), 193-207.

Dollard, M. W., & Mahoney, K. (2010). How effective is the jigsaw method when used to introduce new science curricula in middle school science?. *Ontario Action Researcher*, *10*(3), 50-64.

Doolitle,P.E. (1997). Vygotsky's Zone of proximal development as a theorical foundation for cooperative learning. Journal on excellence in College teaching, 8(1), 83-103.

Doymus, K., Karacop, A., & Simsek, U. (2010). Effects of jigsaw and animation techniques on students' understanding of concepts and subjects in electrochemistry. *Educational Technology Research and Development*, 58(6), 671-691.

Fawcett, L. M.,&Garton, A. F. (2005). The effect of peer collaboration on children's problemsolving ability. British Journal of Educational Psychology, *75*, 157–169.

Felder, R. M., & Brent, R. (2007). Cooperative learning.

Fritschner, L. M. (2000). Inside the undergraduate college classroom: Faculty and students differ on the meaning of student participation. *The journal of higher education*, *71*(3), 342-362.

Gillies, R. M. (2006). Teachers' and students' verbal behaviours during cooperative and small-group learning. *British Journal of Educational Psychology*, 76(2), 271-287.

Gillies, R. M., Ashman, A. F., & Terwel, J. (2007). The Teacher's Role in Implementing Cooperative Learning in the Classroom: An Introduction. *The Teacher's Role in Implementing Cooperative Learning in the Classroom*, 1.

Gömleksiz, M. N. (2007). Effectiveness of cooperative learning (jigsaw II) method in teaching English as a foreign language to engineering students (Case of Firat University, Turkey). *European journal of engineering education*, *32*(5), 613-625.

Hossain, M., Tarmizi, R. A., &Ayud, A. F. M. (2012).Collaborative and Cooperative Learning in Malaysian Mathematics Education. *Indonesian Mathematical Society Journal on Mathematics Education*, *3*(2), 103-114.

Huang, Y. M., Liao, Y. W., Huang, S. H., & Chen, H. C. (2014). A Jigsaw-based Cooperative Learning Approach to Improve Learning Outcomes for Mobile Situated Learning. *Educational Technology & Society*, 17(1), 128-140.

Johnson, D. W. (1991). *Cooperative Learning: Increasing College Faculty Instructional Productivity. ASHE-ERIC Higher Education Report No. 4, 1991.* ASHE-ERIC Higher Education Reports, George Washington University, One Dupont Circle, Suite 630, Washington, DC 20036-1183.

Jolliffe, W. (2007). Cooperative learning in the classroom: Putting it into practice. Sage.

Jordan, A., Carlile, O., & Stack, A. (2008). *Approaches to learning: a guide for teachers*. McGraw-Hill Education (UK).

Karacop, A.,&Doymus, K. (2013).Effects of jigsaw cooperative learning and animation techniques on students' understanding of chemical bonding and their conceptions of the particulate nature of matter. Journal of Science Education and Technology, 22(2), 186-203.

Kelly, P. (2005). Using thinking skills in the primary classroom.SAGE.

Kilic, D. (2008). The effects of the jigsaw technique on learning the concepts of the principles and methods of teaching. *World applied sciences journal*, 4(1), 109-114.

Leng, L. H., Leng, C. H., & Abedalaziz, N. (2013). Using Weblog in Cooperative Learning to Improve the Achievement of History Learning. Malaysian Online Journal of Educational Technology, *1*(3), 30-43.

Maceiras, R., Cancela, A., Urrejola, S.,&Sanchez, A. (2011). Experience of cooperative learning in engineering. *European Journal of Engineering Education*, *36*(1), 13-19.

Maden, S. (2011). Effect of Jigsaw I Technique on Achievement in Written Expression Skill. *Educational Sciences: Theory and Practice*, *11*(2), 911-917.

Mahdikhani, M., Hamzehloo, S., Shayestefard, M.,&Mahdikhani, N. (2016). Student Participation in Classroom Discussions. *International Journal of Science Social Studies Humanities and Management*, 2(6).

Mahyuddin, R., Elias, H., Cheong, L. S., Muhamad, M. F., Noordin, N.,&Abdullah, M. C. (2006). The relationship between students' self-efficacy and their English language achievement. *Jurnal Pendidikdan Pendidikan*, 21, 61-71.

Marhamah&Mulyadi. (2013). Jigsaw Cooperative Learning: A Viable Teaching-Learning Strategy? *Journal of Educational and Social Research*, 3(7), 710.

McPherson, M. B., & Liang, Y. (2007). Students' reactions to teachers' management of compulsive communicators. *Communication Education*, 56(1), 18-33.

Meng, J. (2010). Jigsaw cooperative learning in english reading. *Journal of Language Teaching and Research*, 1(4), 501-504.

Mengduo, Q., &Xiaoling, J. (2010). Jigsaw strategy as a cooperative learning technique: Focusing on the language learners. *Chinese journal of applied linguistics (bimonthly)*, 33(4), 113-123.

Merriam, S., &Tisdell, E. J. (2009). Qualitative research: A guide to design and implementation. John wiley& Sons. *Inc, CA: San francisco*.

Miller, P.H.(2011). Theories of Developmental Psychology.NewYork:Catherine Woods.

Mohammadjani, F.,&Tonkaboni.F. (2015).A Comparison between the Effect of Cooperative Learning Teaching Method and Lecture Teaching Method on Students' Learning and Satisfaction Level.*Interational Education Studies*, 8(9), 107.

Muhammad, M. (2013). ACEHNESE-SPEAKING PARENTS'CHOICE OF LANGUAGE OF THE CHILDREN: PARENTS'ATTITUDE TOWARDS BILINGUALISM IN ACEHNESE-INDONESIAN CONTEXT. Englisia Journal, 1(1).

Mustapha, S. M. (2010). Understanding classroom interaction: a case study of international students' classroom participation at one of the colleges in Malaysia. *International Journal For The Advancement Of Science and Arts*, 1(2), 91-99.

Mustapha, S. M., Rahman, N. S. N. A., &Yunus, M. M. (2010). Factors influencing classroom participation: a case study of Malaysian undergraduate students. *Procedia-Social and Behavioral Sciences*, *9*, 1079-1084.

Njoroge, J. N., &Githua, B. N. (2013). Effects of cooperative learning/teaching strategy on learnersmathematics achievement by gender. *Asian Journal of Social Sciences and Humanities*, 2(2), 567-576.

O'Leary, N., & Griggs, G. (2010).Researching the pieces of a puzzle: the use of a jigsaw learning approach in the delivery of undergraduate gymnastics.*Journal of further and higher education*, 34(1), 73-81.

Oakley, L. (2004). Cognitive development. Routledge.

Oludipe, D., & AWOKOYA, J. O. (2010). Effect of cooperative learning teaching strategy on the reduction of students' anxiety for learning chemistry. *Journal of Turkish science education*, 7(1), 30.

Park, S. M. (2013). *Immigrant students' heritage language and cultural identity maintenance in multilingual and multicultural societies* (Vol. 4, pp. 30-53). Concordia Working Papers in Applied Linguistics.

Peklaj, C. (2003). Gender, Abilities, Cognitive Style and Student's achievement in Cooperative Learning. *Psiholoskaobzorja/Horizons of Psychology*, 12(4), 9-22.

Petersen, R. P., Johnson, D. W., & Johnson, R. T. (1991). Effects of cooperative learning on perceived status of male and female pupils. *The journal of social Psychology*, 131(5), 717-735.

Pillai, S., & Yusuf, Y. Q. (2012). An instrumental analysis of Acehnese oral vowels. *Language and Linguistics*, 13(6), 1029.

Rasuli. (2011). Comparison of the effect of cooperative learning method and lecture teaching methods on the creative thinking and academic achievement in career and technology course of third grade secondary school female students of Yazd city. New Educational Thoughts, Faculty of Educational Science and Psychology, Alzahra University.

Richards, J. C., & Rodgers, T. S. (2000). *Approaches and methods in language teaching*.**外**语教学与研究出版社.

Rocca, K. A. (2010). Student participation in the college classroom: An extended multidisciplinary literature review. *Communication Education*, *59*(2), 185-213.

Rusman. (2013). Model-model pembelajaran: mengembangkanprofesionalisme guru. Jakarta: Rajawali Pers.

Sabbah, S. S. (2016). The Effect of Jigsaw Strategy on ESL Students' Reading Achievement. *Arab World English Journal*, 7(1).

Sachs, G. T., Candlin, C. N., & Rose, K. R. (2003).Developing cooperative learning in the EFL/ESL secondary classroom. *RELC journal*, *34*(3), 338-369.

Şahin, A. (2011).Effects of Jigsaw III technique on achievement in written expression. *Asia Pacific Education Review*, *12*(3), 427-435.

Santoso, T. (2017).*Menatap Masa Depan Bahasa Daerah: StudiKasus di Aceh*. Retrieved from http://badanbahasa.kemdikbud.go.id/lamanbahasa/

Slavin, R.E. (2008). Cooperative Learning, successful for all, and evidence-based reform in education.*Education etdidactique*, 2(2), 149-157.

Sonwane, J. R. (2011). THE EFFECT OF THE JIGSAW LEARNING DESIGN. GYANODAYA: *The Journal of Progressive Education*, 4(2).

Souvignier, E., &Kronenberger, J. (2007). Cooperative learning in third graders' jigsaw groups for mathematics and science with and without questioning training. *British Journal of Educational Psychology*, 77(4), 755-771.

Summers, J. J. (2006). Effects of collaborative learning in math on sixth graders' individual goal orientations from a socioconstructivist perspective. *The Elementary School Journal*, *106*(3), 273-290.

Tamah, S. M. (2007). Jigsaw Technique in Reading Class of Young Learners: Revealing Students' Interaction. *Online Submission*.

Tayebinik, M., &Puteh, M. (2013). Does greater participation in online courses lead to passing grade? An EFL learning context. *British Journal of Educational Technology*, 44(6), E199-E202.

Tembe, J., & Norton, B. (2008). Promoting local languages in Ugandan primary schools: The community as stakeholder. *Canadian Modern Language Review*, 65(1), 33-60.

Tesfaye, S., &Berhanu, K. (2015). Improving Students' Participation in Active Learning Methods: Group Discussions, Presentations and Demonstrations: A Case of MaddaWalabu University Second Year Tourism Management Students of 2014. *Journal of Education and Practice*, 6(22), 29-32.

Thien, S. J. (2008). The teaching-learning trinity. Retrieved June, 8, 2009.

Sachs, G. T., Candlin, C. N., & Rose, K. R. (2003).Developing cooperative learning in the EFL/ESL secondary classroom.*RELC journal*, *34*(3), 338-369.

Tran, V. D., & Lewis, R. (2012). The effects of jigsaw learning on students' attitudes in a vietnamese higher education classroom. *International Journal of Higher Education*, 1(2), 9.

Tran, V. D. (2014). The effects of cooperative learning on the academic achievement and knowledge retention. *International Journal of Higher Education*, *3*(2), p131.

Van Dat, T. (2016). The Effects of Jigsaw Learning on Students' Knowledge Retention in Vietnamese Higher Education. *International Journal of Higher Education*, 5(2), p236.

Vandrick, S. (2000). Language, Culture, Class, Gender, and Class Participation.

Walker, Iain.,andCrogan, Mary. (1998). Academic Performance, Prejudice, and the Jigsaw Classroom:New Pieces to the Puzzle. *Journal of Community and Applied Social Psychology*, 8(6), 381-393.

Wang, L. (2007). Sociocultural learning theories and information literacy teaching activities in higher education. *Reference and User Services Quarterly*, 149-158.

Ward, P., & Lee, M. A. (2005). Peer-assisted learning in physical education: A review of theory and research. *Journal of Teaching in Physical Education*, 24, 205–225.

Wildan.(2010). Kaidah Bahasa Aceh.Geuci: Aceh

Yapıcı, H. (2016). Use of jigsaw technique to teach the unit science within time in secondary 7th grade social sciences course and students views on this technique. *Educational Research and Reviews*, 11(8), 773-780.

Yildirim, O. (2012). A Study on a Group of Indian English as a Second Language Learners' Perceptions of Autonomous Learning. *Online Submission*, *3*(2), 18-29.

Yoruk, A. (2016). Students' Ideas on Cooperative Learning Method. Universal Journal of Educational Research, 4(5), 1231-1235.

Yun, S. M., & Kim, H. B. (2015). Changes in students' participation and small group norms in scientific argumentation. *Research in Science Education*, 45(3), 465-484.

Yusuf, Y. Q. (2009). A syntactic analysis of the Acehnese phrase structure: The application of Chomsky's Government and Binding Theory. *Iranian Journal of Language Studies*, *3*(3).

Zhang, Y. (2010). Cooperative language learning and foreign language learning and teaching. *Journal of Language Teaching and Research*, 1(1), 81-83.

Zulfadli. (2014). A Sociolinguistic Investigation of Acehnese with a Focus on West Acehnese: A Stigmatised Dialect(Doctoral dissertation, University of Adelaide).





SCHOOL OF EDUCATION

LEMBAR PERSETUJUAN MENJADI RESPONDEN

Kepada Yth. Orangtua/Wali Siswa di tempat

Dengan hormat,

Kami mahasiswi program Master Degree bidang Pendidikan Guru dari Universitas Tampere yang bekerja sama dengan Yayasan Sukma:

Annisa Aris Tantya, S.PdSiti Sarayulis, S.I.KomMaster StudentMaster studentEmail : cha.chubb@yahoo.comEmail : yulishasanuddin@gmail.comTelf. +62 823 6752 3257Telf. +62 852 6063 9582

bermaksud akan melaksanakan penelitian tentang "STUDENTS' PARTICIPATION IN LOCAL LANGUAGE LEARNING THROUGH JIGSAW-BASED COOPERATIVE LEARNING METHOD". Peneliti berniat untuk mengamati aktivitas yang dilakukan oleh putra/i. Adapun kegiatan yang akan dilakukan bersama putra/i adalah Kegiatan Belajar Mengajar (KBM) dengan menggunakan metode jigsaw. Segala informasi/kegiatan yang putra/i Bapak/Ibu berikan akan dijamin kerahasiaan identitasnya dan kami bertanggung jawab apabila informasi yang diberikan merugikan putra/i Bapak/Ibu.

Sehubungan dengan hal tersebut, mohon partisipasi putra/i Bapak/Ibu untuk ikut serta dalam penelitian ini (mohon untuk mengisi dan mendandatangani lembar persetujuan ini).

Atas kesediaan dan kerjasamanya, kami ucapkan terimakasih.

Nama siswa : Kelas :				
Diketahui Oleh, Kepala SD,	Diajukan oleh, Peneliti,		Disetujui (Orangtua/	Dleh, Wali Siswa,
Yulia Fitriana, S.Pd NIP. 12071031	Siti Sarayulis, S.I.Kom NIP. 12141011	Annisa Aris Tantya, S.Pd NIP. 12156002	()

THE LESSON PLAN

School : Elementary School

Grade/Semester : Fifth Grade / One

Time : 35 minutes

A. Lesson Material

Short story

(consists of 5 paragraph)

Day One : Ie Beuna

- Day Two : Doa Seulaweut
- Day Three : Jak Sikula
- Day Four : Surah Al-Fatihah

B. Learning Approachment and Learning Methods

Approachment : Scientific

Methods : Problem Solving, Discussion, Jigsaw

C. Sources

- 1. Network
- 2. Acehnese Books

Material Learning

- 1. A piece of paper consisted of one paragraph
- 2. Voice recorder
- 3. Video recorder

D. Learning Steps

ACTIVI TIES	DESCRIPTIONS	TIME
	• The teacher prepared the material and medium of learning.	
Apperce	• Checked the attendence.	5
ption	• The teacher described the aim of study on each meeting.	minutes
	• Warming up.	

1. The teacher divided students into five persons jigsaw groups.	
segment.	25 minutes

ACTIVI TIES	DESCRIPTIONS	TIME
Closing Activitie s	• The teacher affirm the essense of the material.	5 minutes

Headmaster

Lhokseumawe, 2016 Subject teacher



1. How do you like studying in local language during these weeks?

2. What are the benefits or ease that you got when studying in local language learning?

3. What were the challenges or problems that you had when studying local language learning?



																нс	OME	GRO	UP																		
Ne	CRITERIA				Gro	oup	1						Gro	up 2				T			Grou	ıp 3				(Group	4					G	roup	5		
No	CRITERIA		1	2		3	4	1	5	1	L	2	() () () () () () () () () ()	3	4		5	1	1	2	3		4	5	1	2	3		4	5	1	2	2.	3	- 4	ł	5
	cooperative work																																				
1	sharing resources																																				
2	encouraging each other's effort to achieve																																				
3	reflecting on group session																																				
	Respecting each other																																				
1	interrupt politely																																				
2	paying attention and makin eye contact																																				
3	following teacher's instruction																																				
	Individual Accountability																																				
1	writing the result																																				
2	mastering the essence of the material																																				
3	staying in the group																																				
4	complete task on time																																				
5	resolve problem constructively																																				
6	initiating to talk																																				
7	presenting the result																																				
8	giving opinion																																				
	TOTAL	I																																			

Appendix 4(6)

No	CRITERIA			Grou						Group	2				Group 3					Group	4				Grou		
NU	CRITERIA	1	2	3	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	5	1	2	3	4	- 5
	cooperative work																										
1	discuss handout																										
2	encouraging each other's effort to achieve																										
	Respecting each other																										
1	interrupt politely																										
2	paying attention and makin eye contact																										
3	following teacher's instruction																										
	Individual Accountability																										
1	writing the result																										
2	staying in the group																										
3	complete task on time																										
4	resolve problem constructively																										
5	initiating to talk																										
6	giving opinion																										
	TOTAL																										

EXPERT GROUP

Classroom Observation For Teacher's Activities During Learning Process

CRITERIA	YES	NO
Opening		
1. Warming up		
2. Apperception		
3. Describing the learning goal		
Teacher's attitude in learning process	•	
1. Voice articulation		
2. Teacher's intervention to the passive students		
Content acquisition		
1. Suitability between method and lesson plan		
2. Clear instruction in delivering content		
3. Understand the content		
Main activities		
1. Dividing students into groups		
2. Giving handout		
3. Responding students' question		
4. Dividing the lessons		
5. Giving students time to read over their segment		
6. Form temporary "expert groups" by having one student from each jigsaw group join other students assigned to the same segment		
7. Bringing students back into their jigsaw groups		
8. Asking each student to present her or his segment to the group		
Evaluation		
1. Reflection		
2. Confirming the learning content		
3. Giving students chance to give opinion or question		
4. Conclude		
Follow up		1
1. Informing the next material		
2. Giving motivation		1

TEACHER'S ACTIVITIES FOR FOUR DAYS IMPLEMENTATION OF JIGSAW METHOD

FIRST DAY

The teacher opened the learning process by greeting the students using Acehnese, "peu haba uroe nyoe?" (how are you today). All students answer enthusiastically, "Alhamdulillah, amazing, Allahu Akbar!". Some of them looks little bit uninteresting, thus the teacher great them again for making them more focus to her.

Before starting the lesson, she checked the students' present. In the first day, two students did not attend to the class. After that, she asked the students whether the students ever read story in Acehnese language. In the first day, when the teacher asked them using Indonesian whether they ever read Acehnese story, one of 23 students answered, "I did, Ms! I read about 'palang merah' in grade 4!". Others also answered the different title, which entitle "peulihara manok" and "lakee izin bak Ma". After that, the teacher asked them whether they found difficult words in the reading. "Of course, we found difficult words", one of them answered. Because some students had ever experienced in reading the story in Acehnese, the teacher told them the story about "jak sikula" and students only listen to teacher's story. The story was too long and spent a lot of time. Some students looked bored; they are starting to talk with others, acting as the substance of the story, playing with friends beside them, and playing with their hand like dancing. As the medium of instruction, the teacher not only uses Acehnese, but also Indonesian when explaining the material. When she asked for their impression about the story by using Indonesian, only one student was able to answer the correct question. She also ensured the students whether the students understand the command in the story.

After discussing for a while about the students' experience when reading, the teacher continues to the main topic about "Ie Beuna" ("Tsunami"). Then, the teacher divided the students into jigsaw group, which consisted of five students and asked them to remember the members of their jigsaw group. Afterward, she reorganized them into expert group, expert group also consisted of five members which is mixed between male and female students and different ability. Then, the teacher gave them the material that obligated to every member to discuss about it in their own expert group. Before discussing the material in the expert group, the teacher asked them to read the material about 5 minutes. They should master the material and after 15 minutes' discussion, every member has to return to the jigsaw group and teach their friends about his/her responsibility. The

teacher also asked students for clap their hand as the sign for moving group and made them concentrate more to her instruction.

In the first implementation of jigsaw method, the teacher spent until 10 minutes for making groups. Students were still unfamiliar with jigsaw method. Thus, the teacher cannot complete all the jigsaw steps. There was one more jigsaw step left; presenting the result.

SECOND DAY

The teacher opened the lesson by asking students to clap their hand.

"Those who are listening, please give two claps... spirit clap...."

She did not take a long time for affirmation, she asked students about the lesson that they learned before and acquainted them with material for today "Doa Al-fatihah" (Surah Al-Fatihah). After that, she directly did the jigsaw procedure. Then, she continued directly to the main topic and started to follow jigsaw steps in the learning process. For arranging groups, she only needs 3 minutes for grouping because students stayed on the same group just like previously. After every student sits in their own group, the teacher made the students concentrate on her by clapping the hand like in the first meeting. Then, she continued to divide the material for students and remind them that they have limited time to discuss in the expert group.

"You have utilize your time to discuss with others your material that I gave for you all, you have 10 minutes to discuss it"

During discussion, she is looking around to visit each group for checking the discussion progress and help them if they needed some helps. After 10 minutes, she asked them to come back to the jigsaw group and share his/her information to others. In the jigsaw group, there was one of students forgot his essence of the material, thus the teacher tried to provoke the information from him by asking question.

> *T: "Is the prayer asking about sustenance?" S: "Nope Ms, wait a minute, I need to think about it, I forgot"*

The student needed more time to recall the information, thus he asked his friend to continue. After all members take a turn, he took his turn again. In the last 30 seconds, the teacher reminded the students more about the time.

"30 minutes left, not 30 minutes (she is smiling)"

In the few last minutes, students seemed encouraging each other writing the result and motivating their friends to achieve the learning goal. Afterwards, five minutes before finish the class, teacher uses the time for presenting the result. She asked the students who would present their discussion result, five of them raised their hand to present their discussion result. Because shortage time, she chose one of students and asked others to listen their friends' explanation, thus they can compile their friends' explanation. Before presenting the result, she exemplified the way to present. During presentation, there were students who were chatting. She admonished them to listen to their friends' explanation.

T:"*Please others listen to your friend's explanation, if others speak, we should listen*".

They focus more on his/her friend's presentation. After presenting the result, she went on asking students whether addition explanation for her details. One of them raised her hand and gave her opinion. Teachers listened to the her opinion while nodded his head. After that, she confirmed the learning content of those days and made the conclusion of it. Besides that, she motivated them before closing the class and asked them to collect their book to the teacher. Hence, she can achieve the jigsaw step in the second day for 40 minutes.

THIRD DAY

To avoid a boring class, the teacher directly opened the class by greeting the students and asked them the materials that have been learned before. In the third day, the procedure of applying jigsaw method was similarly as before. The different was on the way teacher greeted their student which used Acehnese before starting to learn and its material "jak sikula".

"Assalamu'alaikum...how are you today?"

"Alhamdulillah, amazing, Subhanallah, Allahu Akbar".

After greeting the students, teacher directly asked students the material that learned in the last meeting about "do'a seulaweut". Five students participated actively by answering teacher's question, but some only listened to their friends' explanation and compiled each other's explanation. After 5 minutes, she continued to apply the jigsaw procedure, the first step, she begun by dividing all students in the expert group. After forming the groups, the teacher ensured every students paid attention to her by asking them to clap their hand. Then, dividing the material into every group.

The teacher asked students to read the material and gave them instruction about the assignment. After that, she exemplified the way to make a summary from the material and limited

the time for discussion in the expert group. While the discussion process, she walked towards each group to facilitate them. Afterward, the time was over and she asked every group to collect the discussion result. Before, she ensured that every group finished the task.

T: "Which group that I called, please answer by saying "ready Miss", group 2" S: "Ready miss" And so on to five group.

Next, she continued the learning process by asking students to return to their jigsaw group. When they returned to their jigsaw group, some of them looked vigorously while exclaiming "go back, go back, go back". In the jigsaw group, similarly as before, they share the information and continue to present the result before closing 35 minutes the local language learning process.

FOURTH DAY

In the fourth day, formerly like in the last three days, the jigsaw process was successful. The teacher welcomed students by asking students' condition. Before going to the main topic about "Surah Alfatihah", she asked students' understanding about the previous material "Jak Sikula". Similarly, like in the third day, still the same students who reflect about the last material. After that, she directly continued to ask students to sit in their expert group. After 2 minutes, she ensured that every student had in their own group.

T: "If I call your group, please answer by saying "ready miss" S: "Yes, Miss" T: "Group 5" S: "Ready miss" T: "Group 2" S: "Ready miss" T: "Rroup 4" S: "Ready miss" T: "Rroup 1" S: "Ready miss"

In checking students' group, the teacher forgot to mention one group, thus the student reminded her to call their group.

S: "Miss, do you not call our group"? T: "O, yeah group 3" S: "Ready miss"

Next, she gave them the material and asked them to discuss it in 10 minutes. In addition, she reminded them to be serious in the discussion process because they only had shortage time.

"You only have 10 minutes for discussion. If you already discussed, please remember and comprehend your discussion result, because later you may not look at your book. Additionally, you should notice your paragraph"

Students can be seen focus in the discussion process, but suddenly two students who did not follow instruction to attend the class on time were coming late and disturbed other in the learning process. The teacher asked those two boys to join directly in the discussion process.

"Please, do not do the same bad behavior more. Then, please join your group and discuss today's material"

Before the 10 minutes was over for discussion, most of the students looked noisy, thus the teacher asked them to raise their hand if the discussion process already done.

"The group who finished, please raise your hand"

Only two groups did not finish yet, because one of their group members was coming late, thus they ought to wait for him. After all groups were finished the discussion, the teacher asked them to collect their book, return to the jigsaw group, and instruct them to share their information from expert group to the jigsaw group.

"If you comprehended the material, please collect your book to me, then return to your jigsaw group, tell the result to your teammate. Please tell them your paragraph"

Students immediately back to their jigsaw group. For strengthening the students' understanding, the teacher repeated the instruction.

"You should tell your friends in your team the essence of the story. Please write it in this paper (while raising the empty paper)"

After that, teacher divided them new blank paper for writing. She went around every group and asked their progress in teaching each other, in order to ascertain that every student understand the instruction. She found that one student who was busy to seek the correction pen, thus she suggested him to left it and re-write the correct word on the next space.

"Whose turn in the first paragraph? No need to put correction pen there, just left it, because we only have shortage time"

After 10 minutes left, the teacher assigned students to present their discussion result. She asked students to sit neatly. During the presentation process, she is listening to student's presentation and nodding her head. Subsequently, she asked all students to give comment on the student's presentation.

"Okay, the first paragraph is correct, the second paragraph is correct, the third paragraph there is no explanation, who will add an explanation?"

Four of 25 students raised their hand to compile previously result, but the student who presented his result was not the serious person, thus the teacher decides to give his chance to others. While the second presentation, the teacher asked other groups who their member groups absent for today to complete their paragraph.

"For fifth group, please listen your friend explanation, then you can complete your paragraph"

The last student who present the discussion result, his voice sounds small, thus the teacher asked her to amplify the sound of his voice. From his presentation, there was also an incomplete paragraph. Thus, the teacher asked another group to help him. Otherwise, group five only sits and listens to their friend's explanation without revising, therefore the teacher asked them to finish their paragraph.

"So, why group 5 only sits without revising your task, please revise it if you did not complete yet your paragraph."

Afterward, the teacher asked another student to present and still there was group 4 who have not complete yet their paragraph, thus the teacher asked him to repeat his explanation to help his friends' understanding about the paragraph.

After a while, in the last presentation session, the teacher ought to guide the student in presentation, because she looked stutter.

"....We come from group 2...."

This student only needed teacher's guidance in the starting process, and then she can do it independently. While presenting the result, there was one group who can be seen very noisy, therefore the teacher rebuked them to pay attention to their friends' explanation.

"Group three! Do not just play in your group, please pay attention to your friend's presentation"

Before time is running out, the teacher summarized material for today and motivated students to study hard. Additionally, she also asked students to collect all of the discussion result. In closing class, she asked students to clap "thankful clapping".

"Thankful clapping...thank you, she-she, syukran, acha-acha, arigato, yeah...thank you o, yeah please collect all of your discussion process."