Building Students' Interaction By Using Talking Chips Technique: 
A Classroom Action Research

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Abstract
This study focuses on building students' interaction by using the talking chips technique, and it aims to find out how the talking chips technique can be applied to build students' interaction and describe the responses toward the implementation of this test of this research was students of SMA Negeri 14 Ambon consisting of 26 students (4 groups) in XI-Science class. The data was collected from classroom observation, weekly observation, and questionnaires. The design was classroom action research. The study concludes that this technique is successfully applied to build students' interaction, and the students have a positive response towards the implementation of this technique. Applying the Talking Chips technique in the learning-teaching process gives students more opportunities to be actively involved and work cooperatively in learning activities. This technique also motivates students to speak or express their ideas; therefore, it has a good impact on the students in building their interaction in the classroom.

Keywords: Talking Chips Technique, Interaction Building.

Introduction
Interaction "facilitates language acquisition because it connects input (what learners hear and read); internal learner capacities, particularly selective attention and output (what learners produce) in productive ways" (M. H. Long, 1996). This contention has at least four domains: comprehensible input, interaction, feedback, and output. Related to the researcher's observation and learning experience, the researchers noticed that even learners at the university level are still unable to interact well where only a few students participate by voluntarily answering, asking questions, or contributed to the discussion. Therefore, class sessions became, to some extent, a lost opportunity to assess and promote learning. This experience has brought the researcher to
conduct a preliminary study. The preliminary study was conducted by classroom observation, after permission was granted by the English teacher. It was observed that there was a problem with students’ interaction such as passive students not participating, one or two students monopolizing and lack of motivation to speak in the classroom. The cause of this problem was the lack of student’s self-confidence to speak or interact in English, such as when delivering a presentation in front of the classroom, some students can speak confidently. It can be seen when they can communicate their opinion when responding to peer questions. However, other students cannot. When the students do not believe that they can speak, this will become a big problem for them, as (Mackey, 1999) states that speech difficulties can be affected by a person’s emotional state. Speech is often clearer when a person feels confident and relaxed, which is one of the most important factors to consider when interacting or communicating with people who have speech difficulties.

Second, the lack of vocabulary. The researcher found that most students reserved more Bahasa Indonesia during the presentation because of their tendency not to use English in classroom communication. Consequently, when the students were asked to speak, they were unprepared for what they wanted to say; thus, they got stuck. Third, the lack of participation for all students to interact with only some students can answer the question or provide feedback and question during the presentation. (Emerson et al., 2016) states that participation means students interacting in the classroom, such as answering teachers’ or other students’ questions and asking questions to get a better explanation and clarification. Students who do not participate in that way are often considered to be passive in the classroom.

(Ellis, 1991) states that interaction can occur if there is a performance of a communicative task. In a previous study entitled improving students’ speaking skill through talking chips technique, the results of the research showed that the learning atmosphere also improved. The class became more confident, fun and enjoyable. Furthermore, talking Chips technique was able to improve the students’ Speaking Skill (Fitria, 2017). It supported by (Kagan & Kagan, 1998), one of the communicative tasks that can promote all students’ equal participation in the Talking Chips Technique. Talking Chips Technique is one of the Cooperative Learning Approach’s teaching techniques in which students participate in a group discussion. The students work in a group to help one another to improve their skills. (Slavin, 2010) states that pupils work together in a small group to support each other to improve their own learning and others’. This technique aims to ensure equal participation by regulating how often each member is allowed to speak. This technique encourages passive students to speak out since this technique emphasizes full and even participation from all the members.
Literature Review

The Essence of Interaction in Language Classroom

Interaction is important in the teaching process. Interaction is a process marked by face-to-face action by making eye contact, facial expression, or gestures between teacher-learner and learner (Angelo & Cross, 1993). The concept of interaction can also be defined as:"Reciprocal events that require at least two objects and two actions. Interaction occurs when the objects and the events naturally influence one another” (Wagner, 1994).

To complete the idea above, (Vygotsky, 1978) states in his theory about social development theory that a learner learns best when interacting with those around him or her to solve a problem. Besides that, in social constructivism theory, the individuals actively construct knowledge and understand different knowledge, experience, and interest by connecting or interacting with other people. There are three points in the interaction itself. These are input, feedback, and output.

Input hypothesis is important in language learning. Input hypothesis relates to what learners hear and read. (Oller & Krashen, 1988) argues that the input hypothesis is a term of language acquisition, which results from meaning negotiation that can be facilitated through group discussion. When learners can interact or discuss with their friends in a group, they will surely find difficulty communicating. Negotiation meaning through discussion or interaction that learners do to get input can conclude asking the question-answering question, asking for clarification-giving clarification, and giving correction of learners error pronunciation or learners sentences (Oller & Krashen, 1988). This reveals that the input hypothesis is what learners get from their listening, reading, or understanding of a topic that teachers provide for discussion.

Feedback consists of two types: explicit feedback and implicit feedback (Gass & Mackey, 2014). Explicit feedback includes correction and metalinguistic explanation, and implicit feedback includes negotiation strategies like confirmation checks, request for clarification, comprehension checks, and recast. In a discussion or interaction activity, each learner has the opportunity to deliver their ideas or exchange mind to one and another. In this activity, learners will surely find the difficulty. From the difficulty, it becomes a process of negotiation, meaning called an interaction activity or discussion. Feedback is a process of negotiation, meaning each student has the opportunity to deliver their ideas. (Gass & Mackey, 2014) The interaction context feedback can be obtained from confirmation checks, clarification requests, comprehension checks, and recast. Thus, the feedback is a negotiation process, meaning such as discussion or interaction activity that involves all learners in a group.
The output is the language that learners produce. According to (Oller & Krashen, 1988), the output is obtained from competence, which only comes from input and feedback. This means that the result of negotiation meaning establishes output or what learners produce. The output is a result of the acquisition process. When learners can build interaction with other learners, like giving their ideas in a group discussion, it is an output. Students will find the difficulties like learners know what they want to say during the interaction activity, but they cannot find a way to use the language itself in delivering their ideas. Therefore, negotiation, meaning feedback, is useful to solve such problems. According to (Oller & Krashen, 1988) after producing a problematic utterance and receiving feedback like correction, learners can realize that what they have just said is not understood, so they have to force themselves to reformulate the initial utterance to make themselves understood by producing more target-like output. This means that their friends' help in the interaction context makes it easier to elicit the solution of their problem that provides an effect for the learners to produce their output.

Interaction in EFL Classroom: Its Purpose and Function

In the learning-teaching process, the participation from teacher-students and student-student is necessary to make it happen. The interaction is needed to mediate the learning-teaching process. The interaction has some purposes and functions in the EFL classroom.

Firstly, it can increase students' knowledge of the language. Through interaction, students can improve their language skills if they can listen to or read authentic linguistic material, the output of their fellow students, the discussion, skits, and joint with problem-solving tasks (D. R. Long & Rivers, 1988). This means that they have to be able to be active in every task that is given by the teacher. Secondly, reinforce their social relationship. By interaction, students' can develop their social relationships with the teacher and their classmates since it gives them the chance to learn from each other and get feedback for their performance. Thirdly, developing students' communicative skill. Interaction in the classroom facilitates the acquisition of linguistic resources skills to improve students' communicative skills (D. R. Long & Rivers, 1988).

Communicative skills will be improved if language teachers also apply speaking activities such as debates, topic-based discussions. The communicative skill also builds students' self-confidence in speaking. In a language classroom, interaction is an important thing in improving their social activities, which is improving the knowledge and building self-confidence and identity as competent language users (Ellis, 1991).
Types of Interaction

Teacher – Students Interaction

Teacher-students interaction is crucial and important, not only for the organization and management of the classroom but also for the acquisition (Wubbels & Brekelmans, 2005). This means the teacher has a role in helping students avoid the error to improve students' language acquisition. In this interaction, the teacher strives to achieve the goals shared with all students. First, after planning or giving a curriculum, a content program to be taught, teachers strive to stimulate or at least maintain students' interest in what is taught to motivate students to learn and improve and maintain students' interest, including self-direction and self-motivation. Then, the teacher prepares a presentation. This can be in the form of information presentations, demonstrations of skills, or modeling attitudes and values. The teacher also tries to organize students’ application of what is being learned, both the practice of the skills shown or the manipulation of information and ideas that have been presented. The teacher also arranges evaluations to ascertain whether students are progressing and help decide whether to change strategies. Finally, the teacher gives advice, support, and encouragement to each student. Besides, teachers brainstorm students' knowledge by asking questions, using students' ideas, giving directions, criticizing, or justifying students talk responses.

Students-Students Interaction

According to (Vygotsky, 1978) theory about the concept of zone proximal development (ZPD), he also states that students learn language best through interaction because when students interact with others, their language acquisition is improved. Students-students interaction is the communication between and among peers, a group with or without the teacher present. Students-students interaction can influence and contribute to each others' learning. In support of this idea, (Richards & Rodgers, 2001) reveal that learners exert a strong influence over each other's learning and, to a lesser extent, over the linguistic content. (Webb, 1982) also adds that if students-students interaction is well structured and managed, it can be important for cognitive development.

In Piaget's theory (Piaget, 1952) about cognitive theory, he adds that cognitive development contains two complementary processes; assimilation and accommodation. Assimilation is an enabling process where students incorporate new information or experience to the already existing knowledge or information. Meanwhile, accommodation is the process where the new information, knowledge or point of view changes based on what ready knowledge the students have.
To combine the opinions above, the researcher concludes that students-students interaction is improved when students can pay attention first to others' talk. In interaction, students with their friends are doing negotiation of meaning like error correction to each other that affects what students' produce in interaction. Interaction happens when there are two or more individuals who communicate with each other. It means that there is feedback between students-student. To confirm that students-students interaction affects the development of students' skills in the classroom, (Johnson, 1981) in his paper, conducted a qualitative research method was employed to examine the role of students-students interaction in developing their speaking skills. This shows that learner-learners interaction plays an important role in enhancing speaking skill of second language learners. The study also found that learners-learners interaction in a classroom setting was the best factor in developing students' skills and reducing their mistakes during a conversation.

**Talking Chips: A Way to Build Students' Interaction**

**The Concept of Talking Chips Technique in EFL Classroom**

Talking chips is one technique of cooperative learning that pushes students to participate in a group discussion and can speak confidently (Kagan & Kagan, 1998). The chips are a sign that will ensure students' participation by regulating how often each group member is allowed to speak or deliver their ideas. Besides, (Muklas, 2017) adds that talking chips is the strategy that makes the value of everyone's contribution tangible and gives a chance to speak. It means all students have the same opportunity in the classroom to deliver ideas. Based on the definition above about the talking chips technique, the researcher concludes that this strategy is an excellent strategy to use with students as it helps them regulate their impulsive talking and provides structure practice in how to take turns appropriately.

The purpose of this technique is to encourage all students to speak out and to reflect. The talking chips regulate the discussion so that every student, even those who have the low ability to interact or speak, shy and passive, have to speak up and contribute to the discussion and develop their language skill. Also, (Syaripudin & Nuristiana, 2018) argues that talking chips can help students produce and deliver their ideas orally because every student has to use their chips to speak up. So, they will share their ideas with their group member and avoid classroom condition problems such as dominating group members.

There are some advantages to using the talking chips technique during the learning process. The talking chips technique allows every student to hold accountable for participating. Besides that, the talking chips technique can develop students' speaking skills. During the activity, students
need to discuss certain topics in a group. Each student has to share their ideas when their turn comes. Therefore, this technique provides an opportunity for all students to speak. (Kagan & Kagan, 1998) adds that the talking chips technique helps build on others' ideas, contribute an idea, and develop other skills such as team building, social skills, communication skills, thinking skills, and knowledge building. In the talking chips technique, the students are in a group. It means they have to work together with others to complete the task. In here, they need to build trust in each other. Besides that, when they try to communicate with others like give feedback toward other's error correction or give a comment or critique to others by using the chips which is a ticket for them to speak, their communication skill, thinking skill to find out the solution of problem and knowledge of content also improved (Sheen, 2010). All group members are the machine pieces; if one does not work well, a failure may occur. However, some points needed to give more attention to applying this technique, like time management for preparation and the number of students in the classroom because it is quite difficult to apply in a large class.

The Steps in Applying Talking Chips Technique

According to (Kagan & Kagan, 1998) some steps in implementing Talking Chips Technique are as follow:

1. The teacher first has to explain the materials that are going to be learned.
2. The teacher prepares a small box to contain several colorful chips.
3. The teacher creates 6 or 7 member teams of students who hold different viewpoints on an issue and gives each team member a symbolic "talking chips."
4. Begins the discussion. Anyone in the group could start the discussion related to the topic by placing their chip in the center of the team table.
5. Continues the discussion. Any student could continue the discussion by using his or her chip to comment, critique, ask for clarification or error correction, etc. However, they need to wait until the first speaker is done speaking.
6. When all chips are used, teammates collect all their chips and continue the discussion using their talking chips.

Research Methodology

Research Questions

Based on the problem statement above, the researcher formulates the research problems as follows:
1. How can the talking chips technique build students' interaction in the classroom?

2. What are the students' responses to implementing the talking chips technique in their English learning activities?

Setting of the Study

The study was conducted from August 30th, 2018, to September 2018. The data were collected from students of SMA Negeri 14 Ambon consisting of 26 students (4 groups) in XI-Science class.

Research Design

The design was classroom action research. According to (Newsome et al., 1988)" Action Research is a mode of self-reflective that involving the participants (teachers, students or principals) that have a specific purpose of improving their shrewdness and fairness of their own social or educational practices and their understanding of the practices. Action research gets on a problem finding, formulating possible actions for the problem, applying an action, and finally evaluating the action's result. These activities look like a circle. Sometimes, we should reiterate the process until we can achieve success in getting a good result.

Data Collection & Analysis

3 instruments were applied to help the researcher to collect the data; observation checklist, weekly observation (using overall spoken interaction scoring rubric), and questionnaire. In conducting this study, the researcher used the following:

a. Classroom Observation

This instrument is used to describe overall activity during the implementation of the talking chips technique, such as: how the implementation of talking chips technique, learners' interest, and learners' interaction. This data is presented in descriptive form from the recordings of the dynamics of each group's interaction and the transcripts of each group's interaction.

b. Weekly Observation

The aim of using weekly observation is to gain data about learners' interactions. The weekly observation form is a group discussion in which the group's learners were being asked to interact with their friends by talking chips technique. The data of weekly observation was analyzed by using overall spoken interaction, which adapted from the European
framework of reference for languages: learning, teaching, assessment which was developed by (Little, 2006) including output feedback and input.

c. Questionnaire

A questionnaire is to gain data about learners' responses regarding the application of the talking chips technique. 15 questions were using Likert Scale, and the data itself was analyzed quantitatively and based on the formula by (SUDJANA, 2004)

\[ \frac{f}{n} \times 100 \]

Result & Discussion

This research was conducted in two cycles, where each cycle consists of four meetings. At the end of the fourth meeting of each cycle, an assessment was given to the students. The first cycle was conducted in four meetings from August 30th until September 2018. The subjects were 26 students (4 groups). Three points will explain how the talking chips technique can build students' interaction. It comes from:

1. Interaction

In implementing the talking chips technique, the teacher used the chips as a tool for students to speak. (Fitria, 2017) in the result of her research, it shows that the talking chips technique can help students produce and deliver their ideas orally because every student has to use their chips to deliver the ideas, give questions, ask for clarification, and give clarification, etc. whereas in the implementing this technique in this research, the teacher gave 3 to 4 chips for each student in the group. It means that all students have the same opportunity to speak. Students' chips are the responsibility and a must for students to speak, deliver their ideas, or make the error correction to others based on the topic given by the teacher. The result shows that the talking chips technique is able to build students' interaction in the classroom because it pushes students to work in a group. The talking chips technique is also a part of cooperative learning. Cooperative learning is a learning activity that happens in a group. (Ohta, 2005) states that working together in a group helps students improve their skills in interacting and solving problems together. To manage the activity in the classroom, the teacher collaborates with the researcher. The teacher's activity is the unique activities, which is the teacher provided the topic for each group to be discussed. In implementing the talking chips technique, all students have the same opportunity to deliver their ideas in a group. During the process of this technique, students learn to pay attention
when others talk. They have to listen to what their friends are talking about. After that, they were given a chance to comment, ask for clarification or error correction, etc.

In the last meeting of the cycle where the students were assessed. The assessment was conducted through a scoring rubric, which assessed three aspects of interaction: output, feedback, and input. This assessment is conducted to know whether the implementation of the talking chips technique has benefited the student in building their interaction in a group. The students had 100 minutes to discuss the topic in their group. During the process, the teacher facilitated the process and managed the class. The teacher found that the students developed their interaction with more ideas and used good sentence structure. Based on the activities that have been done in the classroom, students have shown good improvement in the second cycle. They already reached the indicator of success in a presentation by reaching the score of 70-100. The researcher found that students could build their interaction with others where they can correct each other errors grammatically. It can also affect their knowledge of a topic and their vocabulary bank. Based on the result of students' assessment, the researchers conclude that the students' interaction is developed by using the talking chips technique in the classroom.

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<thead>
<tr>
<th>Group</th>
<th>Cycle 1</th>
<th>Cycle 2</th>
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<tbody>
<tr>
<td>Group 1</td>
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<td>77</td>
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<tr>
<td>Group 2</td>
<td>66</td>
<td>85</td>
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<tr>
<td>Group 3</td>
<td>77</td>
<td>88</td>
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<tr>
<td>Group 4</td>
<td>77</td>
<td>85</td>
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</tbody>
</table>

*Table 4.1.5 Students' Overall Interaction Scoring*
2. The Activity in the Classroom

Based on the observation during the first cycle and second cycle, three points will be discussed. It started from the physical setting, such as the classroom's cleanliness that affects students' comfort during the learning-teaching process. In every meeting, the teacher tried to control the class so that there was no noise, and every activity in the classroom could take place well. Besides that, the teacher also provided feedback at the end of each meeting to recall what they had learned in class.

The second section of the researcher's observation is the students' interaction in the classroom. Students' positive responses were indicated by their active involvement in every meeting activity using the talking chips technique. At the first meeting in the first cycle, some students felt afraid of making mistakes, but when the researcher applied the talking chips technique in the teaching and learning process, they became very interested in-class activities. During the application of the talking chips technique in the second meeting, students showed their enthusiasm. When the class activity turned into a group discussion, it was found that students were actively involved in the group. However, it was observed that when some students wanted to convey their opinion in a group, some other students laughed at them. As a result, the students had lost self-confidence at the time. The teacher motivates the class for their pronunciation errors by asking them to learn by doing and learning from mistakes. In the first cycle, the interaction was poor. This is understandable because the activity was new for them, and they need time to adapt to the technique. As a result, there was only one group that achieved the standard score of the assessment based on overall spoken interaction rubric which adapted from European framework of reference for languages: learning, teaching, assessment which was developed by (Little, 2006).

After making the evaluation and the reflection, the researcher and classroom teacher prepared the next cycle material based on the revision. In the classroom, they showed a good result in their group. This technique helped them to be more active, creative, and competitive in the interaction. They tried to deliver their ideas, which was exciting because the students had significant improvement in this cycle. Their structure in sentences was better than before, and the researcher was satisfied with the students' results because all of the students have achieved the indicator of success. Besides, none of them was at a poor level.

The third section is the observation of teacher-student interaction in the classroom. In the first meeting of the first cycle, the teacher mostly took part in giving input, such as correcting every wrong sentence structure, but when the talking chips technique was implemented in each meeting, students often played a role in expressing and clarifying each other opinions. Besides that, the
teacher also allowed students to interact with others by forming them into groups and giving each group topics to be discussed together. During the teaching-learning process, the teacher tried to motivate the students by using "ok, good, well done." Not only that, but the teacher also uses many types to correct language structure errors used by students. Usually, it happened at the end of the learning-teaching process, which the teacher provided feedback on the students' activity in the classroom. The second cycle's observation result found that there was good improvement in students' responses and attitudes toward the teaching and learning process. It can also be said that Talking Chips Technique really helped students be actively involved in the teaching and learning process, and it also builds students' interaction. The observation result also showed that there is an improvement in every classroom activity. Students who previously were passive in the English learning process showed their curiosity and willingness to learn English. It happened from the first meeting of the first cycle until the last meeting of the second cycle. They became more active in the teaching and learning process.

The concept of interaction defines as "Reciprocal events that require at least two objects and two actions; Interaction occurs when the object and the events naturally influence one another" (Wagner, 1994). Interaction happens because there is an activity of negotiating to mean. Here, students are in a group and have to give feedback to one another—the result of negotiating to mean called language acquisition. The research results show that students have better improvement when implementing the talking chips technique in the classroom. For example, in the first meeting of the first cycle, only five students could interact and be brave to deliver their ideas in the classroom. However, when the teacher implemented the talking chips technique in the second meeting of the first cycle, the improvement happens to student 2 (S2) in group 1. She provided an opinion then clarified her opinion to the student (S7), who asks for clarification toward her opinion. This means that the talking chips technique can build interaction and improve students' cooperation in the classroom. It is supported by (Muklas, 2017) stated that the talking chips technique could build students' interaction and improve students' speaking skills.
3. Students' Responses toward the Application of Talking Chips Technique

The graph above can be described as follows; 1) All students (100%) thought they like to study English. It clearly is seen by their answer yes to this question. 2) Twenty-five students (96.15%) think that they like to interact in the classroom by using English during the learning-teaching process; meanwhile, one student (3.84%) answered sometimes. 3) All of the students (100%) thought that they like to implement Talking Chips Technique in the English learning-teaching process for building interaction in the classroom. 4) Twenty-four students (92.30%) thought that they do not find out difficulties in interaction; meanwhile, two students answered sometimes. 5) All of the students (100%) think that the teacher's way of teaching English, especially in speaking skills, using the Talking Chips Technique is fun. 6) All of the students (100%) think that they feel motivated to ask about the things that they do not understand yet with the teacher's guidance. 7) All of the students (100%) thought that using the Talking Chips Technique can build students' interaction or are effective in the classroom. 8) All of the students (100%) thought that their understanding of a topic is increased by using this technique. 9) All of the students (100%) think that they really understand the material they have learned all this time. 10) Twenty-four students (92.30%) thought that using the Talking Chips Technique can help students in increasing their understanding during the learning-teaching process; meanwhile, two students (7.69%) answered sometimes. 11) Twenty-five students (96.15%) thought that their English pronunciation is better by using the Talking Chips Technique. Meanwhile, one student answered sometimes. 12) Twenty-four students (92.30%) think that by using this technique, their English vocabulary more increases; meanwhile, two students (7.69%) answered sometimes. 13) All of the students (100%) think that it can increase their skill in giving and asking opinions using the Talking Chips Technique. 14) All of the students (100%) think that by using the Talking Chips Technique, they felt so motivated to continue developing and enhancing the classroom's ability to interact. 15) All of the students (100%) think that Talking Chips Technique can help students' speaking skills in English. In
conclusion, the students felt happy interacting with each other in the classroom especially when implementing talking chips technique was able to motivate them to work collaboratively and also develop their understanding of the material being taught.

**Conclusion**

The research's main purpose is to build students' interaction in class XI, and the research result showed that the interaction was developed. By implementing the Talking Chips technique in the learning-teaching process, the students can interact confidently with other students. Talking chips is also useful for helping students discuss controversial issues and is also useful for solving problems such as dominating or clashing group members. It can be seen through each group’s scores from the first cycle until the second cycle, where there is the progress of students' interaction in the classroom.

Talking Chips could have a good impact on the students that talking chips technique is able to build interaction in classroom. Based on students' perception in the questionnaire sheet, they agreed that the implementation of Talking Chips technique is able to build students' interaction in classroom. The researcher can conclude that the Talking Chips technique successfully builds students' interaction at class XI of SMA Negeri 14 Ambon.

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