A STUDY OF CLASSROOM INTERACTION CHARACTERISTICS IN A GEOGRAPHY CLASS CONDUCTED IN ENGLISH: THE CASE AT YEAR TEN OF AN IMMERSION CLASS IN SMA N 2 SEMARANG

A THESIS
In Partial Fulfillment of the Requirements
For Master's Degree in Linguistics

Sita Nurmasitah
A4C007015

POSTGRADUATE PROGRAM
DIPONEGORO UNIVERSITY
SEMARANG
2010

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CERTIFICATION OF ORIGINALITY

I certify that this thesis, entitled "A Study of Classroom Interaction Characteristics in a Geography Class Conducted in English: The Case at Year Ten of an Immersion Class in SMA N 2 Semarang" is original. I am completely responsible for the content of the thesis. Other writers' opinion or findings included in this thesis are quoted or cited in accordance with the ethical standard.

Semarang, June 2010

Sita Nurmasitah

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O ye who believe! when it is said unto you, Make room! in assemblies, then make room; Allah will make way for you (hereafter). And when it is said, Come up higher! go up higher; Allah will exalt those who believe among you, and those who have knowledge, to high ranks. Allah is Informed of what ye do.

QS. al-Mujadilah (58) : 11

Dedicated to:

my father, Abdurrachman Faridi,

my mother, Sarah Nurbaidah,

my brother, Akbar Faisal.

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ABSTRACT

Sita Nurmasitah. 2010. *A Study of Classroom Interaction Characteristics in A Geography Class Conducted in English: The Case at Year Ten of An Immersion Class in SMA N 2 Semarang.* Thesis. Linguistics Graduate Program. Diponegoro University Semarang. Advisor: Dr. Sugeng Purwanto, M.A.

An immersion Class is a special program intended for junior (SMP) and senior high schools (SMA) in which seven subjects (Mathematics, Physics, Biology, Chemistry, Economics, History and Geography) are delivered to the students in English. For these reasons, the interactions in the immersion classes are supposed to be different from the general ones. This condition motivates the writer to focus the study on the classroom interaction. The objectives of this study are to explore the classroom interaction characteristics and to find out whether or not the English classroom activities as used to teach at year ten of Immersion Class at SMAN 2 Semarang have met Walberg's teaching effectiveness. The subject of the study was 30 students and one teacher at year ten of immersion class at SMAN 2 Semarang. The observation used three instruments to analyze the data; Flanders Interaction Analysis (FIA) to identify the classroom interactions, teaching effectiveness elements based on the Walberg's theory, and Likert Scale to measure the students' opinion results from questionnaire. The results of the analysis showed that the most dominant characteristic in immersion classroom interaction was the content cross. It reflected that most of the teaching-learning time was devoted to questions and lectures by the teacher. The teacher spent 57.43% of the teaching-learning time, while the students spent 22.20% of the teaching-learning time. It showed that the students were active enough in the classroom interaction. The interaction in this immersion classroom was in three-way communication; there were interaction between teacher-students, students-teacher, and students-students. The immersion classroom interaction also met the requirements of teaching effectiveness elements made by Walberg (1986). The teaching effectiveness elements used in the classroom were in the form of; academic learning time, use of reinforcement, cues and feedback, co-operative learning, classroom atmosphere, higher order questions, advance organizers, direct instruction, indirect teaching, and the democratic classroom. Based on the students' opinion, the teaching-learning process in the classroom was good enough, however some students felt uncomfortable with the classroom atmosphere and the teacher's discipline of time.

Keywords: classroom interaction, teaching effectiveness, immersion.

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INTISARI

Sita Nurmasitah. 2010. ***Penelitian Karakteristik Interaksi Berbahasa Inggris Dalam Mata Pelajaran Geografi: Studi Kasus Pada Kelas X Program Imersi SMA N 2 Semarang.*** **Tesis. Magister Linguistik. Universitas Diponegoro Semarang. Pembimbing: Dr. Sugeng Purwanto, M.A.**

Kelas imersi adalah suatu program yang ditujukan untuk SMP dan SMA dimana tujuh mata pelajaran (Matematika, Fisika, Biologi, Kimia, Ekonomi, Sejarah dan Geografi) disampaikan kepada siswa dalam bahasa Inggris. Karena alasan tersebut, interaksi di dalam kelas imersi seharusnya berbeda dengan kelas umum. Kondisi tersebut memotivasi penulis untuk meneliti interaksi di dalam kelas, khususnya di kelas imersi. Tujuan penelitian ini adalah untuk mengetahui karakteristik interaksi di dalam kelas imersi dan untuk mengetahu apakah kegiatan belajar mengajar di dalam kelas imersi memenuhi unsur-unsur efektivitas dalam proses belajar mengajar. Subyek dari penelitian ini adalah 30 siswa kelas X dan satu guru Geografi di SMA N 2 Semarang. Tiga instrumen analisis digunakan untuk menganalisis data di penelitian ini, yaitu Flanders Interaction Analysis yang digunakan untuk mengidentifikasi karakteristik interaksi kelas; unsur-unsur efektivitas dalam proses belajar mengajar berdasarkan teori Walberg; dan Likert Scale yang digunakan untuk menganalisis data kuesioner yang telah diisi oleh para siswa. Hasil analisis menunjukkan bahwa karakteristik yang paling dominan di kelas imersi adalah *Content Cross*. Hal ini menunjukkan bahwa sebagian besar waktu belajar mengajar dihabiskan oleh guru untuk bertanya dan menjelaskan materi. Guru menghabiskan rata-rata 57.43% dari total waktu belajar mengajar, sedangkan siswa menghabiskan rata-rata 22.20%. Hasil tersebut menunjukkan siswa cukup aktif dalam kegiatan belajar mengajar. Interaksi di dalam kelas imersi dapat dikatakan sebagai interaksi tiga arah; interaksi antara guru-siswa, siswa-guru, dan siswa-siswa. Kegiatan belajar mengajar di kelas imersi juga memenuhi unsur-unsur efektivitas mengajar berdasarkan teori Walberg, yaitu; *academic learning time, use of reinforcement, cues and feedback, co-operative learning, classroom atmosphere, higher order questions, advance organizers, direct instruction, indirect teaching*, dan *democratic classroom*. Para siswa berpendapat bahwa proses belajar-mengajar di kelas cukup baik, namun ada beberapa siswa yang kurang nyaman dengan suasana kelas dan disiplin waktu guru.

Kata Kunci: interaksi kelas, efektivitas mengajar, imersi

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CHAPTER I

INTRODUCTION

A. Background of the Study

In this globalization era, English, as the world language for international communication and science, will be used for communication in many countries. According to Ramelan (1992:2-3) English as an international language is used to communicate, to strengthen and to fasten relationship among all countries in the world in all fields, for example in tourism, business, science, technology, etc. Considering the importance of English, people from various non-English speaking countries, including Indonesia, learn English either as a second or a foreign language.

With regard to the aforementioned reasons, Indonesia begins to use English in every aspect of life, including education field. Indonesian government made law No.20 of 2003 on National Education Systems, "Government and/ or local government carry out at least one education unit in all educational level to be developed into internationally standard education unit." The government made this policy because high school leavers in Indonesia have poor ability in English. National Education Service of Central Java stated that high school leavers have poor English ability because English language learning can not provide good support to the students mastering in English (2004). Because of this reason, Central Java Government conducted *Immersion program*; a class that uses English as a means of

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instruction in its teaching learning process, as the realization of law No.20 of 2003 on National Education Systems. Immersion class program was introduced by the government of Central Java in the year of 2004 (Diknas Jateng: 2004). It is a special class program intended for Junior and Senior High Schools in which seven subjects (Mathematics, Physics, Biology, Chemistry, Economics, History and Geography) are delivered to the students in English. Until now, there are some Junior and Senior High Schools in Central Java implement it at their schools with the purpose to improve the educational quality and to produce good quality of human resources in facing globalization era. Shortly, an Immersion Class can also be defined as a special class in which English is used as a medium of interaction, both between the teacher-students and students – students. Immersion classes are expected to be the answer to the key issues to improve competitiveness in the international world. This class will equip the students with the ability to communicate in English both oral and written skills, which will become the gate of science and technology mastery.

Establishing immersion classes in Central Java is not a simple job. It needs to have particular preparation such as the teacher's competencies (approach, method, technique, media, and material) and also learning environment, or classroom setting. There are factors which influence them such as what material to be given to the students? Who will teach them? How does the teacher teach? What technique will be used? A teacher in immersion classes is supposed to be the one who has sufficient knowledge of teaching skills for the students in term of how he delivers the materials, what techniques and strategies he uses, and how he interacts with the students. The

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teacher who takes more parts than others in the teaching learning process. There are some factors which influence the teaching learning process such as teacher, curriculum, syllabus, materials, methods, media, evaluation, students, and interaction (Harmer 2001: 167). For the sake of having more concentration to the research, the discussion will be focused on the classroom interaction between teacher and students whether or not will influence the learning activities and learning outcomes.

Interaction in the classroom is an essential part of teaching learning process. Interaction or human interaction has been defined as a process whereby two or more people engaged in reciprocal actions. This action may be verbal or nonverbal (Celce-Murcia, 1987). Interactions in the immersion classes are supposed to be different from the general ones. The teacher might use English for the whole interaction program with the purpose that the students can improve their mastery in English. One of the reasons is that when English is used as a scaffolding talk, the students are getting used to interact in their daily activities using the language (Diknas 2004: 63). How does the teacher maintain classroom climate conducive for teaching learning process is highly crucial? The classroom climate is built up by the pattern of interaction between teacher and students' verbal exchange, asking questions, responding and reacting. The most important factors in a classroom situation are the interactions and exchanges initiated by teacher and students.

Flander (1963) originally developed a research tool, named as Flander Interaction Analysis (FIA). FIA system was designed to categorize the types and quantity of verbal interaction in the classroom and to plot the information on a matrix

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so that it could be analyzed and interpreted. The results gave a picture as to who was talking in the classroom, how much and kind of talking that took place. FIA became widely used coding system to analyze and improve teacher student interaction pattern.

B. Reason for Choosing the Topic

Recently, international standardized school becomes popular in education field. After the government issued the regulation No.20 of 2003 on National Education Systems, "Government and/ or local government carry out at least one education unit in all educational level to be developed into internationally standard education unit," each region, including Central Java, began to prepare international standard school that started from immersion classroom program in several schools had been chosen.

Immersion program was created as a starting point of the international standardized school. SMA N 2 Semarang was one of the schools selected by the government to run the immersion program for their students. Seven subjects were delivered to the students using the English. At first there were only two immersion classes program in SMA N 2 Semarang, but because of the high interest of the people who want to study in immersion classes, now there are three immersion classes that consists of 30 students in each class. At the end, if the school will become an international standardized school, all the students should interact in the teaching-learning process by using English, not only one or two classes, but the whole classes in this school.

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Chaudron (1988:10) stated that interaction is viewed as significant because it is argued that only through interaction, the learner can decompose the teaching learning structures and derive meaning from classroom events. Moreover, Allwright and Bailey (1991:25) stated that through classroom interaction, the plan produces outcomes (input, practice opportunities, and receptivity). It can be concluded that interaction plays very important role in teaching-learning process.

What about interaction in immersion class? Since the teacher and the students are not used to communicate and have interaction using English, will the teaching-learning process in this class runs smoothly? This classroom interaction between students and the teacher is important and interesting to be researched, especially in immersion classroom. There are correlations between classroom interaction and the effectiveness of the teaching-learning process. That was the reason why the writer chose the teacher – learner interaction and its effectiveness as the topic of this thesis.

C. Problem of the Research

In Immersion Class program, seven subjects (Mathematics, Physics, Biology, Chemistry, Economics, History and Geography) are delivered in English. The classroom interaction should also be done in English. Since the teachers and the students are not used to communicate and explain in English, the interaction characteristics might be different with classroom interaction in general or in English class. The problem in this research is whether or not the English interactions as used

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to teach Geography at year ten of Immersion Class at SMAN 2 Semarang have met teaching effectiveness elements.

D. Purposes of the Research

From the above research problem, the writer can formulate the objectives of the study, they are; to explore the classroom interaction characteristics and to find out whether or not the English interactions as used to teach Geography at year ten of Immersion Class at SMAN 2 Semarang have met teaching effectiveness elements.

E. Significance of the Research

1. **For the teacher**

   This research results can be used as reference for the teacher about her teacher's performance, so that the teacher can improve her performance in teaching during teaching-learning process.

2. **For the other teachers**

   The results of this research are expected to be the model of interaction in teaching-learning process. At least the other teachers can apply this teaching model in their own classroom.

3. **For the students**

   The results of this research will cover multiple advantages, namely attitude, improvement, verbal competence, and reasoning pattern of the students, all of which are useful for their preparation to enter a higher education level as well

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as the teacher's skill in developing teaching-learning process which enables them to motivate students to use language.

4. **For the researcher**

   This research can develop the writer knowledge about the characteristics of classroom interaction and the teaching effectiveness in immersion classroom.

5. **For the further researchers**

   The results can be used for the further researchers which focus on developing classroom interaction between teacher and students by using English in immersion, bi-lingual, RSBI or SBI schools.

F. Scope of the Study

The scope of the study was the Geography teacher and Immersion Class students at year ten (X-3) of SMA N 2 Semarang. The class consisted of 30 students. The study concerned with the teaching effectiveness elements and classroom interaction characteristics in immersion classroom.

This research was intended to give an important contribution to a better quality of the high school leavers who will continue their study to the university, especially their English. It was also expected to improve the quality of the teacher's performance during teaching learning process in Senior High School. The writer conducted the observation in Immersion Class so that the other classes were expected to reflect it as a model of teaching learning pattern.

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G. The Organization of Writing

This study is comprised of five chapters. In order to help the readers in comprehending the study, this study is systemized as follows:

Chapter one shows the background of the study, reason for choosing the topic, problem of the research, purposes of the research, significance of the study, scope of the study, and the organization of writing. In general, this chapter provides the framework or the ground thinking of this study to bridge the following chapters.

Chapter two provides the review of the related literature. It describes the theories used in developing the study. All of them will serve the fundamental references in conducting and analyzing the study.

Chapter three concerns in the method of investigation conducted by the writer. It gives the description of the research design, the subject of the study, the research procedures, the instruments, and the data analysis.

Chapter four discusses the main purpose of conducting this study. It provides the explanation of the patterns of classroom interaction used by the teacher and students in immersion class as the result of the study conducted by the writer. Besides, it also provides the result whether or not the English interactions as used to teach Geography at year ten of Immersion Class at SMAN 2 Semarang have met Walberg's teaching effectiveness.

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Chapter five provides the overall discussion of the study as the conclusion and followed by the suggestions given by the writer at the end of the study for the sake of language teaching in pedagogy.

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CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter deals with the review of literature related to the present study. The study was designed to explore classroom interaction characteristics and to find out whether or not the English as used to teach Geography at year ten of Immersion Class at SMA N 2 Semarang has met elements of teaching effectiveness.

A. Previous Studies

The following studies have been reviewed in relation to the present study.

1. **Classroom Interaction and the Effectiveness of Teaching Learning English as a Local Content Subject at the Elementary School**

   Pheasanty (2003) conducted a research that the objective was to identify the characteristics of the classroom interaction in the elementary school English classes; to identify the English mastery of the Elementary school students; and to find out whether there are any significant differences in the effectiveness of teaching learning process among classes with different percentages of of classroom interaction characteristics.

   This study involved the fifth grade students and the English teachers of some schools as the subjects. The observation used Flanders Interaction Analysis

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to identify the classroom interaction. While the English mastery test were analyzed by using one way ANOVA.

The result of the analysis showed that the dominant characteristics of classroom interaction in Elementary School are the student participation, indirect ratio, and content cross. The English mastery tests of the fifth graders of these Elementary Schools are good enough. The inferential analysis shows that there are significant differences in the effectiveness of teaching learning English among classes which have different percentages of characteristics of classroom interaction.

2. Patterns of Classroom Interaction at the Different Educational Levels in the Light of Flanders Interaction Analysis

In 2005, Inamullah conducted the research to explore patterns of classroom interaction at secondary and tertiary levels in the North West Frontier Province of Pakistan using Flanders Interaction Analysis system. This study was significant because its findings and conclusions may stimulate teachers to improve their teaching behavior in order to maximize students learning.

Fifty observations were carried out, each in one classroom, using Flanders Interaction Analysis system to secure the data. To do this, time sampling was used and each classroom was observed for 810 second in a 45-minutes class. After obtaining and encoding the data, it was tabulated, analyzed and interpreted by using percentages, means, standard deviations and t-test.

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The result shows that the students talk time at secondary and tertiary level differed in favor of secondary level classes where students talk time was greater than at tertiary level. The talk time of teacher at tertiary level was greater than that of the teacher's at secondary level. Silence time at secondary level was significantly greater than at tertiary level.

B. Theoretical Background

1. Classroom Interaction

Interaction is occurred everyday in the classroom activities between the teacher and the learners. Interaction commonly defines as a kind of action that occurs as two or more objects has an effect upon one another. The idea of a two-way effect is essential in the concept of interaction, as opposed to a one-way causal effect (www.wikipedia.com).

Education with its correlated activities of teaching and learning process involves interaction between teacher and students as channels of realizing its objectives. Interaction occur everyday in teaching and learning process. It is managed by everyone, not only by the teacher in the classroom, but also the students. This interaction is usually used to express their ideas together. Allwright and Breen as quoted by Chaudron (1988:10) stated:

Interaction is viewed as significant because it is argued that:

a. Only through interaction, the learner can decompose the TL structures and derive meaning from classroom events.

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b. Interaction gives learners the opportunities to incorporate TL structures into their own speech (the scaffolding principles) and
c. The meaningfulness for learners of classroom events of any kind, whether thought of as interactive or not will depend on the extent to which communication has been jointly constructed between the teacher and learners.

Moreover, Allwright and Bailey (1991:25) stated that through classroom interaction, the plan produces outcomes (input, practice opportunities, and receptivity). The teacher has to plan what he intends to teach (syllabus, method, and atmosphere). So, the classroom interaction has important role in teaching-learning process. It can be seen from the figure below.

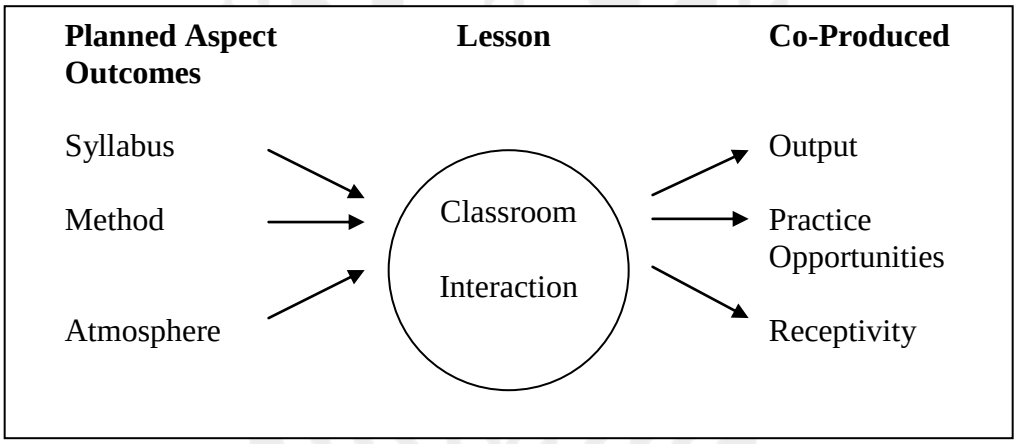

Figure 2.1 The relation between plans and outcomes

Furthermore, Rivers (1987:6-9) stated that the teacher in teaching learning process should not be too focus on the best method, the teacher should be looking for the most appropriate approach, design of materials, or set of procedures in a particular case. The teacher is being flexible, while keeping interaction central; interaction between teacher and learners, learners and teacher, learner and learner,

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learner and authors of texts, learner and the community that speak the language. The teacher should not be directed and dominated in the classroom. Interaction cannot be one-way, but two-way, three-way or four-way.

2. Teacher's Role in Teaching Learning Process

Cameron (2001) has already given the general description about teaching. She emphasizes that teaching is a process to construct opportunities for learning and to help learners take advantages of them.

> …....teaching can never guarantee learning; all it can do is to construct opportunities for learning and to help learners take the advantages (Cameron 2001: 242).

According to that quotation, it can be drawn that in a teaching learning process, the teachers should be able to help the students in constructing understanding towards the lesson.

Holtrop (1997) specified the teacher's role in teaching-learning process as follows;

a. Lectures

A traditional view of the teacher is of someone who dispenses knowledge; someone who lectures, tells, feeds, disseminates, covers material, teaches the subject matter more than the students. The students sit passively while the teacher is on show. Desks in rows and a blackboard and podium up front are an arrangement designed for this role of a teacher. However, lectures are effective

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for giving short sets of instructions, background information, guidelines, or other information that is needed in a short time frame (e.g., before doing a class project, lab, or group activity).

b. Demonstrations

Demonstrations, on the other hand, allow students to experience more fully the information and concepts the teacher wants to impart during the lesson. Although the teacher is still the center of the action and the dispenser of knowledge, students can more easily see what they need to know and more efficiently link it to prior knowledge in their own ways. Students remember much better what they have both heard and seen (or even touched, smelled, or tasted).

c. Listening

Listening is a very important teacher role, something that we don't usually think of in connection with the lecturer role, however. Listening is crucial for assessment of learning (checking comprehension and appropriate challenge level), for collaboration between teachers and students (coaching instead of just judging), and for giving students a real sense of ownership of classroom activities as well as for allowing students to articulate and internalize the learning processes. Teachers who listen can turn around and provide very effective support structures to guide students on to the next level of challenge.

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d. Empowering

Empowering is really what teaching is all about. Ironically, though, many teachers act as if empowering students' means weakening themselves--their authority as both a classroom disciplinarian and a subject-matter authority. But maybe power is like love: the more you give, the more you get.

From that teacher's roles explanation, it can be concluded that the teacher should not only give lectures or explanation on the whole teaching-learning process, but also give a time to the students. The students should participate in classroom activities.

Nunn (1996) stated that only one of every forty minutes of class time is devoted to student participation. This statement shows that the kind of teaching that most typifies in high school classrooms right now is that the teacher tells and the students listen, then the students tell or regurgitate information on a written test and the teacher evaluates. This kind of method of teaching should not be applied any longer because it does not give any chance for the students to be independent learners in mastering the lesson. More progressive teaching is seen when the teachers model strategies and knowledge making in the context of task completion, and then students attempt to do the task the way the teachers did it (Wilhelm et al. 2001: 2).

Moreover, Chaudron (1988) stated that there are two kinds of teacher constitution in teaching learning process, they are;

a. Teacher – centered: don't speak unless you are spoken to

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b. Open or student – centered: if you have something to say, say it.

Those kinds of interaction is negotiable, depends on the rules of speaking established by the teacher. Teachers behave in different ways and therefore there are different types of classroom interactions. When teacher talks, commands, restrict student's freedom to talk, it is teacher – centered. When teacher allows students to talk, ask questions, accepts their ideas and stimulates their participation in class activities, it is open or student – centered.

3. Elements of Teaching Effectiveness

The most comprehensive review of elements of teaching effectiveness has been made by Walberg (1986) in Inamullah (2005). He collected more than 3,000 studies, and then carefully analyzed them to determine how important each particular element was in student learning. From his result, he compiled a list of weighted factors selected from his overall list of elements that are very closely related to teacher behavior in the classroom. The selected elements consisted of academic learning time, use of positive reinforcement, cues and feedback, cooperative learning activities, classroom atmosphere, high order questioning, and use of advance organizers.

a. Academic Learning Time

Academic learning time in the classroom has emerged as an important variable; how efficiently lesson are planned and how long it take to get started, how the teacher handles digressions, off-task behavior, and

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discipline, and how the teacher handles transitions will have an effect on student learning (Walberg, 1990). Each classroom has different rule of academic learning time, it depends on the government or school's policy. Usually, in Indonesia, each meeting has 45 minutes length, and the subject is usually taught in two times meeting (90 minutes).

b. Use of Reinforcement

B.F. Skinner developed the theory of reinforcement. Reinforcement is the specialist term in operant conditioning for the 'stamping-in' of stimulus associations and response habits that follows the experience of reward. Skinner's theory, as well as other reinforcement techniques was later applied to classroom settings with the idea that using reinforces could increase the frequency of productive behaviors and decrease the frequency of disruptive behaviors.

There are two kinds of reinforcement; positive and negative reinforcement. Positive reinforcement is presenting a reward after a desired behavior, whereas negative reinforcement is taking away an aversive stimulus after a desired behavior. Basically, in classroom situation, positive reinforcement is when teachers praise and reward students for correct behavior. Negative reinforcement is when punishment is coupled with positive experiences for correct behavior. Studies have shown that specific praise is very effective, while general praise is not. In other words, saying,

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"Johnny, excellent job adding those numbers," is much better than saying, "Great job, class" (www.everything.com/education).

c. Cues and Feedback

To some extent, the use of cues and feedback is related to the process of questioning. Through cueing, the teacher provides some helps to students in answering questions. While the feedback encompasses not only correcting students, but also offering them an assessment of how well they have done (Harmer, 2001:99). Moreover, Hattie and Timperley (2003) in http://rer.sagepub.com stated that feedback is conceptualized as information provided by an agent (e.g., teacher, peer, book, parent, self, experience) regarding aspects of one's performance or understanding.

d. Co-operative Learning

The effectiveness of cooperative learning is a most interesting new finding. The main point here is the importance in the classroom of employing small-group techniques with cooperative objectives. Such a procedure encourages student participation and also results in improved academic performance.

The most direct way to create classroom interaction is toadopt the principles of *collaborative learning*. In collaborative learning, the teacher designs a learning problem or task, and then assigns small groups of students to address the problem collaboratively. Students are typically instructed to reach a consensus on an issue, or to create a group product.

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The purpose of the collaborative learning is to enhance learning and achievement by encouraging peer-to-peer interaction and cooperation (Bishop, 2000).

e. Classroom Atmosphere

Main element of effective teaching is the need to create a relatively relaxed learning environment within teaching-learning process. The arrangement of classroom setting is one of the ways to create relaxing atmosphere. Moreover, the classroom facilitation also gives an effect to the students' desire to study.

A positive atmosphere can make a classroom a more pleasant place to be and, in turn, a more effective, motivating place to learn. It's simple to do, and it can have positive results on the achievement of students (http://www.wikihow.com/Create-a-Positive-Classroom-Atmosphere). Moreover, When teacher creates a positive classroom atmosphere, students learn better. Every student must feel safe and important in the class in order for maximum learning to take place. A positive classroom environment does not just happen; the teacher creates it (http://www.ehow.com/how_2241604_create-positive-classroom-atmosphere.html). How to create a positive atmosphere in the classroom can be seen below.

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1) Create a Positive Physical and Emotional Atmosphere

- Lead the students by example. Changes begin with the teacher's positive caring attitude and thoughtful construction of the physical environment.
- Begin each class greeting students with a smile and a personal welcome. Help each student feel important and set a positive tone to the class.
- Organize the classroom neatly and methodically to control confusion and stress. The teacher and the students need to know where to find books and materials at all times.
- Plan lessons that allow students to actively participate in the learning process, and arrange the desks to meet the needs of the students and lessons.
- Teach students to set measurable academic and behavior goals. Acknowledge the completion of the goals with stickers, treats, public announcements and certificates.
- Search for students' strengths and build on them. Put activities in teacher’s lesson plans that allow every student to feel a measure of success.

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2) Create a Positive Classroom Discipline System

- Allow students to help set classroom rules to give them ownership in the discipline process. Post the rules and consequences in the room.
- Stick to the rules and fairly and consistently execute the consequences.
- Use negative consequences infrequently by reinforcing positive behaviors with a reward system.
- Integrate correct behavior and accountability instruction into the teacher's lesson plan. Hold each student accountable for her actions and don't allow the blame game.
- Discipline students privately. This demonstrates respect and protects the student from public humiliation.
- Praise the students frequently and find something positive to say about each student.

f. Higher Order Questions

A higher-order question is basically a query that requires the student to analyze and produce a reasoned response, not the teacher's words. In order words, there is not an already prescribed factual answer to the question.

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g. Advance Organizers

The final skill involves the use of the deductive approach. The student is told in advance what the main point or the main concepts to be covered will be. On the one hand, such advance organizers have been shown to help students focus attention on the key points. On the other hand, the effect is positive but not particularly strong, representing about a 25 percent improvement in the standard deviation. In all probability, then, an advance organizer is a good method to get a class glued in.

h. Direct Instruction

Essentially, direct instruction is in highly structured. The teacher presents material in small steps, uses advance organizers, checks for understanding, has students answer turn by turn in ordered fashion, and provides immediate feedback on their answers.

i. Indirect Teaching

Several aspects of teaching effectiveness have been strongly advocated. One of these was the concept of "indirect teaching" as propounded by Flander (1970). Indirect teaching is usually defined to include minimum teacher's talk and maximum student's talk, minimum lecture and maximum discussion, stress on independent student learning, frequent praise of

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students, frequent use of student ideas and inclusion of student ideas in discussion, and frequent student to student interaction.

j. The Democratic Classroom

In democratic classroom and schools, students are given more power and responsibility than in autocratic system. If they are to learn how to live in a democracy, students must be able to manage freedom responsibly.

4. Flanders Interaction Analysis

Flanders (1970) originally developed a research tool, namely Flanders Interaction Analysis (FIA). FIA is a system of classroom interaction analysis and became widely used coding system to analyze and improve teaching skills.

Flanders coding system consists of ten categories of communication which are said to be inclusive of all communication possibilities. Seven categories are used to categorize various aspects of teacher talk and two are used to categorize student talk. The last category is used when there is silence or confusion in the class. The figure below shows the Flanders categories in classroom interaction.

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TEACHER TALK	INDIRECT INFLUENCE	1. ACCEPTS FEELING: accepts and clarifies the feeling tone of the students in a non-threatening manner. Feeling may be positive or negative. Predicting or recalling feeling is included. 2. PRAISES OR ENCOURAGES: praises or encourage student actions or behavior. Jokes that release tension, not at expense of another individual, nodding head or saying "um hum?" or "go on" are included. 3. ACCEPTS OR USES IDEAS OF STUDENTS: clarifying, building, or developing ideas suggested by a student. As a teacher bring more of his own ideas into play, shift to category five. 4. ASK QUESTIONS: asking a question about content or procedure with the intent that a student answers.
	DIRECT INFLUENCE	5. LECTURING: giving facts or opinion about content or procedure with his own ideas, asking rhetorical question. 6. GIVING DIRECTIONS: directions, commands, or orders to which a student is expected to comply. 7. CRITICIZING OR JUSTIFYING AUTHORITY: statements intended to change student behavior from non-acceptable to acceptable pattern; bawling someone out; stating why the teacher is doing what he is doing; extremely self-reference.
STUDENT TALK		8. STUDENTS TALK-RESPONSE: a student makes a predictable response to teacher. Teacher initiates the contact or solicits student statements and sets limits to what the student says. 9. STUDENTS TALK INITIATION: talk by students which they initiate. Unpredictable statements in response to teacher. Shift from 8 to 9 as student introduced own ideas.
		10. SILENCE OR CONFUSION: pauses, short periods of silence, and periods of confusion in which communication cannot be understood by the observer.

Figure 2.2 Flanders Interaction Categories

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5. Immersion Class

Immersion class can be defined as a learning one or more subjects by using foreign language as medium language (www.wikipedia.com). Unlike a more traditional language course, where the target language is simply the subject material, language immersion uses the target language as a teaching tool, surrounding or "immersing" students in the second language. In-class activities, such as math, social studies, and history, and those outside of the class, such as meals or everyday tasks, are conducted in the target language. A new form of language related syllabus delivery called Internationalized Curriculum provides a different angle by immersing the curricula from various countries into the local language curriculum and separating out the language-learning aspects of the syllabus. Proponents believe immersion study in a language foreign to the country of instruction doesn't produce as effective results as separated language learning and may, in fact, hinder education effectiveness and learning in other subject areas.

a. Immersion Type

A number of different immersion programs have evolved since those first ones in Canada. Immersion programs may be categorized according to *age* and *extent* of immersion.

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1) Age

- *Early immersion:* Students begin the second language from age 5 or 6.
- *Middle immersion*: Students begin the second language from age 9 or 10.
- *Late immersion*: Students begin the second language between ages 11 and 14.

2) Extent

- In *total immersion*, almost 100% of class time is spent in the foreign language. Subject matter taught in foreign language and language learning per se is incorporated as necessary throughout the curriculum. The goals are to become functionally proficient in the foreign language, to master subject content taught in the foreign languages, and to acquire an understanding of and appreciation for other cultures. This type of program is usually sequential, cumulative, continuous, proficiency-oriented, and part of an integrated grade school sequence. Even in total immersion, the language of the curriculum may revert to the first language of the learners after several years.
- In *partial immersion*, about half of the class time is spent learning subject matter in the foreign language. The goals are to become functionally proficient in the second language (though to a lesser extent than through total immersion), to master subject content taught in the foreign languages, and to acquire an understanding of and appreciation for other cultures.

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- In *two-way immersion*, also called "*dual-*" or "*bilingual immersion*", the student population consists of speakers of two or more languages. Ideally speaking, half of the class is made up of native speakers of the major language in the area (e.g., English in the U.S.) and the other half is of the target language (e.g., Spanish). Class time is split in half and taught in the major and target languages. These way students encourage and teach each other, and eventually all become bilingual. The goals are similar to the above program. Different ratios of the target language to the native language may occur.
- In *content-based foreign languages in elementary schools* (FLES), about 15–50% of class time is spent in the foreign language and time is spent learning it as well as learning subject matter in the foreign language. The goals of the program are to acquire proficiency in listening, speaking, reading, and writing the foreign language, to use subject content as a vehicle for acquiring foreign language skills, and to acquire an understanding of and appreciation for other cultures.
- In *FLES* programs, 5–15% of class time is spent in the foreign language and time is spent learning language itself. It takes a minimum of 75 minutes per week, at least every other day. The goals of the program are to acquire proficiency in listening and speaking (degree of proficiency varies with the program), to acquire an understanding of and appreciation for other cultures, and to acquire some proficiency in reading and writing (emphasis varies with the program).

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- In *FLEX* (Foreign Language Experience) programs, frequent and regular sessions over a short period or short and/or infrequent sessions over an extended period are provided in the second language. Class is almost always in the first language. Only one to five percent of class time is spent sampling each of one or more languages and/or learning about language. The goals of the program are to develop an interest in foreign languages for future language study, to learn basic words and phrases in one or more foreign languages, to develop careful listening skills, to develop cultural awareness, and to develop linguistic awareness. This type of program is usually noncontiguous.

  (www.wikipedia.com)

b. Immersion Program in Central Java

Immersion class program in Indonesia, especially in Central Java, was held by the government in the year of 2002. It is held in order to prevent the educational problem in Indonesia.

Driven by noble intentions to improve the quality of education, Central Java Provincial government through Education and Cultural Services have an idea to organize the ideas immersion classes introduced from Park Ridge School, Australia. This idea came after a joint team of central java of Education held a study visit to Australia in July to August 2002. There, the team was very

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impressed with the students who are studying Australia Indonesian who follow the process of learning all their subjects in Bahasa Indonesia. Immersion class is also applied to those who study Japanese and China language. Therefore, after returning from Australia, the team immediately planned establishment of English language immersion classes that apply to junior and high school students.

Government held immersion classes based on several laws, among others:

1. Amendments 2002 of constitution 1945,
2. Law No.20 of 2003 on National Education Systems,
3. Law No.22 of 1999 on Local Government,
4. Government Regulation No.25 of 2000 on The Authority of the Central Government and Provincial Authorities as Autonomous Regions,
5. Local Regulations of Central Java Province No.7 of 2001 regarding the formation, position, main tasks, functions and organizational structure services.

Immersion classes at Central Java intended to develop and improve the quality of education. In addition, it is also to produce good quality and international perspective of human resources. Whereas, the purpose of immersion class in Indonesia are:

1. Improving student's and teacher's foreign language competence, especially English.
2. Improving students and teacher's skill, competence, knowledge and view.
3. Developing school's competence and human resources.

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4. Improving the ability to face the international competition by creating competitive competence.

c. Immersion Class Goals

An immersion class in the implementation of central java has a short-term, medium and long goal.

1) Short Term Goals (1 year)

- The arrangement of basic formula which is underlying the program. This goal is achieved among others by organizing study visits, workshops and preparation of implementation manuals immersion classes that provide general guidelines for Head of Education Service in the district/ city and school principals who will open the immersion classes.
- The development of English language proficiency of teachers who will teach immersion classes. This goal is achieved by providing English language training for prospective teachers to equip them with the four basic skills in language, namely listening, speaking, reading and writing.
- Availability of English-language teaching materials is achieved by translating teaching materials written in Bahasa Indonesia to English.
- Implementation of coaching and mentoring programs for schools that will open immersion classes.

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2) Medium Term Goals (1-5 years)

- Implementation immersion classes as a pilot project.
- The increasing ability of teachers to teach (plan, implement and conduct evaluations) in English.
- This is achieved partly by training in making lesson plans, micro teaching and arranging the test script in English.
- The availability of enrichment facilities that support the reference and teaching materials for immersion classes include: language and computer labs that has internet access, English language dictionaries and specialized dictionaries for each subject.
- The increasing teachers' ability to use various media and technologies for teaching, such as the Internet.

3) Long Term Goals (>5 years)

- Establishment of trust in the community that the English class into the strategic needs that need to be further developed into schools with English language.

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d. Teaching and Learning Process in Immersion Classes

Basically, the process of teaching and learning in immersion classes has the same standards with regular classes. The curriculum used is Competency-Based Curriculum (KBK), which is based on School Based Management (SBM), while teaching methods used are the various methods which refer to the current approach, effective and creative fun. Immersion classroom learning times same with regular classroom learning time. But, if necessary, schools can add learning time as needed.

What distinguishes immersion classes with regular classes is the medium of language. The lessons are usually taught in Indonesian in regular classes, in the immersion classes, they are taught using the medium of English. At the initial stage, subjects are presented immersion classes in English, as many as seven subjects. Subjects in Senior High School immersion classes delivered in English, among others: Mathematics, Physics, Chemistry, Biology, Geography, History and Economy. But in the future development needs to have additional English language courses, adapted to the conditions of the school organizers immersion classes. Textbook for the immersion classes is consistent with the current curriculum, which has been translated into English, as well as other books that have not been translated into English. Here, school / Education Service must provide a handbook for teachers.

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Immersion class teaching-learning process has the same allocation time with the regular. But, if necessary, schools can add learning time as needed.

e. Immersion Program in SMAN 2 Semarang

Immersion program in SMAN 2 Semarang was established in 2004 when the Central Java government held this program. SMAN 2 Semarang was designed to be one of the pioneers of internationally standard school in Central Java. There are three immersion program classes for each grade, so there are 9 immersion classes in total; 3 classes for year ten, 3 classes for year eleven in Science program and 3 classes for year twelve in Science program. The numbers of students in each class are 30 students.

The students in this program are choice students who have some qualifications, such as; having good interest and motivation following the teaching-learning process using English as the language, and passed the tests (written and interview). The teachers are also qualified teacher, who have been trained to be immersion class teacher. The teacher should have some qualification, such as; mastering English both in spoken and written, and mastering the material, method and teaching techniques.

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CHAPTER III

RESEARCH METHOD

The study focused on classroom interaction characteristics in the tenth grade of Geography Immersion Class at SMA N 2 Semarang in the light of Flanders Interaction Analysis. Besides, it also observed the teaching effectiveness elements based on the Walberg's theory. This study was an observational type of the descriptive method. The following procedure was adopted for studying characteristics of classroom interaction and the teaching effectiveness.

A. Population

Population is a group which is treated by the researcher as the object to generalize the result of research (Fraenkel and Wallen, 1990:68). Moreover, (Rianto, 1996:51) stated population as a set which consists of people, animals, plants, and things which have the same characteristics.

The population as the sources of the data in this research were the Geography Immersion Class students at year ten (X-3) of SMA N 2 Semarang. The students and the teacher became the subjects of this research. There were 30 students and one Geography teacher, Mrs. Dyah Listyorini, S.Pd.

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B. Sample

Marzuki (1997:43) stated that using sampling method can generate a better research because it can make the research done more specific. The sampling technique used in this research is purposive random sampling. Simple random sampling is the basic sampling technique where we select a group of subjects (a sample) for study from a larger group (a population). Each individual is chosen entirely by purposive, so it is called purposive random sampling. Based on the suggestion from the coordinator of Immersion Program at SMAN 2 Semarang, it was suggested to take class X-3 with the following reasons;

1. The class was conducive and communicative, because the students' ability in English was a little bit higher compared with other classes of the same level.
2. The subject the coordinator suggested was Geography, because in other subjects like Physics, Mathematics, Chemistry, Biology, Economics and History, the students were not active, they were more engaged with exercises.

C. Research Data and Data Collection Procedure

In this research the writer used observation and questionnaire as the instruments to collect the data.

1. Observation

The writer observed the interaction between teacher and students in teaching – learning process. Besides, the writer also observed the teacher's performance during teaching – learning process. This observation was done to

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explore the classroom interaction characteristics and to observe teaching effectiveness in teaching – learning process.

The observation data were taken from the tenth grade immersion class students of SMA N 2 Semarang. In order to obtain the data, the following observation procedure was adopted:

1. In each class period of 90 minutes, 30 minutes (1800 seconds) were used as observation period.
2. 30 minutes (1800 seconds) were divided in to three time units.
3. One time unit was 10 minutes (600 seconds).
4. In the first thirty minutes of the class observation period, one time unit was observed randomly, comprising 10 minutes (600 seconds).
5. In the second thirty minutes of the class observation period, one time unit was observed randomly, comprising 10 minutes (600 seconds).
6. In the third thirty minutes of the class observation period, one time unit was observed randomly, comprising 10 minutes (600 seconds).
7. Total time for observation in a classroom comprised 30 minutes (1800 seconds) in each meeting.

Camera video was settled in the best position to record the classroom interaction, while the researcher sat at the back of the classroom to take back up notes on students' responses which were otherwise not recorded in camera.

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2. Questionnaire

The questionnaire is a widely used and useful instrument for collecting survey information, providing structured often numerical data, being able to be administered without the presence of the researcher (Wilson and Mclean in Cohen et. al., 2007: 317).

In this research the purpose of the questionnaire was to find out the students' opinion about the teaching – learning process and teacher's performance in their immersion classroom. The writer asked the 30 students of the year ten of immersion class students in SMA N 2 Semarang to fill up the questionnaire.

D. Research Design

This research used observational design. The approach used in this research was the qualitative one supported by simple statistic calculation (percentage) in order to support the findings, whereas the analysis model used was the inductive type which started from the data or facts obtained in the field for abstraction and drawing the conclusion.

E. Research Setting

The research was conducted in SMA N 2 Semarang. SMA N 2 Semarang was one of the pioneers in conducting immersion program. It is located in Jalan Sendangguwo Semarang.

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This research was started on May 2009 and finished on June 2009. The writer observed the year ten of immersion class students in SMA N 2 Semarang when they studied Geography subject. The Geography subject was taught every once a week. The writer observed four meetings during a month observation.

F. Instruments Analysis

In order to find out the results, there were three research instruments have been used in this research, they are;

1. Flanders Interaction Analysis

The first instrument in this research is FIA (Flander's Interaction Analysis) that was developed by Flanders (1970) and has been used extensively in various studies regarding classroom interaction. FIA is a standardized check list type instrument which has the following steps as the procedures:

Step 1: Coding the verbal interaction

The observer translates the observed behavior into a descriptive code. Each verbal behavior is recorded as a number. The following ground rules from Flander (1967) are helpful to decide the proper categorization of the interactive behaviors, when the observer is faced with some difficulties;

1. When not certain in which of the two or more categories a statement belongs, choose the category that is numerically farther from the category five, with the exception of category ten.

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2. If more than category occurs during the three second interval, then all categories used in that interval are recorded. If no change occurs within three seconds, repeat the category numbers.
3. When the teacher calls on a child by name, the observer ordinarily records as 4.
4. If there is discernible period of silence, record one 10 for every 3 seconds of silence, laughter, board work, etc.
5. Statements such as 'uh hah' yes, all right, okay, which occur between two 9s are recorded as 2.
6. A teacher's joke which is not made at the expense of the children is a 2. If the joke makes fun of a child, then it is coded as a 7.
7. An 8 is recorded when several students respond in union to a narrow question.

The example of data transcription can be seen in the example table below.

Actual Classroom Verbal Interaction	Recorded as
Teacher : What's the shape of a Basin?	4
Students: Oval.	8
Teacher : Yes, right!	2
The shape is oval.	

Table 3.1 Classroom Interaction Transcription

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Each number describes the type of verbal interaction and who is speaking. Every time the verbal interaction change, a new number is recorded. If the same verbal interaction continues for more than three seconds, the same number will be recorded.

Step 2: Plotting the coded data into a matrix

To plot the numbers recorded in Step 1 on a matrix pairs of numbers are organized as illustrated below.

4

1st pair

8

2nd pair

9

3rd pair

2

4th pair

10

The first pair represents one point on the matrix; the second pair represents another point on the matrix, and so on. The matrix consists of ten columns and ten rows. Each column and row represents one of the ten categories of the Flanders's coding system. Below is the sample matrix;

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	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1										
2										1
3					1					
4								1		
5					1				1	
6										
7										
8									1	
9		1	1							
10					1					

Table 3.2 Matrix of Flanders Interaction Analysis

Step 3: Analyzing the matrix

In a complete matrix, some areas have tallies than others. A heavier concentration of tallies in a certain area gives information about who is talking and what kind of talking is taking place. Here is the example.

	1	2	3	4	5	6	7	8	9	10
1	TEACHER SUPPORTS							STUDENT		
2										
3										
4	CONTENT CROSS									
5										
6						TEACHER CONTROL		PARTICI PATION		
7										
8										
9										
10										

Figure 3. Matrix of Flanders Interaction

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The matrix analysis shows the types of interaction characteristics. The types of interaction characteristics are presented as follows.

1. Content Cross

   A heavy concentration in a column 4 and 5 and row 4 and 5 indicates teacher dependence on questions and lectures.

2. Teacher Control

   A concentration on column and row 6 and 7 indicates extensive commands and reprimands by the teacher.

3. Teacher Support

   A heavy concentration of tallies in column and row 1, 2, and 3 indicates that the teacher is reinforcing and encouraging students' participation.

4. Student Participation

   A concentration of tallies in column 8 and 9 reflects student responses to the teacher's behavior.

Step 4: Analyzing additional data

Adding the tallies in any one column and comparing that number to the tallies in other columns can determine the percentage of time spent on that activity. For example, adding up all the tallies in column 5 and comparing that number to tallies in the other columns on the matrix will show how much classroom time the teacher spends in lecturing.

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Columns : 1 2 3 4 5 6 7 8 9 10

Total numbers : 5 3 4 6 20 9 8 10 10 5

Total for all columns : 80

Total for column 5 : 20

Proportion of classroom time spent lecturing:

$$\frac{\text{Column 5}}{\text{Column 1-10}} = \frac{20}{5+3+4+6+10+9+8+10+10+5}$$

$$= \frac{20}{80}$$

= 0,25 (25% of the classroom time was spent in lecturing)

The result shows the proportion of lecturing in the classroom teaching-learning process.

2. Elements of Teaching Effectiveness by Walberg's

To find out whether the interaction in immersion class meets the requirements of the teaching effectiveness elements, the following observation sheet was used beside the Flanders Interaction Analysis instrument.

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No	Teaching Elements	Yes	No
1	Academic learning time		
2	Use of reinforcement		
3	Cues and feedback		
4	Co-operative learning		
5	Classroom atmosphere		
6	Higher order questions		
7	Advance organizers		
8	Direct instruction		
9	Indirect teaching		
10	Democratic classroom		

Table 3.3 Elements of Teaching Effectiveness

The researcher observed the classroom interaction by using this observation sheet. Each element of teaching effectiveness has been observed in the classroom interaction. If the element appeared in the interaction, the researcher would make "✓" mark in column "yes".

3. *Likert* Scale

Likert scale is used to measure attitudes, opinions and perceptions of a person or group of events or social phenomena. In the study of social phenomena, it has been specifically defined by the researchers, who hereinafter refer to as a research variable.

When using a *Likert* Scale, the measured variable is translated into dimensions, dimensions are translated into sub-variables, and then the sub variables are translated into indicators that can be measured. Finally measurable indicators can be used as a starting point to create instrument items that form the questions or statements that need to be answered by respondents. Each

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answer is connected with form or support a statement that the attitude expressed in words as follows:

Positive Statement			Negative Statement		
Sangat Setuju	(SS)	= 5	Sangat Setuju	(SS)	= 1
Setuju	(S)	= 4	Setuju	(S)	= 2
Netral	(N)	= 3	Netral	(N)	= 3
Tidak Setuju	(TS)	= 2	Tidak Setuju	(TS)	= 4
Sangat Tidak Setuju	(STS)	= 1	Sangat Tidak Setuju	(STS)	= 5

Table 3.4 Positive and Negative Statements of Likert Scale

In this research, the researcher used *Likert* Scale to measure the students' opinion about teacher performance and classroom activities in teaching-learning process. The researcher asked the Immersion Class students at year ten (X-3) of SMA N 2 Semarang to fill up the questionnaire about classroom activities and Geography teacher performance in teaching learning process. The questionnaire consisted of 15 statements and measured with the positive statement. Below is the form of questionnaire.

NO	PERNYATAAN	ALTERNATIF JAWABAN				
		5	4	3	2	1
		SS	S	N	TS	STS
1	Guru tepat waktu dalam memulai dan mengakhiri proses belajar mengajar.					
2	Guru menggunakan waktu belajar mengajar secara efisien (porsi antara menerangkan, memberikan pertanyaan, memberikan tugas, diskusi, dll seimbang).					
3	Guru menerangkan materi pelajaran dengan baik dan jelas.					
4	Jika ada siswa yang kurang atau tidak paham terhadap materi pelajaran, guru akan menerangkan kembali dengan cara yang berbeda.					
5	Guru berinteraksi dengan siswa dengan					

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	memberikan pertanyaan-pertanyaan tentang materi yang sedang diajarkan.					
6	Dalam memberikan pertanyaan kepada siswa, guru memberikan "kata kunci" atau "kata bantu" untuk menjawab pertanyaan tersebut.					
7	Jika jawaban dari siswa kurang benar atau salah, guru akan mengkoreksi dan memberitahu jawaban yang benar.					
8	Guru meminta siswa untuk mengerjakan tugas secara berkelompok di dalam kelas.					
9	Suasana di dalam kelas mendukung proses belajar mengajar.					
10	Guru memberitahu siswa apa yang akan dipelajari sebelum pelajaran dimulai.					
11	Guru mengecek pemahaman siswa dengan cara bertanya kepada beberapa siswa.					
12	Guru banyak menggunakan waktu di dalam kelas untuk menerangkan materi dan memberikan pertanyaan kepada siswa.					
13	Guru menggunakan sedikit waktu di dalam kelas, sedangkan siswa banyak berdiskusi dan menjawab pertanyaan-pertanyaan dari guru.					
14	Siswa diberi kebebasan dan tanggung jawab di dalam kelas.					
15	Siswa merasa senang dan dapat mengikuti proses belajar mengajar dengan baik.					

Table 3.5 Questionnaire

Related to the data collection technique, this instrument was given to 30 respondents, and then it recapitulated. From the 30 respondents, for example;

Respond 5 : 2 students

Respond 4 : 8 students

Respond 3 : 5 students

Respond 2 : 5 students

Respond 1 : 10 students

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How to calculate the score:

Total score of 2 students respond 5 : 2 x 5 = 10

Total score of 8 students respond 4 : 8 x 4 = 32

Total score of 5 students respond 3 : 5 x 3 = 15

Total score of 5 students respond 2 : 5 x 2 = 10

Total score of 10 students respond 1 : 10 x 1= 10 +

Total = 77

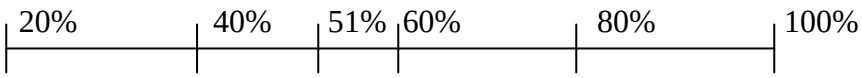
Ideal score for item No.1 (the highest score) = 5 x 30 = 150 (SS)

The lowest score = 1 x 30 = 30 (STS)

Based on the data (item no.1) obtained from 30 respondents, the valuation of teaching time lies in neutral territory. In the continuum can be seen as:

So, based on the data (item No. 1) obtained from 30 respondents, the teaching time: $\frac{77}{150}$ x 100% = 51.33% is categorized neutral/ enough.

Percentage of group respondents to item No.1 can be viewed as:



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Explanation: Score Interpretation Criteria

0% - 20% = Very Weak

21% - 40% = Weak

41% - 60% = Enough

61% - 80% = Strong

81% - 100% = Very Strong

G. Data Analysis

1. Classroom Interaction Characteristics Analysis

The data analysis of the classroom interaction characteristics is descriptive in nature. The four steps of Flanders Interaction Analysis (FIA) were used to analyze the data. The four steps of FIA are presented below (the details are given in previous sub-chapter).

STEP 1 : Coding the verbal interaction

STEP 2 : Plotting the coded data into the matrix

STEP 3 : Analyzing the matrix to the categories below;

1. Content Cross
2. Teacher Control
3. Teacher Support
4. Student Participation

STEP 4 : Analyzing the additional data;

1. Teacher's Talk

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2. Lecturing
3. Direct Teaching
4. Indirect Teaching
5. Silent

2. Teaching Effectiveness Analysis

The researcher observed the classroom interaction by using this observation sheet. The observation sheet was made from Walber's theory (1986) about elements of teaching effectiveness. Each element of teaching effectiveness has been observed in the classroom interaction. If the element appeared in the interaction, the researcher would make "✓" mark in column "yes".

After the observation was completed, the resulting identification was then converted into percentage, for example; below is the data result of the first meeting observation;

Table 3.6 Example of Teaching Effectiveness

No	Teaching Elements	Yes	No
1	Academic learning time	✓	
2	Use of reinforcement		✓
3	Cues and feedback		✓
4	Co-operative learning		✓
5	Classroom atmosphere	✓	
6	Higher order questions	✓	
7	Advance organizers	✓	
8	Direct instruction	✓	
9	Indirect teaching	✓	
10	Democratic classroom		✓

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Based on the result, 4 of 10 elements were not appeared in the teaching-learning process. Then it was converted into percentage;

$$\frac{6}{10} \times 100\% = 60\ \%$$

From the result, it could be interpreted that the teaching effectiveness elements of the first meeting reached 60%. It meant this classroom effectiveness were in category enough.

Explanation: Score Interpretation Criteria

0% - 20% = Very Ineffective

21% - 40% = Ineffective

41% - 60% = Enough

61% - 80% = Effective

81% - 100% = Very Effective

3. Questionnaire

The writer used *Likert* Scale to measure the students' opinion about teacher performance and classroom activities in teaching-learning process. The procedure of data analysis was presented on the previous sub-chapter in this chapter.

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CHAPTER IV

RESULTS AND DISCUSSION

This research explored the classroom interaction, the teacher performance and the teaching effectiveness in teaching-learning process. In the following chapter the researcher tries to describe in detail the results of observation conducted in Immersion Class of SMA N 2 Semarang.

A. Results

1. Variable of Classroom Interaction Characteristics

From the data collection, this research recorded four meetings of classroom interactions. Each meeting was observed in 30 minutes length. The observed behavior was translated into the descriptive codes. Its printed out is enclosed in appendix.

Conducting step 1 and step 2 of Flanders Interaction Analysis resulted in a matrix of classroom interaction. The matrix is presented in tables below.

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Table 4.1 Characteristics of Classroom Interaction of the Tenth Grade of Geography in Immersion Class SMA N 2 Semarang by Interaction Categories (IC 1-10) – (1st Meeting)

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1			1					2	1		**4**
2											**0**
3			7	10	4	1		20		6	**48**
4			5	76	2	16		95		23	**217**
5	1			11	627	4			12	21	**676**
6				16	2	27		32	9	22	**108**
7											**0**
8	2		30	82	1	31		48	2	13	**209**
9	1			1	13	7			23	2	**47**
10			5	21	27	22		12		404	**491**
TOTAL	**4**	**0**	**48**	**217**	**676**	**108**	**0**	**209**	**47**	**491**	**1800**

Table 4.2 Characteristics of Classroom Interaction of the Tenth Grade of Geography in Immersion Class SMA N 2 Semarang by Interaction Categories (IC 1-10) – (2nd Meeting)

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1								1			**1**
2											**0**
3			9	6	13	1		28		5	**62**
4				50	24	3		100	14	66	**257**
5			13	30	488	37				20	**588**
6				4	35	27		63	20	42	**191**
7											**0**
8			35	91	3	64		62	1	16	**272**
9	1			14	3	18		1	11	2	**50**
10			5	62	22	41		17	4	228	**379**
TOTAL	**1**	**0**	**62**	**257**	**588**	**191**	**0**	**272**	**50**	**379**	**1800**

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Table 4.3 Characteristics of Classroom Interaction of the Tenth Grade of Geography in Immersion Class SMA N 2 Semarang by Interaction Categories (IC 1-10) – (3rd Meeting)

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1					1	1		1			**3**
2		2	9	2	1	5		7			**26**
3		8		7	3			16		8	**42**
4			4	47	30	21		91	4	44	**241**
5				46	463	17			4	22	**552**
6	2	1		24	14	66		50	10	43	**210**
7											**0**
8		14	19	76	5	42		139	3	27	**325**
9	1	1	2	5	1	13		1	4	11	**39**
10			8	34	34	45		20	14	207	**362**
TOTAL	**3**	**26**	**42**	**241**	**552**	**210**	**0**	**325**	**39**	**362**	**1800**

Table 4.4 Characteristics of Classroom Interaction of the Tenth Grade of Geography in Immersion Class SMA N 2 Semarang by Interaction Categories (IC 1-10) – (4th Meeting)

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1		1		2				1	2		**6**
2		1	5	2	1						**9**
3		4	2	15	1	2		10	1		**35**
4	1			46	6	17	1	183	13	14	**281**
5				19	298	10	1	3	15	4	**350**
6				28	5	57	2	87	16	13	**208**
7				6	1	1		5	1	6	**20**
8	2	3	26	122	17	91	10	247	15	10	**543**
9	2		2	21	15	17	3	3	40	11	**114**
10	1			20	6	13	3	4	11	176	**234**
TOTAL	**6**	**9**	**35**	**281**	**350**	**208**	**20**	**543**	**114**	**234**	**1800**

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The matrix of 4 meetings was analyzed using step 3 and 4 to know the types of interaction characteristics, and then the results could be seen as follows.

a. Content Cross

Content Cross profile indicates teacher dependence on questions and lectures. It is represented by concentration of tallies in columns and rows 4 – 5 of the matrix. Below is the result of content cross proportion in each meeting.

Table 4.5 The Results of Content Cross in Each Meeting.

No	Meeting	Content Cross (in second)	Percentage
1	First	1786	**99.22%**
2	Second	1690	**93.88%**
3	Third	1586	**88.11%**
4	Fourth	1262	**70.11%**

b. Teacher Control

Teacher Control profile indicates extensive commands and reprimands by the teacher. It is represented by a concentration of tallies in columns and rows 6 – 7. Below is the result of teacher control proportion in each meeting.

Table 4.6 The Results of Teacher Control in Each Meeting.

No	Meeting	Teacher Control (in second)	Percentage
1	First	27	**1.5%**
2	Second	27	**1.5%**
3	Third	66	**3.67%**
4	Fourth	60	**3.33%**

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c. Teacher Support

Teacher Support profile indicates teacher's reinforcing and encouraging. It is represented by the tallies concentration in columns and rows 1 – 3. Below is the result of teacher support proportion in each meeting.

Table 4.7 The Results of Teacher Support in Each Meeting.

No	Meeting	Teacher Support (in second)	Percentage
1	First	8	**0.44%**
2	Second	9	**0.50%**
3	Third	19	**1.05%**
4	Fourth	13	**0.72%**

d. Student Participation

Student Participation profile indicates students' responses to the teacher's behavior. It is represented by a concentration in column 8 and 9. Below is the result of student participation proportion in each meeting.

Table 4.8 The Results of Student Participation in Each Meeting.

No	Meeting	Student Participation (in second)	Percentage
1	First	256	**14.22%**
2	Second	322	**17.89%**
3	Third	364	**20.22%**
4	Fourth	657	**36.50%**

Besides exploring the types of interaction characteristics, the researcher also analyzed additional data by adding the tallies in any one column and comparing that number to the tallies in other columns can

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determine the percentage of time spent on that activity. The results are summarized in below tables.

e. Teacher Talk

Teacher Talk indicates teacher's verbal activities in teaching – learning process. It is represented by a concentration in column 1 – 7. Below is the result of teacher talk proportion in each meeting.

Table 4.9 The Results of Teacher Talk in Each Meeting.

No	Meeting	Teacher Talk (in second)	Percentage
1	First	1053	**58.50%**
2	Second	1099	**61.05%**
3	Third	1074	**59.67%**
4	Fourth	909	**50.50%**

f. Direct and Indirect Influence

In teacher talk, there are two teacher's influences; direct and indirect influence. Direct influence determines the degree of teacher direct teaching, while indirect influence determines the degree of teacher indirect teaching. Direct influence is represented by a concentration of tallies in columns 5 – 7 divided by those columns 1 – 7 and indirect influence is represented by a concentration of tallies in columns 1 – 4 divided by those columns 1 – 7.

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Table 4.10 The Results of Direct and Indirect Influence in Each Meeting.

No	Meeting	Teacher Talk (in second)	Direct Influence (in second)	Percentage	Indirect Influence (in second)	Percentage
1	First	1053	784	74.45%	269	25.54%
2	Second	1099	779	70.88%	320	29.11%
3	Third	1074	762	70.95%	312	29.05%
4	Fourth	909	578	63.59%	331	36.41%

g. Lecturing

Lecturing indicates teacher's activities in explaining, giving facts or opinion about content or procedure with his own ideas; asking rhetorical questions. It is represented by a concentration in column 5. Below is the result of lecturing proportion in each meeting.

Table 4.11 The Results of Lecturing in Each Meeting.

No	Meeting	Lecturing (in second)	Percentage
1	First	676	**86.22%**
2	Second	588	**75.48%**
3	Third	552	**72.44%**
4	Fourth	350	**60.55%**

h. Silent

Silent indicates pauses, short periods of silence, and periods of confusion in which communication can not be understood by the observer during teaching – learning process. It is represented by a concentration in column 10. Below is the result of silent proportion in each meeting.

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Table 4.12 The Results of Silent Proportion in Each Meeting.

No	Meeting	Silent (in second)	Percentage
1	First	491	**27.28%**
2	Second	379	**21.05%**
3	Third	362	**20.11%**
4	Fourth	234	**13%**

In summary, the results of the classroom interaction characteristics proportion are presented in table below.

Table 4.13 Summary Results of Classroom Interaction Characteristics

No	Profile	First Meeting	Second Meeting	Third Meeting	Fourth Meeting	Total Meeting
1	Content Cross	99.22%	93.88%	88.11%	70.11%	87.83%
2	Teacher Control	1.50%	1.50%	3.67%	3.33%	2.50%
3	Teacher Support	0.44%	0.50%	1.05%	0.72%	0.68 %
4	Student's Participation	14.22%	17.89%	20.22%	36.50%	22.20%

Table 4.14 Summary Results of Additional Data

No	Profile	First Meeting	Second Meeting	Third Meeting	Fourth Meeting	Total Meeting
1	Teacher's Talk	58.50%	61.06%	59.67%	50.50%	57.43%
2	Lecturing	37.55%	32.67%	30.67%	19.44%	30.08%
3	Direct Teaching	74.45%	70.88%	70.95%	63.59%	69.72%
4	Indirect Teaching	25.55%	29.12%	29.05%	36.41%	29.79%
5	Silent	27.28%	21.05%	20.11%	13.00%	20.36%

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2. Teaching Effectiveness in Immersion Class

In order to know the teaching effectiveness in immersion classroom interaction, the second instrument (Walberg's teaching effectiveness observation sheet) was used. The following table is the results.

Table 4.15 Elements of Teaching Effectiveness in Immersion Class

No	Teaching Elements	First Meeting		Second Meeting		Third Meeting		Fourth Meeting	
		Yes	No	Yes	No	Yes	No	Yes	No
1	Academic Learning Time	✓		✓		✓		✓	
2	Use of Reinforcement		✓		✓	✓		✓	
3	Cues and Feedback		✓		✓	✓		✓	
4	Co-operative Learning		✓		✓		✓	✓	
5	Classroom Atmosphere	✓		✓		✓		✓	
6	Higher-order Questions	✓		✓		✓		✓	
7	Advance Organizers	✓		✓		✓		✓	
8	Direct Instruction	✓		✓		✓		✓	
9	Indirect Teaching	✓		✓		✓		✓	
10	Democratic Classroom		✓	✓		✓		✓	

3. Students' Opinion of Teacher Performance by Using *Likert Scale*

In this research, the researcher used *Likert* Scale to measure the students' opinion about teacher performance and classroom activities in teaching-learning process. The researcher asked 30 students in Immersion Class at year ten (X-3) of SMA N 2 Semarang to fill up the questionnaire about classroom

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activities and Geography teacher performance in teaching learning process. The questionnaire consisted of 15 statements and measured with the positive statement. Below is the data result.

No	Statement	Respondent Response (%)				
		SS	S	N	TS	STS
1	Suasana di dalam kelas mendukung proses belajar mengajar.	10 %	20%	30%	30%	10%
2	Guru tepat waktu dalam memulai dan mengakhiri proses belajar mengajar.	13.33%	16.67%	26.67%	40%	3.33%
3	Guru memberitahu siswa apa yang akan dipelajari sebelum pelajaran dimulai.	13.33%	50%	20%	13.33%	3.33%
4	Guru menggunakan waktu belajar mengajar secara efisien (porsi antara menerangkan,memberikan pertanyaan,memberikan tugas,diskusi,dll seimbang).	20%	16.67%	30%	30%	3.33%
5	Guru menerangkan materi pelajaran dengan baik dan jelas	6.67%	50%	30%	10%	3,33%
6	Jika ada siswa yang kurang atau tidak paham terhadap materi pelajaran, guru akan menerangkan kembali dengan cara yang berbeda	16.67%	10%	46.67%	23.33%	3.33%
7	Guru berinteraksi dengan siswa dengan mamberikan pertanyaan-pertanyaan tentang materi yang sedang diajarkan	13.33%	43.33%	30%	13.33%	0,0%
8	Dalam memberikan pertanyaan kepada siswa, guru akan	16.67%	40%	10%	26.67%	6.67%

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No	Statement	Respondent Response (%)				
		SS	S	N	TS	STS
	memberikan"kata kunci" atau " kata bantu" untuk menjawab pertanyaan tersebut.					
9	Jika jawaban dari siswa kurang benar atau salah, guru akan mengoreksi dan memberitahu jawaban yang benar.	16.67%	43.33%	26.67%	13.33%	0,0%
10	Guru meminta siswa untuk mengerjakan tugas secara kelompok di dalam kelas.	0,0%	36.67%	56.67%	6.67%	0,0%
11	Guru mengecek pemahaman siswa dengan cara bertanya kepada beberapa siswa.	3.33%	60%	30%	6.67%	0,0%
12	Guru banyak menggunakan waktu di dalam kelas untuk menerangkan materi dan memberikan pertanyaan kepada siswa.	10%	40%	36.67%	10%	3.33%
13	Guru menggunakan sedikit waktu untuk menerangkan di dalam kelas, sedangkan siswa banyak berdiskusi.	3.33%	30%	40%	26.67%	0,0%
14	Siswa diberi kebebasan da tanggung jawab di dalam kelas.	3.33%	30%	50%	13.33%	3.33%
15	Siswa merasa senang dan dapat mengikuti proses belajar mengajar dengan baik.	0,0%	13.33%	26.67%	46.67%	13.33%

Table 4.16 Results of Students' Response in Questionnaire

Note: SS = Sangat Setuju (Strongly Agree)
S = Setuju (Agree)
N = Netral (Neutral)
TS = Tidak Setuju (Disagree)
STS = Sangat Tidak Setuju (Strongly Disagree)

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B. Data Interpretation

1. Classroom Interaction Analysis

The characteristics of classroom interaction of each meeting in Immersion Class have been presented on the data results in the previous part of this chapter. The interpretation of data results will be presented as follows;

a. The Characteristics of Classroom Interaction in the First Meeting

The content cross was the most dominant characteristic in the first meeting. The proportion (99.22%) showed that the teacher spent more time in teaching – learning process to ask questions and lecture.

The second dominant characteristic was the students' participation. The students participated in responding the teacher's question and talking initiation. The proportion of student's participation in the first meeting was 14.22%, it meant that the students were active enough in the classroom interaction.

The teacher control was the third dominant characteristic in the first meeting. It spent 1.50% of teaching – learning time. From the result, it showed that the teacher spent a little time in giving directions and criticizing or justifying activity. While in supporting the students, teacher only spent 0.44% of the teaching – learning time. It showed that the teacher was rarely in praising or encouraging the students.

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From the additional data results, the other characteristics of classroom interaction could be interpreted. The characteristics of classroom interaction in the first meeting are summarized below;

1. The teacher spent more her talking time in lecturing (37.55%). She was giving facts or opinion about content or procedure with her own ideas and asking rhetorical questions to the students. It meant that lecturing was the dominant activity this teaching – learning time.
2. Teacher used more direct teaching (74.45%) than indirect teaching (25.54%) in her talking time. It meant that the teacher used more direct teaching in teaching her students; for example: lecturing, giving directions, and criticizing or justifying authority.
3. The proportion of silent time was still high in this classroom interaction. Silence or confusion in this classroom spent 27.28% of the teaching – learning time.

b. The Characteristics of Classroom Interaction in the Second Meeting

The content cross was also the most dominant characteristics in the second meeting. The proportion of content cross was 93.89%, it meant that the teacher dominant in the classroom activities was still high but it was lower than the first meeting.

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The second dominant characteristic in the second meeting was also students' participation. It spent 17.89% of teaching – learning time. It showed that the students more participated than in the first meeting.

Just like in the first meeting, the teacher control was the third dominant characteristic in the second meeting. It spent 1.50% of teaching – learning time. It had a same proportion with the first meeting. From the result, it showed that the teacher spend a little time in giving directions and criticizing or justifying activity. While in supporting the students, teacher only spent 0.50% of the teaching – learning time. It showed that the teacher was rarely in praising or encouraging the students.

From the additional data results, the other characteristics of classroom interaction could be interpreted. The characteristics of classroom interaction in the second meeting are summarized below;

1. The teacher spent more her talking time in lecturing (32.67%). She was giving facts or opinion about content or procedure with her own ideas and asking rhetorical questions to the students. It meant that lecturing was the dominant activity this teaching – learning time.
2. Teacher used more direct teaching (70.88%) than indirect teaching (29.11%) in her talking time. It meant that the teacher used more direct teaching in teaching her students; for example: lecturing, giving directions, and criticizing or justifying authority.

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3. Silence or confusion in this classroom spent 21.05% of the teaching – learning time. It meant that pauses, short periods of silence, and periods of confusion in which communication can not be understood by the observer were quite high.

c. The Characteristics of Classroom Interaction in the Third Meeting

The most dominant characteristic in the third meeting was also content cross. The proportion of content cross was 88.11%; it meant that the teacher did more asking question and lecturing in classroom activities. During teaching – learning process, the teacher was asking questions about content or procedure with the intent that a students' answer, she was also giving facts or opinion about content or procedure with her own ideas and asking rhetorical question.

The next dominant characteristic was students' talk or students' participation. Whether the teacher was still talking more than the students, but the proportion of students' talk was 20.22%, it meant that the students were active enough in the classroom interaction. The students were active in responding teacher's questions in both of predictable and unpredictable response.

The teacher control in this meeting increased from the previous meetings. The proportion of the teacher control was 3.67%, it meant that the teacher was giving more directions and criticizing or justifying

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activity in this meeting. While the teacher support was still in little proportion (1.05%), it meant that the teacher used the limited time to accept feeling, to praise and encourage the students and to accept or use students' ideas.

From the additional data results, the other characteristics of classroom interaction could be interpreted. Then the characteristics of classroom interaction in the third meeting are summarized below;

1. Lecturing (30.67%) was the dominant activities in teacher's talk time. She was giving facts or opinion about content or procedure with her own ideas and asking rhetorical questions to the students. It meant that lecturing was still the dominant activity this teaching – learning time.
2. Teacher used more direct teaching (70.95%) than indirect teaching (29.05%) in her talking time. It meant that the teacher used more direct teaching in teaching her students; for example: lecturing, giving directions, and criticizing or justifying authority.
3. The proportion of silent time was still high in this classroom interaction. Silence or confusion in this classroom spent 20.11% of the teaching – learning time.

d. The Characteristics of Classroom Interaction in the Fourth Meeting

In the fourth meeting, content cross was still the most dominant characteristic; it was 70.11%. From the percentage, it could be interpreted

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that teacher spent the teaching – learning time in asking questions and lecturing, but that was not too much. The students in this meeting were very active; they participated more in responding the teacher. The proportion of students' participation was 36.50% and it was the second dominant characteristic in the fourth meeting.

Teacher control in this meeting was increased from the three previous meetings. The proportion of teacher control was 3.33%, it meant that the teacher was giving more directions and criticizing or justifying activity in this meeting. While the teacher support was also still in little proportion (0.72%), it meant that the teacher used the limited time to accept feeling, to praise and encourage the students and to accept or use students' ideas.

From the additional data results, the other characteristics of classroom interaction could be interpreted. The characteristics of classroom interaction in the second meeting are summarized below;

1. The teacher spent her talking time for lecturing in proportion 19.44%. She was giving facts or opinion about content or procedure with her own ideas and asking rhetorical questions to the students. It meant that the proportion of lecturing was decreased in this teaching – learning time.
2. Teacher still used more direct teaching (63.59%) than indirect teaching (36.41%) in her talking time. It meant that the teacher used more direct

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teaching in teaching her students; for example: lecturing, giving directions, and criticizing or justifying authority.

3. Silence or confusion in this classroom spent 13% of the teaching – learning time. It meant that pauses, short periods of silence, and periods of confusion in which communication can not be understood by the observer were not too high.

From the discussion, it can be concluded that the classroom interaction in Immersion Class had the same characteristics in each meeting. The teacher was still the dominant in the teaching-learning Teacher spent more time in teaching learning process than the students. She usually taught the children by using direct influence. However, the students were active enough in the classroom interaction. It can be seen from the results of the students' participation.

2. Elements of Teaching Effectiveness by Walberg

In order to know the teaching effectiveness in the immersion classroom interaction, the second instrument, Walberg's teaching effectiveness observation, was used. Walberg in 1986 made the most comprehensive review of elements of teaching effectiveness. The data result of the observation was presented in the previous part of this chapter. Then, the data were converted into percentage, and the results presented in the graph below.

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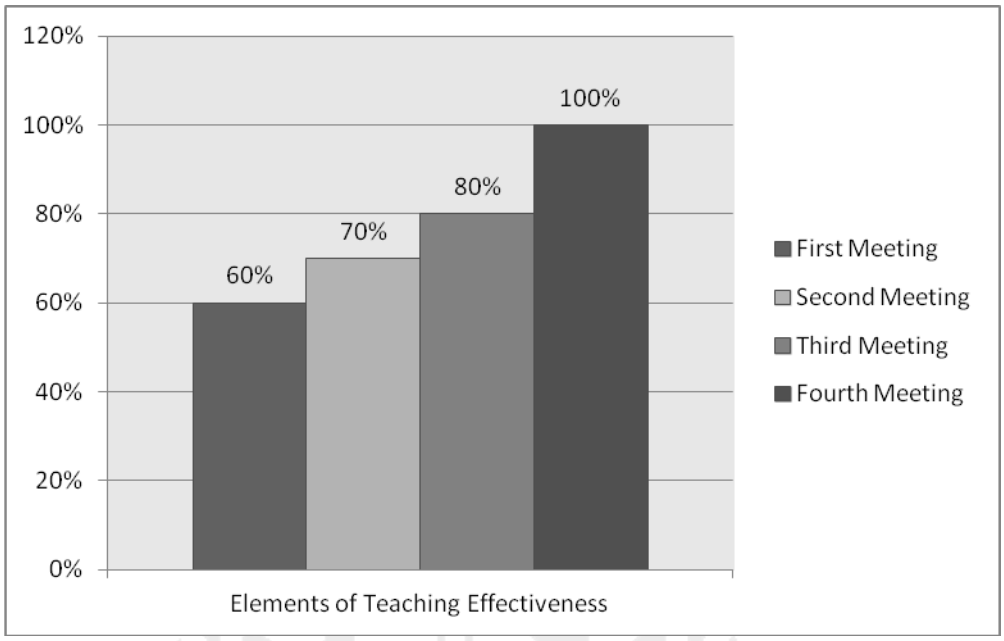

Graph 4.1 Elements of Teaching Effectiveness in Immersion Class

Explanation: Score Interpretation Criteria

0% - 20% = Very Ineffective

21% - 40% = Ineffective

41% - 60% = Enough

61% - 80% = Effective

81% - 100% = Very Effective

In summary, the results of the teaching effectiveness elements in the classroom activities are interpreted as follows;

1. First meeting; 6 of 10 teaching effectiveness elements were on the classroom interaction. Use of reinforcement, cues and feedback, co-operative learning and democratic classroom were not appeared in the

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classroom interaction. It reached 60% of the teaching effectiveness (enough).

2. Second meeting; 7 of 10 teaching effectiveness elements were on the classroom interaction. Use of reinforcement, cues and feedback, and co-operative learning were not appeared in the classroom interaction. It reached 70% of the teaching effectiveness (effective).
3. Third meeting; 8 of 10 teaching effectiveness elements were on the classroom interaction. Co-operative learning and democratic classroom were not appeared in the classroom interaction. It reached 80% of the teaching effectiveness (effective).
4. Fourth meeting; all of the teaching effectiveness elements were on the classroom interaction. It reached 100% of the teaching effectiveness (very effective).

3. Students' Opinion on Teaching – Learning Process

The 30 students in Immersion Class at year ten (X-3) of SMA N 2 Semarang were asked to give opinion about teaching – learning process in their Geography class. Then the data results were analyzed by using Likert Scale. The data results were interpreted as follows;

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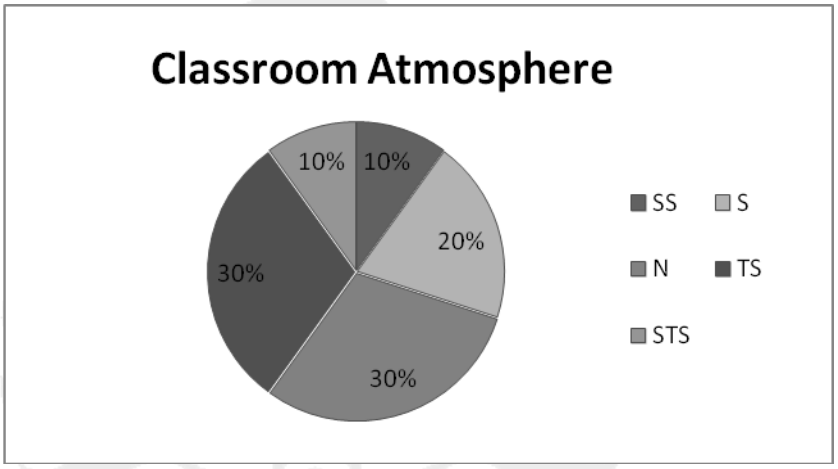
a. **Statement 1**: "Suasana di dalam kelas mendukung proses belajar mengajar"

Statement number one was "classroom atmosphere supports the teaching – learning process." The result showed that 30% of students said that they disagreed and 30% of them were in neutral opinion. However 20% of the students agreed on the statement. It could be said that this statement got neutral response from the students. The result can be seen in the graph below.



Graph 4.2 Students' Response on Classroom Atmosphere

Based on the data obtained from 30 respondents, the classroom atmosphere in this classroom was in neutral category (58%). It meant that some students did not enjoy the classroom atmosphere, for example the arrangement of classroom setting, classroom discipline, and the teacher's method in teaching.

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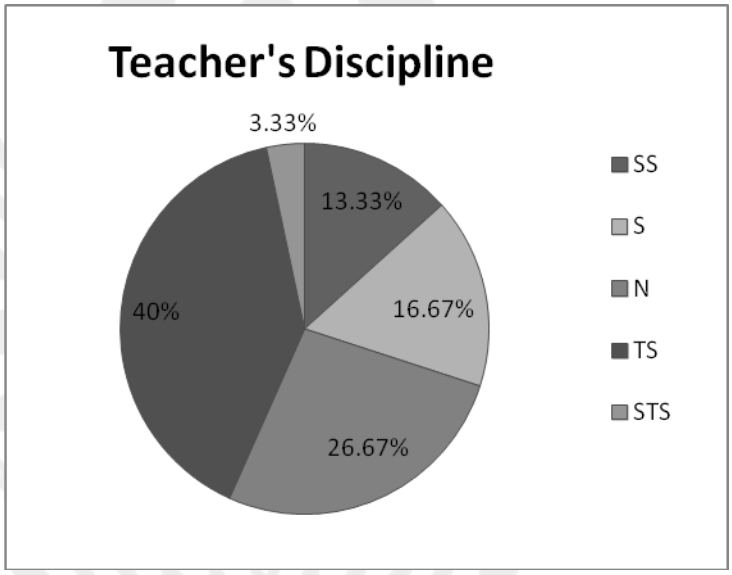
b. Statement 2: "Guru tepat waktu dalam memulai dan mengakhiri proses belajar mengajar".

Statement number two was "teacher starts and ends the class on-time." The result showed that 40% of students said that they disagreed, and 26.67% of them were in neutral opinion. However, 16.67% agreed on the statement. It could be said that this statement got neutral response from the students. The result can be seen in the graph below.



Graph 4.3 Students Response on Teacher's Time

Based on the data obtained from 30 respondents, the statement was in neutral category (59.33%). It meant that the teacher did not usually start and end the classroom on-time.

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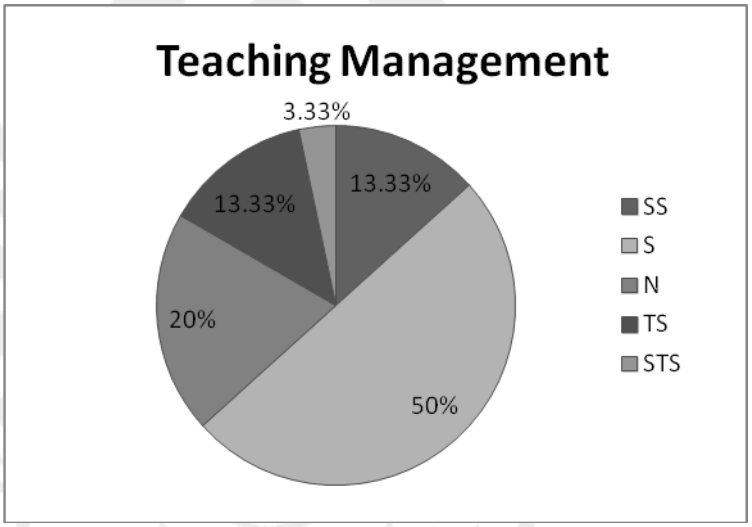
c. Statement 3: "Guru memberi tahu siswa apa yang akan dipelajari sebelum pelajaran dimulai."

Statement number 3 was "the teacher gives explanation what they are going to learn in the beginning of the lesson." The result showed that 50% of students said that they agreed, and 20% of them were in neutral opinion. It could be said that this statement got positive response from the students. The result can be seen in the graph below.



Graph 4.4 Students' Response on Teaching Management

Based on the data obtained from 30 respondents, the statement was in strong category (71.33%). It meant that the teacher was good in organizing the classroom teaching. She usually gave explanation to the students what would they study.

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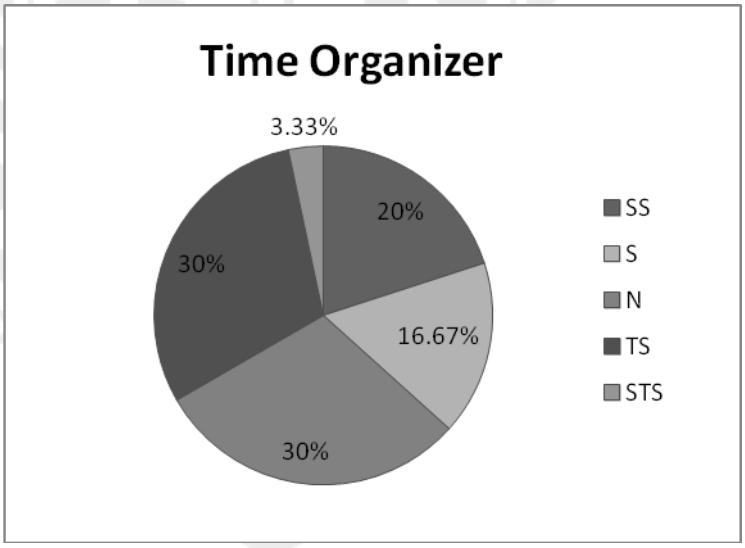
d. Statement 4: "Guru menggunakan waktu belajar mengajar secara efisien (porsi antara menerangkan, memberikan pertanyaan, memberikan tugas, diskusi, dll seimbang)."

Statement number 4 was "the teacher is efficiently organizing the teaching-learning time." The result showed that 30% of students said that they disagreed, and 30% of them were in neutral opinion. But 20% of them strongly agreed and 16.67% of them agreed in this statement. It could be said that this statement got neutral response from the students. The result can be seen in the graph below.



Graph 4.5 Students Response on Time Organizer

Based on the data obtained from 30 respondents, the time efficiency in this classroom was in strong category (64%). It meant that the teacher good in

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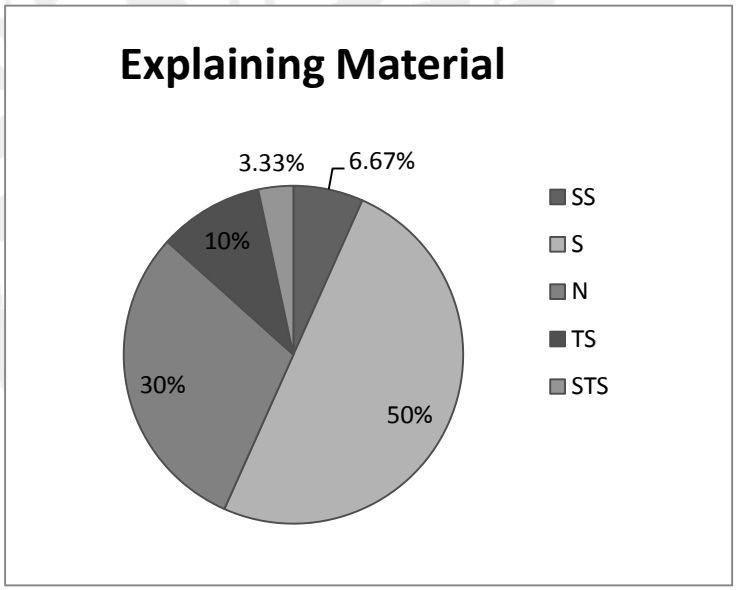
organized the teaching – learning time. She used the teaching – learning time for explaining, asking questions, giving tasks, etc in a suitable proportion.

e. Statement 5: "Guru menerangkan materi pelajaran dengan baik dan jelas."

Statement number 5 was "the teacher explains the materials clearly." The result showed that 50% of students said that they agreed, and 30% of them were in neutral opinion. Only 10% of them disagreed in this statement. It could be said that this statement got positive response from the students. The result can be seen in the Graph below.



Graph 4.6 Students Response on Materials Delivery

Based on the data obtained from 30 respondents, the teacher's explanation in this classroom was in strong category (69.33%). It meant that

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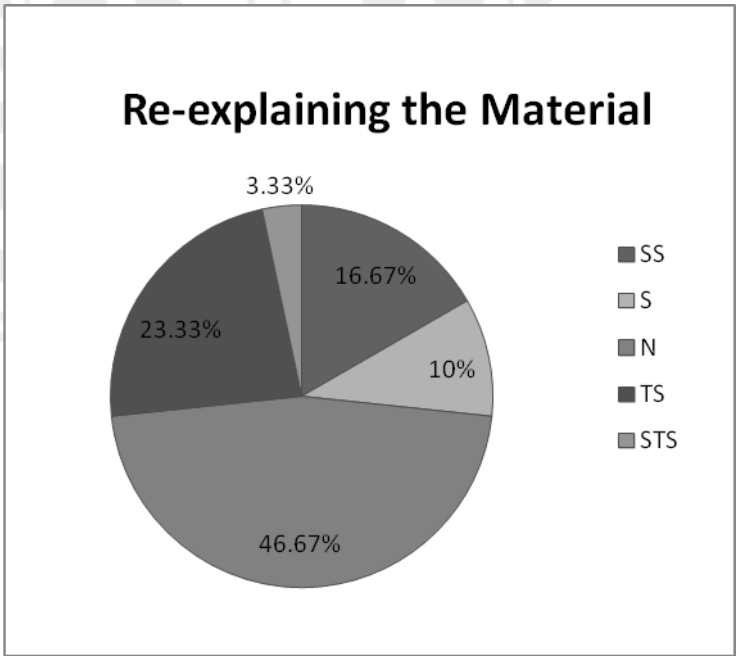
the teacher good in explaining the materials. The students felt satisfied and clearly understood in teacher's explanation.

f. Statement 6: "Jika ada siswa yang kurang atau tidak paham terhadap materi pelajaran, guru akan menerangkan kembali dengan cara yang berbeda."

Statement number 6 was "the teacher re-explains the materials if the students don't understand." The result showed that 46.67% of students were in neutral opinion and 23.33% of them were disagreed. Only 16.67% of them agreed in this statement. The result can be seen in the graph below.



Graph 4.7 Students Response on Re-explaining the Material

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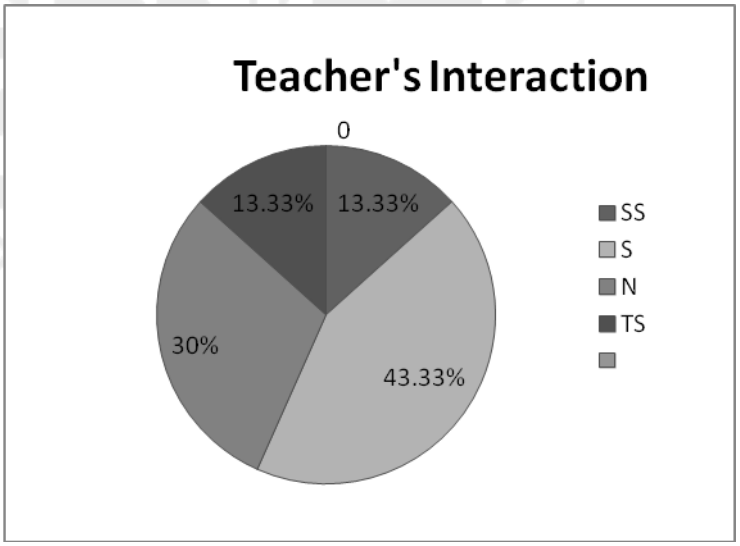
Based on the data obtained from 30 respondents, the statement was in strong category (62.67%). It meant that the teacher would explain the materials again if some students didn't understand.

g. Statement 7: "Guru berinteraksi dengan siswa dengan memberikan pertanyaan-pertanyaan tentang materi yang sedang diajarkan."

Statement number 7 was "the teacher interacts with the students by asking them questions related to the materials." The result showed that 43.33% of students agreed and 30% of them were in neutral response. Only 13.33% of them disagreed in this statement. The result can be seen in the graph below.



Graph 4.8 Students Response on Teacher's Interaction

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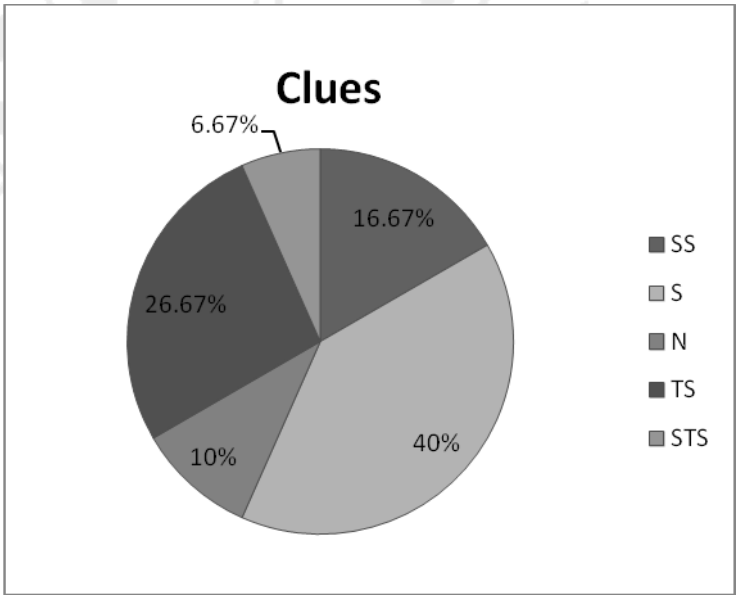
Based on the data obtained from 30 respondents, the statement was in strong category (71.33%). It meant that the teacher had interaction with the by asking some questions that related to the materials.

h. Statement 8: "Dalam memberikan pertanyaan kepada siswa, guru akan memberikan"kata kunci" atau " kata bantu" untuk menjawab pertanyaan tersebut."

Statement number 8 was "the teacher helps the students to answer the questions by giving clues." The result showed that 40% of students agreed and 26.67% of them were in neutral response. The result can be seen in the graph below.



Graph 4.9 Students Response on Teacher's Clues

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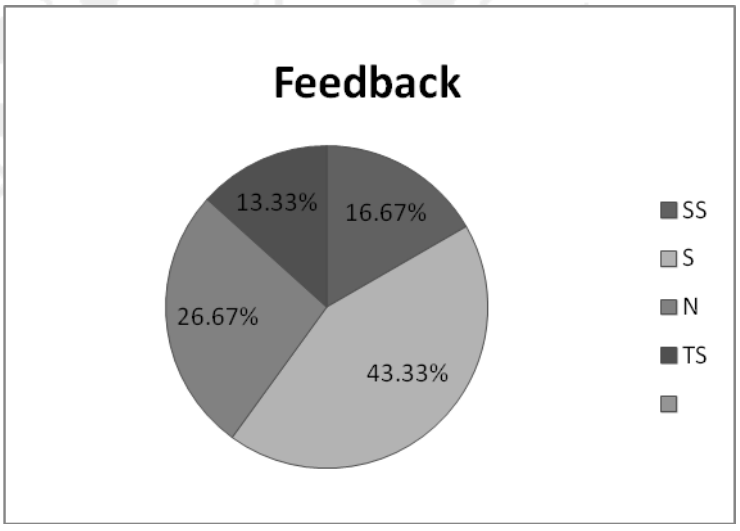
Based on the data obtained from 30 respondents, the statement was in strong category (66.67%). It meant that the teacher usually gave a clue to the students when the students couldn't answer the teacher's question. Clue was usually given to help the students answered the questions.

i. **Statement 9**: "Jika jawaban dari siswa kurang benar atau salah, guru akan mengoreksi dan memberitahu jawaban yang benar."

Statement number 9 was "the teacher will help the students to give the correct answer when they can't answer the questions correctly." The result showed that 43.33% of students agreed and 26.67% of them were in neutral response. The result can be seen in the graph below.



Graph 4.10 Students Response on Teacher's Feedback

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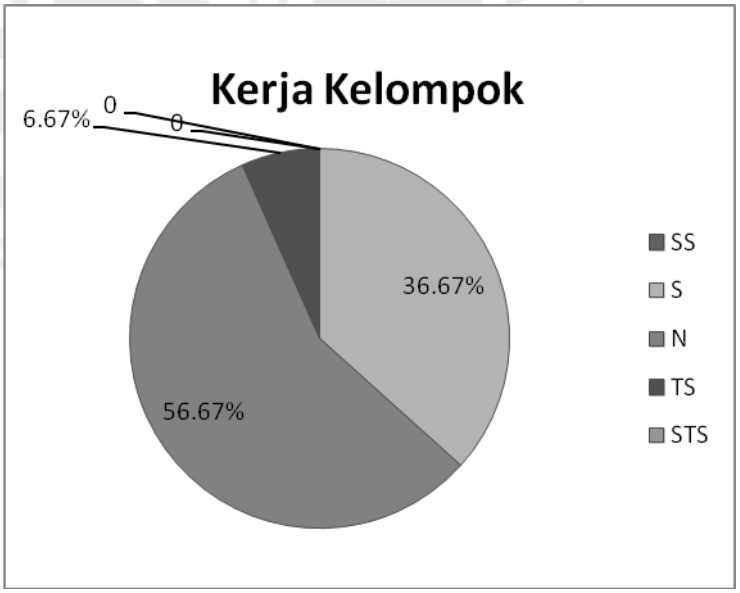
Based on the data obtained from 30 respondents, the statement was in strong category (72.67%). It meant that the teacher usually helped the students to give the correct answer when they can't answer the questions correctly, or in the other words, the teacher gave a feedback to the students.

j. Statement 10: "Guru meminta siswa untuk mengerjakan tugas secara kelompok di dalam kelas."

Statement number 10 was "the teacher asks the students to work in group." The result showed that 36.67% of students agreed and 56.67% of them were in neutral response. The result can be seen in the graph below.



Graph 4.11 Students Response on Co-operative Learning

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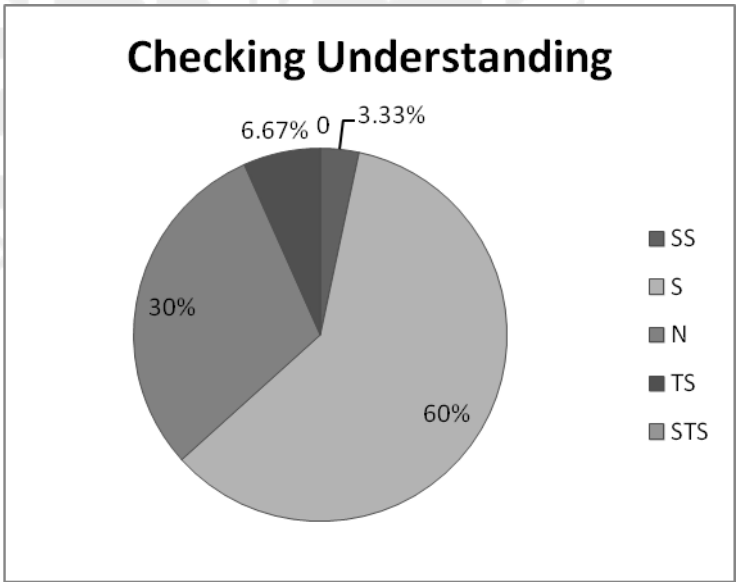
Based on the data obtained from 30 respondents, the statement was in strong category (66%). It meant that the teacher sometimes asked the students to work in group.

k. Statement 11: "Guru mengecek pemahaman siswa dengan cara bertanya kepada beberapa siswa."

Statement number 11 was "the teacher checks the students' understanding by asking questions to some of them." The result showed that 60% of students agreed and 30% of them were in neutral response. The result can be seen in the graph below.



Graph 4.12 Students Response on Checking Understanding

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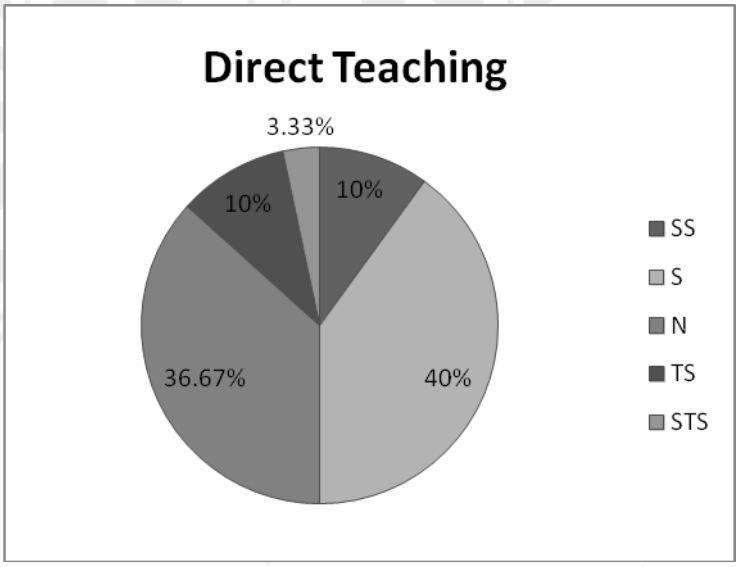
Based on the data obtained from 30 respondents, the statement was in strong category (72%). It meant that the teacher usually checked the students' understanding by asking questions to some of them.

l. Statement 12: "Guru banyak menggunakan waktu di dalam kelas untuk menerangkan materi dan memberikan pertanyaan kepada siswa."

Statement number 12 was "the teacher uses direct influence in teaching." The result showed that 40% of students agreed and 36.67% of them were in neutral response. The result can be seen in the graph below.



Graph 4.13 Students Response on Direct Teaching

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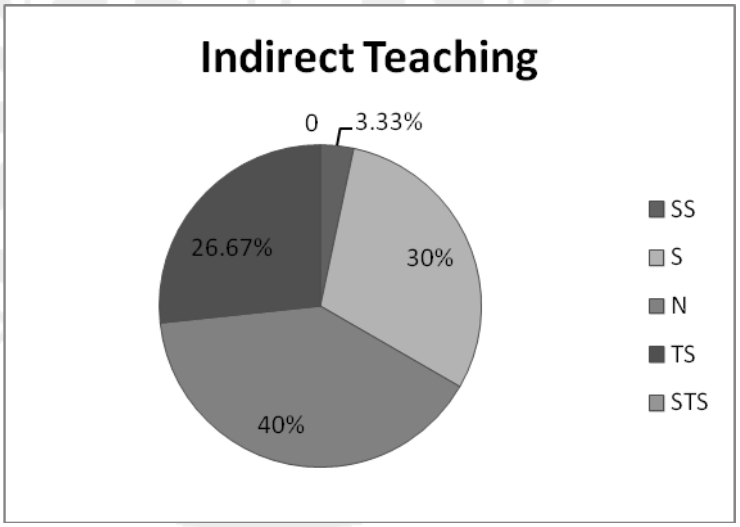
Based on the data obtained from 30 respondents, the statement was in strong category (72.67%). It meant that the teacher spent more the teaching time in explaining and asking questions to the students.

m. Statement 13: "Guru menggunakan sedikit waktu untuk menerangkan di dalam kelas, sedangkan siswa banyak berdiskusi."

Statement number 13 was "the teacher uses indirect influence in teaching." The result showed that 30% of students agreed and 40% of them were in neutral response. The result can be seen in the graph below.



Graph 4.14 Students Response on Indirect Teaching

Based on the data obtained from 30 respondents, the statement was in strong category (62%). It meant that the teacher sometimes spent more the teaching time in discussion than explaining to the students.

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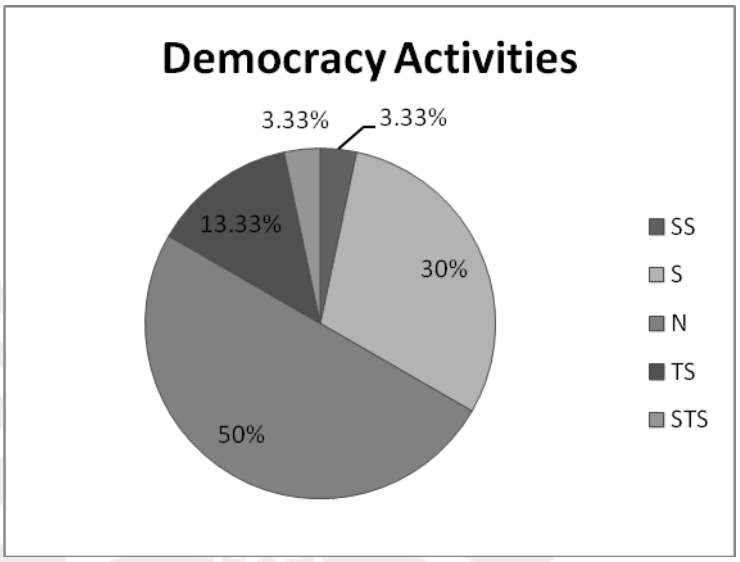
n. Statement 14: "Siswa diberi kebebasan dan tanggung jawab di dalam kelas."

Statement number 14 was about the students' democracy activities. The result showed that 30% of students agreed and 50% of them were in neutral response. The result can be seen in the graph below.



Graph 4.15 Students Response on Democracy Activities

Based on the data obtained from 30 respondents, the statement was in strong category (63.33%). It meant that the teacher sometimes gave the students democracy activities, for example choosing partner in group work.

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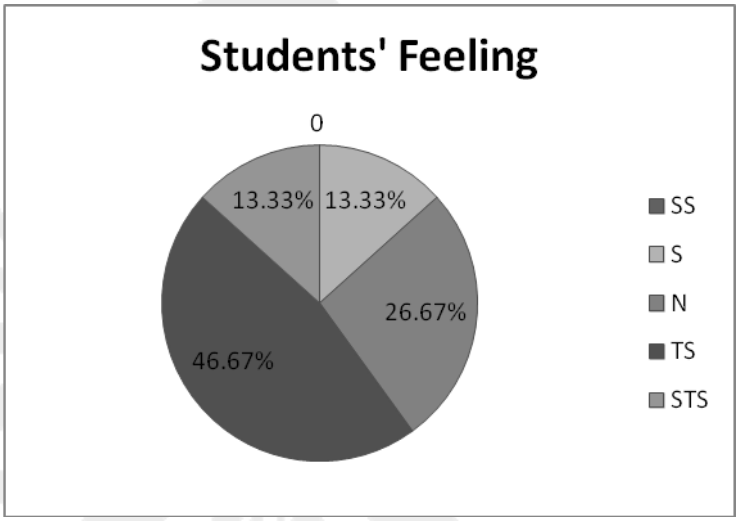
o. **Statement 15**: "Siswa merasa senang dan dapat mengikuti proses belajar mengajar dengan baik."

Statement number 15 was about the students' feeling during the teaching – learning time. The result showed that only 13.33% of students agreed and 26.67% of them were in neutral response. The result can be seen in the graph below.



Graph 4.16 Students Response on Students' Feeling

Based on the data obtained from 30 respondents, the statement was in neutral category (48%). It meant that some students did not really enjoy the teaching – learning process in the classroom.

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C. Discussion

1. Classroom Interaction Characteristics

Based on the results, it could be concluded that most dominant characteristics in the classroom interaction was content cross, it meant that most of the teaching-learning time was devoted to asking questions and lecture by the teacher. Here, asking questions means the teacher asks a question about content or procedure with the intent that a student answers, while lecturing means giving facts or opinion about content or procedure with his own ideas, asking rhetorical question. So, the classroom activities was still in a teacher's dominant, just like typical classroom characteristics in Indonesia. In tis immersion class, teacher spent the most her talking time in explaining the material to the students. She used English in all her teaching activities. The students also tried to respond their teacher in English, but sometimes they still used Indonesian when they couldn't find the words in English.

Teacher control had a little proportion in the classroom interaction. It showed that the teacher used a little time to control the students, such as giving direction and criticizing or justifying activity. It meant that the teacher gave directions, commands, or orders to which a student was expected to comply in little proportion. Teacher gave direction when she asked the students to do assignments or tasks and to answer the questions. It also meant that the teacher rarely gave statements intended to change students behaviour from non-acceptable to acceptable pattern; bawling someone out, stating why

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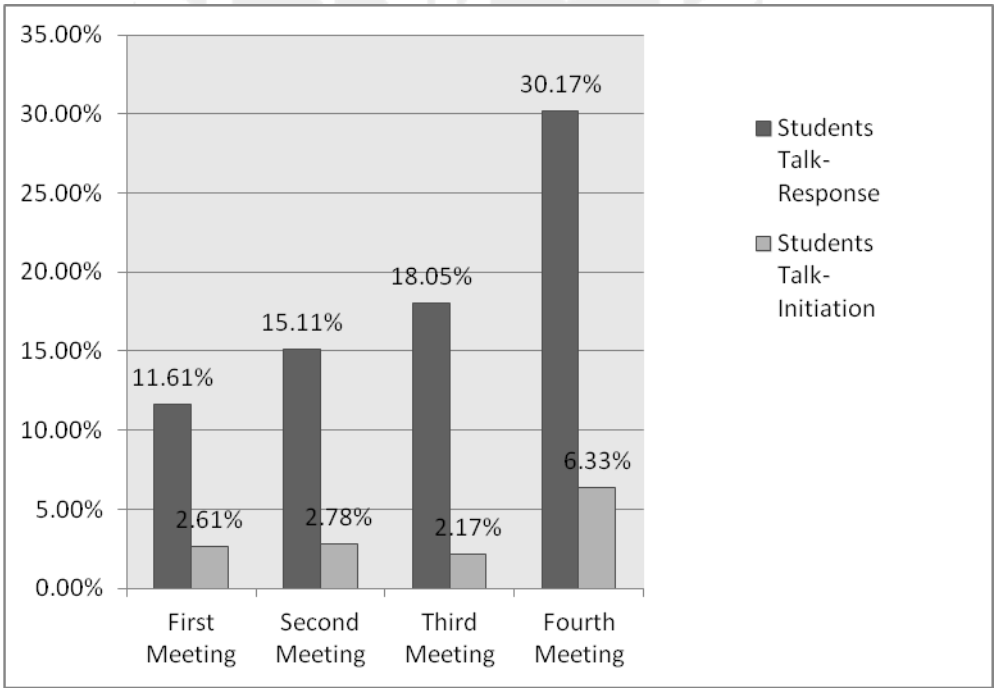
the teacher is doing what she is doing, extremely self-reference, etc. The result also reflected that the teacher spent a little time to accept feeling, praise or encourage the students, and accept or use ideas of students. The teacher rarely clarified, built, or developed ideas suggested by a student. It would be better if the teacher praised the students more to increase the students participation in classroom interaction.

The students were active enough in the classroom interaction. The result showed that the students' participation (students' talk response and students' talk-initiation) was high enough from the total teaching-learning time. The proportion of students' participation can be seen in the graph below.



Graph 17. Students Participation

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From the graph, it could be seen that in the four times meeting, the students were active enough in talking-response and talking-initiation. Talking-response is an activity when the students make a predictable response to teacher, for example answering teacher's questions. Teacher initiates the contact or solicits student statements and sets limits to what the student says. Talking-initiation is when the students make initiation to talk, for example giving comment to the teacher, asking questions to the teacher, etc. Usually, students were more active in talking – response than in talking – initiation.

Moreover, it could be said that the interaction in this immersion classroom was in three-way communication; there were interaction between teacher-students, students-teacher, and students-students. The interaction between teacher and students could be seen from the teacher's activity in asking question, giving direction, accepting feeling, praising or encouraging, accepting or using ideas of students, and criticizing or justifying authority. The students-teacher interaction could be seen from the students' activity like students' talk-response and students' talk-initiation. The students-students interaction appeared when the students had a discussion activity with their groups or partner.

So, it can be concluded that teaching – learning process in Immersion Class was still in teacher's dominant activity. However, the students were active enough in the classroom interaction. Teacher usually asked some questions related to the material that was intended to the students' responds.

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2. Teaching Effectiveness

Walberg in 1986 made the most comprehensive review of elements of teaching effectiveness. The selected elements consists of academic learning time, use of positive reinforcement, cues and feedback, cooperative learning activities, classroom atmosphere, high order questioning, and use of advance organizers. Each elements of teaching effectiveness are discussed one by one as follows;

a. Academic Learning Time

Academic learning time is a time spent in teaching-learning process. Each school or institutions has their own regulation in determining academic learning time. In Indonesia, usually, students study in 45 minutes for one academic learning time. One subject is usually taught for two academic learning times (90 minutes). Immersion class program also has the same academic learning program, and in this oberved class, they study Geography for 90 minutes.

Based on the data result, the students' opinion showed that they disagree with the statement "guru tepat waktu dalam memulai dan mengakhiri proses belajar mengajar", it meant that the teacher sometimes did not start and end the class on-time. From the 30 respondents, 30% of them stated that they disagreed with the statement, and 10% strongly

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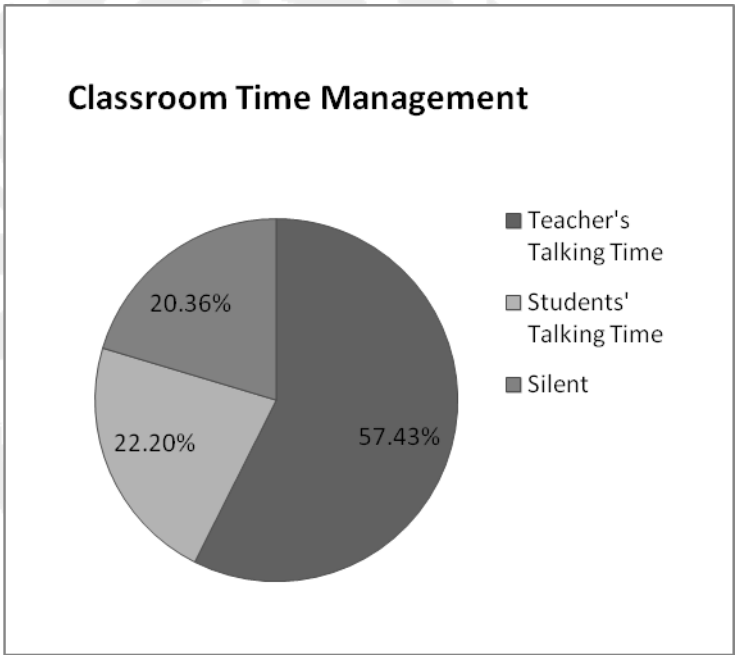
disagreed with the statement. Only 20% of the total respondents agreed with the statements.

But overall, the teacher spent the teaching – learning time in a good proportion. She used the teaching – learning time for explaining materials, asking questions, giving tasks and another activity in a good proportion. Teacher could arrange the time well, but some meetings the silent propotion was still high. In average, the graph of classroom time management can bee seen below.



Graph 4.18 Classroom Time Management

Based on the graph, in average, teacher's talking time was the dominant proportion in the classroom, then the students were active enough

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in the classroom interaction, but the silent time was in high proportion. Silent time means confusion, pauses, short periods of confusion in which communication cannot be understood by the observer. It meant that sometimes the teacher didn't prepare the class well. It would be better if the teacher prepared everything before the class started, so there was no confusion or silent time in the teaching – learning process.

It can be concluded that the academic learning time in immersion class was similar to the other classes. Sometimes, the teacher did not start and end the class on-time. However, the teacher could manage the classroom in a good proportion.

b. Use of Reinforcement

There are two kinds of reinforcement; positive and negative reinforcement. Positive reinforcement is presenting a reward after a desired behavior, whereas negative reinforcement is taking away an aversive stimulus after a desired behavior (www.everything.com/education). Basically, in classroom situation, positive reinforcement is when teachers praise and reward students for correct behavior. Negative reinforcement is when punishment is coupled with positive experiences for correct behavior.

In the observed classroom, the proportion of reinforcement was in very small proportion. Teacher was not used to give reinforcement to the

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students. In the first and second meetings, the teacher didn't reinforce the students. In the third and fourth meetings, teacher reinforced the students but in little proportion; in the third meeting was 1.44% and the fourth meeting was 1.61% of the total teaching-learning time. The teacher usually reinforced the students after they answered her questions. For example, if the students answered the question correctly, the teacher would praise them with expressions "good; good answer; that's right," etc. But if the student's answer wasn't correct, the teacher would criticize them with expressions "no; it's not correct answer; I don't think so," etc then justified the answer. The teacher never punished the students using action punishment, but only used verbal punishment, e.g critics, reprimand, etc.

c. Cues and Feedback

Cues and feedback in this classroom interaction appeared in the classroom interaction, but in very little proportion. When the students couldn't answer teacher's question, sometimes the teacher would give little cues, so that the students could answer the question. Then after students anwered the teacher's question or gave opinion, the teacher gave a feedback. The students also gave feedback to the teacher when the teacher made mistake in explaining the material.

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Based on the students response in questionnaire, the statement number 8, about teacher's clues, the result showed that 40% of students agreed and 26.67% of them were in neutral response. The statement was in strong category (66.67%). It meant that the teacher usually gave a clue to the students when the students couldn't answer the teacher's question. While for the statement number 9, about teacher's feedback, the result showed that 43.33% of students agreed and 26.67% of them were in neutral response. The statement was in strong category (72.67%). It meant that the teacher usually helped the students to give the correct answer when they can't answer the questions correctly, or in the other words, the teacher gave a feedback to the students.

It can be concluded that the teacher usually gave cues and feedback to the students. The teacher gave some cues to the students when they could not answer the teacher's question. Then after students anwered the teacher's question or gave opinion, the teacher gave feedback.

d. Co-operative Learning

Co-operative leaning means the students are asked to do something in group or work in group. Co-operative learning in this classroom only appeared in the last meeting. It was reflected when the teacher asked the students to work in group. In the end of lesson, teacher asked the students

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to make group of three and gave them question to discuss. While the students discussed, the teacher looked around to check the students' activity.

The co-operative learning is an effective way to make the students have active interaction in teaching – learning process. They will interact to their group partner to answer question or do assignment from the teacher. In this observed time, the teacher also asked the students to work in group. The students also gave opinion that the teacher sometimes asked them to work in group. It could be seen from the result of the questionnaire that the statement "the teacher asks the students to work-in group" got a strong positive response. 36.67% of students agreed and 56.67% of them were in neutral response.

Based on the result, it can be interpreted that the teacher sometimes asked the students to work in group, especially at the end of lesson. She asked the students to discuss the explained material with their partners. While the students discussed, the teacher looked around to check the students' activity.

e. Classroom Atmosphere

A positive atmosphere can make a classroom more pleasant place and, in turn, more effective, motivating place to learn. It can have positive results on the achievement of students. The positive atmosphere could be created

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not only from the physical condition, e.g. facilities, classroom arrangement, etc, but also from the non-physics condition, e.g. classroom discipline, classroom management, etc.

The observed immersion classroom consisted of 30 students. This condition was conducive for the teaching learning process because the number of students was not too large. The classroom was facilitated with teaching media, such as; white board and OHP, but in this Geography subject, teacher just used white board as the media in explaining the material. The classroom arrangement was similar to other classes characteristic; they sat in a row, usually 3 -4 tables in a row.

Based on the students' opinion, some of them said that they didn't enjoy the classroom atmosphere. Statement number one was "the classroom atmosphere supports the teaching – learning process." The result of the questionnaire showed that 30% of students said that they disagreed and 30% of them were in neutral opinion. Only 20% of them agreed that the classroom atmosphere support the teaching – learning process. It could be said that this statement got negative response from the students.

Based on the observation, the classroom atmosphere in immersion class was quite good and the facilities were complete. They supported the students and teacher activity in teaching – learning process. However,

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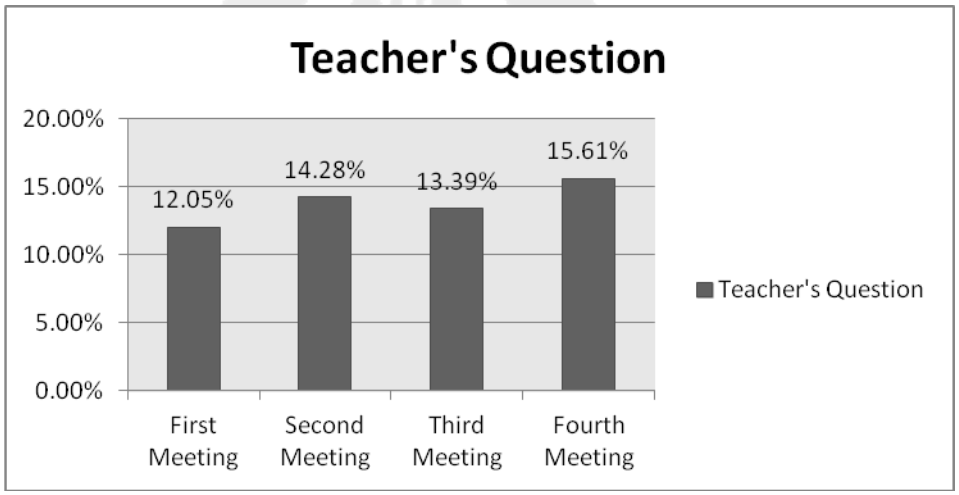
some students did not enjoy the classroom atmosphere, because of the physical condition or non-physics condition .

f. Higher – Order Question

Higher – order questions means a query that requires the student to analyze and produce a reasoned response, not the teacher's words. In order words, there is not an already prescribed factual answer to the question.

In immersion classroom interaction, the proportion of teacher's question was high enough. The teacher asked questions about content or procedure with the intent that the students answer. The results showed that the proportion of teacher's question was 13.83% in average, from the total teaching-learning time. Below is the graph of teacher's question in each meeting.



Graph 4.19 Teacher's Question

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The higher intense of teacher's question was in the beginning and in the end of lesson. Teacher asked questions in the beginning, in order to recall the students about the last lesson or to build the knowledge of the field (warming-up). In the end of the lesson, teacher asked questions to check the students' understanding.

So, in this immersion class, teacher frequently asked questions to the students. The teacher's questions were usually asking the students understanding, it required the students to analyze and produce a reasoned response, e.g. teacher asked question to the students using "why" questions, then the students should analyze and produce a reasoned response.

g. Advance Organizer

Based on the students' opinion to the statement "the teacher is efficiently organizing the teaching-learning time." The result showed that 30% of students said that they disagreed, and 30% of them were in neutral opinion. But 20% of them strongly agreed and 16.67% of them agreed in this statement. It could be said that this statement got neutral response from the students.

The teaching learning process in this immersion class was organized quite well. During the observation (4 meetings), the teaching

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learning process in this immersion classroom was in similar pattern. In the beginning of the lesson, teacher usually told the students what they were going to study. After that, she asked some questions to the students to review the last meeting's lesson. The next part, teacher began to explain the material and sometimes asked some students to check whether they understand or not. Some minutes before she ended the lesson, she sometimes gave task or exercise for students' discussion or individual work.

h. Direct Instruction

In a teaching – learning process in the classroom, if the direct influence is greater than indirect teaching, it means the model of teaching - learning process is still focused on the teacher or in other words teacher centered. Teaching – learning process would be better if the students also participate actively in the classroom.

Direct instruction in the immersion classroom interaction reflects the proportion of lecturing, giving direction, and criticizing or justifying authority. In Flanders Interaction Analysis, it is categorized in category 5, 6 and 7. The results showed that the proportion of direct influence was more than a half of teacher talking time in average (69.72%). It reflected that the teacher did more activities in lecturing, giving direction, and

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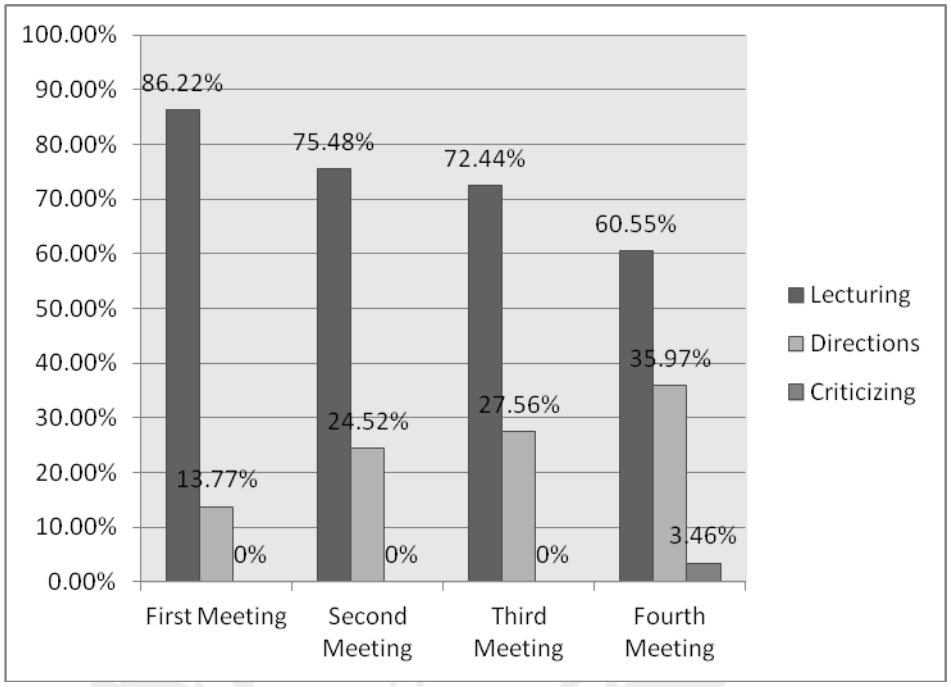
criticizing or justifying authority. The graph of the results can be seen below.



Graph 4.20 Direct Influence in the Teaching – Learning Process

Based on the students opinion, teacher did more direct influence than indirect influence. The result in previous sub-chapter showed that 40% of students agreed in statement "the teacher uses direct influence in teaching," and 36.67% of them were in neutral response. The statement was in strong category (72.67%). It meant that the teacher spent more the teaching time in explaining and asking questions to the students.

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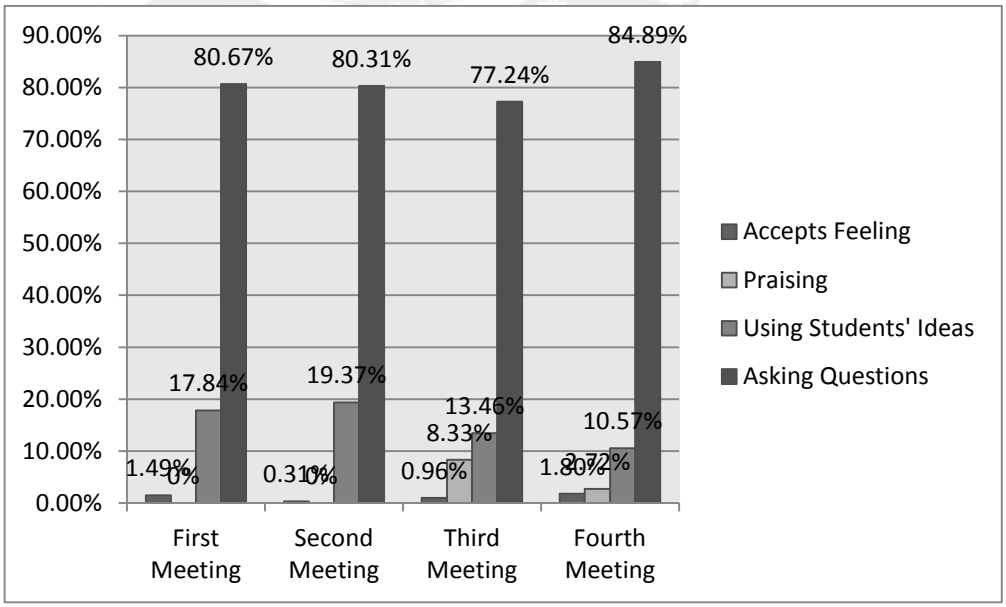
i. Indirect Teaching

If the teacher in teaching – learning process do more indirect teaching, it means she allows the students to be active in her classroom. It is kind of students – centered model learning, the teacher only gives little explanation about the material, then students have discussion with their friends or with the teacher.

The results showed that the proportion of indirect influence in classroom interaction was lower than the direct influence. In average, 29.79% of teacher talking time was used for indirect influence. It reflected that the teacher spent more her talking time in direct influence than in indirect influence. The results of indirect influence can be seen in the graph below.



Graph 4.21 Indirect Influence in the Teaching – Learning Process

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Based on the students opinion, teacher did more direct influence than indirect influence. The result in previous sub-chapter showed that 30% of students agreed in statement "teacher uses indirect influence in teaching – learning process," and 40% of them were in neutral response. The statement was in strong category (62%), but the direct influence got more response from the students (72.67%). It meant that the teacher sometimes spent more the teaching time in discussion than explaining to the students.

j. The Democratic Classroom

The democratic activity was appeared in this classroom, but only in the second and fourth meetings, because the classroom control was still in under teacher's control. Teacher controlled the activities during the teaching learning process, such as; material, teaching learning time, discussion, doing exercise, etc.

Statement number 14 was about the students' democracy activities. Based on the students opinion, the result showed that 30% of students agreed and 50% of them were in neutral response. The statement was in strong category (63.33%). It meant that the teacher allows the students to do some things in the classroom but students still must be responsible for what they do. The teacher also taught her students to do

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democracy activities through some activities in the teaching – learning process.

The democratic activity in the classroom interaction was done, for example, when the teacher gave exercises or assignments to discuss in groups. The students chose the group's member, and also the group's leader. They tried to do democratic activities through this activity.

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CHAPTER V

CONCLUSIONS AND SUGGESTIONS

A. Conclusions

Based on the data analysis and the results of the study, following conclusions were drawn.

1. The most dominant characteristic in immersion classroom interaction was content cross. It reflected that most of the teaching-learning time was devoted to questions and lectures by the teacher. Teacher emphasized on the subject matters.
2. The students were active enough in the classroom interaction. The results showed, in average, 22.20% from the total teaching-learning time was devoted to students' participation. The students participated in talk-response and talk-initiation.
3. The interaction in this immersion classroom was in three-way communication; there were interaction between teacher-students, students-teacher, and students-students.
4. The immersion classroom interaction met the requirements of teaching effectiveness elements made by Walberg (1986). Most of the teaching effectiveness elements were on the classroom interaction; academic learning time, use of reinforcement, cues and feedback, co-operative learning,

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classroom atmosphere, higher order questions, advance organizers, direct instruction, indirect teaching, and the democratic classroom.

5. Based on the data results from the questionnaire, it could be concluded that the students responded positively to some extent in the teaching-learning process. However, there were some statements got a negative response from students. 40% of the students said that they didn't like the classroom atmosphere in their class and 43,33% of the students said that the teacher was not discipline.

B. Suggestions

1. Suggestions for the Teacher

The results of the research indicate that the classroom interaction in each meeting had similar pattern; content cross and teacher's talking were the dominant characteristics. Moreover, the classroom interaction met most of requirements of teaching effectiveness elements by Walberg, but some of them were in very little proportion. So, the classroom interaction was not active enough. Teacher still controlled all of the teaching-learning activities. For this, there are some suggestions for the teacher to realize the importance of the classroom interaction characteristic and to develop her teaching skill and method.

First, it is better if the teacher not only spends the teaching-learning time by explaining the material. Teacher can organize some activities for the

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students to make the classroom interaction more effective. For example; teacher asks the students make a group and gives one topic of the material to discuss. After having discussion, each group presents their discussion result in front of the class. The other students can ask questions to the presenter. This activity can make the classroom interaction more effective, because the students carry out the co-operative learning. Moreover, the students are also more active in talking. The teacher can give some feedbacks after students' discussion.

Second, it is better if the teacher gives more reinforcements to the students. Reinforcements could increase the frequency of productive behaviors and decrease the frequency of disruptive behaviors. Basically, positive reinforcement is when the teacher praises and rewards students for correct behavior. Negative reinforcement is when punishment is coupled with positive experiences for correct behavior. Teacher can give positive reinforcement by praising the students when they answer the question correctly. As a result, the students will be more active because they will be pleased to answer teacher's question.

Third, teacher should be the model of students discipline. It would be better if the teacher was more discipline in managing time. Punctuality in starting and end the class is very influential on students' achievement. If the teacher started the class late, the time used for teaching and learning activities

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would be reduced, and consequently students were not able to get the material completely.

Fourth, the teacher should create positive atmosphere in the classroom, so the students will more enjoy taking a part in the teaching – learning activities. The teacher can create positive atmosphere through some ways, e.g. change the way she act, talk, teach, communicate with her students; encourage the students with positive feedback whenever possible; create a positive physical and emotional atmosphere; create a positive classroom discipline system, etc.

2. Suggestions for the Next Researcher

This research is a preliminary research of classroom interaction study. It is focused on the classroom interaction in immersion class. It is known that seven subjects in immersion class are explained in English. The teacher is not used to explaining the material in English. So, this research is focused in characteristics and the effectiveness of classroom interaction in immersion class. Other researchers could carry out a research and development in order to increase the effectiveness of classroom interaction in immersion class. The results of this research can be a basic result to develop the other new researches.

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APPENDICES

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3. Questionnaire

ANGKET PENILAIAN SISWA
TERHADAP PROSES BELAJAR MENGAJAR
DI DALAM KELAS

Berilah jawaban pernyataan berikut ini dengan tanda (✓) pada kolom yang tersedia sesuai dengan pendapat anda.

NO	PERNYATAAN	ALTERNATIF JAWABAN				
		5	4	3	2	1
		SS	S	N	TS	STS
1	Guru tepat waktu dalam memulai dan mengakhiri proses belajar mengajar.					
2	Guru menggunakan waktu belajar mengajar secara efisien (porsi antara menerangkan, memberikan pertanyaan, memberikan tugas, diskusi, dll seimbang).					
3	Guru menerangkan materi pelajaran dengan baik dan jelas.					
4	Jika ada siswa yang kurang atau tidak paham terhadap materi pelajaran, guru akan menerangkan kembali dengan cara yang berbeda.					
5	Guru berinteraksi dengan siswa dengan memberikan pertanyaan-pertanyaan tentang materi yang sedang diajarkan.					
6	Dalam memberikan pertanyaan kepada siswa, guru memberikan “kata kunci” atau “kata bantu” untuk menjawab pertanyaan tersebut.					
7	Jika jawaban dari siswa kurang benar atau salah, guru akan mengkoreksi dan memberitahu jawaban yang benar.					
8	Guru meminta siswa untuk mengerjakan tugas secara berkelompok di dalam kelas.					
9	Suasana di dalam kelas mendukung proses belajar mengajar.					
10	Guru memberitahu siswa apa yang akan dipelajari sebelum pelajaran dimulai.					
11	Guru mengecek pemahaman siswa dengan cara bertanya kepada beberapa siswa.					

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12	Guru banyak menggunakan waktu di dalam kelas untuk menerangkan materi dan memberikan pertanyaan kepada siswa.					
13	Guru menggunakan sedikit waktu di dalam kelas, sedangkan siswa banyak berdiskusi dan menjawab pertanyaan-pertanyaan dari guru.					
14	Siswa diberi kebebasan dan tanggung jawab di dalam kelas.					
15	Siswa merasa senang dan dapat mengikuti proses belajar mengajar dengan baik.					

Keterangan:
SS : Sangat Setuju
S : Setuju
N : Netral
TS : Tidak Setuju
STS : Sangat Tidak Setuju

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Appendix 1

CLASSROOM INTERACTION TRANSCRIPTION

First Meeting

SUBJECT	CLASSROOM INTERACTION	CATEGORY
Teacher	Good morning, students.	5
Students	Good morning, Mom.	8
Teacher	How are you today?	4
Students	I'm fine, thank you.	8
	And you?	9
Teacher	Well, I'm fine, thanks.	1
	Let's start our lesson today.	5
	Last week, we had discussed about Sea and	5
	Coastal.	4
Students	And do you still remember, what is Sea?	8
Teacher	Yes	4
Students	And the sea is divided into…..	8
	Two	8
Teacher	Three	4
Students	Three, two or four?	8
Teacher	Three	3
	Three.	6
Student	Mention! Ira! Ira!	8, 4
Teacher	Marginal Sea…	3
	OK, Marginal Sea…..	4

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Student	Based on the location……	8
	Based on the location consists of Marginal Sea,	8
Teacher	Middle Sea and Continental Sea.	3
	Yes, based on the location consists of Marginal	3
	Sea, Middle and Continental Sea.	6
Teacher	OK. Next, Arfian!	4
	What is the different between sea and ocean?	4
	I think last week, I have explained.	5
	What is the different? Sea and ocean?	4
Students	(Silent)	10 (2x)
Teacher	Who knows? What is the different between sea and	4
	ocean?	4
	Nesa, Nesa!	4
	What is the different between sea and ocean?	4
	(Silent)	10 (5x)
Student	Sea is the part of ocean, narrow than ocean. And	8
	ocean is the wide of sea.	8
Teacher	OK. If sea is the part of ocean where is the	3, 4
	area…..?	
Students	Narrow	8
Teacher	is narrow.	3
	And ocean is the wide of sea, where is some parts?	5, 4
	Strait, bay, coast and so on.	
Students	OK, next, now we will discuss about relief of sea	8
Teacher	bottom.	5
	(Teacher draws picture on the whiteboard)	5
	Relief of sea bottom.	10 (17x)
	(Students take a note)	5

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Students	Please look at the whiteboard. Relief in sea bottom.	8 (16x)
Teacher	In principal, relief of sea bottom is same with relief	5
	of sea surface. Where is in sea surface, has some	5
	parts. They are hill, mountain, and so on.	5
	Next, in sea bottom, in principle, has some parts,	5
	they are continental shelf, in here, number one.	5
	Number two, it is called continental slope. Number	5
	three, it is called basin or bacon. Number four, it is	5
	called reef or sea hill, number four sea mount, and	5
	number six…..	5
	(Silent)	5
	Nomer empat mana, Bu?	5
Students	Oh..Sea hill, OK! Do you see the picture? OK.	10 (3x)
Teacher	Our country has two shelves, where is in the West,	9
	in here, and in here.	5, 4
	What's the name? In the West of Indonesia. What	5
	shelf?	5
	(Silent)	4
	Usually the part formed the same of sea.	4
Students	Continental shelf is the shallow sink.	10 (3x)
Teacher	It is called in Western? Mahmud?	5
	(Silent)	5
	It is called in the Western.	4, 6
Students	The sea including Continental Slope, Continental	10
Teacher	Shelf, that is Karimata Straight, Java Sea, Sunda	5
	Straight, South Sea, in here including Continental	5
	Shelf.	5
	Usually it is called, in the Western?	5

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	Sulawesi Sea.	5
	Sulawesi Sea…and….	4
Students	Makasar	8
Teacher	Makasar Straight. Another? Another? These all	3
Students	Sea. That is sea including Continental Shelf or all	8
Teacher	seas in the central Indonesia.	3, 4
	OK, is it clear?	5
	Clear	5
	OK, next, Basin.	4
Students	Look at this picture.	8
Teacher	What about that? The form of basin.	5
	If we saw the picture, we can get conclude, that	6
	basin it has bla bla bla shape.	4
	Oval	5
	What about that? The form?	4
Students	Oval	8
Teacher	Oval? Oval, another? Bowl, oval.	4
Students	Oval shape comes from the process of depressant,	8
Teacher	the process, depressant of land from sea bottom,	3, 4
	the basin.	5
	Indonesia has basin.	5
	Where is it? Here, Indonesia has basin.	5
	Where is it?	5
	Makasar	4, 5
	Maluku	4
Students	Nusa Tenggara	8
	No, in here. Basin is still including in Continental	8
	Slope. Where is it?	8

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Teacher	Banda	1, 5
	Banda Basin. We can conclude that Banda	4
Students	including Continental Slope and basin.	8
Teacher	Is it clear?	3, 5
	Clear	5
	OK. Next, Reefs. Reefs or Sea Hill. If you see the	4
Students	picture, what about the form of the sea hill or reefs?	8
Teacher	For example, sea hill and sea mount in principle is	5
	the part of mount ridge.	4
	Where is the location?	
	Krakatau	5
	Krakatau?	5
	Indonesia is one of country passed by 2 young	4
Students	mountains on the world.	8
Teacher	Where is in the western?	4
	Mediterranean.	5
	Mediterranean from intern us and outer us.	5
	And in the western? Pacific range from enter	4
Students	Indonesia through Philippine and Kalimantan.	8
Teacher	But in Kalimantan?	3
	Is cut.	4, 5
	Is cut. OK.	5
	Ridge or sea hill, and sea mount, in principle	4
Students	almost same. Only ridge has flat top, has flat top.	8
Teacher	But sea mount has the top in the surface. For	3
	example for sea mount in?	5
	Krakatau	5
	Krakatau. Krakatau is the one of part which	5

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	volcano or active, and ridge or sea hill for example,	4
Students	for example mounts range in Western Sumatra.	8
Teacher	Sea mount is the mount which top in the sea	3, 5
	surface. Then, last relief of the sea bottom.	5
	Look at the picture.	5
	What about the pool?	5
	Palung	5
	Another name palung. We can get conclude based	5
	on the picture. So number 6 is the sea bottom with	6
	steep slope and long. Steep slope and long.	4
Students	What about the process? Long port rain can save	8
Teacher	from dislocation process.	5
	Do you know the different between the depression	5
	and dislocation?	5
	No…No…	5
	What is the different?	4
	Depressant can shape bowl or basin. But	5
	dislocation can shape trog.	4
	Look at the picture!	4
Students	Please compare between basin and trog.	8
Teacher	What is the different? Basin and trog?	4
	Ima! Is the same? Yes? Basin, bowl.	5
	(Silent)	5
	Why? Why the basin can shape the bowl? Through	6
	depression process?	6
	(Silent)	4
	What is the meaning of depression process?	6, 4
Students	Depression of land, depression of sea bottom?	10 (4x)

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Teacher	(Silent)	4
	Who know the different between depression and	4
Students	dislocation?	10 (2x)
Teacher	Dislocation is the process of friction of soil layer,	4
	dislocation.	4
Students	In depression is the process of?	10 (4x)
Teacher	Down	4
	Down soil layer. Is clear?	4
	No	5
	No? Basin can bowl shape because of from	5
	depression process.	4
Students	From the depression process, it does soil layer.	8
Teacher	It's the soil layer, fill down. So it can bowl shape.	3, 4
Students	If dislocation process can happened trough raise	8
Teacher	soil layer.	4, 5
	So, the same are regular form. But in basin	5
	irregular form.	5
	Do you know what I mean?	5
	Basin and bowl shape and palung as irregular form.	5
	Is it clear?	5
	Yes	5
	OK. Any question? Any question? Roby?	5
	Basin?	5
	If basin irregular, eh has regular form. Based on the	4
	form. This process.	5
	It's bowl shape. Trog has irregular form based on	
	the step slope, based on the form from depression	4
Students	as process where the soil layer is decrease.	8

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Teacher	Decrease of land together so it can bowl shape.	4
Students	And dislocation is process together down.	9
Teacher	Down soil layer.	5
	Clear? Faily? Clear?	5
	Any question?	5
	(Silent)	5
	(Students take a note)	5
	OK. We will continue.	5
	Belum	5
	(Crowded situation)	5
	OK. What is the different between wave and	5
Teacher	current?	4
	The wave is vertically sea water movement.	4
Students	Why the wave can happen? What is the factor	10 (12x)
	which influence wave can happen?	8 (20x)
Teacher	The wind and the earthquake.	5
Students	Which one is dangerous?	9
	Earthquake.	10 (16x)
Teacher	Why? Why earthquake more dangerous than wind?	4
	Tsunami.	5
	Why earthquake more dangerous than wind?	4
	(Silent)	4
	Ikhsan? Ikhsan? Why?	5
	(Silent)	5
	Why?	4
Students	Because earthquake it cause a wide tectogen	8
Teacher	power. And wind cause wide exogen power.	4
	So? Do you know my question?	

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Students	No	9
Teacher	If earthquake is often come from deep so it can	4
Students	influence all sea water, deep freezer goes up sea	10 (2x)
Teacher	surface. All. But the wind only sea surface. The	4
Students	wind pushes sea surface.	10 (4x)
Teacher	Is that clear?	4
	Yes	5
	Why the wind is also the part of wave?	5
	(Silent)	4
Students	In principal, process of number one, is called crest	8
Teacher	Number 2 trough, number 3 it is called, it is	5
	between two crests, wave length. Yes. Number 4 it	5
	is between crest and trough, it is called wave high-	5
	end.	5
	Number 5?	4
Students	(Silent)	8
Teacher	Is return. Number 6 is swash. Seven back swash.	4
Students	Number 8 is the circulation on the sea water,	10 (3x)
Teacher	friction. Look at the picture, crest is the wave top.	5
	It is cause of by wind. If crest the wave top, trough,	5
	number 2?	5
		5
		4
Students		10 (4x)
Teacher		5
		5
		5
		5

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		5 5,4

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Appendix 2

RESEARCH INSTRUMENTS

1. Flanders Interaction Analysis

a. Matrix for Recording Interaction Analysis (1st Meeting)

1). First Time Unit (600 seconds)

	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1			1					2			**3**
2											**0**
3			2	2		1				6	**11**
4				33	1	1		33		15	**83**
5				2	231	1				20	**254**
6				2	1			17		6	**26**
7											**0**
8	2		3	30		16		14	2	1	**68**
9	1					1			1		**3**
10			5	14	21	6		2		104	**152**
TOTAL	**3**	**0**	**11**	**83**	**254**	**26**	**0**	**68**	**3**	**152**	**600**

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2). Second Time Unit (600 seconds)

	1	2	3	4	5	6	7	8	9	10	TOTAL
1											**0**
2											**0**
3			2	7							**9**
4			5	21	1	10		23		7	**67**
5				5	216	1			12		**234**
6				8	1	25		15	1	6	**56**
7											**0**
8			2	20	1	15		12		10	**60**
9					11				10	2	**23**
10				6	4	5		10		126	**151**
TOTAL	**0**	**0**	**9**	**67**	**234**	**56**	**0**	**60**	**23**	**151**	**600**

3). Third Time Unit (600 seconds)

	1	2	3	4	5	6	7	8	9	10	TOTAL
1									1		**1**
2											**0**
3			3	1	4			20			**28**
4				22		5		39		1	**67**
5	1			4	180	2				1	**188**
6				6		2			8	10	**26**
7											**0**
8			25	32				22		2	**81**
9				1	2	6			12		**21**
10				1	2	11				174	**188**
TOTAL	**1**	**0**	**28**	**67**	**188**	**26**	**0**	**81**	**21**	**188**	**600**

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4). Total Time Unit (1800 seconds)

FIRST EVENT	SECOND EVENT										
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
	1			1					2	1		**4**
	2											**0**
	3			7	10	4	1		20		6	**48**
	4			5	76	2	16		95		23	**217**
	5	1			11	627	4			12	21	**676**
	6				16	2	27		32	9	22	**108**
	7											**0**
	8	2		30	82	1	31		48	2	13	**209**
	9	1			1	13	7			23	2	**47**
	10			5	21	27	22		12		404	**491**
	TOTAL	**4**	**0**	**48**	**217**	**676**	**108**	**0**	**209**	**47**	**491**	**1800**

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b. Matrix for Recording Interaction Analysis (2nd Meeting)

1). First Time Unit (600 seconds)

	1	2	3	4	5	6	7	8	9	10	TOTAL
1								1			**1**
2											**0**
3			3	2	1	1		9		5	**21**
4				25	1	1		27	10	16	**80**
5			1	4	166	13				5	**189**
6				1	12	8		21	5	14	**61**
7											**0**
8			12	23	2	21		30	1	11	**100**
9	1			10		5			5	2	**23**
10			5	15	7	12		12	2	72	**125**
TOTAL	**1**	**0**	**21**	**80**	**189**	**61**	**0**	**100**	**23**	**125**	**600**

2). Second Time Unit (600 seconds)

	1	2	3	4	5	6	7	8	9	10	TOTAL
1											**0**
2											**0**
3			2	2	12			11			**27**
4				14	8			22	4	18	**66**
5			12	8	162	18				15	**215**
6				2	17	8		21	13	11	**72**
7											**0**
8			13	22		21		20		3	**79**
9				4	1	13			4		**22**
10				14	15	12		5	1	72	**119**
TOTAL	**0**	**0**	**27**	**66**	**215**	**72**	**0**	**79**	**22**	**119**	**600**

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3). Third Time Unit (600 seconds)

	1	2	3	4	5	6	7	8	9	10	TOTAL
1											**0**
2											**0**
3			4	2				8			**14**
4				11	15	2		51		32	**111**
5				18	160	6					**184**
6				1	6	11		21	2	17	**58**
7											**0**
8			10	46		22		12		2	**93**
9					2			1	2		**5**
10				33		17			1	84	**135**
TOTAL	**0**	**0**	**14**	**111**	**184**	**58**	**0**	**93**	**5**	**135**	**600**

4). Total Time Unit (1800seconds)

		SECOND EVENT										
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
FIRST EVENT	**1**								1			**1**
	2											**0**
	3			9	6	13	1		28		5	**62**
	4				50	24	3		100	14	66	**257**
	5			13	30	488	37				20	**588**
	6				4	35	27		63	20	42	**191**
	7											**0**
	8			35	91	3	64		62	1	16	**272**
	9	1			14	3	18		1	11	2	**50**
	10			5	62	22	41		17	4	228	**379**
	TOTAL	**1**	**0**	**62**	**257**	**588**	**191**	**0**	**272**	**50**	**379**	**1800**

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c. Matrix for Recording Interaction Analysis (3rd Meeting)

1). First Time Unit (600 seconds)

	1	2	3	4	5	6	7	8	9	10	TOTAL
1					1						**1**
2				1		4					**5**
3				5				6			**11**
4			4	11	3	7		33	1	1	**60**
5				4	181	4			3	3	**195**
6		1		7	2	33		33	2	15	**93**
7											**0**
8		4	6	24	2	26		33	3	10	**108**
9	1		1	4		4		1	4	4	**19**
10				4	6	15		2	6	75	**108**
TOTAL	**1**	**5**	**11**	**60**	**195**	**93**	**0**	**108**	**19**	**108**	**600**

2). Second Time Unit (600 seconds)

	1	2	3	4	5	6	7	8	9	10	TOTAL
1						1					**1**
2			5	1	1	1					**8**
3		4		2	2			10		4	**22**
4				35	4	3		53	1	17	**113**
5				14	176	1			1	1	**193**
6	1			5		22		1	8	10	**47**
7											**0**
8		3	12	48	2			34		2	**101**
9		1	1		1	8				1	**12**
10			4	8	7	11		3	2	68	**103**
TOTAL	**1**	**8**	**22**	**113**	**193**	**47**	**0**	**101**	**12**	**103**	**600**

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3). Third Time Unit (600 seconds)

	1	2	3	4	5	6	7	8	9	10	TOTAL
1								1			**1**
2		2	4					7			**13**
3		4			1					4	**9**
4				1	23	11		5	2	26	**68**
5				28	106	12				18	**164**
6	1			12	12	11		16		18	**70**
7											
8		7	1	4	1	16		72		15	**116**
9				1		1				6	**8**
10			4	22	21	19		15	6	64	**151**
TOTAL	**1**	**13**	**9**	**68**	**164**	**70**		**116**	**8**	**151**	**600**

4). Total Time Unit (1800 seconds)

		SECOND EVENT										
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
FIRST EVENT	**1**					1	1		1			**3**
	2		2	9	2	1	5		7			**26**
	3		8		7	3			16		8	**42**
	4			4	47	30	21		91	4	44	**241**
	5				46	463	17			4	22	**552**
	6	2	1		24	14	66		50	10	43	**210**
	7											**0**
	8		14	19	76	5	42		139	3	27	**325**
	9	1	1	2	5	1	13		1	4	11	**39**
	10			8	34	34	45		20	14	207	**362**
	TOTAL	**3**	**26**	**42**	**241**	**552**	**210**	**0**	**325**	**39**	**362**	**1800**

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d. Matrix for Recording Interaction Analysis (4th Meeting)

1). First Time Unit (600 seconds)

	1	2	3	4	5	6	7	8	9	10	TOTAL
1		1									**1**
2				1	1						**2**
3			2	9	1	1		1			**14**
4				20		5		65	1	1	**92**
5				10	114	5		1	1	1	**132**
6				7	3	23		52	2	1	**88**
7				2				2			**4**
8		1	12	36	11	48	4	41	5	5	**163**
9	1			3	1	3		1	1	1	**11**
10				4	1	3			1	84	**93**
TOTAL	**1**	**2**	**14**	**92**	**132**	**88**	**4**	**163**	**11**	**93**	**600**

2). Second Time Unit (600 seconds)

	1	2	3	4	5	6	7	8	9	10	TOTAL
1								1	2		**3**
2			4								**4**
3		4						8			**12**
4	1			8	1	6		52	6	4	**78**
5					108	4			3	1	**116**
6				8		10		25	10	7	**60**
7					1			1	1	1	**4**
8	1		8	47		25	2	94	5	2	**184**
9				8	4	12	2	1	27	4	**58**
10	1			7	2	3		2	4	62	**81**
TOTAL	**3**	**4**	**12**	**78**	**116**	**60**	**4**	**184**	**58**	**81**	**600**

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3). Third Times Unit (600 seconds)

	1	2	3	4	5	6	7	8	9	10	TOTAL
1				2							**2**
2		1	1	1							**3**
3				6		1		1	1		**9**
4				18	5	6	1	66	6	9	**111**
5				9	76	1	1	2	11	2	**102**
6				13	2	24	2	10	4	5	**60**
7				4		1		2		5	**12**
8	1	2	6	39	6	18	4	112	5	3	**196**
9	1		2	10	10	2	1	1	12	6	**45**
10				9	3	7	3	2	6	30	**60**
TOTAL	**2**	**3**	**9**	**111**	**102**	**60**	**12**	**196**	**45**	**60**	**600**

4). Total Time Unit (1800 seconds)

		SECOND EVENT										
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
FIRST EVENT	**1**		1		2				1	2		**6**
	2		1	5	2	1						**9**
	3		4	2	15	1	2		10	1		**35**
	4	1			46	6	17	1	183	13	14	**281**
	5				19	298	10	1	3	15	4	**350**
	6				28	5	57	2	87	16	13	**208**
	7				6	1	1		5	1	6	**20**
	8	2	3	26	122	17	91	10	247	15	10	**543**
	9	2		2	21	15	17	3	3	40	11	**114**
	10	1			20	6	13	3	4	11	176	**234**
	TOTAL	**6**	**9**	**35**	**281**	**350**	**208**	**20**	**543**	**114**	**234**	**1800**

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e. Matrix for Recording Interaction Analysis (Total Meeting)

FIRST EVENT	SECOND EVENT										
		1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
	1		1	1	2	1	1		5	3		**14**
	2		3	14	4	2	5		7			**35**
	3		12	18	38	21	4		74	1	19	**187**
	4	1		9	219	62	57	1	469	31	147	**996**
	5	1		13	106	1876	68	1	3	31	67	**2166**
	6	2	1		72	56	177	2	232	55	120	**717**
	7				6	1	1		5	1	6	**20**
	8	4	17	110	371	26	228	10	496	21	66	**1349**
	9	5	1	4	41	32	55	3	5	78	26	**250**
	10	1		18	137	89	121	3	53	29	1015	**1466**
	TOTAL	**14**	**35**	**187**	**996**	**2166**	**717**	**20**	**1349**	**250**	**1466**	**7200**

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2. Second Instrument: Observation Sheet of Teaching Effectiveness Elements

a. First Meeting

No	Teaching Elements	Yes	No
1	Academic learning time	✓	
2	Use of reinforcement		✓
3	Cues and feedback		✓
4	Co-operative learning		✓
5	Classroom atmosphere	✓	
6	Higher order questions	✓	
7	Advance organizers	✓	
8	Direct instruction	✓	
9	Indirect teaching	✓	
10	Democratic classroom		✓

b. Second Meeting

No	Teaching Elements	Yes	No
1	Academic learning time	✓	
2	Use of reinforcement		✓
3	Cues and feedback		✓
4	Co-operative learning		✓
5	Classroom atmosphere	✓	
6	Higher order questions	✓	
7	Advance organizers	✓	
8	Direct instruction	✓	
9	Indirect teaching	✓	
10	Democratic classroom	✓	

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c. Third Meeting

No	Teaching Elements	Yes	No
1	Academic learning time	✓	
2	Use of reinforcement	✓	
3	Cues and feedback	✓	
4	Co-operative learning		✓
5	Classroom atmosphere	✓	
6	Higher order questions	✓	
7	Advance organizers	✓	
8	Direct instruction	✓	
9	Indirect teaching	✓	
10	Democratic classroom		✓

d. Fourth Meeting

No	Teaching Elements	Yes	No
1	Academic learning time	✓	
2	Use of reinforcement	✓	
3	Cues and feedback	✓	
4	Co-operative learning	✓	
5	Classroom atmosphere	✓	
6	Higher order questions	✓	
7	Advance organizers	✓	
8	Direct instruction	✓	
9	Indirect teaching	✓	
10	Democratic classroom	✓	

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Appendix 3

Data Calculation

1. Classroom Interaction Data Analysis Result in the First Meeting

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1			1					2	1		**4**
2											**0**
3			7	10	4	1		20		6	**48**
4			5	76	2	16		95		23	**217**
5	1			11	627	4			12	21	**676**
6				16	2	27		32	9	22	**108**
7											**0**
8	2		30	82	1	31		48	2	13	**209**
9	1			1	13	7			23	2	**47**
10			5	21	27	22		12		404	**491**
TOTAL	**4**	**0**	**48**	**217**	**676**	**108**	**0**	**209**	**47**	**491**	**1800**

a. Content Cross

Content Cross = (Columns 4 and 5) + (Rows 4 and 5)

= (217 + 676) + (217 + 676)

= 1786

Content Cross proportion in the classroom interaction:

$$\text{Content Cross} = \frac{1786}{1800} \times 100\%$$

= 99.22%

The proportion of content cross is **99.22%**

b. Teacher Control

Teacher Control = Columns and Rows 6 – 7

= 27 + 0 + 0 + 0

= 27

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Teacher Control proportion in the classroom interaction:

Teacher Control $= \frac{27}{1800} \times 100\%$

$= 1.5\%$

The proportion of teacher control is **1.5%**

c. Teacher Support

Teacher Support = Columns and Rows 1 – 3

$= 0 + 0 + 1 + 0 + 0 + 0 + 0 + 0 + 7$

$= 8$

Teacher Support proportion in the classroom interaction:

Teacher Support $= \frac{8}{1800} \times 100\%$

$= 0.44\%$

The proportion of teacher support is **0.44%**

d. Student's Participation

Students' Participation $= \frac{\text{Students' Talking Time (8-9)}}{\text{Total Time}} \times 100\%$

$= \frac{209 + 47}{1800} \times 100\%$

$= \frac{256}{1800} \times 100\%$

$= 14.22\%$

The proportion of students' participaton is **14.22%**

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e. Silent

Silent Proportion = $\frac{\text{Silent (Column 10)}}{\text{Total Time}} \times 100\%$

= $\frac{491}{1800} \times 100\%$

= 27.28%

The proportion of silent is **27.28%**

f. Teacher's Talking Time

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1			1					2	1		**4**
2											**0**
3			7	10	4	1		20		6	**48**
4			5	76	2	16		95		23	**217**
5	1			11	627	4			12	21	**676**
6				16	2	27		32	9	22	**108**
7											**0**
8	2		30	82	1	31		48	2	13	**209**
9	1			1	13	7			23	2	**47**
10			5	21	27	22		12		404	**491**
TOTAL	**4**	**0**	**48**	**217**	**676**	**108**	**0**	**209**	**47**	**491**	**1800**

Teacher's Talking Time = $\frac{\text{Teacher's Talking Time (1-7)}}{\text{Total Time (1-10)}} \times 100\%$

= $\frac{4 + 0 + 48 + 217 + 676 + 108 + 0}{1800} \times 100\%$

= 58.50%

The proportion of this profile is **58.50%**.

Lecturing = $\frac{\text{Column 5}}{\text{Total Time}} \times 100\%$

= $\frac{676}{1800} \times 100\%$

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= 37.55%

The result indicates that **37.55%** of total time was used for lecturing.

g. Indirect and Direct Influence

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1			1					2	1		**4**
2											**0**
3			7	10	4	1		20		6	**48**
4			5	76	2	16		95		23	**217**
5	1			11	627	4			12	21	**676**
6				16	2	27		32	9	22	**108**
7											**0**
8	2		30	82	1	31		48	2	13	**209**
9	1			1	13	7			23	2	**47**
10			5	21	27	22		12		404	**491**
TOTAL	**4**	**0**	**48**	**217**	**676**	**108**	**0**	**209**	**47**	**491**	**1800**

$$\text{Indirect Teaching} = \frac{\text{Indirect teacher influence (cat 1 – 4)}}{\text{Total teacher influence (cat 1 – 7)}} \times 100\%$$

$$= \frac{4 + 0 + 48 + 217}{4 + 0 + 48 + 217 + 676 + 108 + 0} \times 100\%$$

$$= \frac{269}{1053} \times 100\%$$

$$= 25.55\%$$

The result indicates that the proportion of this profile is **25.55%**.

$$\text{Direct Teaching} = \frac{\text{Direct teacher influence (cat 5 – 7)}}{\text{Total teacher influence (cat 1 – 7)}} \times 100\%$$

$$= \frac{676 + 108 + 0}{4 + 0 + 48 + 217 + 676 + 108 + 0} \times 100\%$$

$$= \frac{784}{1053} \times 100\%$$

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= 74.45%

The proportion of this profile is **74.45%.**

2. Classroom Interaction Data Analysis Result in the Second Meeting

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1								1			**1**
2											**0**
3			9	6	13	1		28		5	**62**
4				50	24	3		100	14	66	**257**
5			13	30	488	37				20	**588**
6				4	35	27		63	20	42	**191**
7											**0**
8			35	91	3	64		62	1	16	**272**
9	1			14	3	18		1	11	2	**50**
10			5	62	22	41		17	4	228	**379**
TOTAL	**1**	**0**	**62**	**257**	**588**	**191**	**0**	**272**	**50**	**379**	**1800**

a. Content Cross

Content Cross = (Columns 4 and 5) + (Rows 4 and 5)

= (257 + 588) + (257 + 588)

= 1690

Content Cross proportion in the classroom interaction:

Content Cross $= \frac{1690}{1800} \times 100\%$

= 93.88%

The proportion of this profile is **93.88%**.

b. Teacher Control

Teacher Control = Columns and Rows 6 – 7

= 27 + 0 + 0 + 0

= 27

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Teacher Control proportion in the classroom interaction:

Teacher Control $= \frac{27}{1800} \times 100\%$

$= 1.5\%$

The proportion of this profile is **1.5%**.

c. Teacher Support

Teacher Support = Columns and Rows 1 – 3

= 0 + 0 + 0 + 0 + 0 + 0 + 0 + 0 + 9

= 9

Teacher Support proportion in the classroom interaction:

Teacher Support $= \frac{9}{1800} \times 100\%$

$= 0.50\%$

The proportion of this profile is **0.50%**.

d. Student's Participation

Students' Participation $= \frac{\text{Students' Talking Time (8-9)}}{\text{Total Time}} \times 100\%$

$= \frac{272 + 50}{1800} \times 100\%$

$= \frac{322}{1800} \times 100\%$

$= 17.89\%$

The proportion of this profile is **17.89%.**

e. Silent

Silent Proportion $= \frac{\text{Silent (Column 10)}}{\text{Total Time}} \times 100\%$

$= \frac{379}{1800} \times 100\%$

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= 21.05%

The proportion of this profile is **21.05%**.

f. Teacher's Talking Time

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1								1			**1**
2											**0**
3			9	6	13	1		28		5	**62**
4				50	24	3		100	14	66	**257**
5			13	30	488	37				20	**588**
6				4	35	27		63	20	42	**191**
7											**0**
8			35	91	3	64		62	1	16	**272**
9	1			14	3	18		1	11	2	**50**
10			5	62	22	41		17	4	228	**379**
TOTAL	**1**	**0**	**62**	**257**	**588**	**191**	**0**	**272**	**50**	**379**	**1800**

$$\text{Teacher's Talking Time} = \frac{\text{Teacher's Talking Time (1-7)}}{\text{Total Time (1-10)}} \times 100\%$$

$$= \frac{1 + 0 + 62 + 257 + 588 + 191 + 0}{1800} \times 100\%$$

$$= 61.06\%$$

The proportion of this profile is **61.06%**.

$$\text{Lecturing} = \frac{\text{Column 5}}{\text{Total Time}} \times 100\%$$

$$= \frac{588}{1800} \times 100\%$$

$$= 32.67\%$$

The result indicates that **32.67%** of total time was used for lecturing.

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g. Direct and Indirect Influence

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1								1			**1**
2											**0**
3			9	6	13	1		28		5	**62**
4				50	24	3		100	14	66	**257**
5			13	30	488	37				20	**588**
6				4	35	27		63	20	42	**191**
7											**0**
8			35	91	3	64		62	1	16	**272**
9	1			14	3	18		1	11	2	**50**
10			5	62	22	41		17	4	228	**379**
TOTAL	**1**	**0**	**62**	**257**	**588**	**191**	**0**	**272**	**50**	**379**	**1800**

$$\text{Indirect Teaching} = \frac{\text{Indirect teacher influence (cat 1 – 4)}}{\text{Total teacher influence (cat 1 – 7)}} \times 100\%$$

$$= \frac{1 + 0 + 62 + 257}{1 + 0 + 62 + 257 + 588 + 191 + 0} \times 100\%$$

$$= \frac{320}{1099} \times 100\%$$

$$= 29.12\%$$

The proportion of this profile is **29.12%**.

$$\text{Direct Teaching} = \frac{\text{Direct teacher influence (cat 5 – 7)}}{\text{Total teacher influence (cat 1 – 7)}} \times 100\%$$

$$= \frac{588 + 191 + 0}{1 + 0 + 62 + 257 + 588 + 191 + 0} \times 100\%$$

$$= \frac{779}{1099} \times 100\%$$

$$= 70.88\%$$

The proportion of this profile is **70.88%**.

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3. Classroom Interaction Data Analysis Result in the Third Meeting

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1					1	1		1			**3**
2		2	9	2	1	5		7			**26**
3		8		7	3			16		8	**42**
4			4	47	30	21		91	4	44	**241**
5				46	463	17			4	22	**552**
6	2	1		24	14	66		50	10	43	**210**
7											**0**
8		14	19	76	5	42		139	3	27	**325**
9	1	1	2	5	1	13		1	4	11	**39**
10			8	34	34	45		20	14	207	**362**
TOTAL	**3**	**26**	**42**	**241**	**552**	**210**	**0**	**325**	**39**	**362**	**1800**

a. Content Cross

Content Cross = (Columns 4 and 5) + (Rows 4 and 5)

= (241 + 552) + (241 + 552)

= 1586

Content Cross proportion in the classroom interaction:

$$\text{Content Cross} = \frac{1586}{1800} \times 100\%$$

= 88.11%

The proportion of this profile is **88.11%**.

b. Teacher Control

Teacher Control = Columns and Rows 6 – 7

= 66 + 0 + 0 + 0

= 66

Teacher Control proportion in the classroom interaction:

$$\text{Teacher Control} = \frac{66}{1800} \times 100\%$$

= 3.67%

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The proportion of this profile is **3.67%**.

c. Teacher Support

Teacher Support = Columns and Rows 1 – 3

= 0 + 0 + 0 + 0 + 2 + 9 + 0 + 8 + 0

= 19

Teacher Support proportion in the classroom interaction:

$$\text{Teacher Support} = \frac{19}{1800} \times 100\%$$

= 1.05%

The proportion of this profile is **1.05%**.

d. Student's Participation

$$\text{Students' Participation} = \frac{\text{Students' Talking Time (8-9)}}{\text{Total Time}} \times 100\%$$

$$= \frac{325 + 39}{1800} \times 100\%$$

$$= \frac{364}{1800} \times 100\%$$

= 20.22%

The proportion of this profile is **20.22%**.

e. Silent

$$\text{Silent Proportion} = \frac{\text{Silent (Column 10)}}{\text{Total Time}} \times 100\%$$

$$= \frac{362}{1800} \times 100\%$$

= 20.11%

The proportion of this profile is **20.11%**.

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f. Teacher's Talking Time

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1					1	1		1			**3**
2		2	9	2	1	5		7			**26**
3		8		7	3			16		8	**42**
4			4	47	30	21		91	4	44	**241**
5				46	463	17			4	22	**552**
6	2	1		24	14	66		50	10	43	**210**
7											**0**
8		14	19	76	5	42		139	3	27	**325**
9	1	1	2	5	1	13		1	4	11	**39**
10			8	34	34	45		20	14	207	**362**
TOTAL	**3**	**26**	**42**	**241**	**552**	**210**	**0**	**325**	**39**	**362**	**1800**

$$\text{Teacher's Talking Time} = \frac{\text{Teacher's Talking Time (1-7)}}{\text{Total Time (1-10)}} \times 100\%$$

$$= \frac{3 + 26 + 42 + 241 + 552 + 210 + 0}{1800} \times 100\%$$

$$= 59.67\%$$

The proportion of this profile is **59.67%**.

$$\text{Lecturing} = \frac{\text{Column 5}}{\text{Total Time}} \times 100\%$$

$$= \frac{552}{1800} \times 100\%$$

$$= 30.67\%$$

The result indicates that **30.67%** of total time was used for lecturing.

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g. Direct and Indirect Influence

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1					1	1		1			**3**
2		2	9	2	1	5		7			**26**
3		8		7	3			16		8	**42**
4			4	47	30	21		91	4	44	**241**
5				46	463	17			4	22	**552**
6	2	1		24	14	66		50	10	43	**210**
7											**0**
8		14	19	76	5	42		139	3	27	**325**
9	1	1	2	5	1	13		1	4	11	**39**
10			8	34	34	45		20	14	207	**362**
TOTAL	**3**	**26**	**42**	**241**	**552**	**210**	**0**	**325**	**39**	**362**	**1800**

$$\text{Indirect Teaching} = \frac{\text{Indirect teacher influence (cat 1 – 4)}}{\text{Total teacher influence (cat 1 – 7)}} \times 100\%$$

$$= \frac{3 + 26 + 42 + 241}{3 + 26 + 42 + 241 + 552 + 210 + 0} \times 100\%$$

$$= \frac{312}{1074} \times 100\%$$

$$= 29.05\%$$

The proportion of this profile is **29.05%.**

$$\text{Direct Teaching} = \frac{\text{Direct teacher influence (cat 5 – 7)}}{\text{Total teacher influence (cat 1 – 7)}} \times 100\%$$

$$= \frac{552 + 210 + 0}{3 + 26 + 42 + 241 + 552 + 210 + 0} \times 100\%$$

$$= \frac{762}{1074} \times 100\%$$

$$= 70.95\%$$

The proportion of this profile is **70.95%**.

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4. Classroom Interaction Data Analysis Result in the Fourth Meeting

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1		1		2				1	2		**6**
2		1	5	2	1						**9**
3		4	2	15	1	2		10	1		**35**
4	1			46	6	17	1	183	13	14	**281**
5				19	298	10	1	3	15	4	**350**
6				28	5	57	2	87	16	13	**208**
7				6	1	1		5	1	6	**20**
8	2	3	26	122	17	91	10	247	15	10	**543**
9	2		2	21	15	17	3	3	40	11	**114**
10	1			20	6	13	3	4	11	176	**234**
TOTAL	**6**	**9**	**35**	**281**	**350**	**208**	**20**	**543**	**114**	**234**	**1800**

a. Content Cross

Content Cross = (Columns 4 and 5) + (Rows 4 and 5)

= (281 + 350) + (281 + 350)

= 1262

Content Cross proportion in the classroom interaction:

$$\text{Content Cross} = \frac{1262}{1800} \times 100\%$$

= 70.11%

The proportion of this profile is **70.11%**.

b. Teacher Control

Teacher Control = Columns and Rows 6 – 7

= 57 + 2 + 1 + 0

= 60

Teacher Control proportion in the classroom interaction:

$$\text{Teacher Control} = \frac{60}{1800} \times 100\%$$

= 3.33%

The proportion of this profile is **3.33%**.

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c. Teacher Support

Teacher Support = Columns and Rows 1 – 3

= 0 + 1 + 0 + 0 + 1 + 5 + 0 + 4 + 2

= 13

Teacher Support proportion in the classroom interaction:

$$\text{Teacher Support} = \frac{19}{1800} \times 100\%$$

= 0.72%

The proportion of this profile is **0.72%**.

d. Student's Participation

$$\text{Students' Participation} = \frac{\text{Students' Talking Time (8-9)}}{\text{Total Time}} \times 100\%$$

$$= \frac{543 + 114}{1800} \times 100\%$$

$$= \frac{657}{1800} \times 100\%$$

= 36.5%

The proportion of this profile is **36.5%**.

e. Silent

$$\text{Silent Proportion} = \frac{\text{Silent (Column 10)}}{\text{Total Time}} \times 100\%$$

$$= \frac{234}{1800} \times 100\%$$

= 13%

The proportion of this profile is **13%**.

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f. Teacher's Talking Time

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1		1		2				1	2		**6**
2		1	5	2	1						**9**
3		4	2	15	1	2		10	1		**35**
4	1			46	6	17	1	183	13	14	**281**
5				19	298	10	1	3	15	4	**350**
6				28	5	57	2	87	16	13	**208**
7				6	1	1		5	1	6	**20**
8	2	3	26	122	17	91	10	247	15	10	**543**
9	2		2	21	15	17	3	3	40	11	**114**
10	1			20	6	13	3	4	11	176	**234**
TOTAL	**6**	**9**	**35**	**281**	**350**	**208**	**20**	**543**	**114**	**234**	**1800**

Teacher's Talking Time $= \frac{\text{Teacher's Talking Time (1-7)}}{\text{Total Time (1-10)}} \times 100\%$

$= \frac{6 + 9 + 35 + 281 + 350 + 208 + 20}{1800} \times 100\%$

$= 50.5\%$

The proportion of this profile is **50.5%**.

Lecturing $= \frac{\text{Column 5}}{\text{Total Time}} \times 100\%$

$= \frac{350}{1800} \times 100\%$

$= 19.44\%$

The result indicates that **19.44%** of total time was used for lecturing.

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g. Direct and Indirect Influence

FIRST EVENT	SECOND EVENT										
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**TOTAL**
1		1		2				1	2		**6**
2		1	5	2	1						**9**
3		4	2	15	1	2		10	1		**35**
4	1			46	6	17	1	183	13	14	**281**
5				19	298	10	1	3	15	4	**350**
6				28	5	57	2	87	16	13	**208**
7				6	1	1		5	1	6	**20**
8	2	3	26	122	17	91	10	247	15	10	**543**
9	2		2	21	15	17	3	3	40	11	**114**
10	1			20	6	13	3	4	11	176	**234**
TOTAL	**6**	**9**	**35**	**281**	**350**	**208**	**20**	**543**	**114**	**234**	**1800**

$$\text{Indirect Teaching} = \frac{\text{Indirect teacher influence (cat 1 – 4)}}{\text{Total teacher influence (cat 1 – 7)}} \times 100\%$$

$$= \frac{6 + 9 + 35 + 281}{6 + 9 + 35 + 281 + 350 + 208 + 20} \times 100\%$$

$$= \frac{331}{909} \times 100\%$$

$$= 36.41\%$$

The proportion of this profile is **36.41%**.

$$\text{Direct Teaching} = \frac{\text{Direct teacher influence (cat 5 – 7)}}{\text{Total teacher influence (cat 1 – 7)}} \times 100\%$$

$$= \frac{350 + 208 + 20}{6 + 9 + 35 + 281 + 350 + 208 + 20} \times 100\%$$

$$= \frac{578}{909} \times 100\%$$

$$= 63.59\%$$

The proportion of this profile is **63.59%**.

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