Role Assigning in Jigsaw Classroom: An Asian Classroom Reality Revealed

by Siti Mina Tamah

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Taking the principles of constructivist thinking, teachers are required to transform their traditional class into a 'constructive' one. A Jigsaw class is an alternative. Jigsaw teachers believe that each student owns the capability to be the contributor of knowledge. Students are encouraged to learn from their fellow students in their expert team and when they go back to their home team they are encouraged to teach one another the material they have worked on in the expert team.

Assigned different roles of *captain*, *time keeper*, *secretary*, and *common member* to maintain smooth functioning groups, the students from two junior high schools in Surabaya, Indonesia were involved in the experiment to reveal a reality of role assigning. Totally 32 students having the role of 'captain', 32 'secretary', 32 'time keeper', and 69 'common member' were available. The analyzed questionnaires cross-checked with classroom observation, and some interviews eventually revealed one particular reality in Jigsaw classroom. The classroom reality revealed covers students' perception concerning their own role, students' perception concerning their own role related to the other roles in their expert team, and overall perception on roles assigned. Some underlying theories – Cooperative Learning, Jigsaw and Positive Interdependence – precede the main discussion.

Key words: cooperative learning, Jigsaw, role assigning

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BACKGROUND

Cooperative learning has gained increasing acceptance in Indonesia since the government applied Competency-Based Curriculum in the 2004/2005 academic year. The new curriculum being applied, the Indonesian teachers are inevitably to start changing - to alter their presentational technique hence forcing the students to abandon their old learning method.

The theory underlying the emergence of that 'new' Curriculum is constructivism. Kaplan (2002) points out that constructivism proposes that learning environment should support multiple interpretations of reality, knowledge construction as well as context-rich and experience-based activities. Teachers who are for the constructivist principles believe that learners ought to be engaged in doing something as learning is an active process of which meaning is constructed out, and that learners learn by interaction with their fellow students, teachers and families.

What is implied from the principles of constructivist thinking is that it is high time that teachers abandoned their spoon-feeding technique. Teachers are required to transform their traditional class into a 'constructive' class. The teachers are, in other words, faced with constructivist thinking of how to involve students in relevant tasks so that the students are really engaged in the classroom.

Listening class is conducted by the teacher's providing an oral text. The students listen and then the teacher conventionally leads the whole-class discussion. The classroom interaction to discuss the oral text is then typically teacher-centered. The teacher asks a question; the students wanting to respond raise their hands; the teacher calls on one student and the student called on tries to state the correct answer. This particular classroom structure can be altered to make the class more interactive by jigsaw technique.

The main issue is then on how the teacher can involve more students in their listening class. The class teacher is challenged to implement the types of assistance to trigger more student-student interaction. Simply the teacher is encouraged to bring opportunities for the students to learn maximally on their

own in this case by taking part in jigsaw activities to achieve listening skill.

The attempt can, as previously indicated, be realized by performing cooperative structures one of which is Jigsaw where students are engaged in two sorts of discussion teams. Jigsaw teachers believe that each student owns the capability to be the contributor of knowledge. Students are encouraged to learn from their fellow students in their expert team and when they go back to their home team they are encouraged to teach one another the material they have worked on in the expert team. This Jigsaw design facilitates students' interaction in the class enabling them to value each other as contributors (Aronson, 2005, 2008).

In their discussion team, students are given different roles of *captain*, *time keeper*, *secretary*, and *common member* to maintain smooth functioning groups or to strengthen positive interdependence. The opportunities are brought to the students to learn maximally on their own in this case by the additional role assigning in their group activities.

This paper is then primarily intended to reveal a typical reality of a current Asian classroom by highlighting three main issues related to role assigning in the implementation of Jigsaw technique: the students' perception concerning their own role, the students' perception concerning their own role related to the other roles in their expert team, and the overall perception on all roles assigned. Prior to the main discussion, the underlying theories of Cooperative Learning, Jigsaw, and Positive Interdependence are presented.

COOPERATIVE LEARNING

As Coelho (1992) states, cooperative learning is an approach to education based on the philosophy that education should be learner centered and learner directed; that learners can be teachers; and that teachers are guides and facilitators rather than the source of all knowledge and directions. Cooperative learning, argued by Kessler (1992) who refers to Olsen (1984), offers ways to organize group work to enhance learning and increase academic achievement.

It is carefully structured and organized so that each learner interacts with others. Similarly, Nurhadi (2004) defines cooperative learning as a learning approach focusing on the use of small groups of students who work together so that learning condition is maximized to attain learning objectives.

Referring to Slavin (1990), Jacobs, Lee and Ball (1996) in Tamah (2007) point out that cooperative learning requires students to work together to learn and to be responsible for their fellow students' learning as well as their own. Implicitly this sort of cooperation requires that student are prepared for the new learning paradigm. The students have the right to ask other members in the group for assistance and that they have the duty to assist the other group members who ask for help (Cohen *et al.*, 1994).

Slavin (1983), as quoted by Kessler (1992), states that cooperative learning helps the students interact with their peer in contributing to gains in academic achievement. In cooperative learning, the students can teach one another to accomplish the group goal. The students work together to learn and to be responsible for their fellow students' learning as well as their own. Further, Slavin (1994, p. 1) asserts "Cooperative learning methods are practical classroom techniques teachers can use everyday to help student learn any objectives, from basic skills to complex problem solving."

Similarly, Louisell and Descamps (1992) quoted by Harlim (1994) argue that the main purpose of cooperative learning is to increase academic achievement of the students, to improve relations between one student and the others (although they have different background). It also improves students' ability in problem solving. Besides that, students also learn how to interrupt other students politely, how to give their opinion, and how to praise other students.

McGroarty (1989), as quoted by Kessler (1992), identifies six major benefits of Cooperative Learning for students acquiring English. First, Cooperative Learning increases frequency and variety of second language practice through different types of interaction. Second, there is a possibility for development or use of the first language in ways that support cognitive development and increased second language skill. Third, Cooperative Learning

gives opportunities to integrate language with content-based instruction. Fourth, Cooperative Learning also gives opportunities to include a greater variety of curricular materials to stimulate language as well as concept learning. Next, it provides freedom for teachers to master new professional skills, particularly those emphasizing communication. The last one is that it gives opportunities for students to act as resources for each other, thus assuming a more active role in their learning.

Elements or basic principles of cooperative learning are not to be ignored to make teacher's efforts to obtain more productive group work. Johnson and Johnson (1994) mention 5 essential components of cooperative learnin[1]. They are (1) Face-to-face (promotive) Interaction, (2) Individual Accountability, (3) Interpersonal & Small-Group Skills or, keeping Johnson and Johnson's term, social skills, (4) Group Processing, and (5) Positive Interdependence. Face-to-face interaction is encouraged to promote each other's success. Students help, support, explain, and discuss the study material together with the members in the group. Individual Accountability is, Kagan and Kagan (1994) point out, making each other accountable for his or her own learning. It can be enforced by, among others, giving an individual test to each student. Working in group requires students to own Interpersonal Skills. Some social skills to be taught are Leadership, Decision-making, Trust-building, Communication, and Conflict-management skills. Group Processing occurs when students discuss how well they are achieving their goals and maintaining effective working relationships. They describe what actions are helpful and not helpful and they also decide what behaviors to continue or change. Positive Interdependence is related to the idea of sinking or swimming together. As Positive Interdependence is the cooperative learning component which becomes another main underlying theory, it will be discussed further in another sub-part of the paper.

Some cooperative techniques or 'structures' extensively claimed and employed are: Think-Pair-Share, Inside-Outside Circle, and Jigsaw. In

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[1] see also http://edtech.kennesaw.edu/intech/cooperativelearning.htm

Jigsaw, groups of 4 – 5 students (home teams) are formed and each group is assigned a part of the material to learn and then to teach to the other members in the group. The next sub-part focuses on Jigsaw which becomes another core of this paper.

JIGSAW

Jigsaw, initially introduced by Aronson in 1978, is one of the cooperative learning techniques (Slavin, 1985 uses the word 'techniques' and 'methods' interchangeably; meanwhile Clarke (1994) uses 'method', 'approach', 'activity', and 'process' interchangeably). It is a more systematic group work. Groups of 4 – 5 students are formed. Each group member is assigned a sub-part of material to learn and to teach his group members. To assist in the learning, students working on the same sub-part of the material get together to decide what is important and how to teach it. After learning together in these 'expert' groups, the original groups – the home teams – reform and students teach one another.

A teacher who employs Jigsaw agrees with the idea that her students are capable of learning by themselves. Each student is believed to own the capability to be the contributor of knowledge in class. Not only teachers can provide knowledge in class. Students themselves can be the contributors. Aronson (2005, 2008) puts it: "This "cooperation by design" facilitates interaction among all students in the class, leading them to value each other as contributors to their common task."

Presenting the benefits of Jigsaw, Aronson (2005, 2008) claims that it is an efficient way of learning. It is even more beneficial as the process in Jigsaw technique encourages listening, engagement, and empathy. Aronson (2005, 2008) more particularly points out: "First and foremost, it is a remarkably efficient way to learn the material. But even more important, the Jigsaw process encourages listening, engagement, and empathy by giving each member of the group an essential part to play in the academic activity."

Aronson (2005), as quoted by Tamah *et al*. (2007), states that Jigsaw is an efficient way of learning and it also has some benefits. Students have the opportunity to teach themselves, instead of having material presented to them. The technique fosters depth of understanding. Students have practice in peer teaching, which requires that they understand the material at a deeper level than students typically do when simply asked to produce on an exam. Students "talk geology" and become more fluent in use of geological terminology. Each student has a chance to contribute meaningfully to a discussion, something that is difficult to achieve in large-group discussion. Each student develops an expertise and has something important to contribute.

POSITIVE INTERDEPENDENCE

In small groups, the students are expected to share their ideas freely, comfortably, and effectively by facing each other. However, group work has its risks. The students might not discuss what they should discuss in the group. There is also a possibility for one student to dominate the discussion and make the other members passive. They might not think of the success of the group as the success of each member. When this occurs, the group lacks of what Johnson and Johnson (1989) in Johnson and Johnson (1994) call "positive interdependence".

Positive Interdependence, claimed by Kagan and Kagan (1994) as "the most basic principle in cooperative learning", is created whenever an achievement of one group member means an achievement of another as well as the failure of one group member means a failure of another. The students realize that they are positively interdependent one another in the learning group – that everyone in the group sinks or swims together (Kagan & Kagan, 1994), and that "no one is successful unless everyone is successful" (Male, 1994).

Male (1994) categorizes some types of interdependence. *Goal interdependence* is introduced when the teacher, for instance, says, "You're not finished until

everyone in the group can explain how a computer works." When the teacher says, "Each of you will be an expert on a different aspect of the story -- one on the setting, one on the characters, and one on the plot, then decide together how to retell the story", *Task interdependence* is employed. In *Resource interdependence*, the teacher gives only one sheet to the group rather than one sheet for each student so that they work together to, for example, record the group's predictions of how life would be in the future on that one worksheet. Using *Role interdependence*, the teacher may state: "Each of you will have job; one of you will be a checker, for example, to make sure that everyone can explain how an answer is obtained. I will give your group credit for how well each of you does your job." Related to *Reward interdependence*, the typical teacher's encouragement is: "If everyone on the team scores at least x, then you will get y bonus points for your own grade."

In this paper which is a report of a study on Jigsaw in a listening class, *Role interdependence* is taken as the issue to center. Each member in the expert team is assigned a different role to strengthen positive interdependence. Sherman (1994, p. 27) argues "Each team member must have a role, so duties are shared in a predetermined way."

When students work in group, they need to have a leader so the group can work better. Aronson (2006, 2008) puts it, "Leaving the groups leaderless creates problems …." The leaderless group will have trouble getting organized and accomplishing the task. Some other roles that can be assigned vary. Cohen *et al*. (1994) putting forward some widely used roles and the function of role assigning assert: "The most widely used roles are facilitator, materials manager, recorder/reporter, safety officer, and harmonizer. … Each role is designed to help the group function and work together more efficiently. Many of these roles are roles the teacher plays in the whole class setting. Instead of asking the students "to mind their own business," as in the conventional classroom, in group work, we are asking the students to mind each other's business." (Cohen *et al*. 1994, pp. 88-89)

Sherman (1994) writes some roles to include in science class are principal investigator, materials manager, recorder, and spokesperson. The *principal*

investigator is in charge of the group, and coordinates the activity or experiment. This person also assumes the responsibility of overseeing the rotation of roles before the next activity begins. The *materials manager* collects the materials the group needs. This person may be supplied with a list of materials to gather from a general supply area, or collect preassembled materials packets for the activity. The *recorder* is responsible for writing down the observations of the group. The recorder may create tables or charts for the group. The *spokesperson* reports the group's findings to the class and ensure that each one understands the material and can explain what has been done. The *timekeeper* keeps the group working within the assigned time period, while the *gatekeeper* tries to have each member participate equally. The gatekeeper role is especially good for a student who has difficulty working in the group. This particular role keeps the students very busy, and tends to occupy the student who has extra energy. The *checker* makes sure that each group member understands the task and agrees with how the group arrived at its conclusions. The *encourager/praiser* looks for individual contributions that deserve praise and rewards those contributions with positive comments. Meanwhile Jacobs, Lee and Ball (1996) state some possible roles to maintain smooth functioning groups: a time-keeper, a noise monitor, an encourager, a reporter, a secretary, and a checker.

Cossette and Saba (2000) suggest some roles that can be applied in 'expert team'. The member who gets the role as *leader* should manage the process of the discussion. The leader should make sure that each member of the 'expert team' has chance to share his/her idea. The member who gets the role as *secretary* should take a note about important information or opinions that appears in the discussion. He/she may help the leader if the leader gets stuck. The member who gets the role as *time keeper* should pay attention to the time besides paying attention to the discussion. His/her role is making sure the discussion will finish on time. The member who gets the role as *speaker* should report what the group has discussed before. He/she may report with a note that has been written by the secretary or without note. The other members of 'expert team' who do not get those 4 main roles will be the

encourager. They should give contributions and their ideas in the discussion. In this paper, the assigned roles are modified and simplified as the roles of a captain, a secretary, a time keeper and a common member.

STUDENTS' PERCEPTION ON ROLE ASSIGNING IN JIGSAW CLASS

Research Method

The data were obtained from two classes of junior high schools X and Y in Surabaya, Indonesia. The second grade students belonging to the academic year of 2007/2008 were involved. They studied listening materials using Jigsaw on three regular English classes. As expected, they were grouped into their home teams and expert teams each of which were allocated for 15 - 20 minutes. In expert teams consisting of 4 - 5 students, each student was assigned a different role: the captain, the time keeper, the secretary and the common member. The captain's role is coordinating the group work, making certain every one contributes and keeping the group on task. The secretary's role is keeping notes on important information appearing in the discussion. The time keeper's is keeping track of time and reminding group how much time is left. The common member was not assigned a special role, but was asked to contribute to the discussion. The role was ensured every time prior to their expert team work. The teacher reminded the captain to ensure every one contributed in the discussion.

A set of questionnaire was used to obtain the data to indicate students' perception on role assigning. An observation sheet and a recorder to record the interview with some students were also employed as a cross check. In the five-statement questionnaire, Likert scale comprising 1 (strongly disagree) to 4 (strongly agree) was used to reveal the students' perception on the role assigned to them when they studied in their expert team on two out of three Jigsaw classes.

At school X, there were actually 36 students. However, when the data were

taken, 2 students and 1 student were absent on the second and third Jigsaw classes respectively. At school Y, there were 48 students and all of them were present when the data were taken.

On the implementation, 8 expert teams were formed. There were then 8 captains, 8 time keepers, 8 secretaries in each class. For the role of 'common member', the number varied depending on the number of students present on the days when the data were taken. Totally 32 students having the role of 'captain', 32 'secretary', 32 'time keeper' and 69 'common member' were available.

The next sub-part deals with the classroom reality revealed in three issues: the students' perception concerning their own role, the students' perception concerning their own role related to the other roles in their expert team, and the overall perception on all roles assigned.

Student Perception Concerning Their Own Role

Item number 1 in the questionnaire concerned about the students' perception on the role they got in the expert team. Did the respondents agree that the role they got enabled them to discuss well?

The questionnaire having been analyzed indicated that totally only 1 captain on the second implementation, disagreed, 12 agreed, and 3 strongly agreed. On the third implementation, no captain 'strongly disagreed' to the statement, 2 disagreed, 12 agreed, and 2 strongly agreed to the statement. The captains' perception on their own role is summarized in Table 1 below the paragraph depicting the common members' perception on their own role.

On the second implementation totally 1 secretary strongly disagreed to the statement 'The role I get enables me to discuss well'. Similarly, totally only 1 secretary disagreed. Altogether 13 secretaries agreed to the statement; 1 agreed strongly to the statement. On the third implementation totally 2 secretaries disagreed to the statement and 25 agreed. Totally 2 secretaries strongly agreed to the statement. The secretaries' perception on their own role is summarized also in Table 1.

On the second implementation no time keeper strongly disagreed to the

statement 'The role I get enables me to discuss well'. Two time keepers disagreed; twelve agreed to the statement. Two keepers agreed strongly to the statement. On the third implementation one time keeper strongly disagreed to the statement. Two disagreed to the statement. Nine agreed to the statement; three strongly agreed. The time keepers' perception on their own role is summarized also in Table 1.

On the second and third implementation altogether one common member strongly disagreed to the statement 'The role I get enables me to discuss well'. Six disagreed, 54 agreed, and 8 agreed strongly. The students' perception on their own role is summarized in Table 1.

TABLE 1
Perception on One's Own Role

The role I get enables me to discuss well	Captain's		Secretary's		Time-keeper's		Common member's	
	Total	%	Total	%	Total	%	Total	%
Strongly Disagree	0	0.0	1	3.13	1	3.13	1	1.45
Disagree	3	9.38	3	9.38	4	12.50	6	8.70
Agree	24	75.00	25	78.13	22	68.75	54	78.26
Strongly Agree	5	15.63	3	9.38	5	15.63	8	11.59
Total	32	100	32	100	32	100	69	100

Table 1 indicates that no captain (0%) disagreed strongly to the statement 'The role I get enables me to discuss well'. Three captains (9.38%) disagreed plainly. Those agreed comprised 15.63%; those strongly agreed amounted to 15.63%. Table 1 also indicates that one secretary (3.13%) disagreed strongly to the same statement. Three secretaries (9.38%) disagreed plainly. The secretaries agreeing comprised 78.13%; the ones strongly agreeing amounted to 9.38%. As revealed in Table 1 above one time keeper (3.13%) disagreed strongly to the statement 'The role I get enables me to discuss well'. Four (12.50%) disagreed plainly. Those agreeing comprised 68.75%; those strongly agreeing amounted to 15.63%. It is also clearly indicated in the table that one common member (1.45%) disagreed strongly to the statement 'The role I get enables me to discuss well'. Six (8.70%) chose 'disagree'. Those agreeing comprised 78.26%; those strongly agreeing amounted to 11.59%.

Student Perception Concerning Their Role Related to the Other Roles

Item numbers 2 and 4 in the questionnaire concerned about the students' perception on the role they got related to the other roles. Translated from the original Indonesian statements, they particularly said, 'I cannot discuss well because my friend does not play their role as expected' and 'My friends monopolize the discussion'. What were the respondents' answers to those statements?

On the second implementation, total of 6 and 8 captains respectively strongly disagreed and disagreed to the statement concerning their friends' not playing their role as expected. Only 1 captain agreed. Similarly merely 1 captain strongly agreed. On the third implementation 2 and 9 captains respectively strongly disagreed and disagreed to the statement. Three captains agreed; 2 strongly agreed. The captains' perception on the role they got related to the other roles role is summarized in Table 2 below the paragraph discussing the common member's perception on their own role related to the other roles.

On the second implementation totally 5 secretaries strongly disagreed to the statement concerning their friends' not playing their role as expected. Seven disagreed. Two agreed to the statement. Two agreed strongly to the statement. On the third implementation totally 4 secretaries disagreed strongly to the statement. Nine disagreed and two agreed to the statement. Only 1 secretary strongly agreed.

On the second implementation altogether 6 time keepers strongly disagreed to the statement 'I cannot discuss well because my friend does not play their role as expected'. Nine, one, and no time keepers opted 'disagree', 'agree' and 'agree strongly' respectively. On the third implementation 7 time keepers strongly disagreed to the statement. Four, five, and no time keepers chose 'disagree', 'agree' and 'agree strongly' respectively. The time keepers' perception on this particular issue is summarized also in Table 2.

On the second implementation 8 common members strongly disagreed to

the statement 'I cannot discuss well because my friend does not play their role as expected'. Twenty one disagreed. Five agreed; no common member strongly agreed. On the third implementation 9 common members strongly disagreed to the statement. Eighteen disagreed. Eight and no common members chose 'agree' and 'strongly agree' respectively. All students' perception on their own role related to the other roles is summarized in Table 2 below.

TABLE 2
Perception on One's Own Role Related to the Other Roles (1)

I cannot discuss well because my friend does not play their role as expected	Captain's		Secretary's		Time-keeper's		Common member's	
	Total	%	Total	%	Total	%	Total	%
Strongly Disagree	8	25.00	9	28.13	13	40.63	17	24.64
Disagree	17	53.13	16	50.00	13	40.63	39	56.52
Agree	4	12.50	4	12.50	6	18.75	13	18.84
Strongly Agree	3	9.38	3	9.38	0	0.00	0	0.00
Total	32	100	32	100	32	100	69	100

Table 2 above indicates that out of 32, 8 (25.00%) votes were 'strongly disagree'. Seventeen (53.13%) 'disagree', 4 (12.50%) 'agree' and 3 (9.38%) 'strongly agree' concerning their friends' not playing their role as expected. Table 2 also indicates that 9 secretaries (28.13%) disagreed strongly to the statement 'I cannot discuss well because my friend does not play their role as expected'. Sixteen (50%) disagreed plainly. The secretaries agreeing comprised 12.50%; the ones strongly agreeing amounted to 9.38%. Revealed in Table 2 is that 13 time keepers (40.63%) disagreed strongly to the statement concerning their friends' not playing their role as expected. Thirteen (40.63%) disagreed plainly. Those agreeing amounted to 18.75%. No one strongly agreed. It is obviously indicated in Table 2 that 17 common members (24.64%) disagreed strongly to the statement concerning their friends' not playing their role as expected. Thirty nine (56.52%) chose 'disagree'. Those agreeing comprised 18.84%. No one strongly agreed.

Seven captains on the second implementation strongly disagreed to the

statement 'My friends monopolize the discussion'. Eight disagreed. No captain agreed. Merely 1 captain strongly agreed. Meanwhile, four captains on the third implementation 'strongly' disagreed to the statement. Seven disagreed. Totally 3 agreed, and 2 strongly agreed. The captains' perception on the role they got related to the other roles role is summarized in Table 3.

Altogether 7 secretaries on the second implementation strongly disagreed to the statement 'My friends monopolize the discussion'. Similarly, 7 disagreed. One secretary agreed and one agreed strongly. On the third implementation 8 secretaries disagreed strongly to the statement. Seven disagreed; 1 agreed. No secretary strongly agreed.

Responding to the statement 'My friends monopolize the discussion', altogether 7 time keepers on the second implementation revealed their strong disagreement. Eight revealed their plain disagreement. No time keeper agreed and only 1 agreed strongly. On the third implementation 10 time keepers strongly disagreed to the statement. Three disagreed. One agreed to the statement; 2 strongly agreed.

Concerning the common members' answers to the monopoly case, 16 common members on the second implementation strongly disagreed to say that their friends monopolize the discussion. Seventeen disagreed. Only 1 agreed. No common member strongly agreed. On the third implementation 11 common members strongly disagreed to say that the discussion is monopolized by others. Sixteen disagreed and 8 agreed. No common member strongly agreed. All students' perception on their own role related to the other roles is summarized in Table 3 below.

TABLE 3
Perception on One's Own Role Related to the Other Roles (2)

My friends monopolize the discussion	Captain's		Secretary's		Time-keeper's		Common member's	
	Total	%	Total	%	Total	%	Total	%
Strongly Disagree	11	34.38	15	46.88	17	53.13	27	39.13
Disagree	15	46.88	14	43.75	11	34.38	33	47.83
Agree	3	9.38	2	6.25	1	3.13	9	13.04
Strongly Agree	3	9.38	1	3.13	3	9.38	0	0.00
Total	32	100	32	100	32	100	32	100

Table 3 above reveals that out of 32 captains, 11 (34.38%) chose 'strongly disagree' to the statement 'My friends monopolize the discussion'. Fifteen (46.88%) captains chose 'disagree', 3 (9.38%) 'agree' and 3 (9.38%) 'strongly agree' concerning their friends' monopolizing the discussion. It is also revealed that 15 secretaries (46.88%) disagreed strongly. Fourteen (43.75%) disagreed plainly. The secretaries agreeing comprised 6.25%; the ones strongly agreeing amounted to 3.13%. As indicated in Table 3, 17 (53.13%) time keepers disagreed strongly to the statement concerning their friends' monopolizing the discussion. Eleven (34.38%) disagreed plainly. One (3.13%) thought his/her friends monopolized the discussion. Three (9.38%) strongly agreed to say that their friends did so. It is clearly seen in Table 3 that about 39% common members disagreed strongly to the statement concerning their friends' monopolizing the discussion. Thirty three (47.83%) chose 'disagree'. Those agreeing amounted to about 13%. No common member strongly agreed.

Student Perception Concerning All Roles Assigned

Item numbers 3 and 5 in the questionnaire concerned about the students' perception concerning all roles assigned. The translated statements said, "I like role assigning for each student in group discussion" and "Group discussion becomes better because of the role assigned to each student". To what extent did the respondents perceive all roles assigned?

On the second implementation no captain strongly disagreed to the statement 'I like role assigning for each student in group discussion'. Similarly no captain disagreed. Nine agreed, and 7 strongly agreed. On the third implementation 1 captain 'strongly' disagreed to the statement. One captain disagreed. Related to the positive answer, totally 8 and 6 captains agreed and strongly agreed respectively.

On the second implementation no secretary strongly disagreed to 'I like role assigning for each student in group discussion'. No secretary disagreed. Nine agreed. Seven agreed strongly. On the third implementation no

secretary strongly disagreed to 'I like role assigning for each student in group discussion'. One disagreed. Twelve agreed. Three strongly agreed. The summary of the secretaries' perception described in this paragraph is presented in Table 4.

Responding to 'I like role assigning for each student in group discussion', 1 time keeper on the second implementation revealed his/her strong disagreement. No time keeper disagreed. Related to positive answer, 7 and 8 time keepers respectively chose 'agree' and 'agree strongly' to the statement. No time keeper on the third implementation strongly disagreed to the statement, and 3 opted 'disagree'. Meanwhile, concerning the other two options, 8 agreed and 5 strongly agreed.

No common member on the second implementation responded 'strongly disagree' to the statement 'I like role assigning for each student in group discussion'. Only 2 common members responded 'disagree'. Twenty one chose 'agree' as the response. 'Strongly agree' was chosen by 11 common members. Meanwhile, on the third implementation 1 common member strongly disagreed to the statement and 3 simply disagreed. The positive answer was obtained from 22 common members who chose 'agree' and from 9 who chose 'strongly agree'. The students' perception concerning all roles assigned is summarized in Table 4 below.

TABLE 4
Perception Concerning All Roles Assigned (1)

I like role assigning for each student in group discussion	Captain's		Secretary's		Time-keeper's		Common member's	
	Total	%	Total	%	Total	%	Total	%
Strongly Disagree	1	3.13	0	0.00	1	3.13	1	1.45
Disagree	1	3.13	1	3.13	3	9.38	5	7.25
Agree	17	53.13	21	65.63	15	46.88	43	62.32
Strongly Agree	13	40.63	10	31.25	13	40.63	20	28.99
Total	32	100	32	100	32	100	69	100

Table 4 above indicates that out of 32, 1 (3.13%) captain chose 'strongly disagree'. One (3.133%) captain chose 'disagree', 17 (53.13%) 'agree' and 13 (40.63%) 'strongly agree' when they responded to 'I like role assigning

for each student in group discussion'. Table 4 also indicates that no secretary disagreed strongly to the statement 'I like role assigning for each student in group discussion'. One secretary (3.13%) disagreed plainly. The secretaries who agreed comprised 65.63%; the ones who strongly agreed amounted to 31.25%. It is revealed in Table 4 that 1 time keeper (3.13%) strongly disliked role assigning for each student in group discussion. Three (9.38%) disliked plainly. Fifteen (46.88%) liked it. Thirteen (40.63%) strongly liked it. It is obviously indicated in Table 4 above that only one common member (1.45%) chose 'strongly disagree' as the response to the statement 'I like role assigning for each student in group discussion'. Five (7.25%) chose 'disagree'. Those agreeing comprised 62.32%; those strongly agreeing amounted to 28.99%.

On the second implementation no captain strongly disagreed to the statement concerning the positive effect of role assigning in group discussion. Similarly no captain disagreed. Meanwhile, 9 agreed and 7 strongly agreed. On the third implementation no captain strongly disagreed and 1 captain disagreed to the statement. Nine agreed and 6 strongly agreed.

On the second implementation the negative answers 'strongly disagree' and 'disagree' were not obtained from the secretaries concerning the positive effect of role assigning in group discussion. Eight agreed to the statement. Eight agreed strongly. On the third implementation no secretary strongly disagreed. Three disagreed. Nine agreed and four strongly agreed.

When asked to respond to 'Group discussion becomes better because of the role assigned to each student', on the second implementation no time keeper revealed his/her strong disagreement. No time keeper disagreed either. Ten agreed. Six showed their strong agreement to the statement. On the third implementation two time keepers revealed their strong disagreement. One plainly disagreed. The positive answers 'agree' and 'strongly agree' were obtained from 5 and 8 time keepers respectively.

On the second implementation no common member responded 'strongly disagree' to 'Group discussion becomes better because of the role assigned to each student'. No common members responded 'disagree'. Twenty three chose 'agree' as the response. The option 'strongly agree' was chosen by 11

common members. On the third implementation, 2 common members disagreed strongly. Six disagreed. Meanwhile, 19 agreed and 8 strongly agreed. The captain's, secretary's, time-keeper's, and common members' perception concerning all roles is summarized in Table 5.

TABLE 5
Perception Concerning All Roles Assigned (2)

Group discussion becomes better because of the role assigned to each student	Captain's		Secretary's		Time-keeper's		Common member's	
	Total	%	Total	%	Total	%	Total	%
Strongly Disagree	0	0.00	0	0.00	2	6.25	2	2.90
Disagree	1	3.13	3	9.38	1	3.13	6	8.70
Agree	18	56.25	17	53.13	15	46.88	42	60.87
Strongly Agree	13	40.63	12	37.50	14	43.75	19	27.54
Total	32	100	32	100	32	100	69	100

Table 5 above indicates that out of 32, no captain chose 'strongly disagree'. One (3.13%) captain chose 'disagree', 18 (56.25%) 'agree' and 13 (40.63%) 'strongly agree' when they responded to 'Group discussion becomes better because of the role assigned to each student'. Table 6 shows that out of 32, no captain chose 'strongly disagree'. Three (9.38%) chose 'disagree', 17 (53.13%) 'agree' and 12 (37.50%) 'strongly agree' when they responded to 'Group discussion becomes better because of the role assigned to each student'. It is also seen in Table 6 that 2 time keepers (6.25%) strongly disagreed with the statement 'Group discussion becomes better because of the role assigned to each student'. One time keeper (3.13%) disagreed. Fifteen (46.88%) did agree. Fourteen (43.75%) strongly agreed. It is obviously indicated in Table 6 that 2 common members (2.90%) chose 'strongly disagree' as the response to the same statement. Six (8.70%) chose 'disagree'. Those agreeing comprised 60.87%; those strongly agreeing amounted to 27.54%.

DISCUSSION

More carefully observed, Table 1 indicates that all the captains, secretaries, time keepers, and common members have similar perception on their own roles. Considering the percentage of 'agree' and 'strongly agree' (90.63% of the captains, 87.50% of secretaries, 84.38% of the time keepers, and 89.86% of common members) the writer found the average opinion of about 88%. The students believed that the roles they got enabled them to discuss well. The captains, secretaries, time keepers, and common members held consistent positive perception on how useful the role assigned to them was for their discussion.

This main finding is in line with the ones obtained from the interview. From the interview transcript, it is found out that among 11 students interviewed, 9 students answered YES to the interviewer's question 'Given the specific role, can you discuss well?' One said NO; one 'QUITE SO'. These findings are also supported by the ones from the observation form completed by the observers (contact the writer to get more information about the interview transcript and the completed observation form). The majority of the observers (80%) admitted that the students discussed well.

More careful observation on Table 2 indicates that all the captains, secretaries, time keepers, and common members have similar perception on their own roles related to the other roles. Considering the percentage of 'strongly disagree' and 'disagree' as the response to 'I cannot discuss well because my friend does not play their role as expected' (78.13% of the captains, 78.13% of secretaries, 81.25% of the time keepers, and 81.16% of common members), the writer found the average opinion of about 80%. The students refused 'I cannot discuss well because my friend does not play their role as expected' hence admitting that their friends played their role as expected. Considering the percentage of 'strongly disagree' and 'disagree' as the response to 'My friends monopolize the discussion' (81.25% of the captains, 90.63% of secretaries, 87.50% of the time keepers, and 86.96% of common members as indicated in Table 3), the writer found the average

opinion of 86.58%. The students refused to the statement hence admitting that there was no monopoly in the group discussion. The captains, secretaries, time keepers, and common members held consistent positive perception on how useful the other roles assigned to their friends. In brief the majority agreed to say that their own role was positively influenced by the other roles in the group.

This main finding is confirmed by the one obtained from the interview. From the interview transcript, it is found out that among 11 students interviewed, eight students gave negative answer to the interviewer's question concerning the monopoly and their friend's playing their role. The three others thought that their friends did not play their role as expected and that there were some friends monopolizing. Meanwhile, the observers (60%) disagreed to 'Some students monopolize in the discussion' and to 'Some students do not participate in the discussion'. In conclusion, the observers' perceptions paralleled the students'

The finding revealed in Table 4 shows that the majority of captains, secretaries, time keepers, and common members have positive perception on role assigning. Considering the percentage of 'agree' and 'strongly agree' as the response to 'I like role assigning for each student in group discussion', the writers found that the average percentage revealing the preference of role assigning is 92.36%. The students liked role assigning. The reasons – that the discussion ran more smoothly because of the role assigning – the interviewed students provided also support this particular finding. Considering the percentage of 'agree' and 'strongly agree' as the response to 'Group discussion becomes better because of the role assigned to each student', the writer, based on the data analysis revealed in Table 5, found the average percentage revealing the positive opinion on role assigning is 91.63%. This finding is in line with the preference indicated previously.

This last finding is supported by the result of the observers filling in the observation form. The observers (100%) agreed to 'The students like the role assigning'. The interviewed students who belong to the 'minority' in the previous discussion showed their positive perception concerning general role

assigning. All of the interviewed students did like role assigning. Generally, the expected finding might be related to the teacher's role – reminding the students regularly about their role assigning before they started the discussion.

CONCLUSION

The paper has presented a typical reality of a current Asian classroom by highlighting the perception on role assigning in Jigsaw class. It has initially reviewed three issues namely Cooperative Learning, Jigsaw and Positive Interdependence as the underlying theories of the primary discussion. The paper has eventually revealed one particular reality in the classroom where Jigsaw is applied. The classroom reality revealed is restricted to three issues: the students' perception concerning their own role, the students' perception concerning their own role related to the other roles in their expert team, and the overall perception on all roles assigned.

It is interestingly found out that the students held consistent positive perception on how useful the role assigned to them was for their discussion. Besides, the students also held consistent positive perception on how useful the other roles assigned to their friends. The majority agreed to say that their own role was positively influenced by the other roles in the group. In general the students perceived role assigning positively. Role assigning as a sort of positive interdependence is not without its value to maintain smooth functioning groups.

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