

## **MULTI-STRUCTURAL CLASS: WHAT AND HOW IT IS PERCEIVED**

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**Abstract:** The perception of “students’ learning which equals students’ being given knowledge” has brought about the theatrical mode of classroom instruction which is typically characterized by whole-class presentational techniques in which teachers perform most of the talking in order to transfer the knowledge to the students. Since this mode was ‘attacked’ quite relentlessly, teachers have been continually challenged to make a professional change. The professional demand is fortunately facilitated by the existence of innovations in teaching approaches, one of which is cooperative learning. Argued implicitly and/or explicitly in some references (e.g. Kagan et al., 1985; Kaye & Rogers, 1968; Sharan, 1994; Slavin, 1994; Tinzmann et al., 1990) is that it is not a good idea to rely on the exclusive use of cooperative classroom. This article is then intended to provide a model of multi-structural class design. It is in fact the exemplification of what the writer has implemented in her reading class of university students. Simply stated, the class which is designed to be multi-structural will be depicted and the students’ perception will, too.

**Keywords:** multi-structural, whole-class technique, cooperative learning, students’ perception, learning together, jigsaw.

The positive answer to “Does learning mean students’ being given knowledge?” has led teachers to employ the theatrical mode of classroom instruction. This type of instruction classically characterized by whole-class presentational techniques in which teachers perform most of the talking has been ‘attacked’ quite relentlessly. Since then teachers have been continually

challenged to make a professional change. Implied is that there is a demand for teachers to alter their 'old fashioned' teaching mode and to opt for 'modern' instructional modes.

However, the demand should not be regarded as a burden. Teachers are fortunate for the demand is lessened by the professional assistance of teaching methodologists. Some innovations or 'some dramatic developments' (referring to Nunan, 1999) have been available. Those methodologists' support covers innovations in teaching approaches and methods which are indeed helpful. Among the numerous widely introduced approaches is cooperative learning.

Cooperative learning is an attempt to find an alternative to 'frontal teaching' which is characterized by a teacher teaching the whole class at once (Toten et al., 1991 in Tamah, 2011), or an alternative to the 'lockstep' (Long et al., 1976; Gaies, 1985).

Due to the remarkable and growing popularity of cooperative learning, teachers seem to be persuaded to implement it (blindly) by plunging their classical lock-step practice. Their classroom instruction should be attached with the label of cooperative learning; otherwise, it is then considered to be unattractive. Along with the increase of proponents and publications concerning the effectiveness of the cooperative learning, the use of cooperative learning keeps expanding.

As Coelho (1992) contends, cooperative learning, which is termed '*pembelajaran gotong royong*' (Lie, 2002, p. 12), 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 direction. Cooperative learning, as argued by Olsen (1984) in Kessler (1992), 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. Cooperative learning is a learning approach emphasizing the use of small groups of students working together so that learning condition is maximized (Nurhadi, 2004; Johnson & Johnson, 1999 in Tuan, 2010).

Slavin (1990, cited in Jacobs, Lee and Ball, 1996) puts forward that in cooperative learning class, students are required to work together to learn and to be responsible for their fellow students' learning as well as their own. This particular nature of cooperation necessitates a new learning paradigm. The students have the right to ask for assistance from the other group members. More-

over, they have the duty to assist the other group members who ask for help (Cohen et al., 1994).

With regard to the benefits of cooperative learning, Law (2008) in Magnessio and Davis (2010) found a significant difference between a group of students in cooperative learning group and their counterparts in traditional instruction group. The cooperative learning group had more favorable perceptions of teachers' instructional practices and better reading comprehension than in the control group. Marzano and associates also found dramatic increases in achievement due to the implementation of cooperative learning (Kagan & Kagan, 2009).

A review of the cooperative learning literature (e.g. Felder & Brent, 2007; Johnson & Johnson, 1994; Kagan & Kagan, 1994) indicates five essential components of cooperative learning which are consistently mentioned. They cover (1) Face-to-face (promotive) Interaction, (2) Interpersonal & Small-Group Skills or, keeping Johnson and Johnson's term, social skills, (3) Group Processing, (4) Individual Accountability, and (5) Positive Interdependence. The last two components, i.e. Individual Accountability and Positive Interdependence, are the most widely reviewed.

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. Each of those activities can be structured into group task directions and procedures. Working in group requires students to own interpersonal skills. Some social skills to be drawn in are Leadership, Decision-making, Trust-building, and Communication 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.

Individual Accountability is making each other accountable for his or her own learning. It can be enforced by, among others, giving an individual test or quiz to each student. Positive Interdependence is "the most basic principle in cooperative learning" (Kagan & Kagan, 1994). It is created whenever an achievement of one group member means an achievement of another and the failure of one group member means a failure of another. The students ought to realize that they are positively interdependent on 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 in Tamah, 2008).

There are some types of positive interdependence: task interdependence, resource interdependence, reward interdependence and role interdependence (Male, 1994 in Tamah, 2008). Task interdependence is performed when the teacher, for instance, says, “Each of you will be an expert on a different paragraph of the text we’re going to discuss – student 1 takes care of paragraph 1, student 2 takes care of paragraph 2, student 3 paragraph 3.” Resource interdependence is established when only one sheet is provided for the group rather than one sheet for each student so that they work together to record the end result of the group work. A typical teacher’s encouragement “If everyone in the team scores at least  $x$ , then you will get  $y$  bonus points for your own grade” is used to ensure reward interdependence. Role interdependence is ensured by assigning roles to the group members to encourage interaction and discussion and to help the group function and work together more efficiently (Cohen et al., 1994).

Learning Together is listed as the first modern method of cooperative learning in Johnson et al. (2000). A class of Learning Together employs (1) formal cooperative learning where students work together for one class period to several weeks, (2) informal cooperative learning where students work together temporarily and (3) cooperative base groups, a heterogeneous one where students work with stable membership for a long term. Learning Together is also characterized by the five essential components of cooperative learning introduced previously. The lesson and classroom routine which is cooperative becomes another element of Learning Together. The last element, which is the consequence of the previous ones, is the alteration of the organizational structure of schools: the competitive/individualistic structure is changed into cooperative team-based one.

Initially introduced by Aronson in 1978, Jigsaw is one of the earliest of the cooperative learning techniques (Slavin, 1994). By and large it is characterized by the students’ being involved in two team discussions. The student is put firstly in the expert team. At the end of the expert team discussion the student is expected to be the expert of a particular material. The student is then put in the home team to share his or her expertise to the home team members.

The reason underlying Jigsaw technique is that students are capable of learning on their own. Each student is believed to possess the capability to be the contributor of knowledge in class. “This ‘cooperation by design’ facilitates interaction among all students in the class, leading them to value each other as contributors to their common task” (Aronson, 2008).

## **METHOD**

This study is intended to provide a model of multi-structural class design. It is in fact the exemplification of what the writer has implemented in her reading class of university students. Therefore the ‘what’ as stated in the title does not have a special method to depict. The method to obtain the perception is illustrated at the end of this section.

The class was a regular one at the English Department of a university in Surabaya, Indonesia where English is taught as a foreign language. It was a 21-student Reading class where semester 3 students were enrolled for Reading II course for 28 classroom sessions. The course outline was designed to fulfill the characteristics of multi-structural class – one that implemented not only whole class teacher-directed approach but also two cooperative learning techniques: Learning Together and Jigsaw.

The four elements of Learning Together were implemented in the classroom. One of the groupings – cooperative base group – was not adopted. No long term grouping was carried out; however, the heterogeneous grouping was maintained – in this case ability-oriented heterogeneity was employed. The sociometric method (Hopkins, 2008) for group composition was carried out by asking the students to write 3 names of their classmates whom they would like to work with in group. From this method 3 Group Formations were set. Group Formations 1 and 3 were for Learning Together implementation while Group Formation 2 was for Jigsaw implementation where each student was assigned to be in a home team and also in an expert team.

To depict how the multi-structural class was perceived, the writer made use of a set of questionnaires. It was distributed twice to the students. The first time is on the first session of the semester. It consisted of open-ended and closed-ended questions. The first 3 open ones covered “What is group work according to you?”, “To what extent have you experienced a cooperative learning class?”, and “Which do you prefer, whole-class teacher directed class or cooperative learning class?” The last 8 items were statements to be responded with numbers (a Likert scale ranging from 1 (strongly disagree) to 4 (strongly agree) was employed). At the end of the semester or the last session of the second half of the semester, the questionnaire was distributed again. This time the item “What is group work according to you?” was dropped.

## **FINDINGS AND DISCUSSION**

### **The Multi-Structural Class**

On the first session of the first half of the semester, the students were informed that they would be learning in a teacher-centered mode as well as student-centered mode of instruction. The course outline was shared along with the introduction of the new learning paradigm. The two essential components – Individual Accountability and Positive Interdependence – were then revealed.

On sessions 2 and 3 the class had a reading class which was teacher-directed. The text discussion was conventionally teacher-fronted. Firstly, triggering questions were posed to the students then the text was read silently. I then led the whole-class discussion. On session 4, the K-W-L reading technique established by Ogle (1986) was introduced and directly employed in the teacher-fronted class.

Sessions 5-7 were primarily for modeling group work. This was carried out due to the consideration of a persistent argument by educators (see Blatchford et al., 2003; Dörnyei, 1997; Graves, 1994; Jaques, 2000; Johnson & Johnson, 1995 in Dörnyei, 1997; Mercer, 2000; Tinzmann et al., 1990) that merely placing students in a learning group and expecting them to cooperate effectively may not lead to the expectation of effective group work. It was also in these sessions when the three essential components of cooperative learning – face-to-face interaction, interpersonal skills and group processing – were introduced and informally taught.

In a typical model session, two groups of students – the model group and the observer group – were set. The model group was in the middle of the class. The other students assigned to be the observers sat surrounding the model group – thus the ‘fishbowl’ technique (quoting Jaques, 2000) was used. Each member in the model group was assigned a different role: captain, secretary, time keeper, speaker, and/or encourager, indicating the component of *role interdependence*. The student assigned a captain role was in charge of coordinating the group work, ensuring everyone contributed and keeping the group on task. The student who became a secretary was assigned to keep notes on important information appearing in the discussion. The time keeper was assigned to keep track of time and remind group how much time left. The speaker’s job was to report what the group had discussed, and the speaker was also assigned to report without any note or with the note that had been written by the secre-

tary. The encourager's share was to identify individual contributions that deserved praise and to reward those contributions with positive comments.

Each student was given a K-W-L individual worksheet (an adaptation of Ogle's (1986)) and a text to discuss. They were given only 1 group worksheet. Put simply, the model group was provided with 2 kinds of worksheet: individual worksheets (depending on the number of the group members) and, to ensure *resource interdependence*, only 1 group worksheet. The reading task directions and procedures indicated in the worksheets were in fact used to ensure face-to-face interaction.

Meanwhile, the observers were divided into 2 groups. Half of them observed the model group discussion for the use of the expressions and the language in general, and the interpersonal or team work skills, and they then jotted down any breakdown in the flow of the discussion and its causes. The other half of the observers paid attention to how the model students did the tasks with regard to the roles assigned to each of the model students. All observers were provided with guiding questions for observation. They were also provided with the text discussed in the model group to assist them in their observation. The model session began when the model group discussed a text while the observers did their assigned task. The teacher-led feedback section was then performed. The observing groups reported their findings. The teacher eventually summed up by drawing the students' attention to the essentials of group discussion.

On session 5, I joined the model group as one of the group members. I took the role of 'captain' to give a model of group work while I was also a model member – a sort of encouragement before the students really worked on their own. On sessions 6 and 7, I joined the observers hoping that the model group could really get the chance to discuss on their own.

On sessions 8-12 the students worked in cooperative learning groups – Learning Together was employed. For sessions 8-11, I implemented Group Formation 1. The 4-student groups were asked to determine their own roles of 'captain', 'secretary', 'time keeper' and 'speaker' in each group. The 5-student group was also asked to do the same thing with an addition of the role 'encourager'. Once a role was assigned, the students kept the role (no role changing) on sessions 8-10. On session 11, the students were asked to rotate the roles among them in the group. On each of these sessions, the material for all groups was the same.

On these Learning Together sessions, the students were reminded of the model group work conducted in the previous sessions 5-7. Each group was also facilitated in performing the reading task by being presented with a note as seen below:

<b>GUIDE FOR GROUP WORK (+ 50-55 minutes)</b>
Step 1: about 5 minutes for the 'K' part: WHAT I (THINK) I <b>KNOW (K)</b> WHAT I (THINK) I WILL <b>KNOW (K)</b> AFTER READING THE TEXT
Step 2: about 30 minutes for the 'W' part about 5 minutes for Individual reading about 5 minutes for Individual completion of WHAT I <b>WANT TO KNOW OR CHECK (W)</b> related to (a) main idea(s)/ main discussion/purpose of the text, (b) inferences (implied information), and (c) factual information about 20 minutes for Discussion
Step 3: about 5 minutes for the 'L' part WHAT I HAVE <b>LEARNED (L)</b>
Step 4: about 10 minutes for Group Worksheet completion
Step 5: about 5 minutes for the speaker to report the result of group work.

Implied in the note is the typical scheme of a Learning Together session. The reading task started with the completion of the 'K' part (step 1) to activate students' prior knowledge before group discussion. By applying lock-step mode of teaching, I asked the students to fill in the 'K' part of the individual worksheet. As an example, on a session when "Indoor Pollution" was discussed, I asked "What comes to your mind when you hear INDOOR POLLUTION?" They were expected to write what they **know (K)** or what they think they **know (K)** about Indoor Pollution. Besides, they also wrote what they thought they would **know** after reading the text later. After that I randomly took a few answers as feedback for their individual work. The lock-step section ended when the students continued working on their own small groups to cover steps 2-5.

Initially the students read the text individually twice. The first reading was done without stopping; the second to complete the 'W' part. They wrote what they wanted to know or check later in the group discussion. They wrote the main idea and the implied information they found, and some factual infor-



mation they thought was important to keep. They also took notes on something they would ask to and discuss with their friends. They wrote them in the worksheet on the section "I don't understand the following parts". Subsequently, the students continued with the group discussion. The students learned from one another – assisting and getting assisted. They then completed the 'L' part writing what they had learned. They went on with the Group Worksheet completion which was intended to reveal the discussion result. Completing the Group Worksheet also meant finishing the task of making comprehension questions that might appear on the quiz or that were important to keep as a group work report (each group had to submit their group worksheet; this was done to ensure they really worked on the task). The group work was terminated when the student – the speaker of the group – reported the group work result.

As previously mentioned, sessions 8-12 were allocated for the students to work in cooperative learning groups where Learning Together was employed. However, session 12 was a bit different as it was designed for providing the model Jigsaw. Group Formation 2 (Teambuilding activity) to establish the 'will' to cooperate was carried out. Next, the students started working in their expert teams for their reading task (the students were not yet introduced to the term 'expert team' though). The materials for each team were not the same; four different materials were used.

On sessions 13-14 the class had a reading class which was teacher-directed. I started with the triggering questions, and then asked the students to read the text silently. The text discussion was conventionally teacher-fronted.

On the first session of the second half of the semester, the students' mid-semester test result was given feedback. Subsequently, an introduction to another technique of cooperative learning i.e., Jigsaw and of the terms 'home team' and 'expert team' was executed. The students were also reminded of the five essential components of cooperative learning.

Session 2 was primarily for modeling Jigsaw class. The students were placed in their expert teams and they again discussed the respective text they had read on session 12 of the first half of the semester. As this was only a review section and the expert team discussion was in fact similar to the one when Learning Together was implemented, it was done shortly. The students were then asked to form their home teams hence the implementation of Group Formation 2. To show how home team discussion was conducted or how the 'expertise' was expected to be shared, I applied the 'fishbowl' technique again.

On sessions 3-7 the Jigsaw was implemented fully. No model Jigsaw was provided. The students directly work on their expert team and home team. The typical Jigsaw session was sequenced as follows: preparation, brief teacher-directed section, student group discussion and quiz.

A 10 minute-preparation was used for checking class attendance, and reminding the students about the principle underlying cooperative learning. A typical encouraging reminder was "Well, each of you has your contribution in the group work. When you ask questions, it means you help others explain thus indirectly helps them learn more." Moreover, the students were reminded about Positive Interdependence and Individual Accountability – that they were expected to help one another so that at last the group members could do well on the quiz where the average of the member scores was taken and that each would get an individual final score taken from the average score and the individual quiz score.

Another 5-minute section was for the teacher to direct the completion of the 'K' part in the individual worksheet to activate the students' background knowledge and to stimulate and generate curiosity about the topic discussed. The teacher first wrote the text title on the board and asked a typical question, "What comes to your mind when you hear ...?" In short, the beginning section of Jigsaw class was similar to the one of Learning Together class.

Two important sections then followed: 40 minute expert team discussion and 30 minute home team discussion. The students first discussed the small portion of the reading text (labeled Parts A, B, C, and D for Experts 1, 2, 3, and 4 respectively). Then they learned the whole text from one another. A 10-minute quiz ended the class. The students did the quiz individually.

In the expert team discussion, after the pre-reading teacher-directed or the 'K' part completion, the students performed the silent reading intended to make the students more prepared for the group discussion. After the silent reading, each completed the 'W' part in the individual worksheet. The main group discussion started afterwards. The last 10 minutes was spent on preparing the questions to be taken to the home team. When there was still time, the individual rehearsal was done. Each student rehearsed verbally what he or she was going to share to the home team members later. The discussion in the expert team was implicitly similar to the one of Learning Together.

In the home team, the students shared their expertise following the pre-determined procedure. Each was assigned to share in about 7 minutes what had been learned in the expert team. Expert 1 got the first turn to share or 'teach'.

Meanwhile, the other members completed their individual worksheet. Expert 1 then questioned the other members to ensure the other members understood. The same procedure was repeated until Expert 4 got his or her turn. Eventually, the home team members completed the group worksheet where they wrote down the essential points for the quiz or for the group work report, and the questions predicted to appear on the quiz.

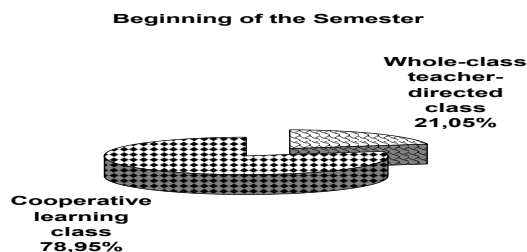
On sessions 8-9 the class again had a conventional reading class which was conventionally teacher-directed. On sessions 10-14, the students worked in small groups using Learning Together technique. On these last 5 sessions, Group Formation 3 was applied. As the new group formation was applied, I spent some time of session 10 for team building activity to establish the 'will' to cooperate.

### **The Multi-Structural Class: How It Is Perceived**

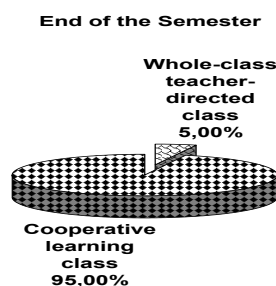
At the beginning of the semester, 85.7% respondents characterized a cooperative learning class as a class where students learn in small groups interacting with one another. Some quoted comments are: "Students work more in group than listen to the teacher", "In cooperative learning class, we would help each other, studying in group and solving the problem together", "Cooperative learning class is a class that students are managed into groups, they can discuss about the materials and the teacher monitors them". Interestingly enough, one respondent added "... sometimes that way [cooperative learning] abused my friend for example just sit, listening without discuss." – revealing the negative side of group work. The remaining 3 (14.3%) respondents gave unintended answers. Respectively they wrote: "Cooperative learning class is interesting", "NO IDEA", and "Teacher teaching students".

Related to the question "To what extent have you experienced a cooperative learning class?", all claimed to have ever experienced cooperative learning class. They said they experienced group work when they were in senior high school and when they took Integrated Course, Speaking, Reading, and TEFL classes, among others. A week after obtaining this particular answer, I spent sometime at the end of the class session to get the students' opinion about the cooperative learning experience. First, the course outline distributed on the first session was shown to them again. They were then asked if they had been exposed to such a course outline. They admitted it was the first time.

When the answers related to the preference on two major types of classroom structures are compared, the following result is obtained:



**Figure 1. Preference on Two Major Types of Classroom Structure at the Beginning of the Semester**



**Figure 2. Preference on Two Major Types of Classroom Structure at the End of the Semester**

It is shown in Figures 1 & 2 that the preference falls to Cooperative learning class both at the beginning and end of the course. The percentage even increases 16% from 79% (at the beginning of the course) to 95% (at end of the course). Their reasons at the beginning of the course are among others: "I think group work is a useful way to help us for understanding some lesson, we can ask our friend", "It makes us be active in the class and we can know each other", "It more enjoyable", "It is more convenient to discuss with friends/classmates than lecturer". Similar reasons are exposed by the students

at the end of the semester: “Sometimes we can ask our friends easier and maybe clearer”, “Students are more active”, “We need to know other people’s point of view”, “While we are learning, we can also socialize with others”.

Quite an interesting finding is revealed when detailed preference on types of classroom techniques is obtained. The finding is presented in Table 1.

**Table 1. Detailed Preference on Types of Classroom Structures**

Detailed Preference	Beginning of the semester		End of the semester	
	No	Yes	No	Yes
Only whole-class teacher-directed learning	4.8%	0%	0%	0%
Only group work	4.8%	6.7%	6.7%	6.7%
More sessions for whole-class teacher-directed learning	4.8%	0%	0%	0%
More sessions for group work	28.6%	46.7%	46.7%	46.7%
50-50	57.1%	46.7%	46.7%	46.7%
<b>Total</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>	<b>100%</b>

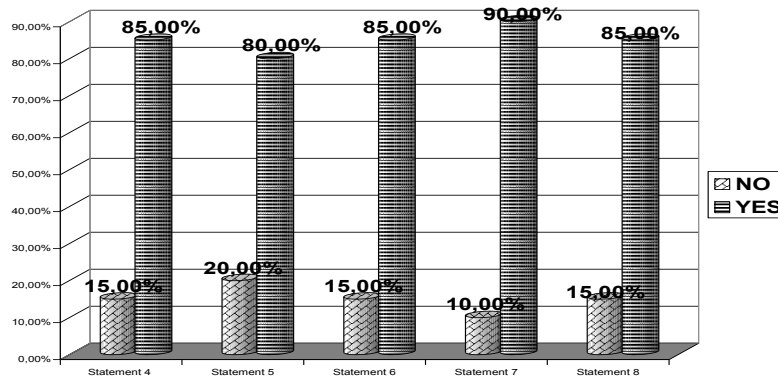
As seen in Table 1, at the beginning of the semester the majority preferred a moderate class – 50% for whole-class teacher-directed and 50% for cooperative learning. Two equally ‘strong’ parties (with the same 46.7% result) were indicated at the end of the semester: one with the preference of ‘More sessions for group work’, and the other one ‘50-50’. The other perception is revealed in Table 2.

**Table 2. Further Perception on Cooperative Learning**

Statement	Beginning of the semester			End of the semester		
	No	Yes	Total	No	Yes	Total
1. I like the idea of cooperative learning technique or peer-directed learning.	33.3%	66.7%	100%	13.3%	86.7%	100%
2. I like the idea of studying in small groups in this reading class.	19.1%	80.9%	100%	6.7%	93.3%	100%
3. I learn better with friends than with lecturers.	61.9%	38.1%	100%	35.7%	64.3%	100%

The students held consistent idea about their preference to cooperative learning as seen in their answers to statements 1 and 2 in Table 2. Nevertheless, at the beginning of the semester, quite an inconsistent answer appeared when they responded to statement 3. The majority (61.9%) disagreed to “I learn better with friends than with lecturers”. This might then be associated with their answer to the detailed preference previously presented. Though they liked cooperative learning more, they probably realized that they did not learn better with friends than with lecturers. They might be aware that they still needed the teacher’s expertise in guiding them chorally in understanding passages thus matching to the answer of ‘50-50’ (amounted to 57.1%) as indicated previously.

Related to the other aspects of the multi-structural class, the students’ perception is summarized in the following figure:



**Figure 3. Further Perception on Multi-structural Class Revealed**

Note:

- Statement 4: The model of group work is useful.
- Statement 5: It is enough to spend 4 sessions on the model of group work.
- Statement 6: It is enough to have three group formations implemented.
- Statement 7: The individual scoring makes me involved in the group discussion.
- Statement 8: The group or cooperative learning scoring makes me involved in the group discussion.

Having asked to state further idea related to statement 6 about the three group formations implemented, the majority (85% respondents) wrote “OK” or “great”. Some of them provided an elaborated opinion such as “I think that’s great! Because with changing in to another group, we can know each students and we can tell whose students will be the most great, the most clever, the most suitable with us to discuss.” and “It’s great because we have variety, we don’t get bored with the same students.” In short the students felt the advantage of getting to know more friends and the lessening of boredom – one of the purposes of group work. Ten percent respondents who disagreed suggested only 2 group formations. One of them noted “The group formation maybe will be better if we could choose our own members and I think there should be a ‘perco-baan’ [translation: try-out] with the group members. Did we feel comfort or not.” revealing the suggestion to let the students choose their own group members.

The answers to the last part in the questionnaire result in the perception on the two types of cooperative learning structures. Three respondents’ answers to this particular question were eliminated as they misunderstood the question. The rest 17 respondents chose option (a) indicating that 100% students preferred Jigsaw to Learning Together. Most respondents revealed the reason of working with more friends as they were involved in 2 different teams (expert and home teams). The other reason concerned with the burden that was reduced as only a small portion of the text was to be discussed in the expert team. Three respondents similarly commented on the chance of sharing their expertise. One of them, for instance, wrote: “We can share what we have learned and more improve our skill”. It seems they feel the advantage of teaching peers – the sort of activity which is not easily available in the conventional teacher-directed class.

The multi-structural class which implicitly possessed the label of cooperative learning had been implemented for one semester. The students engaged had initially shown the preference on cooperative learning. The preference was maintained till the end of the semester – it was even indicated previously that there was a 16% increase from 79% to 95%. This would indicate that the increased preference was due to the various techniques employed – attributable to the multi-structural class hence confirming the argument “It is not a good idea to rely on the exclusive use of cooperative learning” which is acknowledged by the cooperative learning proponents themselves.

## CONCLUSIONS AND SUGGESTIONS

This study has focused on an exemplification of multi-structural class design. It reveals how the two major classroom structures – whole-class teacher-directed and cooperative learning – are implemented. Moreover it depicts how Learning Together and Jigsaw are incorporated. One particular instance of multi-structural class design has then been presented. This paper has also revealed students' perception on the multi-structural class. The majority of students in the multi-structural class indicated positive response to the implementation. Maintaining a multi-structural class is undoubtedly a good idea as no one method is recommended for all classroom instruction.

## REFERENCES

- Aronson, E. (2008). *Jigsaw basics*. Retrieved from <http://www.Jigsaw.org/tips.htm>.
- Blatchford, P., Kutnick, P., Baines, E., & Galton, M. (2003). Toward a social pedagogy of classroom group work. *International Journal of Educational Research, 39*, 153–172.
- Coelho, E. (1992). Jigsaw: Integrating language and content. In Kessler, C. (Ed.). *Cooperative language learning: A teacher's resource book* (pp. 129-152). New Jersey: Prentice Hall Regents.
- Cohen, E. G., Lotan, R. A., Whitcomb, J. A., Balderrama, M. V., Cossey, R. & Swanson, P. E. (1994). Complex instruction: Higher-order thinking in heterogeneous classrooms. In S. Sharan (Ed.) *Handbook of Cooperative Learning Methods* (pp. 82- 96). Westport: Greenwood Press.
- Dörnyei, Z. (1997). Psychological processes in cooperative language learning: Group dynamics and motivation. *The Modern Language Journal, 81*(4), 482-493.
- Felder, R. M. & Brent, R. (2007). Cooperative learning. In P.A. Mabrouk (Ed.), *Active learning: Models from the analytical sciences*, ACS Symposium Series 970, Chapter 4 (pp. 34–53). Washington, DC: American Chemical Society. Retrieved from <http://www4.ncsu.edu/unity/lockers/users/f/felder/public/Papers/CLChapter.pdf>



- Gaies, S. J. (1985). *Peer Involvement in Language Learning*. New York: Prentice Hall Regents.
- Graves, L. N. (1994). Creating a community context for cooperative learning. In S. Sharan (Ed.) *Handbook of Cooperative Learning Methods* (pp. 283-299). Westport: Greenwood Press.
- Hopkins, D. (2008). *A teacher's guide to classroom research* (4<sup>th</sup> ed.). Maidenhead, Berkshire: Open University Press.
- Jacobs, G.M., Lee and J. Ball. (1996). *Learning cooperative learning via cooperative learning*. Singapore: SEAMEO Regional Language Center.
- Jaques, D. (2000). *Learning in groups: A handbook for improving group work* (3<sup>rd</sup> ed.). London: Kogan Page Limited.
- Johnson, D. W., & Johnson, R. T. (1994). Learning together. In S. Sharan (Ed.), *Handbook of cooperative learning methods* (pp. 51-65). Westport: Greenwood Press.
- Johnson, D. W., Johnson, R. T. & Stanne, M. B. (2000). *Cooperative learning methods: A meta-analysis*. Retrieved from <http://www.co-operation.org/pages/cl-methods.html>
- Kagan, S. & Kagan, M. (1994). The structural approach: Six keys to cooperative learning. In S. Sharan (Ed.) *Handbook of Cooperative Learning Methods* (pp. 115-133). Westport: Greenwood Press.
- Kagan, S. Zahn, G. L., Widaman, K., Schwarzwald, J. & Tyrrell, G. (1985). Classroom cultural bias: Impact of cooperative and competitive classroom structures on cooperative and competitive individuals and groups. In R. E. Slavin, S. Sharan, S. Kagan, R. Hertz-Lazarowitz, C. Webb & R. Schmuck (Eds.) *Learning to cooperate, cooperating to learn* (pp. 277-312). New York: Plenum.
- Kagan, S. & Kagan, M. (2009). *Kagan's cooperative learning*. San Clemente, CA: Kagan Publishing. Retrieved from [http://www.kaganonline.com/free\\_articles/research\\_and\\_rationale/309/Cooperative-Learning-Frequent-Questions,1](http://www.kaganonline.com/free_articles/research_and_rationale/309/Cooperative-Learning-Frequent-Questions,1)
- Kaye, B. & Rogers, I. (1968). *Group work in secondary schools and the training of teachers in its methods*. London: Oxford University Press.

- Kessler, C. (Ed.). (1992). *Cooperative language learning: A teacher's resource book*. New Jersey: Prentice Hall Regents.
- Lie, A. (2002). *Cooperative learning: Mempraktikkan cooperative learning di ruang-ruang kelas*. Jakarta: Grasindo.
- Long, M. H., Adams, L., Mclean, M. & Castaños, F. (1976). Doing things with words—verbal interaction in lockstep and small group classroom situations. In J. F. Fanselow & R. H. Crymes (Eds.) *On TESOL 76: Selections based on teaching done at the tenth annual TESOL convention New York*. (pp. 137-153). Washington: TESOL.
- Magnesio, S. & Davis, B. (2010). A teacher fosters social competence with cooperative learning. *Kagan Online Magazine*, Fall/Winter 2010. Retrieved from [http://www.kaganonline.com/free\\_articles/research\\_and\\_rationale/185/A-Teacher-Fosters-Social-Competence-With-Cooperative-Learning](http://www.kaganonline.com/free_articles/research_and_rationale/185/A-Teacher-Fosters-Social-Competence-With-Cooperative-Learning)
- Mercer, N. (2000). *The guided construction of knowledge: Talk amongst teachers and learners*. Clevedon, England: Multilingual Matters.
- Nunan, D. (1999). *Second language teaching and learning*. Boston: Heinle&Heinle Publishers.
- Nurhadi. (2004). *Kurikulum 2004: Pertanyaan dan jawaban*. Jakarta: Grasindo.
- Ogle, D. M. (1986). K-W-L: A teaching model that develops active reading of expository text. *Reading Teacher*, 39(6), 564-570.
- Slavin, R. E. (1994). *A practical guide to cooperative learning*. Boston: Allyn and Bacon.
- Tamah, S. M. (2008). Role assigning in jigsaw classroom: An Asian classroom reality revealed. *The Journal of Asia TEFL*, 5(4), 117-140.
- Tamah, S. M. (2011). *Student interaction in the implementation of the jigsaw technique in language teaching*. (Doctoral Dissertation, Groningen University, Groningen, Netherland).
- Tinzmann, M. B., Jones, B. F., Fennimore, T. F., Bakker, J., Fine, C. & Pierce, J. (1990). *What is the collaborative classroom?* Oak Brook: NCREL.

Tuan, L. T. (2010). Infusing cooperative learning into an EFL classroom. *English Language Teaching* 3(2), 64-77. Retrieved from <http://www.ccsenet.org/journal/index.php/elt/article/view/6240/5012>