Using Two-Way Information – Gap Tasks To Encourage Equal Participation From The Students In Group Work Activities In An EFL Class At Nha Trang Teachers’ Training College
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>1</td>
</tr>
<tr>
<td>I. Introduction</td>
<td>4</td>
</tr>
<tr>
<td>II. Literature Review</td>
<td>13</td>
</tr>
<tr>
<td>III. Methodology</td>
<td>17</td>
</tr>
<tr>
<td>IV. Results</td>
<td>23</td>
</tr>
</tbody>
</table>

**References**

<table>
<thead>
<tr>
<th>Appendix</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Appendix 1</td>
<td></td>
</tr>
<tr>
<td>Appendix 2</td>
<td></td>
</tr>
<tr>
<td>Appendix 3</td>
<td></td>
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<tr>
<td>Appendix 4</td>
<td></td>
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<tr>
<td>Appendix 5</td>
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</tbody>
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“One must learn by doing the thing, for though you think you know it – you have no certainty, until you try.”
(Sophocles, 400 B.C.E., cited in Rogers 1983: 163)
(Markee, 1997, p. 42)

**TITLE**

**USING TWO-WAY INFORMATION – GAP TASKS TO ENCOURAGE EQUAL PARTICIPATION FROM THE STUDENTS IN GROUP WORK ACTIVITIES IN**
AN EFL CLASS AT NHA TRANG TEACHERS’ TRAINING COLLEGE

ABSTRACT

The use of group work activities has currently become popular in EFL (English as a Foreign Language) classrooms in Vietnam since Communicative Language Teaching is encouraged and required by the Government and the MOET (Ministry of Education and Training). Teachers use group work with the hope of creating equal opportunities for students to practise communicating in English as they believe Communicative Language Teaching means “using procedures where learners work in pairs or groups employing available language resources in problem – solving tasks.” (Richards & Rodgers, 1986, p.66) However, they cannot always achieve their goal. Many teachers claim that their students do not equally participate in group work activities. Some students are too talkative while some others are inactive. In the previous research in April 2006, which was about the level of students’ participation in group work activities in EFL classes at Nha Trang Teachers’ Training College (submitted to Ms. Prue Morris of Victoria University by the writer of this research in partial fulfillment of the requirements for her MTESOL), the same situation was acknowledged. It was also therein found that besides such factors as students’ personalities and learning styles, students’ interest in the task and topic, ways of grouping and students’ language ability, the presence or absence of two – way information – gap tasks has significant influence on the level of students’ participation in group work activities. This research, therefore, continues to look at the effect of two - way information – gap tasks on the
even levels of participation of students in group work activities. This innovation could be described as a bottom–up process as it was “indigenous to an institution” (White, 1988, p.118) with the researcher and teacher herself taking the roles of the **Change Agent**, **Adopter** and **Implementer**. Thirty second–year students of the English Class 2A, the researcher’s class, at Nha Trang Teachers’ Training College were the **Clients**. The results of the innovation were evaluated through such instruments as Live Observation with an Observation scheme, Questionnaire and Interview. The findings indicated that **two-way information – gap tasks really helped to generate a significantly greater equality of students’ participation** in the group work activities.
INTRODUCTION

English is taught throughout the world, by all sorts of teachers to all sorts of learners. Schools and classrooms differ greatly in their wealth, size and their provision of equipment. But whatever the conditions in which they are working, how to teach English the most communicatively and effectively seems to have been a vital issue for many English language teachers to settle. Thus, there has currently been a high emphasis on the practice of Communicative Approach in Language Teaching the world over in general and particularly in Vietnam where English is taught as a foreign language (EFL). This teaching approach highlights the importance of Learner – Centered classrooms where teachers’ talking time is minimised and students’ talking time is increased to the utmost. The ideal class size for this is ten to fifteen students per each, “more or less homogeneous in terms of proficiency” (Richards and Renandya, 2002, p.49). Disappointingly, the majority of real life EFL classes are large – sized and mixed ability ones, with over thirty, forty or even fifty students. The high number of students in each class and the differences in their levels make it difficult for every student to have a chance to practise English. Teachers, as a result, have recourse to pair and group work for the situation remedy. However, they are not always successful in conducting effective group work which, according to Penny Ur (1991, p.120), means “the discussion is not dominated by a minority of talkative participants: all get a chance to speak, and contributions are fairly evenly distributed.” Quite a few teachers claim that they fail to generate even levels of participation among students in group work activities.

This kind of failure is also experienced by the researcher herself and her colleagues, the English teachers at Nha Trang Teachers’ Training College. After returning from the
Teachers’ In – Service Training Courses on Communicative Language Teaching conducted by the Vietnam – Australia Training Programme in Hanoi, all of them have excitedly used group work activities in their speaking classes with the hope of increasing students’ talking time and giving everyone of them equal chance to talk and participate. Much to the teachers’ disappointment, though the total talking time of all the students in the class is increased, the level of contribution of each group member is uneven. As indicated in the findings of the researcher’s previous study, “A Research On Students’ Participation In Group Work Activities In Efl Classes At Nha Trang Teachers’ Training College” (see Appendix 1), during group work activities, some students were too talkative while some others were too inactive; they said nothing. The main reasons for the uneven level of students’ participation were found to be the following factors: students’ language ability, students’ personalities and learning styles, students’ interest in the task and topic, ways of grouping, and most important, the absence of information – gap tasks in group work activities.

Although there have been suggestions about the effect of two – way information – gap tasks on the even levels of participation of students in group work, there seem to be very few direct studies into the issue. And not many teachers are fully aware of the importance and usefulness of information – gap tasks so the successful implementation of group work is still hard to achieve. Therefore, this innovation research was to examine the possibility that two – way information – gap tasks would encourage equal participation from the students in group work activities in an EFL class. It was also hoped that the result of this study would help to confirm teachers’ belief in the value of Group work and Communicative
Language Teaching and more and more teachers would use Group work with Two – way information – gap tasks to facilitate students’ learning.

For the above – mentioned reasons, the aim of this bottom – up research was to answer the following question: “Will two – way information gap tasks encourage equal participation from the students in group work activities in an EFL class?”

A few key terms should be clarified prior to the research. These definitions were applied within the context of this research only:

1. **Group work activities**: oral / speaking activities done in small groups, normally group discussion.

2. **Two – way information gap tasks**: the group work tasks in which each member of the group keeps only one piece of information and the tasks can not be accomplished without everyone’s participation.

3. **Equal participation**: equal talking times and time, no dominant students, no inactive students in the groups.

This innovation took place at Nha Trang Teachers’ Training College with the researcher acting as the **Change Agent**, **the Adopter** and **the Implementer**. The **Clients** were thirty students (9 males and 21 females) of the English Class 2A, where the researcher is also the speaking teacher. The research lasted for 10 weeks, from the beginning of July 2006 till the middle of September 2006.

**LITERATURE REVIEW**

Cooperative Learning in CLT and the role of two – way information – gap tasks
It is recognised by many language teaching experts that *Cooperative Learning* (students working together in groups or *Group work* in short) is one of the popular aspects of Communicative Language Teaching (CLT) currently. Jacobs and Hall (1994, in Richards and Renandya, 2002, p. 52) point out that “in the last decade there has been a growing interest among ESL / EFL teachers in using cooperative learning activities.” And according to them, “Cooperative Learning is more than just putting students in groups and giving them something to do. Cooperative learning principles and techniques are tools which teachers use to encourage mutual helpfulness in the group and the active participation of all members.”

Brown (2001, p. 47) completely agrees with Jacobs and Hall (1994) when he recommends that “As students work together in pairs and groups, they share information and come to each others’ aid. They are a “team” whose players must work together in order to achieve goals successfully.” Richards and Platt (1992, p. 87), in the *Longman Dictionary of Language Teaching And Applied Linguistics*, suggest even more advantages of Cooperative Learning: “Such an approach to learning is said to increase students’ learning since a) it is less threatening for many students, b) it reduces the need for competitiveness, c) it reduces the teacher’s dominance in the classroom, and d) it increases the amount of student participation in the classroom.” Lewis and Hill (1985, p. 46) also determine that “Many, if not most, activities in the language classroom can be performed by the students working in groups. Working in this way means more students are directly involved; more students are talking, while the teacher talks less.” Agreeing on the advantages of Cooperative Learning, David Cross (1995, p. 58) states: “teachers can multiply the opportunities for practice and for creative language use by introducing pair and group work.” Sharing this agreement, Baker
and Westrup (2000, p. 131) strongly confirm that “pair and group work is a very good way to manage large classes with mixed abilities and it can improve motivation and students’ use of English. Pair and group work allows all students to practise language and to actively participate.” Le Thi Anh Phuong, in an article entitled *Problems and Solutions for General English Classes at Junior Colleges* printed in Teacher’s Edition (2002, p. 20) once again further elaborates: “the use of pair and group work can help teachers in dealing not only with large classes but also with mixed ability classes. By using pair and group work a teacher can increase student talking time and decrease teacher talking time. This helps to change classes from being more teacher – centered to being more student – centered.”

However, things are not so simple and “implementing Cooperative Learning is not like waving a magic wand: just say a few magic words, and *whoosh!* everything is working great.” (Jacobs and Hall, 1994 in Richards and Renandya, 2002, p.53) In fact, the success or failure of the implementation of Cooperative Learning (group work) depends on “teachers’ decisions on how much choice to give students in such matters as how, about what, and with whom they will collaborate, and how tightly to structure activities to help encourage effective cooperation.” (Jacobs and Hall, 1994 in Richards and Renandya, 2002, p.53)

Concerning the types of tasks suitable for use in group work activities, Le (2002, p. 20) suggests: “teachers must select appropriate group activities and monitor them carefully. For example, they can choose or create activities that have *information gaps* and interesting topics.” As pointed out by Richards and Platt (1992, p. 179), “in order to promote real communication between students, there must be an information gap between them, or between them and their teacher. Without such a gap the classroom activities and exercises
will be mechanical and artificial.” And according to Christine C. M. Goh (2003, p. 21), “Information – gap tasks are based on the principle that people communicate when there is a need to share information. In an information - gap activity, one person has certain information that must be shared with others in order to solve a problem, gather information or make decisions.” Furthering this idea, Neu & Reeser (1997) encourage that teachers should use information- gap tasks in which each participant plays an important role and the task cannot be accomplished without everyone's participation. Here, the importance shifts to the use of a special type of tasks, that is “two – way information – gap” ones. As recorded by David Nunan (1999, p. 52), “In a study reported in 1981, Long found that two – way tasks (in which all students in a group discussion had unique information to contribute) stimulated significantly more modified interactions than one – way tasks (that is, in which one student possessed all the relevant information).” Thus, it can be believed that information – gap tasks and especially two- way information gap will encourage equal participation from the students in group work activities.

The innovation and its rationale

Innovation in itself is a new concept and there have been a number of different definitions of innovation. About this issue, White (1988) writes:

“Miles (1964: 13), for instance, has emphasized organisational behaviour, while the definitions offered by Rogers and Schoemaker (1971: 19) and Rogers (1983: 11) highlight the personal perception and interpretation of innovation. This phenomenological view characterises much of the most insightful work on educational innovation (Hurst 1983: 52-3; Fullan 1982).

Drawing on these earlier definitions, Nicholls (1983:4) defines an innovation as ‘an idea, object or practice perceived as new by an individual or individuals, which is intended to bring about improvement in relation to desired objectives, which is fundamental in nature and which is planned and deliberate’.” (White, 1988, p.114)

Holding the same view as Nicholls’, White himself also emphasizes the difference between Innovation and Change: “What is innovation and how does it differ from change? Change is
considered to be any alteration in something between time 1 and time 2. Change can occur spontaneously and does not involve conscious planning or intention. *Innovation*, by contrast, is defined as involving *deliberate* alteration – intention is a crucial element.” (White, 1988, p.114) Therefore, it may be concluded that an innovation, on one hand, can be perceived as an attempt to change things for the better, but on the other hand, it can also be viewed as an *intentional try-out* to find whether a new idea works well or not in a particular social and cultural context. Accordingly, innovations are not necessarily always successful. On the contrary, the success or failure of an innovation, in most cases, is unpredictable and depends so much on the ways in which it is implemented and on the suitability of the models that it takes to the organizational culture and the sociocultural features of all the people involved. This innovation is a good example of the above-mentioned principle. It was successful because it was initiated by the need for improvement and it was firmly grounded on the real *teaching context* and the *classroom culture* of the institution where it took place.

**The teaching context**

Teaching context is said to be one of the key factors influencing the implementation of an educational innovation. This claim proves to be true in the case of this research. Nha Trang Teachers’ Training College (NTTTC) trains more than ninety percents of the English teachers for Primary, Secondary and High Schools in Khanh Hoa province. Thus, it is considered the cradle of the English teaching methodology and practice in the locality. With its leading position in the field, the college is very open to new things. It has always been taking the initiative in adopting and implementing any curricular innovation directed by the MOET and DOET (Ministry and Department of Education and Training). In Khanh Hoa, the
school is the first to change from traditional and structural approaches to Communicative Language Teaching. However, the teaching methodology practiced here is the *Weak version* of CLT, in the sense that much emphasis is “placed on oral work” (Holliday, 1994, p. 71). Also according to Holliday (1994, p.71), “although the *Weak version* produces much of the classroom methodology in current use and has been successful in many ways, some of its elements are restricted in application to classrooms of a relatively specific type within BANA English language education. It works admirably in classes of *up to fifteen students*, with the right acoustics and furnishings, where the students are mainly adults who come to class with the specific purpose of learning English and are prepared to conform to the learning group ideal.” Considering these features, NTTTC is not an ideal environment for CLT *Weak version* to be applied because the school still lacks the required conditions like small – sized classes and right acoustics and furnishings. Therefore, as a situation remedy, and especially after attending the Teachers’ In – Service Training Courses on Communicative Language Teaching conducted by the Vietnam – Australia Training Programme in Hanoi, all the English teachers in this college have excitedly used group work activities in their speaking classes with the hope of increasing students’ talking time. Then, pair and group work becomes one important focus in classroom observation and teaching evaluation due to the teaching belief that in CLT *Weak version*, “student oral participation is at a premium; and student talking time is an important measurement of a ‘good lesson’.” (Holliday, 1994, p. 71). From this particular reality, a research on how to enhance students’ participation in group work activities has its practical values and is encouraged by the College Authority, the Dean of Department and other teachers as well.
The school and classroom culture

Culture is very important to innovation because “cultures are not rooted in absolutes. They are products of human activity and thinking and, as such, are people-made.” (Murphy 1986 quoted in Holliday 1994, p. 260). Since innovation affects people, it has to be related and respondent to culture. Concerning this issue, Holliday (1994) has explored the role of national and local culture in the success and failure of curricular innovations. He states: “I have developed the notion that there is a deep element to what happens between people in the classroom, consisting of psycho-social, informal and micro-political factors influenced by the wider social environment, and that only by attending to these can appropriate methodologies be devised.” (p.161)

From the definitions by Nicholls (1983, p.4) and White (1988, p.114), innovation can be understood as an attempt to seek for appropriate methodologies. And according to Holliday (1994. p. 162), “achieving appropriate methodology depends on learning about what happens between people in the classroom.” He argues that TESEP institutions have a different purpose socially from BANA institutions and that therefore innovations in TESEP institutions using methodology from BANA countries will not work unless local classroom cultures are taken into account. (Holliday, 1994). Once again, he asserts that “an appropriate methodology must by nature be culture-sensitive. (Holliday 1994, p.162)

Based on the above-mentioned arguments, it can be said that the school and classroom culture in NTTTC is a favourable condition and an impetus for this innovation to take place. The college culture is a rather decentralized one with a little more autonomy for the teachers. It means that, although there are syllabus guidelines from the MOET, the Dean
of the department, after consulting all the teachers’ opinions, makes decisions of the textbooks used. Moreover, as described in page 8, the college is open to new things. It is becoming more low – structured now and allows teachers with more freedom to be as innovative as they can. During the process of teaching, teachers can make any adaptation or change to the techniques or materials that they think will best suit their students and help them to improve their knowledge and skills. In this case, the innovation that the researcher wants to implement is really for the benefit of students. In NTTT College, students have different linguistic backgrounds (some of them have 7 years’ experience of learning English, some others have studied English for only 3 years and the others has never learned English, they learned French at High school) and different social backgrounds. They come from different parts of Khanh Hoa such as Nha Trang city, Dien Khanh, Ninh Hoa, Van Ninh districts or even from the remote areas like Khanh Vinh and Khanh Son where there is almost no chance for learners to practise English outside classrooms. Besides, they belong to the collectivist culture, as described by Hofstede (1986 cited in Holliday, 1994, p. 192), in that they “only speak up in small group.” Therefore, group work is necessary for them to practice using the target language and the attempt to create equal chance for them to participate in group work by using two- way information- gap tasks is worth taking.

The type of social change

This innovation indicates an *Immanent Change* because according to Markee (1997, p.48), “*Immanent change* (or self- motivated change) occurs when the persons who recognise a need for change and those who propose solutions to a perceived problem are all part of the same social system.” In the case of this innovation, the researcher herself realised the need
for change and she also thought of the solution. Though the notion of two-way information-gap tasks has already been addressed by language teaching methodologists, there seemed to be no direct suggestions of using this kind of tasks to generate even levels of students’ participation in group work activities. Besides, since the innovation took place out of the teacher’s own willingness, she held the part of an “internal change agent” and had full sense of “ownership”, which according to Markee (1997) is more likely to lead to success.

**The models of innovation**

**Problem-solving model**

Markee (1997, p.67) also asserts that the problem – solving model “coupled with a normative – reeducative strategy of change is theoretically the most popular approach to promoting change in education.” And according to White (1988, p. 123-124), “a problem – solving approach is also at the basis of action research, whose aim is to make use of research in modifying and improving curriculum practice, thus having a direct relationship to innovation and reform. Indeed, the term “action” research embodies the aims of this approach – the commitment to action, to the elimination of problems and to the growth of practical understanding and the improvement of practice…” This innovation took the model of problem – solving or, more specifically, the form of an action research with the problem being articulated by the “insider” (the researcher and also the class teacher). It followed the bottom-up process which means more teacher’s sense of ownership and responsibility, and thus more likelihood to be successful.

**Social interaction model**
Another aspect of the social interaction model lies in how the ideas of innovations are socially diffused. As stated by Rogers (1993 quoted in Markee 1997, p.62) and Cooper (1982, 1989, quoted in Markee 1997, p.62), “the most important insight that this model offers change agents is the claim that diffusion is nothing less than a form of communication. … Languages spread through the establishment of communication networks.” Once this innovation is found to be successful, its result will be spread to other teachers in the college through social communication or informally reported by the researcher in the Department monthly meeting. Hopefully, there will also be a possibility that the innovation would spread even beyond the college, by means of social interaction when the researcher’s colleagues enter other social networks.

The roles of stakeholders

According to Fullan (1982a quoted in Markee, 1997, p.43), “teachers are key players in all language teaching innovations; however, many other individuals also have a stake in the innovation process”. In much the same way, White (1988) defines stakeholders as all the people who are involved in an innovation.

Since this innovation takes the form of a problem – solving model, the researcher plays the roles of an adopter (the person who makes the decision to change), an implementer (who has to implement the innovation) and the change agent (the person who is responsible for managing the innovation). The students in the class are the clients who receive the innovation. From the beginning till the end of the research, the researcher always received assistance from her colleagues, active participation from the students and there were
no intervention from the Management Authority or anyone else. So it may hopefully be said that there are no Resisters to this innovation.

**METHODOLOGY**

**The participants**

The innovation was implemented at the English Class 2A of Nha Trang Teachers’ Training College with the participation of 30 second – year students who are training to become teachers of English at Lower Secondary Schools after graduation. The students of the class come from different parts of Khanh Hoa province such as Nha Trang city, Dien Khanh, Ninh Hoa, Van Ninh districts or even from the remote areas like Khanh Vinh and Khanh Son where there is almost no chance for learners to practise English outside classrooms. In this sample class, there are 9 male and 21 female students with ages ranging from 19 to 22 (one 22, four 21, three 20 and the rest 19). Among them, 17 students have 7 years’ experience of learning English at Secondary schools, 11 students have learned English for 3 years at High school and especially there are 2 students who did not learn English at Secondary and High schools (they studied French in stead of English) but they got an Elementary –level certificate of English from a Language Center. Now the students are in the first term of the 2006 – 2007 academic year and the result of their first year’s second - term scores of Speaking is as follow :

1/ 2.0 – < 5.0 marks : 10 students
2/ 5.0 - < 7.0 marks : 12 students
3/ 7.0 - < 9.0 marks : 6 students
4/ 9.0 marks : 2 students
(* Note: The total score is 10 marks in which 40 % (4 marks) was given in the end - of - term Speaking examination, 60 % (6 marks) was given for the participation of students in class oral activities during the term (on- going assessment )

This sample class was chosen because it is quite a good representative of large and mixed ability classes in the college so that it would be more probable to ensure the generalisability of the innovation’s results. Besides, it was convenient to conduct the study because the researcher is also the speaking teacher of the class in this school year.

To serve the purpose of the research, the students were deliberately put into 6 groups of five. Each group must consist of 5 students of different levels according to the term scores and especially, the marks of on-going assessment: 1, 2, 3, 4 as previously listed. (Only two groups have one student of 9 marks per each). And the students kept to the same groups from the beginning till the end of the study.

**Phases of the innovation**

This innovation research was carried out from the beginning of July to Mid September 2006. The schedule was as follow:

<table>
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<tr>
<th>From July 1st to September 15th</th>
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<td>Week 1, 2</td>
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<td>Week 3</td>
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<tr>
<td>Week</td>
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<td>------</td>
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</table>
| 4, 5 | Observation stage 1: Sessions 1, 2, 3 (Group work *without* using Two-way information-gap tasks)  
Questionnaire: at the end of session 3 |
| 6, 7, 8 | Observation stage 2: Sessions 4, 5, 6, 7, 8, 9 (Group work *using* Two-way information-gap tasks)  
Structured interview: at the end of session 9 |
| 9, 10 | Analysing the collected data and Interpreting the results of the innovation  
Writing the report |

**Evaluation instruments**

In order to record and evaluate the results of this innovation, the following instruments were used:

1. *Live observations with observation scheme*:

Three fellow teachers from the English Department and three students from 3rd and 4th year classes came and helped to observe the class in group work activities. Each person was in charge of 1 group. They closely followed the interaction of students in the group in order to mark and count their turns and turn-taking (their talking times and time). Whenever the students said something in English to perform the task, they had to note down in the Observation Scheme (see Appendix 2). Attention was also given to the way the teacher introduced and managed group work activities and the tasks she used (to make sure that the teacher strictly followed the try-out plan)
*Notes:* The 3<sup>rd</sup> and 4<sup>th</sup> year students were called for help because other teachers were very busy teaching their own classes. Besides, the observation task was not so difficult and the research subjects are less psychologically embarrassed at their presence than the teachers’ and this might result in more objective observation outcome.

There were 9 sessions of observation scheduled evenly in 5 weeks, deliberately divided into 2 stages:

- **Stage 1 (Sessions 1-3):** Group work *without* using Two-way information-gap tasks
- **Stage 2 (Sessions 4-9):** Group work *using* Two-way information-gap tasks

In stage 1, only the data of Observation session 3 were collected and analysed in order to obtain valid and reliable results because it took students some times to get used to the presence of observers. In stage 2, the data of Observation sessions 8 and 9 were all collected and analysed for comparison. By doing this way, the researcher hoped to avoid the *Instability* of the measurement of results.

During the study, the subjects were not informed about the use or not use of two-way information-gap tasks because it was thought to be unnecessary and the researcher wanted that the study would not be affected by Hawthorne effect and Subject expectancy.

2. **Questionnaire:**

The questionnaire was developed in the form of closed and open questions (see Appendix 3) and were delivered to the students by the observers at the end of the 3<sup>rd</sup> observation session. The aim of the questionnaire was to double check the results of the observation and to find out more about the factors affecting students’ participation in group work activities.
3. **Structured Interview:**

Individual interviews (Appendix 4) were carried out with 14 deliberately selected students who showed the greatest changes in the levels of participation in group work before and after the treatment (these students used to be the group dominants and the most inactive members). The interviews were done after observation session 9 by the teacher observers and were tape recorded to assure the objectivity of the research. It then served as a source of cross-reference to double check the result of the observation analysis. (The reason for using interview instead of questionnaire was to avoid Practice effect).

**RESULTS**

**Findings**

1. **From Live Observation:**

The data collected from *Live Observation* were analysed and the following results were found:

- In the Observation session 3 (the Pre-treatment stage: group work without two-way information – gap tasks), 4 out of 6 groups (66.6%) showed the uneven level of students’ participation (See tables 1-4 below). There were both group dominants and too inactive students in the groups.

*Table 1: Level of participation of students in Group 1, Pre – treatment stage*

<table>
<thead>
<tr>
<th>Name of student</th>
<th>Student’s times of talking (short turns + long turns)</th>
<th>Group’s total turns</th>
<th>Percent (%)</th>
<th>Student’s total talking time</th>
<th>Group’s talking time</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>13</td>
<td>30</td>
<td>43.33</td>
<td>5 mins</td>
<td>9 mins</td>
<td>55.55</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>30</td>
<td>3.3</td>
<td>5”</td>
<td>9 mins</td>
<td>0.92</td>
</tr>
<tr>
<td>C</td>
<td>3</td>
<td>30</td>
<td>10</td>
<td>40”</td>
<td>9 mins</td>
<td>7.40</td>
</tr>
<tr>
<td>D</td>
<td>6</td>
<td>30</td>
<td>20</td>
<td>75”</td>
<td>9 mins</td>
<td>13.88</td>
</tr>
</tbody>
</table>
In the Observation sessions 8 and 9 (the Post-treatment stage: group work with two-way information-gap tasks), all the 6 groups (100%) showed the significantly more even levels of students’ participation. There were neither group dominants nor inactive students in the groups. (See tables 5–10 below)
Table 5: Level of participation of students in Group 1, Post – treatment stage

<table>
<thead>
<tr>
<th>Name of student</th>
<th>Student’s times of talking (short turns + long turns)</th>
<th>Group’s total turns</th>
<th>Percent (%)</th>
<th>Student’s total talking time</th>
<th>Group’s talking time</th>
<th>Percent (%)</th>
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<tbody>
<tr>
<td>A</td>
<td>12</td>
<td>45</td>
<td>26.66</td>
<td>4 mins 10”</td>
<td>15 mins</td>
<td>27.77</td>
</tr>
<tr>
<td>B</td>
<td>6</td>
<td>45</td>
<td>13.33</td>
<td>1 mins 50”</td>
<td>15 mins</td>
<td>12.22</td>
</tr>
<tr>
<td>C</td>
<td>7</td>
<td>45</td>
<td>15.55</td>
<td>2 mins 20”</td>
<td>15 mins</td>
<td>15.55</td>
</tr>
<tr>
<td>D</td>
<td>9</td>
<td>45</td>
<td>20</td>
<td>2 mins 40”</td>
<td>15 mins</td>
<td>17.77</td>
</tr>
<tr>
<td>E</td>
<td>11</td>
<td>45</td>
<td>24.44</td>
<td>4 mins</td>
<td>15 mins</td>
<td>26.66</td>
</tr>
</tbody>
</table>

Table 6: Level of participation of students in Group 2, Post – treatment stage

<table>
<thead>
<tr>
<th>Name of student</th>
<th>Student’s times of talking (short turns + long turns)</th>
<th>Group’s total turns</th>
<th>Percent (%)</th>
<th>Student’s total talking time</th>
<th>Group’s talking time</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>10</td>
<td>43</td>
<td>23.25</td>
<td>3 mins 10”</td>
<td>15 mins</td>
<td>21.11</td>
</tr>
<tr>
<td>B</td>
<td>11</td>
<td>43</td>
<td>25.58</td>
<td>4 mins</td>
<td>15 mins</td>
<td>26.66</td>
</tr>
<tr>
<td>C</td>
<td>6</td>
<td>43</td>
<td>13.95</td>
<td>2 mins 20”</td>
<td>15 mins</td>
<td>15.55</td>
</tr>
<tr>
<td>D</td>
<td>7</td>
<td>43</td>
<td>16.27</td>
<td>2.5 mins</td>
<td>15 mins</td>
<td>16.66</td>
</tr>
<tr>
<td>E</td>
<td>9</td>
<td>43</td>
<td>20.93</td>
<td>3 mins</td>
<td>15 mins</td>
<td>20</td>
</tr>
</tbody>
</table>

Table 7: Level of participation of students in Group 3, Post – treatment stage

<table>
<thead>
<tr>
<th>Name of student</th>
<th>Student’s times of talking (short turns + long turns)</th>
<th>Group’s total turns</th>
<th>Percent (%)</th>
<th>Student’s total talking time</th>
<th>Group’s talking time</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>8</td>
<td>40</td>
<td>20</td>
<td>2 mins 50”</td>
<td>15 mins</td>
<td>18.88</td>
</tr>
<tr>
<td>B</td>
<td>6</td>
<td>40</td>
<td>15</td>
<td>1 mins 50”</td>
<td>15 mins</td>
<td>12.22</td>
</tr>
<tr>
<td>C</td>
<td>7</td>
<td>40</td>
<td>17.50</td>
<td>2 mins 20”</td>
<td>15 mins</td>
<td>15.55</td>
</tr>
<tr>
<td>D</td>
<td>10</td>
<td>40</td>
<td>25</td>
<td>4 mins</td>
<td>15 mins</td>
<td>26.66</td>
</tr>
<tr>
<td>E</td>
<td>9</td>
<td>40</td>
<td>22.50</td>
<td>3.5 mins</td>
<td>15 mins</td>
<td>23.33</td>
</tr>
</tbody>
</table>

Table 8: Level of participation of students in Group 4, Post – treatment stage

<table>
<thead>
<tr>
<th>Name of student</th>
<th>Student’s times of talking (short turns + long turns)</th>
<th>Group’s total turns</th>
<th>Percent (%)</th>
<th>Student’s total talking time</th>
<th>Group’s talking time</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>7</td>
<td>45</td>
<td>15.55</td>
<td>2 mins 20”</td>
<td>15 mins</td>
<td>15.55</td>
</tr>
<tr>
<td>B</td>
<td>6</td>
<td>45</td>
<td>13.33</td>
<td>1 mins 50”</td>
<td>15 mins</td>
<td>12.22</td>
</tr>
<tr>
<td>C</td>
<td>12</td>
<td>45</td>
<td>26.66</td>
<td>4 mins 10”</td>
<td>15 mins</td>
<td>27.77</td>
</tr>
<tr>
<td>D</td>
<td>11</td>
<td>45</td>
<td>24.44</td>
<td>4 mins</td>
<td>15 mins</td>
<td>26.66</td>
</tr>
<tr>
<td>E</td>
<td>9</td>
<td>45</td>
<td>20</td>
<td>2 mins 40”</td>
<td>15 mins</td>
<td>17.77</td>
</tr>
</tbody>
</table>

Table 9: Level of participation of students in Group 5, Post – treatment stage
Table 10: Level of participation of students in Group 6, Post – treatment stage

<table>
<thead>
<tr>
<th>Name of student</th>
<th>Student’s times of talking (short turns + long turns)</th>
<th>Group’s total turns</th>
<th>Percent (%)</th>
<th>Student’s total talking time</th>
<th>Group’s talking time</th>
<th>Percent (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>7</td>
<td>43</td>
<td>16.27</td>
<td>2.5 mins</td>
<td>15 mins</td>
<td>16.66</td>
</tr>
<tr>
<td>B</td>
<td>6</td>
<td>43</td>
<td>13.95</td>
<td>2 mins 20”</td>
<td>15 mins</td>
<td>15.55</td>
</tr>
<tr>
<td>C</td>
<td>11</td>
<td>43</td>
<td>25.58</td>
<td>4 mins</td>
<td>15 mins</td>
<td>26.66</td>
</tr>
<tr>
<td>D</td>
<td>9</td>
<td>43</td>
<td>20.93</td>
<td>3 mins</td>
<td>15 mins</td>
<td>20</td>
</tr>
<tr>
<td>E</td>
<td>10</td>
<td>43</td>
<td>23.25</td>
<td>3 mins 10”</td>
<td>15 mins</td>
<td>21.11</td>
</tr>
</tbody>
</table>

*Note: During all the observation sessions, the teacher (and also the researcher of this study) strictly followed the try – out plan. She had good management of group work activities. So it could be confirmed that teacher’s management of group work had no influence on any changes in students’ participation levels in group work activities.

2. From Questionnaire:

All the 30 questionnaires delivered to the students were returned in completed form (100 %). The answers of students in the questionnaire corresponded with the results of the observation analysis. They all noticed that there was one or two dominant students and two inactive students in each group. About the reasons for their levels of participation, **5 out of 30 students** (16.66 % ) chose answers c, d, g, h (c. I liked that activity very much; d. I had a lot of ideas to say; g. No one said anything so I had to talk; h. I knew all the answers so I told my friends in order to complete the tasks quickly.) while **9 out of 30 students** (30 %)
ticked answers a, b, e, f (a. I had no ideas to say; b. I didn’t like that activity; e. Everyone had the information so there was no need to say anything; f. The task was still completed without my contribution.) These numbers matched the number of students found to be too dominant or inactive in the group work activities through Observation data analysis.

3. From Interview:

All the 14 students who were interviewed said that the changes in their participation levels were due to the new kind of task which the teacher used in group work activities after the time of questionnaire. The “used to be dominant students” told the interviewers that they only possessed one piece of information needed to fulfill the task so they could not talk more even though they wanted to. And “the used to be inactive students” admitted that they were forced to speak out because without their contribution, the group task could not be completed. However, all of them noticed that the group work tasks were not completed as quickly as before because it took longer time for some group members to convey their information. Two students (the previously dominant ones) said they were not very happy with this change because they talked less and they felt impatient to wait for the other members to express their idea.

Discussion

The above – mentioned findings suggested that the using of two-way information – gap tasks really helped to manipulate a significantly greater equality of students’ participation in the group work activities. (See the Diagrams below)
As expected by the researcher from the beginning of this innovation, there were no more either group dominants or inactive members and the students shared the same responsibility for the completion of the group work tasks.

Much as the main purpose of the research (that is encouraging even levels of participation of students in group work activities) was remarkably achieved; however, new problems have arisen. Through students’ answers in the interview and continual conversations with her colleagues, especially the teachers who helped with the observations, the researcher found that it took longer time than before for the group work tasks to be completed, which in fact is a challenge for the timing of the lesson. Another entailed problem was that students (particularly the “used to be inactive and may be the weaker ones”) started to use more Vietnamese than usual in order to get their information and ideas understood more quickly and clearly by the other group members.

**EVALUATION and CONCLUSION**

**Strengths**

To some extent, this innovation is a success. It produced positive results as expected because it was initiated by the need for improvement and it was firmly grounded on the real teaching context and the classroom culture of the institution where it was consciously planned and implemented. Besides, as this innovation took the model of Problem – Solving or, more specifically, the form of an Action Research with the problem being recognized and defined by the “insider” (the researcher and also the class teacher), it followed the bottom-up process which means more teacher’s sense of ownership and responsibility, and thus more likelihood to be successful. In addition, the researcher received great supports from colleagues and students, which is also one favourable condition for the innovation to be successfully implemented.

Taking into consideration the “Five Core Characteristics of Innovations” suggested by Rogers (1983 cited in Markee, 1997, p.59): *Relative advantage, Compatibility with previous practice, Complexity, Trialability and Observability*, this innovation is a successful one. First, it is
not too similar nor too different to current practice as group work has been in used in NTTTC for nearly 7 years but the usefulness of two-way information gap tasks in group work activities has not been fully aware of by all the teachers. Second, it is not too complicated but in fact is easy to observe and carry out. And finally, it may probably be adopted by other teachers because it has the advantage of encouraging students’ equal participation in group work activities, one of the concerns in evaluating classroom teaching and learning.

Seen from another viewpoint, this innovation can also be considered an evaluation process with clear purposes: “Teacher self-development” and more important “Curriculum development and betterment” (Rea-Dickens and Germaine, 2001, p.254). And as defined by Rea-Dickens and Germaine (2001, p.254), and Richards (2001, p.288-291), it is “Formative evaluation”, “Summative evaluation” and “Illuminative evaluation” as well. It is “Formative evaluation” because the information or data were collected from “different people over a period of time” (Rea-Dickens and Germaine, 2001, p.254) through questionnaire, interviews with students and conversations with colleagues during the process of implementing the innovation. It is “Summative evaluation” because it involved “measurement, and analyses of the statistical significance of results obtained” (Rea-Dickens and Germaine, 2001, p.254), which was the counting of the turns and turn-takings of students in group work activities at the end of the implementation period. Finally, it is “Illuminative evaluation” as “it seeks to provide a deeper understanding of the processes of teaching and learning that occur in the program” (Richards, 2001, p.289). That is it tried to examine how students participated in group work, whether two-way information-gap tasks could help to generate equal participation of students in group work activities or not and to which extent it could help. Furthermore, this evaluation process made use of both quantitative and qualitative measurement: observation and counting turns and turn-takings, questionnaire and interview. Therefore, its validity and reliability are significantly high.

Weaknesses
Though the innovation was on the whole successful, it still have some limitations. Firstly, it was not conducted on a large scale and observations only looked at one sample class so its result might not be of very high representativeness. Secondly, the study would still be affected by Maturation because after some time working together in the same group, the students might get closer to each other and they could feel more confident to speak in front of close friends and became proficient at collaboration. Thirdly, it has some entailed problems such as longer time being required for the completion of the tasks or the students’ tendency of using more Vietnamese than before. Though it is accepted in CLT that students can use mother tongue when necessary, it is preferable that the first language should be of as little use as possible. Finally, the time for the implementation of the innovation was quite short, only two months and a half, so it was not ideally enough for all the advantages and disadvantages of the treatment to emerge.

Another thing that should be considered an obstacle to this innovation is the limited source of two-way information-gap tasks suitable for the teaching syllabus at NTTTC. In most cases, teachers need to spend time adapting available tasks to suit their students’ levels, interests and their teaching aims. This poses a threat to the adoptability of the innovation. As it is time-consuming and effort-demanding, it may possibly be not immediately and permanently adopted by other teachers.

**Conclusion**

This study was an attempt to investigate the possibility that two-way information-gap tasks would encourage *equal participation from the students in group work activities in an EFL class*. It produced positive results as expected by the researcher and thus helped to confirm teachers’ belief in the value of *two-way information-gap tasks in group work* and *Communicative Language Teaching*. However, it also has some problems that in turn *need to be carefully addressed*. What is more, as any improvement requires time and effort, the innovation itself is very time-consuming and skill-demanding, especially in collecting and designing two-way information-gap tasks. Therefore, it is suggested that there should be a *secondary innovation* on
where to find and how to adapt two-way information – gap tasks so that the innovation can hopefully be adopted by more teachers.
REFERENCES


APPENDIX 1

EXTRACT FROM PREVIOUS RESEARCH

The following passage is an extract from my own research submitted to Ms. PRUE MORRIS of VU as an assignment paper for the module Research Methodology. This research looked at students’ participation pattern during group work and tried to find out the practical reasons for their uneven contribution in group work activities.

Discussion

The above-mentioned findings suggest that the size of group, the gender and age of students, and the teachers’ management of group work do not account for the uneven contribution of students in group work activities in EFL classes at Nha Trang Teachers’ Training College. Teachers are experienced and familiar with conducting group work. All the students are from 18 to 22 years of age, which is not a significant difference. And among the dominant and too inactive students, there are both males and females so gender may not be a matter. The students were put in groups of 5, which is said by many methodology experts to be a good size for group work. Then, the problem here rests in 4 main aspects: students’ personalities and learning styles, students’ language ability, ways of grouping (which students will work together) and most important, the types and kinds of tasks used. About the students’ personalities and learning styles, students’ language ability and ways of grouping, there is not much that can be done to improve the situation and long-term studies should be needed. With the frequency of answers chosen for question 8 (b: 81.25 %, j: 93.75 %, k: 100 %) and question 9 (answer b: 85 %, g: 100 %), it can be interpreted that students’ interest in the task & topic and the presence or absence of information gap in the tasks have great influence on the level of students’ participation in group work activities. From this study it might be concluded that more attention should be given to the type of group work tasks that can strongly manipulate the active participation of all group members.

CONCLUSION & RECOMMENDATIONS

This study was an attempt to investigate the claim made by many teachers that students do not participate equally in group work activities and an effort to find out the reasons for their uneven contribution. Therefore, the researcher of this study was lucky to receive a lot of assistance from colleagues and positive cooperation from students to achieve her goal. However, there are still some limitations. Firstly, it was not conducted on a large scale so its result might not be of very high representativeness. Secondly, the study might be affected by the researcher’s expectation so the data could not be completely objective. From the findings of this study, it might be possible that an innovation session would follow to investigate the possibility that two-way information gap tasks will encourage equal participation from the students in group work activities in an EFL class. Hopefully, the result of the innovation will help to confirm teachers’ belief in the value of Group work and Communicative Language Teaching and more and more teachers will use Group work to facilitate students’ learning.
APPENDIX 2

OBSERVATION SCHEME

Name of Observer : ………………………………………………………………………………… …………
Name of Teacher : Do Thi Thu Hue
Class : English 2A
No. of students : 30
SS’ Proficiency level : Intermediate
Group : …………………………………………………………………………………………………………
No. of students in group: …………………………………………………………………………………
Group work activity ( min. ) : …………………………………………………………………………………
Date of observation : ……………………………………………………………………………………………
Visit No. : …………………………………………………………………………………………………………

Observation focus : Students’ level of participation in group work

PART I : Teacher’s management & type of task used in group work activity

Instructions to the observer : Tick ( √ ) the appropriate box for your answer about what you can notice when the teacher conducts the group work activity.

1. Does the teacher state the purpose of the activity ?  Yes No
2. Are the teacher’s instructions clear? Yes No
3. Does the teacher check SS’ understanding of what to do during groupwork activity? Yes No
4. Does the teacher set time for the group work to finish? Yes No
5. Does the teacher use information – gap task ? Yes No
6. The task used is : One – way information – gap Two – way information – gap
7. Does the teacher go round the groups to see what is going on and offer help if needed? Yes No

PART II : Students’ level of participation in group work

Instructions to the observer:

- Fill in the table below with the information required about the students in the group you observe.
- Place a slash (/) in the short turn column each time a student produces one or two utterances in English or speaks in English for less than 5 seconds to contribute to the completion of the task.
- Place a slash (/) in the long turn column each time a student produces more than 2 utterances in English or speaks in English for more than 5 seconds to contribute to the completion of the task.
Note down the time (ex: 10 seconds / 32 seconds) for each long turn.
<table>
<thead>
<tr>
<th>Name of student</th>
<th>Short turn</th>
<th>Long turn</th>
<th>Total turns</th>
<th>Total talking time</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
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<td></td>
<td></td>
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</tr>
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</tr>
<tr>
<td>5</td>
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</tr>
<tr>
<td>6</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX 3

QUESTIONNAIRE
(Vietnamese version was delivered to the students)

Dear Students,

We are doing a research on the influence of group work tasks on the students’ level of participation in group work activities in EFL classes. So you will help us a lot if you can take time to answer these questions as fully and as accurately as possible. Then return this questionnaire to your teacher. Remember if the research goes well, you will also benefit from it.

Thank you very much for your cooperation.

Please tick (✓) or write your answers for the following questions:

1. Name: …………………………………………………………………………………

2. Gender: Male Female

3. Class: …………………………………………………………………………………

4. Group: ………………………………………………………………………………..

5. Date: …………………………………………………………………………………

6. How many members were there in your group? …………………………….

7. How much did you talk to participate in the group work task?
   A. Not at all         B. Very little        C. Adequately        D. A lot

8. What are the reasons for your answer in question 7? Tick (✓) all the answers that you think apply to you.
   a. I had no ideas to say.
   b. I didn’t like that activity.
   c. I liked that activity very much.
   d. I had a lot of ideas to say.
   e. Everyone had the information so there was no need to say anything.
   f. The task was still completed without my contribution.
   g. No one said anything so I had to talk.
   h. I knew all the answers so I told my friends in order to complete the tasks quickly.
   i. I kept an important piece of information. Without my contribution, my group could not complete the task.
   j. Others; please specify: ……………………………………………………
      …………………………………………………………………………………
9. How did other members in your group contribute to the completion of the group work task? Tick (✓) all the answers that you think could best describe the situation.
   a. One or two persons kept talking all the time, the rest listened.
   b. One or two persons talked most of the time, other members said something but very short and one person even said nothing.
   c. Most people talked quite a lot, but some people did not say anything or talked very little.
   d. Everyone contributed equally to the completion of the task.
   e. Others; please specify: ..........................................................................................................................

10. Who talked the most in your group? .................................................................
    Why? ..................................................................................................................................................

11. Who talked the least in your group? .................................................................
    Why? ..................................................................................................................................................

12. What should teacher do to help all the members of your group participate more equally to the group work tasks? .................................................................
    ..................................................................................................................................................

😊

Thank you very much for your cooperation.
APPENDIX 4

INTERVIEW QUESTIONS
( To students )

1. What ‘s your name ?
2. Which group are you in ?
3. How did you participate in the group work tasks this time & the two last times after the questionnaire ? Did you participate more or less than before the questionnaire ?
4. Why did you talk more ?
5. Why did you talk less ?
6. How about the other members in your group ? Did they talk more or less ? Why ?
7. Could your group complete the task as quickly as before or more quickly or less quickly ?
8. Are you happy with this change ?
9. What did your teacher do to help all the members of your group participate more equally in the activity ? Could you notice any changes in the group work tasks ?

APPENDIX 5

AN EXAMPLE OF INFORMATION – GAP TASKS

(This task was extracted & adapted from the group discussion activity; “Who Gets The Heart?”, page 7 – 11, from the book “The Non- Stop Discussion Workbook” by George Rooks, Boston: Heinle & Heinle Publishers, 1988 )

* Task materials:

Information Cards

<table>
<thead>
<tr>
<th>Patient 1</th>
<th>Patient 2</th>
</tr>
</thead>
</table>
| Amegneza Edorh, female, age 57. Mrs. Edorh, a renowned poet and novelist from Nigeria, received the 1987 Nobel Prize for literature. | Alicia Fagan, female, age 27. Ms. Fagan’s heart problems, though recent, seem to have a genetic basis inasmuch as her twin sister }
**Teaching steps:**

1. Teacher pre-teaches the new words (renowned, inspiration, deteriorating, dramatically, bout, welfare, donor, recipient …) in the information cards & instructions.
2. Teacher divides the class into 5 groups, using color cards. Each group consists of 6 members.
3. Teacher delivers the information cards to the students (1 card / 1 student). The cards are placed upside down on the table so that the students can’t see the content of the cards.
4. Teacher sets the scene for the discussion, gives each group one piece of *situation reminder* as follow & explain what students do not understand about the situation.

   "You are members of the heart transplant surgery team at a university hospital in Washington, D.C. At the moment, you have six patients who desperately need a transplant if they are to have any chance of living. All six patients are classified as "critically ill", and could die at any time.

   You have just received news that the heart of a 16-year-old boy who was killed in an auto accident has become available for transplantation. Speed is extremely important as you decide which of the following patients is to receive the heart: not only might one of the patients die, but the donor heart will soon begin to deteriorate.

   Remember that the age and sex of the donor has no relationship to the age and sex of the recipient. In other words, the heart of the 16-year-old would work well in a 50-year-old woman. Size, however, might be a consideration in the case of the infant.

5. Teacher instructs students on what they have to do in the group work task:

**Patient 3**
Soohan Kim, male, age 12. Soohan, a junior high school student from South Korea, was born with a congenital heart defect. Doctors wanted to wait until he was a teenager to replace his heart, but his condition has worsened dramatically. He is being kept alive on a heart-lung machine.

**Patient 4**
Galia Feinstein, female, age 27. Mrs. Feinstein is Ms. Fagan’s twin sister. Mrs. Feinstein, who holds a Master’s degree from Harvard University in computer science, currently operates a computer business with her husband. (One daughter, age 4) Mrs. Feinstein’s condition differs from that of her sister in that her kidneys have not been affected.

**Patient 5**
Leonid Gromykovitch, male, age 34. Mr. Gromykovitch works for the U.S. government as a researcher for the Central Intelligence Agency. Born in the Soviet Union, Mr. Gromykovitch is considered the Agency’s foremost Kremlinologist (Soviet expert). Like patient 3, Mr. Gromykovitch is being kept alive on a heart-lung machine. Unmarried (his wife died in an automobile accident), he has three children (ages 6, 3, 2).

**Patient 6**
Martha Rosales, female, age 23. Mrs. Rosales’ heart problems originated from a bout she had with scarlet fever while growing up in the slums of New York. Unemployed and on welfare, Mrs. Rosales raised money for her operation through the contributions of those in her neighborhood. Never married, she has four children (ages 8, 6, 5, 1).
“Now, you have to work in your groups. Each member describes the situation of the patient in your card & give the reasons why this patient should / should not receive the heart. (Do not show your card to other students in the group). Then the whole group discusses which patient to be the first to receive the donor heart, who will be the second ... and who will be the last. Try to reach a group consensus on the best solution to the problem. Be prepare to explain & defend your group’s opinion.

6. Teacher checks students’ understanding of what to do.
7. Teacher sets time for the group work task to finish.
8. Students discuss in group. Teacher goes round the class, monitors & facilitates the group work.
9. Feedback from group discussion. Compare the six groups’ solutions => vote on class’ decision.