STUDENTS' PERCEPTION ON THE JIGSAW TECHNIQUE IMPLEMENTATION IN LEARNING SPEAKING AT THE FIRST-GRADE OF SMA N 7 BANDAR LAMPUNG

Dina Agustina, Mahpul, Feni Munifatullah

Dina.agustina1562@gmail.com

Abstrak. Tujuan penelitian ini adalah untuk menyelidiki persepsi siswa pada implementasi teknik jigsaw dalam pembelajaran berbicara Bahasa Inggris. Subjek penelitian ini adalah 18 siswa kelas X di SMAN 7 Bandarlampung. Penelitian ini menggunakan metode kualitatif deskriptif. Data digunakan dengan menggunakan rekaman video dan wawancara. Pengkodeaan *(coding)* digunakan dalam menganalisis data. Hasil penelitian menunjukan bahwa sebagian besar siswa memiliki persepsi positif terhadap penggunaan teknik jigsaw dalam hal tingkat tingkat kesulitan, tingkat stress, kepercayaan diri, minat, dan motivasi. Hal ini menunjukkan bahwa teknik jigsaw memudahkan siswa dalam menerima materi lebih efektif dan efisien karena kegiatan belajar mengajar yang menyenangkan di jigsaw memberikan suasana belajar yang positif.

Abstract. The objective of this research was to investigate the students' perception of the jigsaw technique in learning speaking English. The subjects of the research were 18 tenth-grade students at SMAN 7 Bandar Lampung. The research employed a descriptive qualitative method. The data were collected through video recording and interviews. Coding was used in analyzing the data. The result showed that majority of students had positive perceptions of the jigsaw technique use in terms of levels of difficulty, degree of stress, confidence, interest, and motivation. This suggests that jigsaw technique facilitates the students in receiving the material more effectively and efficiently because enjoyable teaching and learning activities in jigsaw give a positive learning atmosphere.

Keywords: Perceptions, jigsaw technique, speaking.

INTRODUCTION

Speaking is one of four skills the students of Senior High School need to learn (Curriculum 2013). However, the majority of the students' speaking capability is regarded as being low. According to Leong and Ahmadi (2017), many students are not able to communicate fluently and accurately because they do not have enough knowledge. They are generally facing problems to use foreign language to express their thoughts effectively.

In addition, it is found in the preliminary research that most of the students in SMA N 7 Bandar Lampung faced difficulties in learning speaking. Firstly, their speaking ability is low, they need exercises to improve the practical situation in the classroom. Secondly, the lack of vocabulary is also as one of the problems that was faced by the students. Some students spend much time to pay full attention to express some words in English. Thirdly, the technique was difficult to implement properly and often resulted in inconsistent gains in student performance. of teaching speaking applied by the teacher may not be suitable

One of the techniques that can be used in this case is techniques that employ the concept of Cooperative Learning. Cooperative has some benefits. Firstly, cooperative learning develops students' social skills. When doing group work, students need to share and exchange ideas with each other in order to successfully solve a problem. This is very helpful for students in developing their interpersonal skills. Secondly, cooperative learning can increase students' motivation and opportunity to practice their language learning. Cooperative learning develops students' social skills. When doing group work, students need to share and exchange ideas with each other in order to successfully solve a problem. This is very helpful for students in developing their interpersonal skills. Moreover, each member has opportunities to contribute to the group.

There are several techniques in Cooperative Learning that the teachers/ the lecturers may choose based on the needs and the goals of their learning. They are: Student Teams Achievement Division (STAD), Jigsaw, Teams Games Tournaments (TGT), Think Pair Share (TPS) and Numbered Head Together (NHT). This research used jigsaw technique. According to Karacop and Diken

(2017), Jigsaw is one of the techniques which is used in the implementation of cooperative learning, brings the cooperation to the forefront by providing support to students' working together and removing competition in the classroom.

There are some previous research related to the implementation of Jigsaw Technique. Rusandi (2015) states jigsaw technique in teaching speaking is very effective and applicable in teaching speaking English. in addition, Hersulastuti (2010), finds that jigsaw technique made the class alive and could decrease their nervous to perform because they worked collaboratively with their friends in a group. Then, Qian (2012), the result of this study shows that Jigsaw activities had a positive effect on students' anxiety and speaking ability, and students had positive opinions towards it.

Based on the previous study above, jigsaw technique is effective in teaching speaking, but the researcher wants to know students' perception in implementing jigsaw technique, what makes the technique is effective and why. Perception plays an important role in the learning process. This indicates that exploring students' perceptions is important for teacher and students.

In this research, the researcher conducted qualitative research at the first grade of SMAN 7 Bandar Lampung because the students were lack of experience, especially in practice speaking. Thus, this research was interested to investigate students' perceptions of the jigsaw technique implementation in learning speaking.

METHOD

The research design was a descriptive qualitative method. Then, the researcher was as a participant observation. Participant observation is a process where the researcher can observe a setting to fully participating in the setting to collect data (Glesne & Peshkin, 1992). In collecting the data, there are nine steps considered to be important in the implementation of the jigsaw technique. Aronson (2000) describes them as follows.

Step 1. Students will be divided into 5 person jigsaw groups. The groups should be diverse in terms of gender, ethnicity, race, and ability.

Step 2. One student from each group will be appointed as the leader. Initially, this person should be the most mature student in the group.

Step 3. Students will have the day's lesson into 5 segments.

Step 4. Each student will be assigned to learn one segment, making sure students have direct access only to their segment.

Step 5. Students will get time to read over their segment at least twice and become familiar with it. There is no need for them to memorize it.

Step 6. Students next, form temporary "expert groups", by having one student from each jigsaw group join other students assigned to the same segment. Give students in these experts group time to discuss the main points of their segment and to rehearse the presentations they will make their jigsaw group.

Step 7. Students will back into their jigsaw group. Each student will be asked to present her or his segment to the group. Encourage others in the group to ask questions for clarification.

Step 8. Students focus on their assignments while the teacher floats from group to group, observing the process. If any group is having trouble (e.g., a member is dominating or disruptive), make an appropriate intervention.

Step 9. Students, at the end of the session, will be given a quiz on the material so that students quickly come to realize that these sessions are not just fun and games but count.

Participants

The participants of this research were 18 first grade students at SMAN 7 Bandar Lampung.

Instrument

The research instrument was the interview. To get the information the researcher needed a video recording as the tool in an interview. The researcher would record the class during the implementation of jigsaw technique. Then, the recording would be used in the interview session, the aim was to help students more focused and directed to answer the questions of the interview.

In the interview section, the researcher used open-ended and closed-ended questions with structured the type. The interview protocols used in this research

are based on Mahpul's (2014) adoption from Robinson's (2001) consists of 5 categories: Level of difficulty, stress, confidence, interest, and motivation.

Data Analysis

The data of the students' perception in form of recording were analyzed by the researcher. The data is transcribed first, then all the data coded in detail. The students' responses are coded manually. Then all the data are calculated in percentage. The last, interpreted the result. The opinions of each category were symbolized as (+) and (-). (+) Symbol refers to students' agreement with the activity, while (-) symbol means their disagreement about the activity.

RESULTS AND DISCUSSIONS

Results

Findings gathered from a structured interview on the students' opinions concerning the use of a Jigsaw technique were categorized into five categories. In category 1, difficulty level, the highest percentage of positive perceptions are step 2 and 6 (94.4% respectively), the average percentage of positive perceptions is step 7 (83.3%). Then, the lowest percentage of positive perceptions are step 3 and 4 (66.4%). It means that working individually is more difficult than working in the group.

In category 2, degree of stress, the highest percentage of positive perceptions is step 2 (94.4%). There are some steps that have average percentage, the steps are step 3, 5, 6 and 7 (83.6% respectively). Then, the lowest percentage of positive perception is step 4 (66.8%).

In category 3, degree of confidence, the highest percentages of positive perceptions are step 1 and 9 (88.9% and 88.9%). The average percentages of positive perceptions are step 4 and 8 (77.8% respectively). Then, the lowest percentages of positive perceptions are step 3 and 7 (61.1% and 66.8%).

In category 4, students' interest, the highest percentage of positive perceptions are step 1, 6, and 7 (94.4%). Then, the average percentage of positive perception are step 3, 4,5, 8, and 9 (88.9%). The lowest percentage of positive perceptions is 2 (72.2%).

In category 5, students' motivation, there are some steps that have the highest percentage of positive perceptions are step 3 and 7 (100%). Then the

average percentage are step 4, 5, and 9 (83.3%). Meanwhile, the lowest percentage of positive perception is step 2(72.2%)

The result shows that the Jigsaw technique played a positive role in students' class participation and interaction, although some problems occurred occasionally. In general, working individually (Step 4 and 5) perceived more difficult and stressful than grouping (Step 6 and 7). The comments and level of agreement among the students consist of 5 categories (See Appendix 2, 3, 4, 5 and 6 for each category: difficulty, stress, confidence, interest, motivation)

Discussion

There are some factors that influence students give positive opinions. The factors are mastering one segment, fair distribution, peer interaction, and new experience, and remove the competition. The factors will be discussed as follows.

The most reason that students choose in positive comments was mastering one segment. For example in difficult level category, there are some steps who said the steps were easy. The steps are step 3, 4, 5, 6, and 7 (50%, 44.4%, 16.8%, 11.1%, 38.8% respectively). The students mentioned *"....I think, in presenting the presentation in my home jigsaw group is easy, because I just give responsibility in mastering one segment…"*. It is in line with Qian (2012), the characteristic of the Jigsaw design which is the sharing of the workload, reduced each individual's contribution. In these circumstances, with peer interaction and the sharing of the workload, learning is likely to be more effective and productive. Then, in stress category, some students felt relaxed in doing the steps 3 (50%), 4 (38.8%), 5 (33.3%), 6 (5.6%), and 7(16.6%) because they just had one workload i.e. mastering one segment. Some students said that *"...I felt relaxed, because I only study one segment, a little more than one full story…"*. Qian (2012), the shared responsibilities produced in Jigsaw activities enable individuals to be less stressed to produce outputs. Then, in interest category, step 3, 4, 5, 7 generated 44.4%, 22.2%, 33.35, and 22.2% of mastering one segment reason. Some of them said that *"....it is Interesting because we are given the responsibility to focus on one part, which means training us to be more independent in finding out for ourselves.."*

Not different from the mastering one segment, fair distribution also the most reason that students choose. In difficult level, there are some students who said easily in doing the steps 1, 3, and 7 (61.2%, 11.1%, 5.6%) because of fair division in determining group discussion and giving the materials. For example, in step 1, some students stated that "….*I think, it is easy, because in my group discussion divers of abilities and gender. It makes the discussion balance, there is no one who dominant…".* Then, in stress category, some students felt relaxed in doing the steps 1, 2, 3 and 5 (33.3%, 27.7%, 16.6%, and 11.1%) because of fair distribution. For example, in step 3, some of them said that "…*Relax, because the material is fair, one person is one part. With the same portion. So it's not stressed or burdened because all of them get their segment….".* Burdett (2003), found that the students give positive comments because of the workload was fairly shared.

In addition, peer interaction was one of the reasons that make them relaxed in doing step 6 (55.5%), and 7 (50%). For example, in step 7, some student commented that *"….in present my segment, I felt relaxed because I just explain in a small group then we can share knowledge each other…."* It is in line with Vygotsky (1978), considers interaction with peers as an effective way of developing skills. By interacting with peers, students understand the topic discussed more and easily since they use a simpler language.

Furthermore, a new experience is one of the factors that make them felt interested and motivated in doing the steps of jigsaw technique. In interest category, steps 3, 6, 7 and 9, the result suggest the steps were interesting. They commented that "…*It is interesting because this is the first time that I have done these activities, that is joining with group members from other groups to discuss and prepare our presentation material…".* It is in line with Qian (2012), found that some subjects shared the same opinion that they learned to be cooperative and communicative in this new way of learning. Then, in the motivation category, there are some students who felt motivated in doing the steps 6 (22.2%) and 7 (5.6 %). For example in step 7, one student said that *"…yes, it motivates me because this is the first time to me in learning English. In this step, my friends and I have our respective contributions in presenting the presentation…"*

Removing the competition in the classroom was one of the reasons that make students felt confident and motivated in learning English. In confidence category, there are some students who felt success in doing step 3 (11.1%), and 7 (5.6%). For example, in step 3, one student said that "… *It's success, because it doesn't bother to divide the group's material again, so it's already focused on each part with that time, so it doesn't waste time…"* According to Karacop and Diken (2017), Jigsaw is one of the techniques which is used in the implementation of cooperative learning, brings the cooperation to the forefront by providing support to students' working together and removing competition in the classroom.

However, there were also negative factors that make the implementing jigsaw technique did not run well. The factors are peer interaction and problem with the language.

Peer influence can be both positive and negative. In implementing jigsaw technique, some students face difficulties especially in presenting the presentation (see Appendix 2, 3, 4, 5, and 6). Some students felt nervous and shy when they must present the presentation. For example in confidence category, they said that "….*Not successful, because I feel ashamed to speak in front of friends…"* According to Gregersen and Horwitz (2002), the inability of students to express themselves fully and freely can be caused by anxiety and frustration, lack of confidence, and even apprehension. Negative behavior or attitudes experienced or perceived by students from their peers can be anxiety-provoking. The negative results may be avoided through creating a friendly classroom setting in which students are encouraged and valued

Then, there are some students who felt difficult, stress, unsuccessful, and uninterested in doing the steps of jigsaw technique because they have the problem with the language (See Appendix 2, 3, 4, and 5 for the detailed). For example, in confidence category, some students felt unsuccessful because they face difficulties when they must use English, they said that "…. *I felt not successful because I must share or explain the information from my segment, but I cannot speak English fluently*…." also "…*I have limitations in English vocabulary, for example when saying the word market*….". Students' lack of confidence due to language

problems is consistent with the study by Tavakoli (2009) who found that linguistic demand is considered to be one of the aspects that leads to more difficulty in performing tasks which may then lead the participants to feel less confident when performing the tasks.

Furthermore, some students felt difficult (11.1%), unsuccessful (11.1%), uninterested (5.6%) and no motivate (5.6%) in doing step 1. It is because they could not choose teamwork by their own. Some students said that "…*It is not interesting, because, I prefer to choose teamwork with my close friends*…". Burdett (2003), found that comments by participants (59%, 86 comments) reflected the frustration of dealing with inequalities of effort among group members and conflicts that resulted. Students expressed annoyance with laziness and free-riding on the part of group members who were able to benefit from the compensatory effort of others.

CONCLUSION AND SUGGESTIONS

Based on the result above, all of the 5 categories showed that students' responses are mostly positive rather than negative comments. The students expressed positive feelings and opinions on using Jigsaw technique. Some students felt the activities of jigsaw technique were easy. The felt relaxed and confident in did the activities of jigsaw technique. Then, they were interested and motivated in learning speaking English by using this technique. The factors that make them give positive comments are cooperative learning, sharing of the workload, and peer interaction.

However, there are also have negative responsive of implementing jigsaw technique. Some students felt difficult and stress because of peer interaction. Peer influence can be both positive and negative. Peer interaction, mutual encouragement, and help were found to be effective with students in the group work.

In reference with the conclusion, the researcher gives some suggestions as follow: (1) English teacher can use Jigsaw technique to solve the problem of the learning process. This is because jigsaw technique is one of the cooperative

learning that gives a relaxed learning atmosphere. (2) English teacher must more pay attention to students' anxiety. (3) To the future researchers, particularly those who have the same problem and are interested in conducting jigsaw technique in their research, it is suggested that they apply jigsaw technique in the same field or in the teaching of other language skills.

REFERENCES

Adams, F. H. (2013). Using jigsaw technique as an effective way of promoting co-operative learning among primary six pupils in Fijai. *International Journal of Education and Practice, 1*(6): 64-74.

Aronson, E. (2000). *The jigsaw classroom.* Retrieved November 1, 2018, from Web Site Copyright 2000-2019, Social Psychology Network: http://www.jigsaw.org

Burdett, J. (2003). Making group work: University students' perception. *International Education Journal, 4 (*3):177-191

Glesne, C. & Peshkin, A. (1992). *Becoming qualitative reseacher: An introduction*. White Plains, NY: Longman.

Gregersen, T., & Horwitz, E. K. (2002). Language learning and perfectionism: Anxious and non-Anxious language learners' reactions to their own oral performance. *The Modern Language Journal,* 86(4), 562-570.

Hersulastuti. (2010). Implementing jigsaw technique in speaking class of describing someone reflection. Journal Magistra in English UNWIDHA Klaten.

Karacop, A., & Diken, E. H. (2017). The effects of jigsaw technique based on cooperative learning on prospective science teachers' science process skill1. *Journal of Education and Practice,8* (6):86-97

Kryszewska, H. (2007). Expertise in second language learning and teaching. *ELT Journal, 61(*2): 179-181.

Langton, N., & Robbins, S. (2005). *Fundamentals of organizational behavior, Third Canadian Edition.* Toronto: Pearson Prentice Hall.

Leong, L.-M., & Ahmadi, S. (2017). An analysis of factors influencing learners' English speaking skill. *International Journal of Research in English Education, 2*(1), *3*4-41.

Mahpul. (2014). Task Difficulty in dialogic oral production by Indonesian EFL learners. Master thesis in Curtin University.

Robinson, P. (2001a). Task complexity, cognitive resources, and syllabus design: a triadic framework for examining task influences on SLA. In Robinson, P. (Ed.), *Cognition and second language instruction* (pp. 287–318). Cambridge: Cambridge University Press.

Rusandi, T. (2015). The effectiveness of using jigsaw technique in teaching speaking. Jakarta: Syarief Hidayatullah State Islamic University, English Education. (Unpublished Script)

Qian, L. (2012). Cooperative learning using jigsaw activities in college English speaking classes. Master's Thesis, Suranaree University of Technology, Arts in English Language Studies.

Tavakoli, P. (2009). Investigating task difficulty: Learners' and teachers' perceptions. *International Journal of Applied Linguistics, 19* (1): 1-25.

Vygotsky, L. S. (1978). *Mind in society*. Cambridge, MA: Harvard University Press.

Wahyudi, T. (2014). Improving students' speaking ability through jigsaw task at the class Nine of SMP N 2 Bukit Kemuning. English Education. Unila: Unpublished Script.

Appendices

Appendix 1

Table 1: Students' agreement and disagreement about the activities of jigsaw technique

No	Activities in Jigsaw Technique	Categories									
		Difficulty Percentage		Stress Percentage		Confidence Percentage		Interest Percentage		Motivation Percentage	
		+	-	+	-	+	-	+	-	+	-
1	Dividing group discussion	88.7	11.3	77.8	22.2	88.9	11.1	94.4	5.6	94.4	5.6
2	Appointing leader group	94.4	5.6	94.4	5.6	72.2	27.8	72.2	27.8	72.2	27.8
3	Giving the materials	77.4	22.6	83.6	16.4	61.1	38.9	88.9	11.1	100	0
4	Focusing to learn their segments	66.3	33.7	66.8	33.2	77.8	22.2	88.9	11.1	833	16.7
5	Reading their segments	66.4	33.6	83.3	16.7	72.2	27.8	83.3	16.7	83.3	16.7
6	Discussing and preparing the presentation in the expert group	94.4	5.6	83.3	16.7	83.3	16.7	94.4	5.6	94.4	5.6
7	Presenting the presentation in the home jigsaw group	83.3	16.7	83.3	16.7	66.8	32.2	94.4	5.6	100	0
8	Monitoring the presentation by the teacher	88.9	11.1	88.9	11.1	77.8	22.2	88.9	11.1	83.3	16.7
9	Conducting quiz	77.6	22.4	72.2	27.8	88.9	11.1	88.9	11.1	88.9	11.1

Appendix 2

Difficulty Level

Table 2: Students' perceptions about the difficulty of steps in jigsaw technique

No	Perception	Percentage								
		Step 1	**Step 2**	**Step 3**	**step 4**	**Step 5**	**step 6**	**Step 7**	**Step 8**	**Step 9**
	Reason for feeling the steps were easy									
1	Fair distribution	61.2		11.1	5.6			5.6		
2	Easy to do	27.7				5.6				
3	Control group discussion		94.4						88.9	
4	Master one segment			50	44.4	16.8	11.1	38.8		
5	Interest with the topic			16.6	16.6	16.6		11.1		
6	Have a group discussion						61.2			44.4
7	Planning time					27.7	11.1	11.1		33.3
8	Improve the ability together						11.1	16.7		
	Reasons for feeling the steps were difficult									
1	Cannot choose a teamwork	11.1								
2	Cannot handle the situation		5.6							
3	Uninterested topic			11.1	5.6	5.6				
4	Problem with the language			11.1	5.6	11.1	5.6	11.1		5.6
5	They were shy							5.6	11.1	5.6
6	Cannot share the information				22.2	16.6				
7	answer spontaneity									11.1
Total		**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**	**100**

Appendix 3

Degree of Stress

Table 3: Students' perceptions about the stress in doing the steps of jigsaw technique

No	Perception	Percentage								
		Step 1	**Step 2**	**Step 3**	**Step 4**	**Step 5**	**step 6**	**Step 7**	**Step 8**	**Step 9**
	Reasons for being relaxed in doing the activity									
1	Fair distribution	33.3	27.7	16.6	11.1	11.1				
2	Easy to do	22.2		5.6						
3	Control group discussion		66.7							
4	Master one segment			50	38.9	33.3	5.6	16.6		
5	Interested with the topic			11.1	16.7	16.7	5.6	5.6		
6	Have a group discussion	22.2					11.1		33.3	
7	Can review the material									11.1
8	Planning time					22.2	5.6	11.1		
9	Peer interaction						55.5	50		
10	Had mastered the material								55.5	61.1
	Reasons for NOT being relaxed in doing the activity									
1	Afraid to false								5.6	11.1
2	Shy							11.1	5.6	
3	Afraid to get an inappropriate team	16.7								
4	Cannot handle the situation		5.6							
5	Have not conversation with a friend			5.6	22.2	5.6				
6	Problem with the language			11.1				5.6		16.7
7	Do not like the discussion	5.6					5.6			
8	Responsibility in master one segment				11.1	11.1	11.1			
Total		100	100	100	100	100	100	100	100	100

Appendix4

Degree of Confidence

Table 4 Students' Perception of Degree of confidence of the Technique

No	Perception	Percentage								
		Step 1	**Step 2**	**Step 3**	**Step 4**	**Step 5**	**step 6**	**Step 7**	**Step 8**	**Step 9**
	Reasons for confidence in doing the steps									
1	Fair distribution	44.4		11.1	16.7	11.1				
2	Easy to do	5.6				11.1				
3	Get a team who can cooperate	38.9					27.7			
4	can review the material									5.6
5	control group discussion		50						33.3	
6	Had mastering the material								33.3	83.3
7	Appropriate criteria to be selected		22.2							
8	Master one segment			33.3	27.7	22.2		11.1	11.1	
9	Easy to understand			16.7	16.7		16.7	5.6		
10	Planning time					11.1		16.7		
11	Can sharing information						38.9	11.1		
12	Remove the competition			11.1	5.6			5.6		
13	Interest with the topic				11.1	16.7		16.7		
	Reasons for NOT being confident									
1	Cannot choose a teamwork	11.1								
2	Had common		16.7							
3	Cannot handle		11.1							
4	Cannot discuss with a friend			16.7	11.1	16.7				
5	Problem with language			11.1	11.1	11.1	16.7	11.1	11.1	
6	Shy							22.2	11.1	11.1
Total		100	100	100	100	100	100	100	100	100

Appendix 5
Students' Interest
Table 5 Students' interest in the nine

No	Perception	Percentage								
		Step 1	**Step 2**	**Step 3**	**Step 4**	**Step 5**	**step 6**	**Step 7**	**Step 8**	**Step 9**
	Responses for interest in doing the steps									
1	Get team who can cooperate	55.5					27.7	22.2		
2	Get new knowledge				22.2		33.3	5.6	22.2	5.6
3	Fair distribution	22.2		5.6	11.1	11.1		5.6		
4	New experience			33.3			11.1	33.3		27.7
5	Easy to do	11.1			5.6					
6	Control group discussion		66.7						16.7	
7	Appropriate criteria to be selected		5.6							
8	Master one segment			44.4	22.2	33.3		22.2		
9	Motivate to review									33.3
10	Motivate to learn English				16.7	11.1		5.6	50	16.7
11	Excited	5.6		5.6	11.1	11.1	16.7			
12	Planning time					16.7	5.6			
13	must answer spontaneously									5.6
	Responses for NO interest in steps									
1	Cannot choose teamwork	5.6								
2	Had common		27.7							
3	Cannot discuss with a friend			11.1	11.1	16.7				
4	Difficult to balance the other knowledge						5.6			
5	Problem with the language							5.6	11.1	11.1
Total		100	100	100	100	100	100	100	100	100

Appendix 6

Students' motivation

Table 6: Students' perceptions about the steps of jigsaw technique and their motivation

No	Perception	Percentage								
		Step 1	**Step 2**	**Step 3**	**Step 4**	**Step 5**	**step 6**	**Step 7**	**Step 8**	**Step 9**
Reasons for motivation in doing the activities										
1	Can learning together with friends	44.4					27.7	44.4		
2	Easy to do	5.6			11.1	11.1				
3	Fair distribution	16.7		44.4	38.8	44.4		5.6		
4	Control		72.3						50	
5	Motivate to master the material			22.2	11.1	5.6	11.1	33.3	27.7	55.6
6	Improve the ability			22.2	5.6			11.1		33.3
8	Get new knowledge				16.7	22.2	11.1		5.6	
10	New experience						22.2	5.6		
11	Excited	27.7					11.1			
12	Remove the competition			11.1			11.1			
Reasons for NO motivation in doing the activities										
1	Cannot choose teamwork	5.6								
2	Had common		27.7							
3	Have not conversation with friends				16.7	16.7				
4	Difficult to balance the other knowledge						5.6			
5	Afraid to answer								16.7	11.1
Total		100	100	100	100	100	100	100	100	100