

IMPROVING TEACHERS' COMPETENCE IN TEACHING METHODOLOGY USING COOPERATIVE LEARNING

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Abstract

The objectives of the study are to improve teaching methodology for English teachers using cooperative learning in particular techniques of Student Teams Achievement Division (STAD), Team-Games-Tournaments (TGT) and Jigsaw technique. Second objective is to investigate problems faced by teachers in implementing cooperative learning. The participants of this study were the English teachers of Muhammadiyah Senior High Schools, and Muhammadiyah Vocational schools in Surakarta. The instruments to collect data used observation, feedback and interview. The findings of this study were first, the teachers perceived positively and improved their teaching methodology by implementing techniques of cooperative learning in their English class. Second, problems faced by teachers in implementing the techniques of cooperative learning were students have limited vocabulary and they were not confident to work in small groups. This study also found that teachers were motivated to be better in teaching effectively in their class.

Keywords: *teacher's competence, teaching methodology, cooperative learning*

1. INTRODUCTION

In information and modern era, everything runs and changes fast. This situation influences a lot in the education field. The curriculum, teaching materials and teaching methodology also change a lot. These fast developments have an effect on teacher in particular English teachers. They have to be more active and creative in their teaching methodology in order to transfer knowledge easier and more effective to students. On the other hand, recently students have more media to learn English such as from internet, blog, English newspaper, English movies, English song, and so forth. Students can brows and get information easier and faster. They can get whatever the information that they need from internet. Therefore English teachers have to be keen in improving their teaching methodology in order to teach English successfully in their English class. One of the teaching methodologies is cooperative learning which focuses on students centered.

Nowadays some English teachers still use traditional methodology which does not match with the curriculum that implemented it now. The government has instructed to use curriculum 2013 for those schools which are ready to use it. Therefore to implement new

curriculum, teachers should use many kinds of English teaching methodology. However some teachers still get difficulties in mastering some kinds of teaching methodology. One of them is using cooperative learning. This teaching methodology can be used in implementing curriculum 2013 because this methodology focuses on student centered. Based on this situation, the research problems of this study are how to improve teaching methodology for English teachers in using cooperative learning in particular techniques of Student Teams Achievement Division (STAD), Team-Games-Tournaments (TGT) and Jigsaw. Second, this study also wants to investigate problems faced by teachers in implementing cooperative learning in their English class.

Some Indonesian researchers have investigated the use of cooperative learning for teaching Biology, Mathematics, Science and English (Tamaela, 2010; Muhfahroyin, 2009; Muldayanti, 2010; Fadloli, 2010; Handayani, 2010). However, not many studies which focus on improving teachers' quality in their teaching methodology for Muhammadiyah English teachers have been done. Therefore this study is very important to do to support and improve teachers' skill in their English teaching

methodology.

2. LITERATURE REVIEW

Recently many English teachers still use traditional methodology in their teaching which focuses on teacher centered. The use of traditional methodology such as grammar-translation makes students unable to use the language effectively (Nunan, 1999). Nowadays students need to learn English as communication. Therefore teachers should apply approach to language learning which focuses on students to use the language and involve in cooperative learning tasks using language (Nunan, 1999). A study by Muamaroh (2014) found that the use of cooperative learning could improve students' oral English skill. Moreover, cooperative learning can be used to teach not only language classes but also mathematics, science, geography, and history (Shachar & Sharan, 1994:313; Slavin, 1991:77).

The role of teacher in cooperative learning (CL) methodology is totally different from traditional methodology. His/her role is more complex than traditional one. He/she should initiate group work; present guidelines for small-group operation in order students cooperate and help each other, prepare new material and assignments, and evaluate student performance (Davidson, 1990:55). Moreover, Johnson et al. (2000:16-17) describe the role of teacher in applying cooperative learning in more detail: make pre-instructional decisions, explain task and cooperative structure, monitor and intervene and evaluate and process.

Cooperative learning is one of teaching approaches which focuses on a student-centred teaching paradigm (Dörnyei, 1997: 491). Cooperative learning (CL) methodology uses small group, therefore students can interact each others to study together. According to Slavin (1980:315) states that the definition of cooperative is that, "the term [CL] refers to classroom techniques in which students' works on learning activities in small groups and receives rewards and recognition based on their group's performance."

All activities in cooperative learning use small groups where students help each other in understanding academic material (Cooper,

1990; Johnson et al., 1998: 28; Kluge, 1999: 18; Slavin, 1991: 71). The number of small group can be varied from three to seven students in each group. Each small group usually consists of three to four students (Rimmerman, 1996 in Homan & Poel, 1999: 4) or less than seven (Oxford, 1997: 445).

Since students work in small group during their study, they have more opportunities to participate actively by asking and answering questions in their groups. All group members have an equal opportunity to do it during the lesson. This develops their communicative competence and provides them with opportunities to use a variety of vocabulary and more accurate grammar. They also can correct each other when they make mistakes in their group (Deen, 1991: 177).

The use of cooperative learning in the language classroom is very useful. This is because CL techniques supports and helps the English teacher to encourage students use the language in the class. Kagan and McGoarty (1993: 57) state that "cooperative learning provides a means for placing into practice the principles of language acquisition". Cooperative learning provides students not only individual but also social development. They interact among their group members as much as possible. This is very helpful to motivate students to study more active in using the language.

Teachers should understand principles of cooperative learning in order they can implement cooperative learning successfully in their language class. According to Slavin (1981: 659) cooperative learning has four positive characteristics:

1. The cooperation required among students prevents one student from doing most of the work for the others.
2. In spite of the cooperative nature of the groups, each student must learn the material in order to improve his or her own score and the team score.
3. Even low achievers who may not contribute greatly can receive recognition since scores are based on individual improvement, however small, over past performance.
4. Students are motivated to cooperate since

they receive not just a grade on a piece of paper, but public recognition from the teacher and the class.

However Johnson et al. (1991: 1-2) state the basic elements of cooperative learning as follow:

1. Positive interdependence: students perceive that they need each other in order to complete the group’s task (“sink or swim together”).
2. Face-to-face promotive interaction: students promote each other’s learning by helping, sharing and encouraging efforts to learn. Students explain, discuss and teach what they know to classmates.
3. Individual accountability: each student’s performance is frequently assessed and the results are given to the group and the individual.
4. Interpersonal and small group skills: groups cannot function effectively if students do not have and use the needed social skills.
5. Group processing: groups need specific time to discuss how well they are achieving their goals and maintaining effective working relationships among members.

Furthermore, Cooper (1990) provides an expanded account of positive independence and individual accountability and adds two other elements. They are appropriate rationale for grouping and structured student interaction. While Oxford (1997: 445) also expanded the principle of cooperative learning with accountability, team formation, team size, cognitive development and social development.

Besides teachers should understand the principles of cooperative learning, they also should understand and master some techniques of cooperative learning. Therefore they can choose the best technique which appropriate with language materials. There are some techniques of cooperative learning (Johnson et al, 2000: 3) as presented in the following table.

Table 1. Modern methodologies of cooperative learning

Researchers- Developer	Date	Methodology
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Johnson & Johnson	Mid 1960s	Learning Together & Alone
DeVries & Edwards	Early 1970s	Team-Games-Tournaments (TGT)
Sharan & Sharan	Mid 1970s	Group Investigation
Johnson & Johnson	Mid 1970s	Constructive Controversy
Aronson & Associates	Late 1970s	Jigsaw Procedure
Slavin & Associates	Late 1970s	Student Teams Achievement Division (STAD)
Cohen	Early 1980s	Complex Instruction (CI)
Slavin & Associates	Early 1980s	Team Accelerated Instruction (TAI)
Kagan	Mid 1980s	Cooperative Learning Structures
Stevens, Slavin, & Associates	Late 1980s	Cooperative Integrated Reading & Composition (CIRC).

Based on the table, some of the techniques have similarity in their procedures, such as in learning together, Student Teams Achievement Division (STAD) and Team-Games-Tournaments (TGT). In learning together, a teacher explains the lesson and then students work together in small groups on a single worksheet. In STAD after a teacher explains materials, then each group has to discuss and understand it before they take individual quizzes on the material at the end of the meeting. Furthermore, in TGT the quizzes are replaced by weekly tournaments (Slavin, 1981; 1991). In the group investigation (GI) technique, there is no teacher presentation. Because each group has to do a project and each group has to present the result in the class. While, in the Jigsaw technique each group member has to cooperate with his or her peers

to understand the complete materials (Aronson, 2002: 215). At the end students take individual quizzes (Slavin, 1981: 656; Slavin, 1991: 75).

For the technique of constructive controversy, complex instruction, Team Accelerated Instruction (TAI), and Cooperative Integrated Reading and Composition (CIRC) has its own procedures. Furthermore, according to Kagan (1989: 14), the variations of CL structures are Roundrobin, Corners, Match Mine, Numbered Heads Together, Color-Coded Co-op Cards, Pairs Check, Three-Step Interview, Think-Pair-Share, Team Word-Webbing, Roundtable, Inside-Outside Circle, Partners, Jigsaw, and Co-op Co-op.

3. RESEARCH METHODOLOGY

The participants of the study were eight English teachers. Six English teachers were from Muhammadiyah senior high school and two teachers were from Muhammadiyah vocational school in Surakarta. Most of them graduated under graduate program and only one teacher graduated from master program. Most of them have been teaching English more than 10 years.

The instruments to get data were observation, feedback and interview. The eight teachers never implemented the techniques of cooperative learning therefore they were trained about the techniques in particular the techniques of Student Teams Achievement Division (STAD), Team-Games-Tournaments (TGT) and Jigsaw. Three out of ten techniques of cooperative learning were given to participants to make them focus. The training has been given in theory and practice.

The participants had to give anonymous feedback at the end of the training. Then they were interviewed after they implemented the techniques. To get more detail data, feedback and interview were carried out in Indonesian. Since the location of the schools spreads and the distances are far each other, some interviews were carried out by phone. All statements which are quoted in this paper have been translated from Indonesian into English. For confidentiality reasons, the researcher used code such as P1 means he/she was the first participant. The results from feedback, the

observation during the training and interview were analyzed qualitatively.

4. FINDING AND DISCUSSION

Since all participants never implemented cooperative learning, they were trained about it by the researcher. All participants followed enthusiastically the training about techniques in cooperative learning which was carried out in one day. The three techniques given to participants are Student Teams Achievement Division (STAD), Team-Games-Tournaments (TGT), and Jigsaw.

In the first session, the researcher explained in detail the theory and the concept of cooperative learning included the definition, the principles and techniques of cooperative learning and the role of teacher in implementing it. All participants followed the activity enthusiastically by asking many questions such as how to decide the technique which is appropriate with the materials, how to decide on group size, arrange the room, how to improve teamwork and how to evaluate student learning at the end of the meeting.

The second session was focused on practicing of each technique. All participants were divided into small groups. Each group consisted of three people. The class was designed to make the participants able to discuss and share each other. For STAD and TGT technique, the researcher gave materials and explained them then asked all participants to discuss it in their group before they had to answer quizzes from the trainer. They seemed serious in discussing the material.

All participants seemed so excited when they practiced the techniques of cooperative learning. The trainer changed the member of group for each technique. This was important to make them not feeling bored and monotonous if they had to have the same group members. During the practice, they shared and discussed the materials actively in their groups.

After finishing the training, all participants had to give the feedback. Only seven out of eight wrote feedback as stated below:

P1: I am lucky that I can follow this training because I get experiences that I never got before. I wish that this training can

be followed up.

- P2: It is extraordinary new thing. Considering the time is limited, this should be followed by other meetings so more teachers can join the training.
- P3: After following the training, I feel happy getting good techniques of teaching therefore I can implement them in the class
- P4: The training about teaching techniques is good because the new curriculum 2013 emphasizes students to be active and creative
- P5: This activity is very important because this can equip the teachers in their teaching learning process. I really understand how to implement jigsaw after we practice it in this training.
- P6: After following this training about cooperative learning, I get new knowledge and *Insyallah* I will implement them in my class.
- P7: This activity is good. It motivates me to be better in teaching effectively. This activity has to be followed up with varieties of materials trainings.

In view of the feedback, all participants perceived that the training was very useful and they had positive impression about the activity. First: they felt lucky and happy getting good teaching techniques. They also thought that this activity was important because this helped them to teach English in the class. They also felt that they got new knowledge. It is extraordinary new thing for them; even one of them admitted that she/he got experiences that she/he never got before. Second: the participants suggested that the training should be followed up. Therefore there are many teachers can join it. Third: they want to implement the techniques that they have learnt in their English class. Since the government has started to implement new curriculum 2013 which focuses on student centered. The teachers have to make students active and creative in learning process in the class. The training of cooperative learning improves teachers' motivation to be better in teaching English effectively in the class. Since the training covered not only theory but also

practice, as result this activity made teachers understood more how to implement the techniques in the real class.

The researcher interviewed participants a month after training to ensure that they implemented some techniques that they have learnt. When the researcher asked whether they had implemented the techniques that they have learnt during the training, below were the answers:

- P1: "I have implemented jigsaw to teach reading in year ten students. The students look full of spirit to study, ehmm...they are more active and enthusiastic to follow the lesson".
- P2: "I implement the techniques in year ten and year eleven when I teach reading. Ehmm...students tend to be active when I use cooperative learning. The teaching process depends on the teacher in creating conducive atmosphere in the class. If the atmosphere is comfortable students will be active... but if it is monotonous, students will feel bored. I have suggestion for the next training should be extended so that I can use it to purpose my academic enhancement. 1 Kp is minimum 30 hours".
- P3: "I implemented the techniques in year ten when I teach reading. I ever used role play technique in my class but ...ehm in my opinion jigsaw technique is interesting and appropriate to teach English. In my opinion each student has his/her own problem in studying because his/her background is different that why as a teacher I have to apply different technique. Ehmmm... I always ask to my students problems that they faced. There are four English teachers here but there is no annual training for them. Training and workshop should be priority given for private schools in particular for Muhammadiyah schools. Ehmm... I will be very happy if there is the follow up activity to pursue the training and workshop for English teacher".
- P4: "I have not implemented yet the techniques...because I teach year twelve. I just focus to discuss and answer the

questions for national examination. I hope for the next training the duration of the training should be extended”.

Below the answers from the participants when they were asked about the problems that they faced when they applied techniques of cooperative learning.

P5: “Ehmm...students are not confident, they are not active because their English capability is limited...”

P6: “The problem is because students’ vocabulary is limited. Therefore most of them always ask about English vocabulary to their teacher”.

The results of the interview showed that first: some teachers had implemented the techniques. They stated that when they implemented the techniques in particular jigsaw, students were active and enthusiastic in following the lesson and they were also not bored in the class. They used the techniques to teach English in particular for reading subject. Some teachers admitted that they only implemented the techniques to teach in year ten and year eleven students.

Most of the teacher used cooperative learning techniques when they taught reading subject, although really these techniques can be used to teach other language skills such as speaking, listening and writing even to teach grammar and vocabulary. The researcher was afraid those because he/she gave examples only using reading materials when they practiced the techniques. Therefore they might think that the techniques of cooperative learning are only used to teach reading subject.

Some of teachers had not yet implemented the techniques because they taught year twelve students. Students in year twelve would have national examination therefore most of the teachers only focused to drill them discussing and answering questions in order to prepare them for the national examination. Moreover, some problems that faced by the teachers in implementing the techniques were students have limited vocabulary, their English capability is also limited and most of them were not confident to work in small groups.

Since the training was only given in one day, it was not enough for teachers. Most of them suggested the duration of the training should be extended. The finding supported the finding of the research done by Muamaroh (2014), which found that the training of cooperative learning for teachers should be done in long period. They also suggested that the training should be followed up by other trainings since they really needed it to improve their skill in teaching methodology.

In view of observation during the training, feedback and interview, this study found that all participants have implemented the techniques that they learnt during the training. They have learnt the techniques of Student Teams Achievement Division (STAD), Team-Games-Tournaments (TGT) and Jigsaw. This study found that the implementation techniques of STAD, TGT and jigsaw made students more active and enthusiastic in following the lesson in the class. This finding supported the study by Fadloli (2010) which found that the use of STAD improved students’ achievement. This also supported the study by Septiana (2009) which found that the use of STAD affected students’ achievement and students’ memorisation. This also supported the study by Muhfahroyin (2009) which found that the use of STAD, TPS and STAD and TPS integration improved students’ cognitive achievement, critical thinking and process skills. However, the finding of the study contrasted with the finding of the study done by Muldayanti (2010) which found that the use of TGT and STAD affected students’ achievement but they did not affect students’ curiosity and interest.

Furthermore, in implementing the techniques of cooperative learning this study, teachers faced problems such as students have limited vocabulary and they were not confident to work in small groups. Therefore they tended to ask their teacher frequently when they did not understand the difficult English words. Moreover, when the teachers implemented the techniques of cooperative learning in particular STAD, TGT and jigsaw, they had positive perception and improved their teaching methodology skill. This implementation motivated them to be better in teaching their

students.

5. CONCLUSION AND SUGGESTION

Based on the feedback, interview and observation during the training, the researcher concluded the participants perceived that the training that given improved their teaching skill. First, the teachers perceived positively about the activity. They felt happy to get new experiences. Second, the training should be followed up and the duration should be extended. Third, they have implemented the techniques that they have learnt in their English class. Fourth, they are motivated to be better in teaching effectively in the class and the last problems faced by teachers in implementing the techniques of cooperative learning were students have limited vocabulary and they were not confident to work in small groups.

Moreover, some suggestions that can be proposed are most of teachers need some other trainings to improve their teaching skills. The duration of training can be extended at least 30 hours. The participants of the training should be extended therefore many teachers can join the training.

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