Student Team Achievement Divisions Technique to Improve Students’ Behaviour Engagement

(A Study of Classroom Action Research at Islamic Senior High School of Al Azhar 9 Yogyakarta in Academic Year 2015/2016)

Fajar Arif Herjayanto¹, Suparno², Dewi Rochsantiningsih³

Fajar Arif Herjayanto

¹²³ English Education Department, Graduate Progam, Sebelas Maret University
Surakarta, 57126, Indonesia
¹Fajar28@gmail.com, ²drs.suparno@rocketmail.com, ³dewi_roch@hotmail.com

ABSTRACT

Student Team Achievement Divisions (STAD) is a strategy used in teaching process by which students work collectively in small groups on a structured activity and it is presumably able to improve their behaviour engagement and learning outcome. Collaborative learning and engagement (specifically behaviour engagement) are something considered important in learning, especially in language learning as they can promote the effectiveness of learning by fostering students’ active participation in the learning process. The data of this study were collected by using questionnaire, observation, interview and diary which used successively. The data analysis revealed that (1) STAD can improve students’ behaviour engagement (2) There are several difficulties found when applying STAD to enhance students’ behaviour engagement. Taking sample of twenty one students divided into five small groups, the research was conducted by using classroom action research design. The results indicates that students in a class with caring atmosphere and supportive interaction managed by the teacher; who played active roles as prompter, participant, and/or tutor as well as addressed the students autonomy via group work activity, are engaged behaviourally to the instructional. In conclusion, the student team achievement divisions technique is appropriae to be applied to enhance students’ behaviour engagement on the english class successfully.

Keywords: Student Team Achievement Divisions, Students’ behaviour engagement.

INTRODUCTION

The importance of student engagement in the classroom can be seen by the teachers. So far, some observations showed that (in many language classes) many students are fed-up, apathetic, and detached. These are the indicators of disengagement in the academic and social aspects of school atmosphere. Teachers are constantly working to connect their students to the school atmosphere and to the learning activity because they know that engagement is crucial to the learning goal. It may help teachers to know that students’ engagement occurs on multiple levels. Every level of engagement can increase the teachers’ chances to get their students’ attention. Thus; for many researchers, educators, and policymakers; Students’ engagement is a topic seen as main dimension in addresing problems such as students’ lack of achievement, high level of tardium in classroom, estrangement, and high dropout rates (Fredricks, Blumenfeld, & Paris, 2004). As they progress from elementary to middle school, students are become more disengaged with some estimates that 25–40% of youths are showing signs of disengagement—detached, apathetic, and unmotivated (Friesen, 2008; Dunleavy & Milton, 2009; Yazzie-Mintz, 2007).

Talking about students’ engagement, it is also an important element existing in classroom practice since, through which, students can develop their knowledge acquisition and cognitive development in order to support their skill. Students with a great level of engagement will...
acquire meaningful and long-life learning (Barkley et al., 2014). Kuh et al. (2008) also stated that engagement is the extent to which students are engaged in learning activities. Thus, it can be said that engagement is correlated to expected learning outcomes such as students’ high grades, satisfaction, and perseverance. Moreover, student engagement is commonly considered as the core system that enables motivational processes contributing to learning and development (Skinner & Furrer, 2009, pp. 493-525).

Students’ engagement is a dimension in academic achievement rooted in late 20th century research suggesting students who are fully engaged to the educational activities can get better achievement than those who are not. The concept of engagement—as linked to the learning process designed by teachers and expected from students—is deeply-rooted in the belief that learning process designed from the interest or that is relevant to the student leads to the greater achievement (Schlechty, 2004). From the brief explanation above, we can notice that students’ engagement plays a significance role in the learning process. The higher the students’ engagement is the easier the students and teacher to conduct the successful teaching and learning activity. Some studies estimated that by high school as many as 40–60 percents of youth are disengaged (Marks, 2000). As we notice that students’ engagement is an important thing to increase student achievement, that is why, it is recommended to increase students’ engagement in the classroom.

Engagement is not merely participation as it requires feelings, tacking, and activity (Harper and Quaye, 2009). Furthermore, (Taylor & Parson, 2011, pp.8) states that respectful relationship and interaction are also instrumental elements should be exist to positively engage the students in learning activities. Those elements influence each other—acting without feeling engaged is vacuous; feeling engaged without acting is disintegration. In other versions, behavioral engagement involve observable levels of actions, involvement, perseverance and Studnets’ academic participation, according to rules and on/off-task behaviour (Finn & Voelkl, 1993). Klem and Connell (2004) measure student engagement sampling from two point of view—teachers and students. Teacher measurement is emphasized on student behaviour and performance; and seek engagement as a potent predictor of academic success. Duffy et al. (2005) find that active participations (in learning process) raise the level of engagement. The level itself can be measured through several indicator; interaction, effort, and perseverance.

Focuses should be given more on students’ behavioral engagement. As stated in Regional Educational Laboratory/REL (2011), students’ behavioral engagement is indicated by three main behaviors; (1) students’ attendance to the classroom, (2) Students’ participation during the teaching and learning activity, and (3) students’ positive behavior towards teachers’ performance in the classroom. If the teacher can make those three behaviors present to the classroom, he has successfully made the students engaged to the classroom activity behaviorally. Student engagement dimensions have been proven positively correlated to achievement and likelihood of not dropping out of school (Fredricks, Blumenfeld, and Paris, 2004).

One of the way to realize such intention described is by implementing collaborative learning in the classroom register. Sansivero (2016) said that through such way, students can have many beneficial elements such as “increased openness, conscientiousness, agreeableness, trust and stability in learning”.

Responding to the issues above, in the context of this study, Student Team Achievement Divisions (STAD)—a form of was implemented at Class XI MIA 2 Islamic Senior High School of Al Azhar 9 Yogyakarta to overcome some problems happened in the classroom. This method is generally used in a large class which will be divided into teams, and fosters individual, small group, and class accountability. In STAD, the teams/small group formed usually consist of five/seven students, actively engaged and motivated by learning material, in which they communicate and learn from each other. As what said by Bales (1950) in Kuo & Yu (2011) that when students work in group, their maturity and performance will be more likely developed, especially when they make decisions. In addition, by which, “students voices” which, all this time, has long been lost in the dominance of teacher can be elevated (Bennet, Maton & Kervin, 2008).

In accordance to the reason and its benefit of STAD as teaching strategy, it leads the researcher to conduct a research entitled “Student Team Achievement Divisions Technique to Improve Students’ Behaviour Engagement” (A Study of Classroom Action Research at Islamic Senior High School of Al Azhar 9 Yogyakarta in Academic Year 2015/2016). The reasons why the students have such kinds of problems are that: (1) they feel tired because they study start from 06.30 until 16.00 everyday which really makes them out of energy; (2) They do not feel enthusiastic because they are taught in the same atmosphere every day; (3) And the teacher is not creative enough to give new technique in teaching and learning process.

STAD Technique may offer the best solution to increased students’ behavioral engagement. According to (Slavin, 1994), in Student Team Achievement Divisions (STAD) Technique, students are assigned to learning teams that are mixed in based on several considerations; performance level, gender, and ethnicity. In the first stage, teachers will present the learning material, and then students cooperateively work in their groups. In the final stage, all students take individual quizzes regarding the material, in this time they are not allowed to help each other.

Based on the elucidation before, there are some specifications to concern with in this study: (1) to find out whether and to what extent STAD can improve students’ behavior engagement in English Language Classroom. (2) to investigate the difficulties in implementing this strategy to enhance students’ behaviour engagement. With STAD, the researcher believes that the students’ behaviour engagement to the classroom can be improved. With applying STAD, the teacher will not only serve a new technique in teaching but also serve a different atmosphere to the classroom so that the students’ will have curiosity and enthusiastic to follow the classroom activity. With this assumption, the researcher believes that STAD can be a good problem solving for the students’ engagement to the classroom activity.

**METHOD**
Related to this study, we used Classroom Action Research since it deals with fact finding in practical problem solving in a social circumstance with an intention to improve the quality of action within it, involving the cooperation and collaboration of researchers (Burns, 1999: 30). The place of the research is Islamic Senior High School of Al Azhar 9 Yogyakarta. It is located on Jalan Ringroad Utara No.171, Sinduadi, Mlati, Kabupaten Sleman, Daerah Istimewa Yogyakarta. There were 3 classes in the tenth grade, 3 classes in the eleventh grade, and 3 classes in the twelfth grade.

The subject of this research was the students of tenth year of Science 2 Senior High School at Yogyakarta. There were 3 classes of the tenth year, but the chosen class was X MIA 2 that consists of 21 students. The researcher chose them as the representation of students who have problems with behaviour engagement on learning English subject. This class consisted of different level of competency in mastery of English language. For doing this research in this class, I planned to see the improvement of students’ behaviour on learning English subject. The second subject of this research was the researcher. The researcher was a practitioner who implements the action. In this research, the researcher helped by the collaborator who was the English teacher in that class. The role of the collaborator in this research were participating in designing the plans, observing and making notes what happened in the classroom when the treatments were implemented to the students or while the treatment was applied, and giving suggestions for the better treatment.

The researcher did the research in a series of steps of a classroom action research namely: planning, acting, observing, and reflecting. In doing the steps, we took considerations and ideas from both the collaborator and students during all the activities. Before explaining the schedule of research procedure, the researcher planned the schedule of the whole research activity in Table 1.

| Activities                  | Day/Date          | Place                  |
|-----------------------------|-------------------|------------------------|
| A. Pre-Research             |                   |                        |
| 1. Asking for permission to | Thursday, 17th of  | Head master’s office   |
| the head master of          | December 2015     |                        |
| Islamic Senior High School  |                   |                        |
| of Al Azhar 9 Yogyakarta    |                   |                        |
| 2. Interviewing the English | Friday, 8th of    | Teacher’s room         |
| teacher (collaborator).     | January 2016      |                        |
| 3. Observation 1            | Monday, 11th of   | Classroom              |
|                             | January 2016      |                        |
| 4. Observation 2            | Monday, 18th of   | Classroom              |
|                             | January 2016      |                        |
| 5. Distribution             | Wednesday, 20th of| Classroom              |
| questionnaire               | January 2016      |                        |
| 1. Interviewing the students| Wednesday, 20th of| Classroom              |
|                             | January 2016      |                        |
| B. Implementation           |                   |                        |
| Cycle 1                     | Monday, 25th of   |                        |
| 1. Meeting 1                | January 2016      |                        |
| 2. Meeting 2                | Monday, 1st of    | Classroom              |
|                             | February 2016     |                        |
| 3. Meeting 3                |                   |                        |

The techniques in collecting the data were using: (1) Observation, a mainstay of action research (Burns, 1999: 80); (2) Interview was it direct attempt to obtain reliable and valid measures in the form of verbal responses coming from respondents (Wallace, 1998: 149); (3) Questionnaire, according to Brown (2001: 6) questionnaires were any written instruments that present respondents with a series of questions or statements to which they were to react either by writing out their answers or selecting from among existing answers. As stated in Dornyei (2003: 9), questionnaires can yield three types of data about the respondents: factual, behavioural, and attitudinal. In this research, the researcher used attitudinal type of questionnaire. Attitudinal questions were used to find out what people think. (4) Diary The research diary was one of the most important research methods and it was very commonly used by teachers when they are doing the research. The researcher’s diary contains information about the researcher, what the researcher does, and the process of research.

The stages in action research can be done in several stages such cycle of planning, action, observation and reflection. Based on Kemmis and McTaggart (Burns, 1999: 32) the first stage is developed a plan of critically informed action to improve what is already happening. The next stage is action to implement the plan. After doing action, observation is done to observe the effect of the critically confirmed action in the context of its occurrence. The fourth stages in the classroom action research is reflection, a pause reflecting effects used as the basis of further planning, subsequent critically confirmed action and so on, through a succession of stages.

In analysing the quantitative data, the researcher used Descriptive Statistic to analyze the mean score. Meanwhile, to analyze the qualitative data, the researchers used interactive model of data analysis, Miles and Huberman Said that there are several steps included in this model: (1) data reduction (2) conclusion drawing and verification. Descriptive statistic was technique which was used to describe the basic feature of the data and present quantitative description including mean, media and percentage of questionnaire.
RESULTS AND DISCUSSION

Table 2. Situation before the Research

| Problem indicators | Situation before the Research | %  |
|---------------------|-------------------------------|----|
| productivity/ on-task | 1. They were lack of confident to come forward and express their ideas.  
2. The students did not want to do the task from the teacher. They did not interest in doing it. | 56.70% |
| Level of engagement | 1. Students did not give full attention in teaching and learning process.  
2. Students asked to go home early. | 57.14% |
| Responding | 1. Students became quiet when the teacher asked them, “Is there any difficulty?” or “Is there any question?” or “Is that clear?”  
2. Students only focus on joking, chatting with friends and some of them even sleeping. So, when the teacher asks them about the material being explained “is that clear?” they are just ignorant. | 54.46% |
| Listening skills | 1. Students were lack of concentration to the teacher’s explanation.  
2. Students just keep quiet and say “I don’t know miss” when the teacher asked them about the material which was explained. | 58.04% |
| Behaviour | 1. Students chatted with classmate when teacher explained the lesson.  
2. Students disturbed their friends while learning activities.  
3. Students were indicated sleepy while learning process. | 55.06% |
| Other findings | Students:  
1. Students needed to have readiness and a good preparation toward subject materials that would be given by the teacher in order to have background knowledge so there would be active interactions among them.  
2. Students needed a team to share their ideas, build their confidence and improve their understanding toward learning material.  
3. Students rarely practiced related to the teaching material given by teacher. Actually, they needed to practice what have been taught in order to enrich their understanding.  
Teacher:  
1. The teaching method using attractive activities is needed. Students felt did not focus on the materials, kept chatting with their friends and some of them felt bored because they were just sitting and listening to the teachers’ explanation and finally did the task on LKS they had.  
2. The teacher had to make a solution that was she had to manage interesting teaching activities which could make the students felt comfort and engaged in the teaching activities. She had to make attractive and interesting atmosphere in teaching English subject. | |

Analyzing the data, we found several findings. The finding showed that using STAD in the process of teaching and learning made the students’ behaviour engagement improve. It can be seen from the percentage of quantitative data, the result of questionnaire percentage was increased as displayed at Table 3 and figure 1:

Table 3. the Percentage of Quantitative Data

| No | Indicators | Before the action | Cycle 1 | Cycle 2 | Cycle 3 |
|----|------------|------------------|--------|--------|--------|
| 1  | productivity/ on-task | 56.70% | 60.42% | 65.33% | 69.35% |
| 2  | Level of engagement | 57.14% | 59.08% | 65.03% | 70.54% |
| 3  | Responding | 54.46% | 58.33% | 65.03% | 67.41% |
| 4  | Listening skills | 58.04% | 58.48% | 65.48% | 67.86% |
| 5  | Behaviour | 55.06% | 59.38% | 64.43% | 70.09% |
| TOTAL | | 56.28% | 59.14% | 65.06% | 69.05% |

Figure 1. Percentage of Qualitative Data on Questionnaire

The total percentage of questionnaire before the action was 56.28%, meanwhile in the cycle 1 was 59.14%, in the cycle 2 was 65.06%, and in the cycle 3 was 69.05%. The improvement of the students’ behaviour engagement can be showed in table 4.4:

Table 4. the improvement of the students’ behaviour engagement

| Activity | Percentage | Improvement |
|----------|------------|-------------|
| Pretest  | 56.28%     |             |
| Cycle I  | 59.14%     | 2.86        |
| Cycle II | 65.06%     | 5.92        |
| Cycle III| 69.05%     | 3.99        |

Based on the table 4.3, it can be concluded that from pre research to cycle 1 there is improvement for about 2.86; from cycle 1 to cycle 2 there is improvement for about 5.92; from cycle 2 to cycle 3 there is improvement for about 3.99. Therefore, it was indicated that the students had significant improvement at the end of the research. Their
percentage of questionnaire increased from cycle 1 to cycle 3.

Analyzing the data, we found some occurrence of obstacles in implementing STAD to improve students’ behaviour engagement which include: (1) Difficulties in avoiding conflict among individual which effects to students’ behaviour engagement in doing any activity during the implementation, (2) Some students are resistant from doing any group work activity and let others do it, (3) difficulties in ensuring students to consider more on individual pre class preparation. Such condition will potentially limits the students on both individual learning and team development.

Michaelsen and Sweet (2008:13-25) teacher should ensure that students have Pre class Preparation. Lack of preparation will promote limits on both individual learning and team development. As a result, for the sake of effectiveness, learning by groups clearly needs students who are held liable for class preparation. The finding is affirmed by the work of Johnson, Johnson and Smith (1991) that, learning in small groups helps peers to work together in maximizing their own learning as well as the others—their teammates.

However, despite all the constraints. The results of this research were satisfying in term of improvement of students’ behaviour engagement. Slavin (1994) in Nikou et.al (2014) said that Cooperative learning (in this context is STAD) is an important teaching technique as it promotes interpersonal interaction and co-operation among the students as well as eliminate negative trend of individual competition. On many occasions, students can explain problem-solving tactics to another student better than a teacher can, although teacher often cannot see this perspective. In accordance with, cooperative learning is considered as a mean being important to improve student time on task, quality, and social interaction skills. Humes (2015, pp7) stated “when students work in cooperative groups, they engage in more task-related interactions than peers who are working either in whole class settings or in untrained cooperative groups”.

Compared to individual learning, cooperative learning (one of which is STAD) have been proven able to lead learners to higher levels of thinking of sharing ideas and looking for solutions as, by which, they can see learning in a broader point of view (Humes, 2015, pp.8)—apprehend learning process openly so they will get broader perspective of ideas through interaction, group work, and discussion. The basic principle motivated this strategy is that learners cooperatively learn and be held liable regarding their teammates and their achievements. It is considered as a good model since it can also raise students’ motivation in learning through sharing and exchanging. Kittur (2016) stated that the STAD, as a teaching technique in cooperative learning, has motivated and encouraged the students to learn better.

Furthermore, the result of this study shows that STAD also helps students to actively and enjoyably follow all learning activities on language learning. Specifically, STAD helps students to have positive productivity/on task, level of engagement, responding, listening skills, and behaviour as well as maximize the learners autonomy.

CONCLUSION

Based on the research findings and discussion elucidated before, on the topic of STAD to improve the students’ behaviour engagement, some conclusions can be drawn.

1. The implementation of STAD in an English Language Classroom is proven able to promotes students’ behavioral engagement in the extent that it provides them with the opportunity to work in peer-collaboration to discuss and do the task mandated by their teachers as well as individual task to improve their own learning.

2. In implementing STAD, specifically for the subjects of this study, some constraints were found such as the difficulties in avoiding conflict among individual during the work group due to the difference characters, resistance from several students to work in groups, and the difficulties to ensure the students to consider more on the pre-class preparation.

Accordingly, based on the research result and conclusion, we would like to propose some suggestions for English teachers, the students, school principals and other researchers.

The English teachers should use innovative and more effective student-centered strategy. Such strategy should promote meaning learning of difficult English concepts. The teachers could develop or adapt appropriate package for use with the students. A common problem with many students in the senior high school is their laziness towards learning especially in doing assignment. This study revealed that one effective measure teachers could use to nip this attitude of students in the bud is to adapt the use of concept tests at the beginning of every lesson. With the score been part of the continuous assessment. This could make them prepare adequately before coming to class. Another experience for English teacher is the student lack of attention and passive participation during teaching and learning.

The study also revealed that one major remedy for such student’s behavior is the use of a posttest after every lesson. Students are being mindful of the fact that there would be a test after the lesson become motivated to put down salient points and actively carried out instructions given by the teachers. During lessons, they are prompted to seek help from peers and teacher when in difficulty, and encouraged to ask and response to questions during lessons. Therefore, it is highly recommended that teachers use posttest after every lessons to promote attentiveness and active participation of students during lessons.

REFERENCE

Barkley, E. F., Cross, K. P., & Major, C. H. (2014). Collaborative Learning Techniques: A Handbook for College Faculty. Hoboken, New Jersey, United States of America: John Wiley & Sons.

Bennett, S., Maton, K., & Kervin, L. (2008). The ‘digital natives’ debate: A critical review of the evidence.
Brown, D. H. (2001). *Principle of Language Learning and Teaching*. New Jersey: Prantice Hall Inc.

Burns, A. (1999). *Collaborative Action Research for English Language Teacher*. Cambridge: Cambridge University Press.

Chen, P., Gonyea, R., & Kuh, G. (2008). Learning at a distance: Engaged or not Innovative. *Journal of Online Education*, IV(3), 8.

Dornyei, Z. (2003). *Questionnaires in Second Language Research*. London: Erlbaum Associates Publishers.

Dunleavy, J., & Milton, P. (2009). *What did you do in school today? Exploring the concept of Student Engagement and its implications for Teaching and Learning in Canada*. Toronto: Canadian EDucation Association.

Finn, J. D., & Voelkl, K. E. (1993). School characteristics related to school engagement. *Journal of Negro Education*, 249-268.

Fredricks, J. A., & Blumenfeld, P. C. (2004). School engagement potential of the concept state of the evidence. *Review of Educational Research*, 74, 59-119. doi:10.3102/00346543074001059

Freisen, S. (2008). *Effective teaching practices – A framework*. Toronto: Canadian Education Association.

Harper, S. R., & Quaye, S. J. (2009). *Students Engagement in Higher Education*. London: Routledge.

Humes, D. (2015). *Effects of Online Collaborative Learning on Student Engagement and Academic Success*. River Falls, Wisconsin, United States of America.

Johnson, D. W., Johnson, R. T., & Smith, K. A. (1991). *Active Learning Cooperation in the College Classroom*. Edina, Minnesota: Interactin Book Company.

Kittur, J. (2016). Implementation of Student – Team – Achievement –Divisions activity and Flipped classroom to enhance student learning. *Journal of Engineering Education Transformation*, 1-5.

Klem, A. M., & Conell, J. P. (2004). Relationship matter linking teacher support to student engagement and achievement. *Journal of School Health*, 74, 262-273.

Leah, T., & Parons, J. (2011). Improving Students Engagement. *Current Issues in Education*, 14(1), 1-33.

Mark, H. M. (2000). Student engagement in instructional activity: patterns in the elementary, middle, and high school years. *American Educational Research Journal*, 37(1), 153-184.

Michaelsen, L. K., & Sweet, M. (2008, December 21). *The Essential Elements of Team-Based Learning*. doi:10.1002/tl.330

Miles, M. B., & Huberman, A. M. (1984). *Qualitative Data Analysis: A Source Book of New Methods*. California: SAGE Publication Inc.

Nikou, F. R., Bonyadi, A., & Khatereh, E. (2014). The Effect of Student Team-Achievement Division (STAD) on Language Achievement of Iranian EFL Students across Gender. *European Online Journal of Natural and Social Sciences*, 3(4), 936-949. Retrieved from www.european-science.com

Pascarella, E. T., & Terenzini, P. T. (1991). *How College Affect Students: Finding and Insight from Twenty Years of Research*. San Fransisco: Jossey-Bass.

Sansiviero, G. (2016, May 18). *Challanges & Advantages of Collaborative Learning Developing Workforce Readiness in Students*. Retrieved January 17, 2018, from Southeast Education Network: http://www.seenmagazine.us

Schlchtey, P. (2004). *Working on the work*. San Fransisco: Jossey-Bass.

Skinner, E. A., & Belmont, M. J. (1993). Motivation in The Classroom: Reciprocal Effects of Teacher Behaviour and Students Engagement Across The School Year. *Journal of Educational Psychology*, 85(4), 571-581.

Skinner, E. A., Kinderman, T. A., & Furrer, C. J. (2009). A Motivational Perspective on Engagement and Disaffection. *Educational and psychological Measurement*, 69(3), 493-525.

Slavin, R. E. (2009). *Cooperative Learning Theory, Research, and Practice*. Massachusetts: Needham Heights.

Stenberg, L. D., Brown, B. B., & Dornbush, S. M. (1996). *Beyond the Classroom: Why School Reform has Failed and What Parents Need to Do*. New York: Simon and Schuster.

Wallace. (1998). *Training Foreign Language Teacher*. Cambridge: Cambridge University Press.

Yazzie, M. E. (2015, September 1). Voices of Students on Engagement: A report on the 2006 High chool Survey of Students Engage,ent. Bloomington, Indianapolis, United States of America.

Yu, C. P., & Kuo, F. Y. (2011). Investigating the Development of Work-Oriented Groups in an e-learning Environment. *Educational Technology and Society*, 15(3), 164-176.
