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Understanding student participation within a group learning

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Participation is an effective strategy in the teaching and learning process. Many students contribute in different ways. Nevertheless, many teachers assume that students are only active if they focus on the teacher's learning objectives. The research aimed to describe student participation in-group learning. A mixed research design was conducted to understand student participation. Data were collected through observation and interviews. Interactive data analysis consisted of four-cycle steps: data collection, data reduction, data displays, and the conclusion. This study found that participation in-group learning required mutual respect, a sense of responsibility, awareness of creating a constructive climate, and leadership. The results of this study are expected as a consideration of teachers in determining student participation in teaching and learning processes.

Keywords: group building; group learning; inquiry skill; interpersonal skills

Introduction

The ability to collaborate and manage tasks or projects is essential (Gardner & Korth, 1998; Pfaff & Huddleston, 2003). The benefits of collaborative and cooperative learning have been demonstrated in countless studies and several meta-analyses (Motaei, 2014; Terenzini, Cabrera, Colbeck, Parente & Bjorklund, 2001). Group of learning in a class has an impact and contribution to the evaluation of student learning outcomes (Hoffman & Rogelberg, 2001). The skill and effectiveness in groups, including interpersonal communication, process negotiations, and cooperation between teams are notable in this era. Group learning is essential for developing countries to promote technological development, global economic competition, and economic growth.

Student participation requires the mental and emotional involvement of students in order for them to achieve their aims (Frymier & Houser, 2016). Their participation in class is usually spontaneous, and occurs naturally (Abdullah, Bakar & Mahbob, 2012). The participation of the student in a group is not the same, and they participate in different ways. The goal of increasing participation is not to have every student participate in the same way or at the same rate. Instead, it is to create an environment in which all participants have the opportunity to learn and in which the class explores issues and ideas in-depth, from a variety of viewpoints. Certain students will raise their voices more than others; this variation is a result of differences in learning preferences, as well as in personalities. Teamwork can help overcome many shortcomings of traditional learning methods and provide benefits for the students and teachers, where students become more active (Brown, 2012). Students can learn better when they are participating, involved mentally, and are committed in the process of investigation, discovery, and interpretation (Tesfave & Berhanu, 2015). The formation of a group in the learning process, according to Conderman (2016), aims to improve academic learning outcomes of the students. The implementation of collaborative and cooperative learning can improve the cognitive ability of students, help them achieve a desire to learn, and increase student satisfaction (Fung & Lui, 2016; Prince, 2004). Biggs and Tang (2011) state that when pupils are learning passively, their brains do not work completely, process information, or maintain information efficiently.

The formation of learning groups can be both effective and ineffective. In performance, the productive group will be able to collaborate effectively, whereas an ineffective or dysfunctional group will avoid accountability, show a lack of commitment, fear, conflict, and lack of trust. This can lead to extreme frustration and resentment. The individual differences in a heterogeneous group can raise an issue in which the productivity of the group decreases, because everyone in the group has different abilities and learning styles (Peterson & Peterson, 2011). Kamau and Spong (2015) state that the error in this process affects the performance in the groups. The difference between real performance and potential performance that belongs to each member of the group could decrease student participation (Rubel & Okech, 2017).

Theoretical Framework

Group learning

Group Learning is one of the most generally practiced and intensely studied teaching strategies in the school classroom. Groups provide numerous beneficial resources to obtain more information because of the diversity of members' backgrounds and experiences (Burke, 2011; Hager, 2014). Gil and Mataveli (2017) note that groups play a vital role in organisational learning. Group learning promotes students to achieve shared learning objects. It has been shown to improve student performance, persistence, attitudes, and gain a better understanding of themselves (Wilson, Brickman & Brame, 2018). It can provide opportunities for learners to describe their thought, supporting the cognitive restructuring that leads to learning (Burke, 2011; Kagan, 2014). The learning

benefits of collaborative or group learning are greater than the benefits gained from working individually (Mentz & Goosen, 2007). Groups can be an effective method to motivate students, encourage active learning and participation, and develop essential critical-thinking, communication, and decision-making skills. Group learning permits students to express their views and clarify their ideas (Chiappetta & Koballa, 2009). It is a good strategy for promoting student involvement in the classroom.

Group learning is used by teachers to achieve at least three significant instructional objectives. First, it improves students' thinking and helps them construct their understanding of the subject matter. Second, it promotes student involvement and engagement. Third, it helps students learn valuable communication skills and to develop more effective thinking processes (Arends, 2011). According to Dallimore, Hertenstein and Platt (2004), the benefits of group learning include helping students to develop their critical thinking, promoting self-awareness, creating appreciation for diverse perspectives, spurring creativity, and enhancing the ability to take action. In short, the benefit of learning within group learning will participation significantly affect the cooperation of members. This view is consistent with both socio-cognitive and socio-culture perspectives of learning. From a socio-cognitive perspective, learning is a cognitive process embedded in social contexts. Thus, both social and cognitive factors influence the outcomes of learning (Tjosvold, Chen, Huang & Xu, 2014; Wilkinson & Fung, 2002). From a socio-culture perspective, learning is constructed during interaction and activity with others; there is interdependence of social and individual processes in the co-construction of knowledge (Gil & Mataveli, 2017; Hager, 2014).

Student participation

Participation is the result of democracy, where planning are included people in implementation (Kouba, 2018). They also bear responsibility (Braun & Zolfagharian, 2016). Student participation is crucial to creating active, creative, and enjoyable learning (Phaswana, 2010). Teachers believe that greater learner participation produces greater student learning (Lo, 2010; McMullen, 2014). Participation is represented as individuals and groups of having the right, the means, space, time, and the chance to declare their opinions, to be understood and to contribute to matters affecting them (Niia, Almqvist, Brunnberg & Granlund, 2015). Their views were given in accordance with their age and maturity. According to Lo (2010), aspects of participation that can be measured in the learning process are cooperation and involvement, asking questions, giving a response, providing conclusions, answering the questions, and working in front of the class. While according to Bosworth (1994), collaboration capabilities in a group are divided into five categories, namely: interpersonal skills, group building, inquiry skills, conflict resolution, and presentation.

There are several factors that influence student participation in the process of learning. The first lies in the personality of the students. Students with high self-efficacy show better academic achievement, and participate more in the classroom (Paiares, 1996; Stewart, 2008). They show a more significant interest in learning more by asking questions, giving opinions, and discussing the topics in the classroom. The second important factor is the traits and skills of the teacher are those traits that have been shown by the instructor, such as being supportive, understanding, approachable, and friendly through positive non-verbal behaviour. These teachers smile and nod, are affirmative and open-minded and contributed to the students' active participation in the classroom (Dallimore et al., 2004; Fassinger, 2000). The research of Yu and Lee (2015) finds that the motivation of students in learning affects their participation in groups. The participation of the students in a learning group is closely related to the effectiveness of group learning, including the planning process and supporting facts.

Method

Research Question

The research question is how student participation within group learning?

Participant

The participants of this study were 128 students at Madrasah Tsanawiyah in Surakarta. There were 74 females and 54 males. The Madrasah Tsanawiyah, according to UU No.2/1989, is equivalent to Secondary School and is devoted to the Islamic religion. Overall, 128 participants in this study were in the seventh-grade class, and their ages ranged from 12 to 14 years. The researchers chose the students in the seventh grade, since these individuals have acquired the ability to think abstractly, logically, and concretely.

Instrument and Procedure

Data were collected for two months using an observation sheet and interviews. The indicator participation categories were interpersonal skills, group building, and inquiry skills. For the list items used to assess student participation, please see Table 1.

In conducting observations, the researcher was assisted by seven observers to retrieve data about student participation during the learning process. Some participants also were interviewed individually and in groups before and after classes.

Through the interviews, the researcher was able to investigate and examine in-depth information about the students' views, comments, and feelings.

Table 1 Items used to assess student participation included interpersonal skills, group building, inquiry skills, and participation

Interpersonal skills

- Listening to others
- Giving constructive feedback
- Respect
- Effective communication

Group building

- Keeping on task
- Discussions to solve the problem
- Supporting each other

Inquiry skills

- Seeking information from various sources
- Providing sound evidence
- Sharing ideas
- Report writing

The participants were divided into 32 groups of four students each. Groups of four or five members tend to work best (Burke, 2011). The student group has been organised from the beginning of the learning by the teacher. The classification of the students is the heterogeneous ability (high, moderate, and low) and gender. Students sat in groups, interacted, and worked with other students. The teacher's role is to facilitate learning primarily, monitoring the progress of group learning, mentoring programme and intervening when guidance is needed. All of the student activities were recorded and observed using observation sheets. The observation sheet was combined field notes and checklists by the following categories: 5 (excellent), 4 (good), 3 (okay), 2 (needs improvement), and 1 (poor). The students were asked to participate in group learning for a variety of tasks and in a variety of groupings. For reasons of practicality, the students and a teacher were adaptable to normal classroom conditions.

Data Analysis

A mixed research design was used with a combination of the quantitative and qualitative approach. Numeric data were analysed using the Statistical Package for the Social Sciences (SPSS). In this study, SPSS was used to assess the extent of student participation through teamwork. Interactive data analysis consisted of four-cycle steps: data collection, data reduction, data displays, and the conclusion. Data collection was carried out using observation and interviews, such as how do you express ideas; are you sure that the work produced by your group is in line with your expectations; and, what motivates you to speak up? Data reduction was the process of selecting, focusing, and transforming the raw data that appeared in writing up field notes and interviews. Data displays were an organised assembly of information that allowed for conclusion drawing and action. This is the main component of research in which all data helped researchers interpret student participation. The last step was the conclusion and verification. The reliability of the scales and internal consistency of items within scales were calculated as valid and reliable with Cronbach's alpha 0.851.

Results

The participation of the students in a learning group is closely related to the effectiveness of group learning. The following table shows the test results using Kolmogorov Smirnov, revealing that each variable is normally distributed (see Table 2).

The results of the student participation analysis appear in Figure 1.

Table 2 One-sample Kolmogorov-Smirnov test

		Interpersonal skill	Group building	Inquiry skill
N		128	128	128
Normal parameters	M	106.39	30.86	48.09
	SD	18.035	6.295	8.538
Most extreme differences	Absolute	.154	.142	.171
	Positive	.154	.073	.171
	Negative	138	142	145
Test statistic	_	.154	.142	.171
Asymp. Sig. (2-tailed)		.001	.000c	.022c

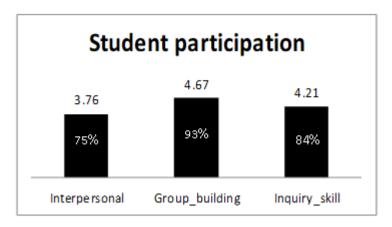


Figure 1 Student participation

Discussion

Interpersonal Skills

Interpersonal skills consist of the skills of an individual to communicate with others adequately. Interpersonal skills require effective communication; empathy; listening to others; showing respect; providing sound evidence or arguments to support proposed or actual actions; critical self-evaluation; cultural competency; and professionalism (Ajjawi & Higgs, 2008; Skinner, Hyde, McPherson & Simpson, 2016). With reference to Figure 1, 75% of students' interpersonal skills related to effective team participation, helping a team to achieve outcomes and to move students progressively toward stronger understanding. Students enthusiastically engaged with other students, and conversed using proper verbal and positive etiquette toward others. The relationships among members are meaningful. They were able to reflect on their experiences and learn.

Students' interpersonal skills needed to be improved, mainly listening to others' opinions. Most students attend less to the views of friends, where, when someone talks, other members tend to be squeezed. The students were often critical, declaring their opinions to be better than those of others. Students did not understand how to give good feedback. "It was complicated to provide input without being struck down" (A Irwan, pers. comm.). This reflects that providing instruction on how to provide constructive feedback by ignoring the ego, and the desire to be recognised as necessary.

The school of Madrasah Tsnawiyah, in its daily courses, emphasis mutual respect in an Islamic way. Students help each other and are polite to one another. They realise that everyone is different, and should keep working together to accomplish the task in the group so as to build an effective learning climate. "Every day at school, our teachers always teach and model examples of mutual respect" (B Susanto, pers. comm.). As for the aspect of effective communication, the ability of students still required improvement, where their

language is remained unfocused and convoluted. Students say, "it is challenging to speak efficiently. I need to describe it first so that others will understand what I mean" (S Munia, pers. comm.). An adequate way of communicating requires a great deal of practice, so the word compilation becomes more effective and efficient in communication strategy.

Group Building

The students in the group are responsible for the results of their group discussions. Building groups of high school students proves to be more natural than building adult groups (Senot, Kostadinov, Bouzid, Picault, Aghasaryan & Bernier, 2010). Referred to Figure 1, student participation in group building is higher than it is in others (93%). Students were eager to work, and to have a sense of responsibility. The assignments have functioned as social expectations, where each group expects that the members have control skills and obtain approved behavioural patterns. Social participation appears to be essential for academic achievement (Niia et al., 2015; Stewart, 2008). The students hoped to reach the learning objective, and were nervous when they were not working on or finishing their task.

"I tried to do the task. Nevertheless, I was not confident with my answer" (K Ali, pers. comm.). The work of the task brings about a sense of responsibility in the student. This study indicates two patterns of student assignment work, namely: 1) the students complete their tasks, then discuss or match the answers of each; or 2) the task is divided into several parts by the number of group members, and each member is assigned different sections.

Students discussed how to complete the task, finding the answers in the task. Students were able to manage the task time well, so the work was completed and finished on time. They had five to 10 minutes before the end time to check the overall assignment.

"We took the time to double-check the assignment; we were afraid that something was

missing" (Yani, pers. comm.). At the time of discussion, the dominant students communicated to provide possible answers. Then, another student replied and continued. This proves to be a challenge for teachers to reduce the dominance of students. Teachers often remind other students to communicate their answers actively. The mutual support of one another in a group is evident in group learning, where group assessment makes students try to help their less fortunate friends. This sense of support constitutes a form of awareness of the team.

Inquiry Skills

The exciting thing in the student participation indicators is that the indicator seeks information from a variety of sources and confirmation page. Students were less interested in searching for information in textbooks or other sources. The students only read the information provided in the worksheet, and the recorded information from the teacher. The result of the interview shows that students did not want to read.

"Reading a textbook is a waste of time and boring" (Ariand, pers. comm.). Some students also said that the information from the teacher was the same as that which was contained in the textbook, so they did not need to read the literature. The students needed an impressive source of information in communication. Teachers are required to be creative, and to be able to provide new information through a medium that fosters students' interest in reading.

The role of teachers and the school environment is highly influential over the success of the learning process (Juan & Visser, 2017; Trivanto & Handayani, 2016). Learning systems in Indonesia caused students to become passive, and to listen to the teacher in the classroom, rather than searching for information or knowledge beyond what was taught. The worksheet ought to be given in the form of a fun project, in which students are required to review a lot of information. Reading is not regarded as monotonous and uninteresting, but as a fun thing for students. Research Progress in International Reading Literacy Study ([PIRLS], Mullis, Martin, Foy & Drucker, 2012), an international study in the field of reading to children in the world sponsored by the International Association for the Evaluation Achievement, shows that Indonesians are located fourth to last of 45 countries. The results of the international research Program for International Student Assessment (PISA) 2015 regarding the ability to read of the students also mentioned that the reading ability of students in Indonesia occupied the sequence Records 69th of 76 countries surveyed. The results are lower than those of Vietnam, which held the twelfth position of all nations surveyed. Ministry of Education and Culture

(Kemdikbud) issued a regulation on growing the outstanding traits of the Regulation No. 23 2015, where the school should be made reading culture 15 minutes at the beginning of the lesson. It also issued a parenting book, and pocketbook about the school literacy movement. This book reveals how schools might strive to develop the culture of literacy, detailing activities to bolster learner interest, and enhance reading skills.

The desire to provide evidence that students have is not much different from the desire to read from various sources. The results of compliance indicated that the desire to think empirically by the students included evidence at the time of numerous discussions. However, the lack of compelling and incomplete literature impacted the presentation of evidence by students. Students were aware that expressing an opinion or doing good work must be accompanied by confirmation. The aspect of discovery in which students were engaged in uncovering an idea was dominated by smart students. However, during the discussion, other members began to respond, and to attempt to give their views. This research suggests that an initiator needs to make the group more active, viz. a leader who will initiate activity in the teamwork. The leadership must be able to develop a favourable climate in the organisation. The structural, cultural classroom climate was receptive to the expansion of leadership (Naicker, Grant & Pillay, 2016).

The pupils actively followed all the steps in the learning process. The students had a desire to find their identity and show themselves in a group. Almost all of the students contributed to class activities. Students recognised and discussed the connection between course material and another aspect of their lives. This became the basis or the reason for participation in the group. The factors that influenced the participation of students based on the analysis of the indicators or criteria for participation in the above were the desire to be recognised in groups. They were motivated to complete the tasks that gave confidence, learning group atmosphere, and support from members of the group. Students built on their prior knowledge as they engaged in a cognitively challenging situation. According to Yonezawa and Jones (2006), participation also can help to increase student engagement and commitment to school, which is critical to student learning and achievement. The primary expected outcome of the group is student motivation and attitude toward the work. The learners with more motivation produced average to high results in the learning outcome (Schulze & Lemmer, 2017). The student believed that success in school work resulted from their effort.

Group learning is probably best suited to learning processes involving conceptual development, thinking, and problem-solving. An

obstacle in this study was seating arrangements, where the furniture was not able to be moved. Physical seating patterns need to be changed to make student interaction easier in different working situations. Students seated in rows may be functional for teacher presentations, but would not be conducive to work. Furthermore, certain things must be emphasised and repaired to reduce the dominance of students who have better cognitive abilities. Aside from that, if the relationship between certain groups, student interactions, and learning tasks are planned strategically, the student experience of learning will be made more effective.

Conclusion

The results of this study concluded that to build the participation of students in a group requires the attitude of mutual respect, awareness of the team, and leadership. In addition, there are two patterns of task work done by students in the group: 1) the students complete their work individually and then compare it; 2) the task is divided into sections and is then made into group answers. The role and participation of the teacher and school must be considered to increase student participation in the learning process. Causing students to be active in the learning process helps them achieve more profound levels of understanding, and it has been a challenge for the teachers involved in the field. The suggestion in this study is to more deeply examine how to create exciting student worksheets that entice students to write and understand easily.

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