The Effect of SFE Type Cooperative Learning Model on Students' Social Skill Viewed from Thinking Style Characteristics

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Abstract

In the process of learning interactions occur between teacher and students or students and other students. Interactions is one of the factors that support learning success. Interaction in this study is concerned with students' social skill. Social skill in question is related to how students collaborate, deliver opinions, establish relationships with others, have a sense of empathy, and dare to make decisions. In addition, in the learning process the students are also engaged in a thought process. In this study thought process refers to thinking style characteristics: concrete sequential (CS) sk, abstract sequential (AS) sa, concrete random (CR) ak, and abstract random (AR). This study used an exploratory research design to provide ideas about the situation and condition of the students of the students. The purpose of this research was to study how the social skill of students was as viewed from the characteristics of their different thinking styles. The result showed that the students with the AK thinking style characteristics has better social skills than the students with other thinking style characteristics. Result this research showed that 1) the students who learned through SFE type cooperative learning model have better social skills than those who learned through direct learning, 2) Each style of thinking gives the same influence to social skill.

Keywords: interaction, learning model, social skills, thinking styles

1. Introduction

Developing learning paradigm is currently a student as a subject of instruction. This course requires an ability which students can put yourself and play a role in the learning process. In addition to learning independently students also learn by interacting with friends, the teacher, and the learning environment. This is particularly necessary because not only knowledge but social skills are also required. In addition to acquiring academic achievement, students must also have social skills. According to Hair et al. (2001), social skill development is related to having a warm and friendly personality, good nonverbal intelligence, parenting parents who are responsive, and regular contact with older brothers/younger siblings (Reynolds & Muijs, 2008). Through the development of social skills, a student can have the ability to socialize and find related information sources of the material being studied.

Through social skills students are expected to interact with peers, teachers and the learning environment. However, it is less in accordance with the expectation that a field. Observation and an interview with the teacher showed that only a small number of students play an active role, in this case, those who asked and answered questions in the learning process. There was even a student who has been appointed by the teacher to ask but just kept silent. When the student was told to solve a simple problem in front of the class still found it difficult but did not ask the teacher how to do it. This shows that the student lacked social skill which is also important to learn.

Combs and Slaby (1977) argues that social skill is the ability to interact with others in a social context in certain ways which are socially acceptable. According to Hargie, Dickson, Boohan, & Hughes (1998) social skills is the individual's ability to communicate effectively with others both verbally and non-verbal in accordance with the situation and condition of a particular time. In line with Kelly's opinion (Merrell & Gimpel, 1998) social skill is a behavior that is learned and used by an individual in the face of interpersonal situations in the

environment. From some expert opinions above in this research is a social skill is the ability to interact and communicate in the face of social problems. In the report by Nealson & Aboud (1985) person gives opinions more easily to his or her friend than to a stranger. This means that a teacher can build an interaction through discussions in groups so that a student can give his or her opinion to his or her friend. This will lead to the ability to analyze, the ability of self-managing information before expressing an opinion. To know the level of children' social skill some instruments can be used such as observation sheet, self-report and questionnaire, rating scale. All these instruments are arranged based on the dimensions of social skill. Observation sheet is used to observe the quality of the interaction of students during the learning of mathematics and self-report questionnaire is given to students to be completed. .

Furthermore, in the process of learning students cannot be separated from the process of thinking. Each student has a different thinking style. This certainly can influence the results of student learning. Gregorc in (Bobbi, Hernacki, & Mike, 2011) concluded that the existence of two possible dominations of the brain is associated with information processing, i.e. (1) the perception of concrete and abstract entities, and (2) the ability of the sequential arrangement (linear) and abstract arrangement (non-linear). Bobbi et al. (2011) combines the two into four thinking styles, namely: (1) concrete sequential (CS), (2) abstract sequential (AS), (3) concrete random (CR), and (4) random abstract (AA).

According to Sagala (2006) thinking is a process of determining relations significantly between those aspects of a piece of knowledge. Then Sardiman (2006) states that the characteristic of the students is "the overall pattern of behaviour and the ability of the student as a result of social upbringing and environment so as to determine the pattern of activity in reaching his or her goal". Ginnis (2008) states that students who have an abstract thinking style explained that they can quickly change a natural experience into abstract thinking. They live in their heads, meaning that they think, they feel, they look for patterns, make relations, find a common ground, want ideas, love the theories and principles much. They "see" the invisible. Students with this style of thinking tend to be subjective.

Ginnis (2008) provides an explanation that students with concrete sequential thinking style focus on the physical reality. They use the modality of the senses. They concentrate more on what they see, feel, hear and touch, and kiss. But they are less patient with ideas and nonsense in the form of the delusion. They are practical and live here and in the present. They have a strong tendency to objectivity. At times, his or her experiences and learning activities must be physical. If learning cannot be seen, touched and "done", he or she is faced with difficulties and does not learn anything. Based on the opinions above a conclusion drawn is that a characteristic style of student's thinking is his or her overall pattern of behaviour and ability in the process of determining the relationship between aspects of the knowledge that come from the social environment, experience, sensing and the students' dispositions forming a pattern of activity to achieve his or her goals.

According to some research, cooperative learning is very effective for improving the academic achievement and students' interaction. In line with the results of research, George (2010) states that cooperative learning can improve learning achievement. Research results from Azmir, Rahim, & Mohamad (2011) indicate that the result from the application of the cooperative learning model is also better than that of the classical learning model. Therefore, cooperative learning is also assumed to be able to improve the social skills of the students. This is caused by the fact that through learning the students will interact actively both in the discussion group or class discussion. One type of cooperative learning model is a Student Facilitator and Explaining (SFE).

The learning model is a model of learning which SFE merit, i.e., it gives the opportunity to students to present ideas or opinions to the other students. Here students will communicate with each other and exchange information with each other Liang (2002), so that the positive interactions arise in achieving learning objectives. In line with the (Juliantine, Subroto & Yudiana (2013) stated that cooperative learning gives the opportunity to students with different backgrounds to interact and learn together.

2. Research Methods

Participants

The population was all of the seventh grade students in Surakarta, the sample consisted of 190 participants. The sample was separated into 4 groups: CS, AS, CR, and AR groups.

Instruments

The instruments used in this research consisted of a structured interview to interview mathematics teachers, observation sheets and questionnaire for finding out the students' social skill in the class, and questionnaire to find out the characteristics of the students thinking styles.

Data analysis

The data analysis was two - way ANOVA with unequal cells with SPSS program. Normality test used Kolmogorov and Smirnorv with significant level 0.05. Homogeneity test used Bartlet test.

Table 1 Between-Subjects Factors

		Value Label	N
Model	1	SFE	96
	2	Direct learning	94
Thinking style	1	CS	67
	2	AS	48
	3	CR	34
	4	AR	41

Table 2 One-Sample Kolmogorov-Smirnov Test

N		190
Normal Parameters[a]	Mean	69.6526
	Std. Deviation	4.26941
Most Extreme Differences	Absolute	.072
	Positive	.072
	Negative	-.066
Kolmogorov-Smirnov Z		.988
Asymp. Sig. (2-tailed)		.283

a. Test distribution is Normal.

3. Result and Discussion

The following is the presentation of data for each model and the students' thinking styles. Based on the test results using the Kolmogorov-Smirnov normality Test in table 2 above, it was concluded that the sample came from a Gaussian population. Furthermore a test was conducted to test its homogeneity with the result as shown in table 3 below.

Table 3 Homogeneity Test

df1	df2	Sig.
1	188	.715

Table 4 Tests of Between-Subjects Effects

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	614.253ª	7	87.750	5.642	.000
Intercept	844132.817	1	844132.817	5.427E4	.000
Model	396.124	1	396.124	25.468	.000
Thinking style	51.372	3	17.124	1.101	.350
Model * thinking styles	37.272	3	12.424	.799	.496
Error	2830.820	182	15.554		
Total	925228.000	190			
Corrected Total	3445.074	189			

a. R Squared = ,178 (Adjusted R Squared = ,147)

Based on the ANOVA two ways with unequal cells test results table 4 by using the SPSS program obtained degrees of significance on the model (0.000) less than 5% significant level. This means that H_0 is rejected in other words there is a difference of social skills using a model of learning rather than learning. Note the extent of significance on the style of thinking students (0.350) more than 5% level of significance. This means thinking styles do not affect social skills of the students. Next the degree of significance of the interaction between the learning model and thinking style (0.496) more than a 5% significance level. This means that there is no interaction between the learning model and the students' thinking style.

Research results from Subaer (2013) provides the information that learners with the abstract sequential thinking type and random abstract thinking type are more creative in planning and solving. Yet the social skill of the students with the characteristics of the concrete random thinking type is higher than that of the students with the other style characteristics. Meanwhile, according to the results of research by Suningsih, Kusmayadi, & Riyadi (2014), students with CS, AS, AR, and CR thinking style characteristics have the same learning achievements. However, in this research it was obtained that the social skills of students in each thinking style characteristics are different. On the other hand, according to the result of research conducted Fitriani et. al. (2016) the achievement of the students with CS thinking style is better than that of those with AS, CR, or AR thinking style and those with AS thinking style have a similar learning achievement to those with AR or CR. The difference between Suningsih's and Fitriani's researches is that they use different models and approaches. The results show that it is not necessarily the case that the students with a high learning achievement has a high social skill also and vice versa. Students with

emotional and/or behavioral disorders are often characterized as demonstrating poor peer-related skills. The students may have a high level of social interactions but in the form of negative or aggressive interactions, and lack general social competence (Nelson & Pearson, 1991).

4. Conclusion

The learning model SFE have better social skills rather than direct learning. On each style of thinking gives the same influence toward social skills. For other researchers can used another the cooperative model and approach the other to to know the extent to which the learning model effectiveness against the social skills of students.

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