Learning Interests with Talking Drawing Strategy of Inclusive Primary School Students in Surakarta

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Abstract: A learning method is necessary in supporting learning activity. Thus, a learning method applied in inclusive school should reinforce learning interests and outcomes of students, both normal students and students with special needs. This research aims to determine the effect of Talking Drawing Strategy (TDS) to improve learning interests of the inclusive primary school students in Surakarta. The research applied random sampling technique with 52 respondents of fourth-class students in two inclusive primary schools in Surakarta. The respondents consist of normal students and students with special needs. Data were gathered by observations of students' learning interests and a questionnaire about the students' learning interest with TDS. Based on descriptive statistical analysis, the research showed that learning activities with TDS can decrease the negative learning behaviours up to 50% in all respondents, 52% in normal respondents, and 45% in respondents with special needs. The research also revealed that (1) 79% of the students like to learn with TDS; (2) 79% of the students stated that TDS is useful in understanding subject matter; and (3) 52% of the students stated that learning with TDS is easy to do. To sum up, TDS improves the learning interests of the inclusive primary school students in Surakarta.

Keywords: Talking Drawing Strategy, learning interest, inclusive primary school students

1. INTRODUCTION

A learning method is necessary in supporting learning activity. Some researchers suggested that one factor that plays an important role in determining the success of learning is a learning method (Arnold & Dwyer, 1976; Blumen Feld & Meece, 1988; Klahr & Nigam, 2004; Hsieh & Cifuetes, 2006; Brahim, 2007).

Salmeto (Hamdani, 2010: 80) stated that a learning method is a way of teacher to deliver learning materials to students. The main purpose of a learning method is to deliver learning materials or messages in school curriculum effectively, so that students enable to receive, understand, record, and digest them well (Anitah, 2009: 84). Thus, it is important for a learning method to support and assist students' learning activities, so it can optimize the learning interest and outcomes of the students.

Besides, a learning method is necessary to assist not only normal students, but also students with special needs. One kind of school which gives opportunities to students with special needs to get same education and same learning activities together with normal students called inclusive schools. Thus, a learning method applied in inclusive school should reinforce learning interests and outcomes of students, both normal students and students with special needs.

A learning method should reinforce the students to develop their learning interests besides develop their learning outcomes. The improvement of learning interest can also improve the learning outcomes because a learning interest is a factor that can affect a learning outcome (Iskandar, 2001). A learning interest is a tendency to sustain attention and remember something continually (Hamdani, 2010).

One form of visualization method which has been investigated several times is Talking Drawing Strategy (McConnell, 1993; Fello, Paquette, & Jalongo, 2006; Paquatte, Fello, &

Jalongo, 2007). This method provides many benefits in learning activities, such as develops better engagement in learning, helps children to organize and reflect his knowledge, provides a better understanding, develops literacy and language skills, and assists students in writing paper (McConnell, 1993; Paquatte, Fello, & Jalongo, 2007).

Talking Drawing Strategy is one kind of learning methods that can assist students in learning (McConnell, 1993). Talking Drawing Strategy can be applied at all levels of education. In Talking Drawing Strategy, students are asked to create a mental picture of a topic. Furthermore, students are asked to explain his picture. After that, students read a text of the topic. In this stage, the teacher also gave a summary explanation of the text. Next, students create a new image depicting his new understanding of the new information received (Fello, Paquette, & Jalongo, 2006).

This research aims to determine the effect of Talking Drawing Strategy to improve learning interests of the inclusive primary school students in Surakarta. The hypothesis proposed in this research is Talking Drawing Strategy can improve the learning interests of the inclusive primary school students in Surakarta.

2. METHODOLOGY

The research was a qualitative research. Descriptive statistical analysis was used to test the hypothesis. The research applied random sampling technique to get two from six inclusive primary schools in Surakarta. The respondents of this study were 52 fourth-class students in two inclusive primary schools. The respondents consist of 45 normal students and 7 students with special needs.

Data collection tool used in this study were an observation sheet (behavioural checklist), to measure students learning interest in learning activities before the research (without TDS) and during the research (with TDS) and a questionnaire sheet about the students learning interest with TDS.

The materials needed in this study include four texts and picture tools (paper and pencil).

The respondents followed the learning with Talking Drawing Strategy for four sessions, twice a week, for 75 minutes at each meeting. It was given classically by the tutor with five

phases. The first phase, the tutor presented a topic, distribute paper and pencil, and then asked students to create figures freely about the topic for 15 minutes. The second phase, students were asked to describe the picture and discuss it with friends for 10 minutes. The third phase, the tutor shared a text about the topic to read together, and then tutor gave an explanation as a summary of the text. The fourth phase, the tutor asked students to draw and add a label/description/ explanation on the picture for 15 minutes. The last phase, students were asked to retell and discuss their new image with their friends based on their new understanding.

3. RESULT & DISCUSSION
3.1 Description of Respondents
3.1.1 All Respondents

There are 52 respondents of fourth-class students in two inclusive primary schools (school A & B), 15 students from school A and 37 students from school B. The respondents consist of 32 male students and 20 female students. The respondents consist of 45 normal students and seven students with special needs.

Table 1. Description of all respondents.

School	Male	Female	Total
A	12	3	15
B	20	17	37
Total	32	20	52
Per cent (%)	62	38	100

3.1.2 Normal Students

There are 45 respondents of normal students in two inclusive primary schools (school A & B), 13 normal students from school A and 32 normal students from school B. The respondents consist of 27 male normal students and 20 female normal students.

Table 2. Description of normal students.

School	Male	Female	Total
A	10	3	13
B	17	15	32
Total	27	18	45
Per cent (%)	60	40	100

3.1.3 Students with Special Needs

There are seven respondents of students with special needs in two inclusive primary schools (school A & B), two students from school A and five students from school B. The students with special needs consist of five male students and two female

students. There are six slow learner students and one student with autism as the respondents of this research.

Table 3. Description of students with special needs.

School	Male	Female	Total
A	2	0	2
B	3	2	5
Total	5	2	7
Per cent (%)	71	29	100

3.2 Observation Result

The observation is about learning interest of the students in inclusive primary school when TDS did not apply (before the research) and applied (during the research). The learning interests show by the decreasing of the negative learning behaviours. The results of observation consist of observation result of all respondent, observation result of normal students, and observation result of students with special needs.

3.2.1 Observation Result of All Respondents

Based on the observation result of all respondents in table 4, it appears many differences in negative learning behaviours before (without TDS) and during the research (with TDS). Almost all of the indicators of learning interest decrease, except indicator 'lying head on table'.

Table 4. Observation result of all respondents.

Aspect	Indicator	Without TDS (mean)	With TDS (mean)
Teacher's explanation (receiving)	Lying head on table	1	2
	Yawning	3	2
	Daydreaming	3	1
	Moving too much	13	6
	Talking too much	16	11
Doing task (responding)	Not answering teacher's questions	6	5
	Responding slowly	14	9
	Moving too much	17	11
	Talking too much	14	4
	Interrupting others	11	0
	Not completing task	7	1
Total		105	52
Percentage		100%	50%
Percentage of decreasing		50%	

In addition, learning activities with TDS can decrease the negative learning behaviours up to 50% in all respondents. It means that learning activities with TDS enables students to decrease their negative learning behaviours, and then increase their positive learning behaviours and learning engagements. Thus, TDS can improve students' learning interest.

3.2.2 Observation Result of Normal Students

Based on the observation result of normal students in table 5, it appears many differences in negative learning behaviours before (learning activities without TDS) and during the research (learning activities with TDS). Almost all of the indicators of learning interest decrease, except indicator 'lying head on table' and 'yawning'. In addition, learning activities with TDS can decrease the negative learning behaviours up to 52% in normal students. It means that learning activities with TDS enables students to decrease their negative learning behaviours, and then increase their positive learning behaviours and learning engagements. Thus, TDS can improve normal students' learning interest.

Table 5. Observation result of normal students.

Aspect	Indicator	Without TDS (mean)	With TDS (mean)
Teacher's explanation (receiving)	Lying head on table	1	1
	Yawning	2	2
	Daydreaming	2	0
	Moving too much	11	4
	Talking too much	12	10
Doing task (responding)	Not answering teacher's questions	1	0
	Responding slowly	14	8
	Moving too much	14	10
	Talking too much	11	4
	Interrupting others	8	0
	Not completing task	7	1
Total		83	40
Percentage		100%	48%
Percentage of decreasing		52%	

3.2.3 Observation Result of Students with Special Needs

Based on the observation result of students with special needs in table 6, it appears some differences in negative learning behaviours before (learning

activities without TDS) and during the research (learning activities with TDS). Some indicators of learning interest decrease, except some indicators like 'lying head on table', 'daydreaming', 'moving too much', 'not answering teacher's questions', and 'responding slowly'. In addition, learning activities with TDS can decrease the negative learning behaviours up to 45% in students with special needs. It means that learning activities with TDS enables students with special needs to decrease their negative learning behaviours, and then increase their positive learning behaviours and learning engagements. Thus, TDS can improve students with special needs' learning interest, though the improvement is not as much as the improvement on normal students.

Table 6. Observation result of students with special needs.

Aspect	Indicator	Without TDS (mean)	With TDS (mean)
Teacher's explanation (receiving)	Lying head on table	0	1
	Yawning	1	0
	Daydreaming	1	1
	Moving too much	2	2
	Talking too much	4	1
Doing task (responding)	Not answering teacher's questions	5	5
	Responding slowly	0	1
	Moving too much	3	1
	Talking too much	3	0
	Interrupting others	3	0
	Not completing task	0	0
Total		22	12
Percentage		100%	55%
Percentage of decreasing		45%	

3.3 Questionnaire Result

The questionnaire is about the students' learning interest with TDS. There are three statements of the questionnaire which are indicated the students' learning interest. The statements are (1) like to learn with TDS; (2) TDS is useful in understanding subject matter; and (3) learning with TDS is easy to do. The results of questionnaire consist of questionnaire result of all respondents, questionnaire result of normal students, and questionnaire result of students with special needs.

3.3.1 Questionnaire Result of All Respondents

Based on the questionnaire results of 52 students as the respondents of this research, the result revealed that 79% students liked to learn with TDS; 79% students stated that TDS is useful in understanding subject matter; and 52% students stated that learning with TDS is easy to do. Thus, it can be conclude that TDS improves the learning interests of the students in inclusive primary schools in Surakarta.

Based on table 7, 41 students (79%) liked to learn with TDS; 5 students (10%) expressed neutral; while six students (11%) did not like to learn with TDS.

Furthermore, 41 students (79%) stated that TDS is useful in understanding subject matter; 7 students (13%) stated neutral; while four students (8%) stated that TDS is not useful in understanding subject matter.

In addition, 27 students (52%) stated that learning with TDS is easy to do; 16 students (31%) declared neutral; while nine students (17%) stated that learning with TDS is difficult to do.

Table 7. Questionnaire result of all respondents.

No	Statement	Answer	Sum	%
1	Like to learn with TDS	Yes	41	79
		Neutral	5	10
		No	6	11
2	TDS is useful in understanding subject matter	Yes	41	79
		Neutral	7	13
		No	4	8
3	Learning with TDS is easy to do	Yes	27	52
		Neutral	16	31
		No	9	17

3.3.2 Questionnaire Result of Normal Students

Based on the questionnaire results of 45 normal students, the result showed that 80% normal students liked to learn with TDS; 78% normal students stated that TDS is useful in understanding subject matter; and 52% normal students stated that learning with TDS is easy to do. Thus, it can be conclude that TDS improves the learning interests of the normal students in inclusive primary schools in Surakarta.

Based on table 8, 36 students (80%) liked to learn with TDS; 4 students (9%) expressed neutral; while 5 students (11%) did not like to learn with TDS.

Furthermore, 35 students (78%) stated that TDS is useful in understanding subject matter; 6 students (13%) stated neutral; while 4 students (9%) stated

that TDS is not useful in understanding subject matter.

In addition, 24 students (53%) stated that learning with TDS is easy to do; 14 students (31%) declared neutral; while 7 students (16%) stated that learning with TDS is difficult to do.

Table 8. Questionnaire result of normal students.

No	Statement	Answer	Sum	%
1	Like to learn with TDS	Yes	36	80
		Neutral	4	9
		No	5	11
2	TDS is useful in understanding subject matter	Yes	35	78
		Neutral	6	13
		No	4	9
3	Learning with TDS is easy to do	Yes	24	53
		Neutral	14	31
		No	7	16

3.3.3 Questionnaire Result of Students with Special Needs

Based on the questionnaire results of 7 students with special needs, the result showed that 72% students with special needs liked to learn with TDS; 86% students with special needs stated that TDS is useful in understanding subject matter; and 54% students with special needs stated that learning with TDS is easy to do. Thus, it can be conclude that TDS improves the learning interests of the students with special needs in inclusive primary schools in Surakarta.

Table 9. Questionnaire result of students with special needs.

No	Statement	Answer	Sum	%
1	Like to learn with TDS	Yes	5	72
		Neutral	1	14
		No	1	14
2	TDS is useful in understanding subject matter	Yes	6	86
		Neutral	1	14
		No	0	0
3	Learning with TDS is easy to do	Yes	3	54
		Neutral	2	28
		No	2	28

Based on table 9, five students (72%) liked to learn with TDS; one student (14%) expressed neutral; while one student (14%) did not like to learn with TDS.

Furthermore, six students (86%) stated that TDS is useful in understanding subject matter; one student (14%) stated neutral; while no student (0%) stated that TDS is not useful in understanding subject matter.

In addition, three students (54%) stated that learning with TDS is easy to do; two students (28%) declared neutral; while two students (28%) stated that learning with TDS is difficult to do.

3.4 Discussion

Based on the observation result, it can be conclude that learning activities with TDS can decrease the negative learning behaviours up to 50% in all respondents, 52% in normal students, and 45% in students with special needs. Those decreasing of negative learning behaviours indicated learning interests of the students. Those results indicated that TDS can improve learning interests in inclusive primary school students in Surakarta.

More students are interested in following the learning activities with Talking Drawing Strategy during the research compared to the learning activities without TDS before the research. More students respond positively to the learning activities with Talking Drawing Strategy than without Talking Drawing Strategy.

Furthermore, those results above also show the different learning interests and learning engagements in the respondents. It appears that the respondents show more positive behaviours while attending learning activities with Talking Drawing Strategy. Students are also more able to develop their learning behaviours, such as doing some discussion, seeking information from various learning resources, and drawing illustrations.

The results of the questionnaire also showed a positive response to Talking Drawing Strategy. Some 79% of the respondents liked to learn with the method and 79% of the respondents stated that the Talking Drawing Strategy can help to understand the learning material. Some 52% of respondents stated that Talking Drawing Strategy is easy to implement.

There are not any significant differences between the observation result and the questionnaire result. The questionnaire result supports the observation result. Furthermore, there are not any significant differences of the observation result and the questionnaire result between all respondents, normal students, and students with special needs.

The results of this research support the results of previous researches about Talking Drawing Strategy can assist students in learning (McConnell, 1993). Students do many learning

activities using Talking Drawing Strategy, such as reading the text, listening to the teacher's explanations, creating their own illustrations, and also discussing their illustrations to the other friend. Thus, Talking Drawing Strategy can lead children to focus their attention on the learning process because of the many types of learning activities. The many types of learning activities in Talking Drawing Strategy develop better engagements and learning interest of the students. The previous researches also stated that Talking Drawing Strategy develops better engagement in learning. (McConnell, 1993; Paquatte, Fello, & Jalongo, 2007).

4   CONCLUSIONS

The observation results showed that learning activities with TDS can decrease the negative learning behaviours up to 50% in all respondents, 52% in normal respondents, and 45% in respondents with special needs. The questionnaire result also supported the observation result. The results of the questionnaire sheet revealed that (1) 79% of the students like to learn with TDS; (2) 79% of the students stated that TDS is useful in understanding subject matter; and (3) 52% of the students stated that learning with TDS is easy to do.

Based on descriptive statistical analysis, it can be concluded that Talking Drawing Strategy can improves the learning interests of the inclusive primary school students in Surakarta.

5   REFERENCES

Anitah, S. (2009). *Teknologi Pembelajaran*. Surakarta: Yuma Pustaka dan *Learning Resource Center* (LRC) UNS.

Arnold, T. C., & Dwyer, F. M. (1976). An empirical analysis of the instructional effectiveness in visualized instruction. *The Journal of Experimental Education,* 44(4), 11-16.

Blumenfeld, P. C., & Meece, J. L. (1988). Task factors, teacher behavior, and students' involvement and use of learning strategies in science. *The Elementary Journal,* 88(3), 235-250.

Fello, S. E., Paquette, K. R., & Jalongo. M. R. (2006). *Talking drawings: Improving intermediate students' comprehension of expository science text*. Accessed on 19 Maret 2010 from: http://www.thefreelibrary.com/Talking+drawings:+improving+intermediate+students'+comprehension+of...-0157032402

Hamdani. (2010). *Strategi Belajar Mengajar*. Bandung:Pustaka Setia.

Hsieh, Y-C. J., & Cifuentes, L. (2006). Student-generated visualization as a strategy for science concept learning. *Educational Technology & Society,* 9(3), 137-148.

Iskandar, S. M. (2001). *Pendidikan Ilmu Pengetahuan Alam*. Bandung: CV. Maulana.

Klahr, D., & Nigam, M. (2004). The equivalence of learning paths in early science instruction: Effects of direct instruction and discovery learning. *Psychological Science*, 1-11.

McConnell, S. (1993). Talking drawings: A strategy for assisting learners. *Journal of Reading,* 36(4), 260-269.

Paquatte, K. R., Fello, S. E., & Jalongo, M. R. (2007). The talking drawings strategy: Using primary children's illustration and oral language to improve comprehension of expository text. *Early Childhood Education Journal,* 35(1), 65-75.