

Increasing Self-Confidence of Indonesian Low Ability Student with Green's Motivational Strategies

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Abstract. Self-confidence is the important factor of mathematical learning, But in the reality, many 8th grade students do not have good self-confidence. To increasing the self-confidence is used Green's motivational strategies. So the purpose of the research is to know whether the Green's motivational strategies can increase the self-confidence of 8th grade students. The research focus on Indonesian junior high school student with lower ability. The research used qualitative research method, with basic qualitative research approach design. The activity included teaching material development and interview with student. From all conversation on the interview with students, students have satisfied feel. Students's self-confidence has changed better. All students show up that they can handle all matemactical problems.

1. Introduction

Self-confidence is an important factor of mathematical learning. According to [6], the mathematics achievement depends on phsycological factors and the most important factor is self-confidence. But in the reality, many 8th grade students do not have good self-confidence. TIMSS 2011 report gave some facts that only 14% of 8th grade students which have good confidence on mathematics, 45% of 8th grade students is somewhat confidence and 41% of 8th grade students is not confidence[3]. Bad self-confidence will disturb the mathematics achievement on matemactical learning.

Özbey [5] defines self-confidence as attitude to belief at self ability and always keep the emotion. Beside that, [1] self-confidence is belief can controlling all situation by self. In other side, Oxford dictionaries [2] defines self confidence as belief to self ability, quality, and judgment. The conclusion about self confidence based of tree definition is some one who have good self confidence will have good belief to his/her ability.

On this research, Green's motivational strategies is used to increase the self-confidence of 8th grade students. Green's motivational strategies were created by Green and developed by rudhumbu [4]. The purpose of the research is want to know are Green's motivational strategies can increase the self-confidence of 8th grade students.

Green's motivational strategies have four categories, that is conveying confidence, conveying high aspirations, giving comments, and valuing of tasks [4]. Conveying confidence is bassic category and most important. On conveying confidence, students is gave stimulate by teacher to build they belief at they ability on mathematics [4]. The stimulae is began with giving some motivation words is like "come on.., you can do it!", or "come on, you will get it!" [4]. Another stimulate is create situation and condition which make student success every find the mathematical problem [4]. The situation and the condition is like began the practice with easy mathematical problem. Student perception about success

will influence their motivation (Middleton and Spanias, 1999). Students must believe that they will succeed.

Conveying high aspirations and giving comments are categories which make Green's motivational strategies more precious and suitable for mathematical teaching and learning. On the second category, conveying high aspirations, students are given a challenge to find more difficult mathematics problems [4]. Do not forget to complete the situation with provocative words like "who was brave to handle this problem?" or "come on be more creative!" [4]. On the third category, giving comments, students are given some positive comments for everything they have done. The comments are like "good job!" or "excellent!" or "go on, you can do better". The both conveying high aspirations and giving comments will make the process of mathematical teaching and learning not boring, cause an easy problem and help students in increasing their ability happily.

On the fourth category, valuing of tasks, students are explained the meaning of the task. Students are not only handle mathematical problems happily, but they also understand that the exercise is so important for them. Valuing of tasks has some sub-category, that is emphasizing the usefulness of a task, emphasizing the importance of a task, emphasizing enjoyment, offering rewards, teacher modeling enjoyment, connecting tasks, mentioning the rationale for a task, and offering choice [4].

2. Experimental Method

This research used qualitative research method, with a basic qualitative research approach design. The activity included the development of teaching material based on GMS and interview with students about their feelings after learning by teaching material developed by GMS. The research focus on Indonesian junior high school students with lower ability. Two schools were chosen and from each school was chosen two classes from 8th grade. The names of two classes at the first school in this paper are SMP 1 A and SMP 1 B. The names of two classes at the second school are SMP 2 A and SMP 2 B.

3. Result and Discussion

3.1. Teaching Material Development

The teaching material development is based on Green's motivational strategies (GMS). The explanation of the teaching material development can be seen in Table 1 and Table 2. The example of teaching material can be seen in Figure 1.

Table 1. The teaching material development product based on GMS

| Category of GMS | Teaching material development |
|----------------------------|---|
| Conveying confidence | Prepare some easy mathematical problem |
| Conveying high aspirations | Prepare some more difficult mathematical problem. All problems connected with prime subject. |

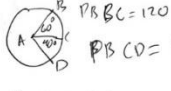
Table 2. Teaching and learning process product based on GMS

| Category of GMS | Teaching material development |
|--------------------------------------|--|
| Conveying confidence | Give some easy mathematical problem at the beginning. |
| Conveying high aspirations | Continue with more difficult mathematical problem. All mathematical problems are given in competition model. Students must finish the problem on limited time (This process is called warming up, don't more of 20 minutes). When we enter at prime subject, we can start with problem as challenge. And then we can give some explanation and example. Second and third example can be given as challenge again. The next exercise must begin with easy problem and continue with more difficult problem. |
| Giving comments and valuing of tasks | Give verbal motivation based on situation. |


Luas Juring

1. Penanaman

- $\frac{40}{60} = \dots$
- $\frac{40}{120} = \dots$
- $\frac{50}{120} = \dots$


4.  $POBC = 120$
 $POCD = ?$


5. $POCD = 120$
 $POBC = ?$


6.  $POQR = 240$
 $PORS = \dots$


2. Menghitung luas juring


Menghitung luas juring sama dengan cara menghitung panjang busur.

 $L_{\text{lingkaran}} = 1200 \text{ cm}^2$
 Luas juring ($L_{\text{J}} OAB = ?$) (ingat cara mencari panjang busur)
 $L_{\text{J}} OAB = \frac{\angle AOB}{360^\circ} \times \text{Luas Lingkaran}$
 $= \frac{60^\circ}{360^\circ} \times 1200 \text{ cm}^2 = \dots$

 $L = 1200 \text{ cm}^2$
 $L_{\text{J}} OPQ = \dots$

 $L = 3600 \text{ cm}^2$
 $L_{\text{J}} ABC = \dots$

 $L_{\text{J}} ABC = 3600 \text{ cm}^2$
 $L_{\text{J}} ACD = ?$

 $L_{\text{J}} KLM = 7200 \text{ cm}^2$
 $L_{\text{J}} KMN = \dots$

3. Mencari kesimpulan

mencari luas juring sama dengan cara mencari panjang busur, bedanya panjang busur berkaitan dengan keliling, sedangkan luas juring berkaitan dengan luas

Figure 1. Example of teaching material product

Findings on the research:

- Mentioning the rationale for a task will be better is gave at the last or when students ask.
- The motivation words is like “good job!” or “wonderful!!” and teacher signatur is more valuable for student than candy or any gift els on offering rewards.
- The lesson, usually is began with apersepsi and motivation speech, but now apersepsi and motivasi can be melted on learning proses. So, students can get more time for learning.

3.2. Interview With Student

The conversation in all interview at this paper is done with different students in different class from different school. All student's name is hidden and be replaced with simbol.

Symbol Explanation of conversation in interview script:

R = Researcher

M1stS = Male first Student

M2ndS = Male second Student

M3thS = Male third Student

F1stS = Female first Student

F2ndS = Female second Student

F3thS = Female third Student

SMP 1A

R : I am have some question, how your filling about my lesson? Maybe you are have some trace with my way, compared with the last teacher

F1st & 2ndS : Hehehe...

R : its just question, if you think my lesson is different you can say different, but if not different, you can say it. Is my lesson different?

F1stS : No, Not different

R : How about you? (F2nd2)

F2ndS : Comfortable

R : why you said comfortable?

F2ndS : I can understand easily

R : what parts which make you can understand easily

F2ndS : when I am learning

R : when You are learnning?

F2ndS : doing exercise

R : ooo.. the exercise make you understand easily

F2ndS : yes..

R : ooo.. the exercise at the beginning lesson, warming up?)

F2ndS : yes..

R : at the last study, you get warming up at the start of learning?

F2ndS : no..

R : so which one do you think better, use warming up or not?

F2nd & 3thS : use warming up is better !!

SMP 1B

R : when the lesson is begin, we always start with warming up. Do you like it or not?

All student : We like it!!

R : which one better, warming up first or not?

All student : warming up first..

M3thS : Its like sport mr, if we not doing warming up, we can get injury

R : which one injury?

M3thS : the foot..

M3thS : if the lesson not use warming up, the lesson always difficult

Other stud : that is right..

R : hahaha.. have you fill scared with mathematics?

M2nd & 3thS : its oke..

M1stS : (shouting) for me.. when I at first grad, mathematics were called death lesson

R : death ?

M1stS : yes mr, it make our head is explode.. becouse over there not use warning up..

M2ndS : death... haha...

M1stS : at Sindangbarang

R : ooh.. piooh.. you are transfer student from Sindangbarang?

M1stS : and I get transfer again to Tangeung. At Tangeung the lesson is better.. when in Sindangbarang, al students always says.. wooy... death lesson!!!...)

R : hahaha... now if we comparing at Tangeung and in here, which one better?

M1stS : in here better... over there always get explanation but saldom practice.. not fun.

R : in here alway practice..

M1stS : always practice, the explanation is few butunderstandable..)

...

R : so.. you not had prablem with mathematics, now how you filling?

All student : more fun...

R : because?

M1stS : fun.. because we are is like competition on handle the problem
Other stud : thats right..

SMP 2A

R : what is the benefit of warming up?
F1stS : so..
F2ndS : if we are forget,we can remember again
F1stS : helfull on exercise
R : ohh.. remember the lost memory by warming up..., are the warming up help you on exercise?)
F1stS : yes.. the exercise become more easy..
R : oh.. more easy.. how about you?
F2ndS : my answer is like her answer
R : warming up is fun
F2ndS : yes.. hehe..
 ...
 ...
R :ya, from the start I continue give you some problems
F2ndS : that were fun.. become challenge..
F1stS : ya.. that were fun.. go to infront of class.. again and again... I had perception before other studen I must be the first go to the infront of the class)
R : oh.. your perception is like that..
F2ndS : yes.. fast and more fast..
R :you want to get competition
F1stS : I must be the first..
R : have you ever learn like this before?
F2ndS : not yet
R : not yet, so it is the first time.. fun or not?
F1stS : fun

SMP 2B

R : the different, the past and present, what is the different?
F1stS : the learning proses become more fun
R : do you like exercise before?
F1stS : bored..
R : Hah..
F1stS : bored..
R : what your mean with bored?
F1stS : ya.. just bored
R : that is past, how about now?
F1stS : no..
R : why?
F1stS : Was fun...at the past the females grop saldom go to the infront of the class, but now they want to go to the infront of the class)
R : why?
F1stS : challenge
R : challenge.. any else?
F2ndS : I belife can handle the problem
R : you belife can handle the problem.. ooo.. can you do it before?
F2ndS : I can, but always confuse

The conversation is done with different students in different class from different school, but all conversations show same expression. From all conversation students have satisfied feeling. Students's self-confidence is change better. All students show up that they belief can handle all mathematical problem.

4. Conclusion

Green's motivational strategies can increase self-confidence of 8th grade students, especially, for Indonesian students with lower ability. From the interview results, students have satisfied feeling. Students's self-confidence has changed better. The research get some findings, specially on applying Green's motivational strategies at Indonesian junior high school with lower ability. That is mentioning the rationale for a task will be better when students ask. The motivation words, such as "good job!" or "wonderful!!" and teacher signature are more valuable for students than candy or any gift else on offering rewards. The lesson, usually is began with motivation speech, but now apperception and motivation can be integrated on the learning process. So, students can get more time for learning.

The research is too simple, but we belief that it can make much alternation. We need more professional research with better instruments and more number of samples.

5. References

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