

Forming Self-Study Skills for Students Bad at Math in High Schools in Vietnam

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Abstract. Self-study helps people study actively in their whole life. The process of self-study which helps students gradually acquire the general knowledge of humankind for themselves self-consciously, positively, and independently has become the key factor in education quality. If each bad student can form his self-study skills and use his own study time suitably, the result and quality of his study will improve, which helps to reduce the rate of bad students in schools.

Keywords: Bad student at math, self-study, self-check.

1. Introduction

Nowadays, teaching is not limited at the function of teaching knowledge, but it also improves students' learning methods. Besides, school time is limited, which requires students' necessary attitudes and abilities to self-orientate, self-update, and enrich their knowledge to meet the requirements of the society.

Mentioning learning methods means mainly mentioning self-study skills which are a bridge connecting learning and scientific research. If learners are trained to have skills, methods, and self-study habits and know how to apply what they have learned to new situations, as well as find out and solve their problems, their love for learning will rise, which is the potential of each person. Studying math should follow this trend, especially when math has some advantages in meeting the above requirements compared with other subjects.

Self-study has been done since education was not real science. At that time, people were already interested in how to make learners study hard, positively remember teacher's teachings and practice what they had learned. In the middle of 1970s, there were books or writings about this matter, such as *Freedom, Autonomy and the Concept of the Person* (Benn, S.-I (1976)), *“Autonomy in Foreign Language Learning”* (Holec, H. (1981)) . In Vietnam, self-study has been launched seriously and widely since the revolution education appeared in 1945, which President Ho Chi Minh was not only the promoter but also an example of teaching spirit and methods. In the 20th century, thoughts of self-study were presented directly and indirectly by many authors (Nguyen, C. T , Nguyen, B. K, etc.) in their research works, such as psychology, pedagogy, subject teaching method, etc.

At the beginning of the current innovation, self-study in general and students' self-study in particular are more and more interested and researched because of the important role of self-study in teaching and learning processes towards learner-centered innovation.

In theory as well as in practice, self-study is an activity having an important meaning in creating the quality and efficiency in teaching math. The current learning activity of high school students is happening in very new conditions. The formation of an information society in a knowledge economy is creating favourable conditions, but also putting pressures on students. It requires students to have big changes in orienting and choosing information, as well as in the way they gain, process, and store information. In that situation, the math knowledge that students have gained in class through teachers' lessons becomes little. They tend to get out of the lessons in class to find out, widen, and deepen knowledge from different sources of information. Therefore, self-study in high schools has turned popular and become a typical characteristic of teaching. Developing the ability of students to self-study is the key point to produce 'internal force' and improve the quality and efficiency in teaching math.

According to Nguyen, B.-K (2007), students bad at math are those who have frequent bad results. Acquiring knowledge and training necessary skills of these students require a lot of force and time, compared with other students.

One of the visible expressions of bad students is that they have bad learning methods. Therefore, to surmount the situation of these students, teachers should have methods to help them study actively and teach them how to learn properly. In our country, this issue is considered and determined one of the orientations to innovate teaching methods in high schools at present.

According to Nguyen. C. T., Nguyen, K. Le, K. B., & Vu, V. T. (2004), studying mainly means self-study, a process of inner development, in which one expresses and changes oneself as well as enriches one's values by receiving and processing information from the surroundings. Meanwhile, according to Pham, D.-K. (2005), the nature of self-study is the process in which a learner personalizes his study so as to meet learning needs and conducts learning activities by himself (through thought manipulation, practice, communications, self-check, self-assessment, etc.) to perform the learning goal and duty effectively.

Thai, D.-T (2008, p.311) has pointed out that building learning motives for students is one of the most important things in improving students' self-study

because the self-study must start internally from the inner ability. Learning motives can be divided into two main groups: cognitive excitement motives and learning duty motives.

Therefore, teachers should find ways to motivate, inspire, and help students form methods and self-study ability so that they can acquire knowledge by themselves and perfect themselves later. Bad students, especially, are not good at knowledge methods (skills in analysis, synthesis, analogy, logical inference, etc.). Therefore, teachers should pay attention to fostering students' knowledge methods by giving math problems with sample key showing the algorithm clearly. Based on this, students should pay more attention to practicing skills in analysis, synthesis, and logical inference. As a result, teachers can enhance identification activities and show them in students' learning process both at school and at home. This skill can be consolidated by classification exercises suitable for students' learning level.

2. The concepts of students' self-study skills

According to Vietnamese Dictionary, practice means practicing many times in reality to gain a stable quality or level. (Hoang, P, (1998))

According to Dang, T.-H (2012), a skill is a form of action performed voluntarily based on the knowledge about work, mobility, and other biological-psychological conditions of a person (who has the skill) such as needs, affection, wills, individual positive, etc. to gain results by purpose, defined criteria, or the level of success following a standard or regulation.

Self-study skill is the ability to carry out a system of self-organized actions and self-control self-study activity based on applying the experience relevant to that activity.

Self-study skills are a system including general skills for learning activities and specialized skills. The number of types of study is equal to the number of specialized skills.

According to Vu, T.-R, self-study skills include four groups: cognitive skills, practical skills, organizational skills, and assessment skills. (1994)

Thus, forming self-study skills for students is teachers' duty with measures combined reasonably, suitable for students' level and the school's teaching conditions. Students should be self-aware and enthusiastic about practicing to form the self-study skills for themselves. Therefore, while practicing, students need to be aware of the meaning and the role of self-study in their future careers. Students should have a proper practicing motive and turn practice into self-practice.

For those whose are bad at math, teachers should require students' self-study skills, especially cognitive skills and practical skills.

3. Factors that affect students' self-study skills

There are a lot of determinants that influence students' self-study. It is the role of teachers in determining students' learning motives, guiding the way of self-study and encouraging students. It is the role of the management in instructing the self-study mission. Or it is the investment of facilities in self-study activities. For students who are bad at math, self-study skills include corresponding skills such as skills in taking notes, reading references, analyzing and synthesizing

knowledge, working in groups, applying knowledge in solving math problems, using information technology, etc.

During the past time, many senior high schools have been interested in training self-study skills for their students. According to our survey at six senior high schools in Lam Dong Province, there are many factors affecting students' self-study activities, as follows:

3.1. Learning motives

Learning motives are what that stimulates and motivates students' learning positive to gain results of awareness and the formation and development of personality. This is a complex structure including many specific motives with differences in the content, quality as well as its position in the structure. The differences make the effect on the subject's activities different and this leads to the difference in the results of activities.

Learning motives decide students' learning results. This requires students to build their needs and learning motives all the time in the process of study. In practice students' learning activities are driven by the motive from their need to learn. They study by themselves to gain knowledge. In fact, many students have not seen the applicability and beauty of math, so they lack their learning motives for this subject, Reducing students' self-study need (accounting for about 92 %)

3.2. Learning interest

Learning interest is one of the important factors that affect the process of students' self-study (accounting for 86 %). When having the interest in the subject, students will feel passionate and want to learn and discover the knowledge relevant to this subject. The interest in math subject is expressed in the concentration and attention to self-study in which the learner see the significance of math in reality.

3.3. The facilities, infrastructure conditions, and time for self-study

Besides the factors from learners such as motives and interest, external factors such as technical infrastructure, facilities and teaching equipment also significantly affect the process of students' self-study (accounting for 78 %). The time for self-study does too because high school students have many subjects. Each subject has a different position, feature, content, information volume and a mutual relationship. To self-study well, students must arrange and manage a reasonable time. At present, most bad students are not used to seeking materials to support self-study and planning a suitable timetable, so their self-study is still limited.

3.4. The role of teachers in orienting self-study activities

According to the oriented education innovation, teachers have to change their form of teaching and teaching methods by improving students' self-study. Teachers have to teach students about the contents, methods, and forms of self-study. At present, the teaching methods and the perspective on assessing learning results of some teachers have not changed much. Teachers still keep

their old habit of lecturing and assessing learning results primarily by periodical written tests without following students' process of learning. Teaching and assessing in that way can have a big effect on the practice of self-study skill of students in most of the subjects, especially math (accounting for 69 %).

4. Self-study skills that need training for bad students at math

Through researching materials and exchanging with colleagues, we have found that to form self-study skills for students bad at math, teachers need to train them in the following skills:

1. Identify learning goals clearly. It is because the learning goals will decide the learning methods and results of students.
2. Have a specific plan and arrange learning time specifically and scientifically to study and relax reasonably.
3. Train ability to read books perseveringly, rewrite important and essential content, and revise every day.
4. Use memory skills to acquire information: while studying in class, students pay attention to the lessons, and then write down the basic content.
5. To understand and be retentive, students should always give opinions to build lessons, give feedbacks, and minimize the passive in class.
6. Methods to learn theorems and formula by heart: skim the whole theorems or formula once, then read slowly and remember the main content. After reading and grasping the key information, take notes by diagrams or summarize the main content on paper.
7. When starting to sit at the desk, the first thing to do is to review the whole lesson of the day, what was taught by the teacher, and then look at the lesson of the next day. Make notes or asterisk what we do not understand or have not understood clearly so that we will pay more attention to these issues when being explained on the next day.
8. Never be complacent towards the results we have gained. Study at school, at home, from books, from friends, outside the textbooks by learning new knowledge in reference books.

In order to train students' self-study effectively, teacher's lesson plan should ensure the following requirements:

- Logical, systematic and linked to forms of classroom teaching.
- Practical and applicable to solving math problems that are interdisciplinary.
- Prepared seriously by teacher and be able to create excitement for students.
- Especially for bad students, teachers can instruct them to write their work carefully in their notebooks. After each class, teachers should also save time to instruct students to read in advance the content of the lesson necessary for the next class: the focused content, the notes of the content, the requirements of the

knowledge, etc. And the most important thing is that teachers should make student feel self-confident and excited about learning math.

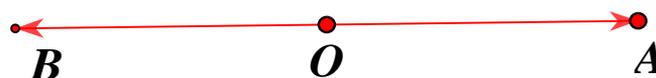
Example 1

To improve self-study ability for bad students at math, teachers can conduct teaching this part of knowledge “The difference of two vectors” (Vietnamese Geometry Textbook 10), as follows:

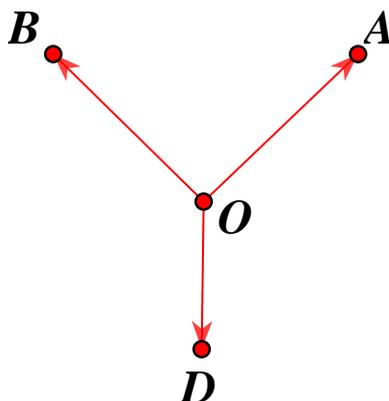
Activity 1: Creating learning motives for students

Teacher raises an issue

Two people act on one object in two opposite directions and with the same magnitude of force. In which direction will the object move?



- Predict the direction the object placed at O will move when there are three forces acting on the object at the same time as shown in the following figure:



Activity 2: Assigning tasks to students (practice reading skill and group work skill for students)

Teacher asks students to look at the presentation in the textbooks and group work to grasp the issues:

- The concept of opposite vectors
- The definition of the difference of two vectors
- The three-point rule in the subtraction of vectors

Activity 3: Have students present the knowledge by themselves (practice memory skill to gain knowledge, minimize the passive in class and practice review skill during class)

- Teacher makes a request:

+ Given two vectors \vec{a} and \vec{b} (teacher draws on the board)

Students identify and draw:

- The opposite vector of \vec{a}
- The difference of \vec{a} and \vec{b}

+ Compare and recall the rule of three points for the sum and the subtraction of two vectors.

Activity 4: Organize identification activities to inculcate the subtraction of two vectors (practice review skill and inculcate knowledge)

Problem 1

Given a parallelogram $ABCD$ with center O . Prove that:

a) $\overrightarrow{CO} - \overrightarrow{OB} = \overrightarrow{BA}$

b) $\overrightarrow{AB} - \overrightarrow{BC} = \overrightarrow{DB}$

c) $\overrightarrow{DA} - \overrightarrow{DB} = \overrightarrow{OD} - \overrightarrow{OC}$

d) $\overrightarrow{DA} - \overrightarrow{DB} + \overrightarrow{DC} = \vec{0}$

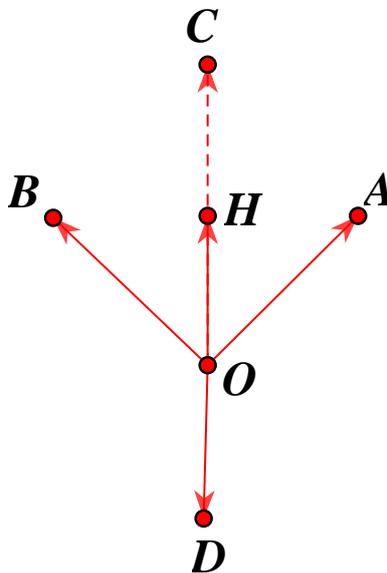
Problem 2

Given an equilateral ABC with its side a . Calculate the length of vector

$$\overrightarrow{AB} - \overrightarrow{BC}$$

Problem 3

Return to the problem in the motive prompting activity, teacher asks students to explain using the knowledge of the difference of two vectors (the object will move from O to H)



$$\overrightarrow{OA} + \overrightarrow{OB} + \overrightarrow{OD} = \overrightarrow{OC} + \overrightarrow{OD} = \overrightarrow{OC} - \overrightarrow{OH} = \overrightarrow{HC} = \overrightarrow{OH}$$

Activity 5: Assigning homework (train skills in using reference books and exploiting learning time properly of students)

Teacher asks students to:

- Review knowledge learned about vectors:

- + The components of a vector
- + Determining the sum of two vectors
- + The three-point rule in the addition and subtraction of two vectors
- + Parallelogram rule
- + Vector relation to the midpoint of the segment and the focus of the triangle
- Solve the exercises in the Geometry workbook 10: 1.8, 1.9, 1.11, 1.12, page 21. (Nguyen, M.-H (2012))

- Identify and draw the following vectors (\vec{a} given before):

$$\begin{aligned}\vec{x} &= \vec{a} + \vec{a} \\ \vec{y} &= -\vec{a} - \vec{a}\end{aligned}$$

Make a comment on the direction and the length of \vec{x}, \vec{y} compared with \vec{a}

In order for students to have good self-study skills, teachers should have measures to help them get self-confidence in learning first. One of the measures is that teachers give suitable exercises and practice analytical and synthetic activities for students when teaching specific contents of math subject. Students will understand and remember what they have learned through their active learning and efforts.

According to Polya, G, analysis and synthesis are two important actions of the mind. If one goes into detail, he can be submerged in it. Too much petty detail impedes thoughts and focus on the main point. It is the case of the person who only sees a tree, not a forest. First, one must understand the exercise as a whole. When the exercise is understood clearly, it is easier for one to consider which detail is fundamental. One has to study the exercise very closely, divides it into steps, and avoids going too far. (Polya, G, (1975))

One researcher has said that analysis is splitting information and concepts into small parts to understand it more fully. Synthesis is joining pieces of information to create a new content. Analysis can be understood as the manipulation of splitting information and concepts into small parts and pointing out their relationship with the whole. Synthesis is a process that discovers the relationships uniting the parts which seem to be separate as a whole to realize them. Therefore, analytical and synthetic activities have an important role in the intellectual development of students.

Students bad at math can especially be limited in the ability to cover issues. Thus teachers should divide issues to be presented into detailed parts and find appropriate activities for each detail.

For example, when having students prove a theorem or do an exercise (a complex activity) with difficulty, we have to divide it into smaller activities:

- What can we infer from the assumption?
- What conditions do we need to get to conclusion?
- Consider a similar special case.

These activities help students not only find out the way to solve a math problem (an activity of condition), but also understand more deeply (an activity of result) Studying effectively in a learning hour often requires certain prerequisites of the level of knowledge and available skills of students. Bad students, however, do

not sometimes have these prerequisites and teachers should help them make the starting premise in class. Teachers should use an explicit form of reproduction, which means stating the knowledge and skills needing to be revised in order to prepare for the learning content of the upcoming formal lesson. Doing so is to enhance the target oriented effectiveness, provide motives and improve students' responsibility for lessons. This helps students feel more confident in learning.

Knowledge with many "gaps" is a common "disease" of students bad at math. The starting premise is also aimed at filling gaps in knowledge and skills of students. In the process of teaching, teachers should be interested in discovering and classifying knowledge gaps and skills of students. Typical gaps which have not been recovered in class because of the time should be continued to solve in groups of bad students. Through the process of learning theory and doing exercises of students, teachers also help students, including bad students self-consciously discover their gaps and know how to fill them.

In reality, training is done under general level and sometimes unsuitable for students bad at math. Therefore, teachers should pay attention to bad students and save time to train them to enhance practice moderately, divide the overall activity into many detailed ones with the following notes:

- Make sure students understand the beginning of an exercise: bad students often stumble right from the first step. They do not understand what the problem is about, so they cannot continue the process. Therefore, teachers should help them overcome this first stumble.

- Increase the number of assignments of the same kind and level: to understand and practice a certain skill, bad students need more exercises of the same kind and level than other average or good students. This increase is implemented in students' self-study time.

- Divide and grade exercises in teaching math: especially for students bad at math, this grading needs to be more meticulous than the general level. That is, the gap between two consecutive grades should not be too far or too high. Many grades of bad students can be put together into one grade of average or good students.

- Driven with the requirements to fit their best, bad students will be less deprived, and since then they will gradually gain the knowledge and skills that the syllabus requires. Although the initial requirements are low, they will create a very important psychological factor if students study successfully: they will believe in themselves, and then have enough courage and determination to overcome the weakness.

Example 2

For good students, mastering the definition "The product of vectors with a number" is simple. They easily grasp the concept. For students bad at math, however, this is a difficult concept. Therefore, teachers should have many activities to help them understand.

The definition in Geometry Textbook 10: "Given a number $k \neq 0$ and vector $\vec{a} \neq \vec{0}$. The product of vector \vec{a} with a number k is a vector, symbolized $k\vec{a}$ in

the same direction with \vec{a} if $k > 0$, in the opposite direction with \vec{a} if $k < 0$, and its length equals $|k||\vec{a}|$.

In order for students bad at math to grasp the problem, teachers can divide this activity into many smaller ones:

1) Based on the instructions of the previous lesson “The sum and difference of two vectors”

$$\vec{x} = \vec{a} + \vec{a} = 2\vec{a}$$

$$\vec{y} = -\vec{a} - \vec{a} = -2\vec{a}$$

Give comments on the direction and length of \vec{x}, \vec{y} , compared with \vec{a}

2) Given a number $k \neq 0$ and vector $\vec{a} \neq \vec{0}$. Have students determine the relationship between $k\vec{a}$ and \vec{a} .

3) Students look at the textbook and determine the direction and length of \vec{a} in the following cases:

$$k = 0$$

$$\vec{a} = \vec{0}$$

From this, teachers generalize the definition “The product of a vector and a number”

4) Determine and draw the following vectors:

$$\vec{u} = \frac{1}{2}\vec{a}$$

$$\vec{v} = -\frac{2}{3}\vec{a}$$

with \vec{a} is given.

The above example helps bad students grasp the definition “The product of a vector and a number”, and then students can solve relevant problems.

Example 3

Solve the following exercise (the problem on page 16, Geometry Textbook 10 (Tran, V. H., & Nguyen, M. H (2006))

Given a triangle ABC with centroid G , let I be the midpoint of AG and K be a point on the side AB so that: $AK = \frac{1}{5}AB$.

a) Find the vectors $\vec{AI}, \vec{AK}, \vec{CI}, \vec{CK}$ by $\vec{a} = \vec{CA}, \vec{b} = \vec{CB}$

b) Prove that the three points C, I, K are collinear.

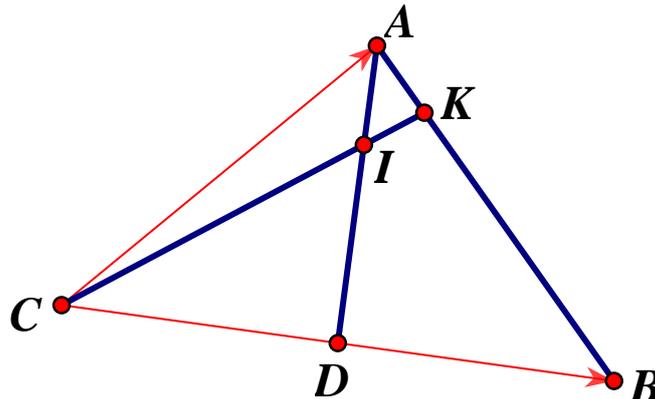
Students with average learning capacity or higher can use extra points to solve the problem, but bad students may not realize. Therefore, teachers give some more extra questions in the problem (divide the problem into many detailed parts).

Given a triangle ABC with centroid G , let I be the midpoint of segment AG and K be the midpoint on segment AB so that: $AK = \frac{1}{5}AB$.

a) Find the vectors $\overline{AI}, \overline{AK}, \overline{CI}, \overline{CK}$ by \vec{a}, \vec{b} . Let D be the midpoint of BC . Find the vector \overline{AD} by $\overline{CA}, \overline{CB}$.

b) Find the vectors $\vec{a} = \overline{CA}, \vec{b} = \overline{CB}$

c) Prove that: $\overline{CK} = \frac{6}{5}\overline{CI}$. From that, the three points C, I, K are collinear.



Solution

$$a) \quad \overline{AD} = \overline{CD} - \overline{CA} = \frac{1}{2}\overline{CB} - \overline{CA}$$

$$b) \quad \overline{AI} = \frac{1}{2}\overline{AG} = \frac{1}{3}\overline{AD} = \frac{1}{6}\vec{b} - \frac{1}{3}\vec{a}$$

$$\overline{AK} = \frac{1}{5}\overline{AB} = \frac{1}{5}(\overline{CB} - \overline{CA}) = \frac{1}{5}(\vec{b} - \vec{a})$$

$$\overline{CI} = \overline{CA} + \overline{AI} = \vec{a} + \frac{1}{6}\vec{b} - \frac{1}{3}\vec{a} = \frac{1}{6}\vec{b} + \frac{2}{3}\vec{a}$$

$$\overline{CK} = \overline{CA} + \overline{AK} = \vec{a} + \frac{1}{5}\vec{b} - \frac{1}{5}\vec{a} = \frac{1}{5}\vec{b} + \frac{4}{5}\vec{a}$$

$$c) \quad \overline{CI} = \frac{1}{6}\vec{b} + \frac{2}{3}\vec{a} = \frac{1}{6}(\vec{b} + 4\vec{a})$$

$$\overline{CK} = \frac{1}{5}\vec{b} + \frac{4}{5}\vec{a} = \frac{1}{5}(\vec{b} + 4\vec{a})$$

$$\text{It is inferred that: } \overline{CK} = \frac{6}{5}\overline{CI}$$

Therefore: C, I, K are collinear.

Example 4

For students good at math, it is not difficult to solve this problem. They can easily find out the solution.

Given a triangle ABC , M and N are movable points so that:

$$\vec{MN} = 2.\vec{MA} + 3.\vec{MB} - \vec{MC} \quad (*)$$

a) Find point I so that: $2.2\vec{IA} + 3.\vec{IB} - \vec{IC} = \vec{0}$.

b) Prove that line MN always passes through a fixed point.

Solution

a) According to the assumption and changing the relation, we have:

$$\vec{0} = 2\vec{IA} + 3\vec{IB} - \vec{IC} = 2\vec{IA} + 3(\vec{IA} + \vec{AB}) - (\vec{IA} + \vec{AC}) = 4.\vec{IA} + 3.\vec{AB} - \vec{AC}$$

From this, we have $\vec{IA} = \frac{1}{4}(\vec{AC} - 3\vec{AB})$. This equation completely determines point I .

b) Comment that the coefficients on the right of (*) are the same as in a). To use the results of a), we just put in point I .

$$\begin{aligned} \vec{MN} &= 2\vec{MA} + 3\vec{MB} - \vec{MC} = 2(\vec{MI} + \vec{IA}) + 3(\vec{MI} + \vec{IB}) - (\vec{MI} + \vec{IC}) \\ &= 4\vec{MI} + (2\vec{IA} + 3\vec{IB} - \vec{IC}) = 4\vec{MI} \end{aligned}$$

Therefore, $\vec{MN} = 4\vec{MI}$.

This equation proves that M , N , I are collinear or MN passes through the fixed point I .

However, for students bad at math, the possibility to solve this problem is not high. Teachers can divide the problem into several smaller question to help them find out the solution as well as feel more interested and confident in learning. And the problem can be modified to suit all students, as follows:

Given a triangle ABC , M and N are points so that:

$$\vec{MN} = 2.\vec{MA} + 3.\vec{MB} - \vec{MC} \quad (*)$$

Let I be a point so that: $2.\vec{IA} + 3.\vec{IB} - \vec{IC} = \vec{0}$.

a) Prove that: $\vec{IA} = \frac{1}{4}(\vec{AC} - 3\vec{AB})$

b) Prove that: $\vec{MN} = 4\vec{MI}$ and M , N , I are collinear or MN passes through a fixed point I .

Solution

a) When looking at the request of the problem, students bad at math will know how to analyze and find \vec{IA} .

$$\vec{0} = 2\vec{IA} + 3\vec{IB} - \vec{IC} = 2\vec{IA} + 3(\vec{IA} + \vec{AB}) - (\vec{IA} + \vec{AC}) = 4\vec{IA} + 3\vec{AB} - \vec{AC}$$

From that, we have

$$\vec{IA} = \frac{1}{4}(\vec{AC} - 3\vec{AB})$$

b) Comment that the coefficients on the right of (*) are the same as in a). To use the results of a), we just put in point I.

$$\begin{aligned}\vec{MN} &= 2\vec{MA} + 3\vec{MB} - \vec{MC} = 2(\vec{MI} + \vec{IA}) + 3(\vec{MI} + \vec{IB}) - (\vec{MI} + \vec{IC}) \\ &= 4\vec{MI} + (2\vec{IA} + 3\vec{IB} - \vec{IC}) = 4\vec{MI}\end{aligned}$$

Therefore, $\vec{MN} = 4\vec{MI}$.

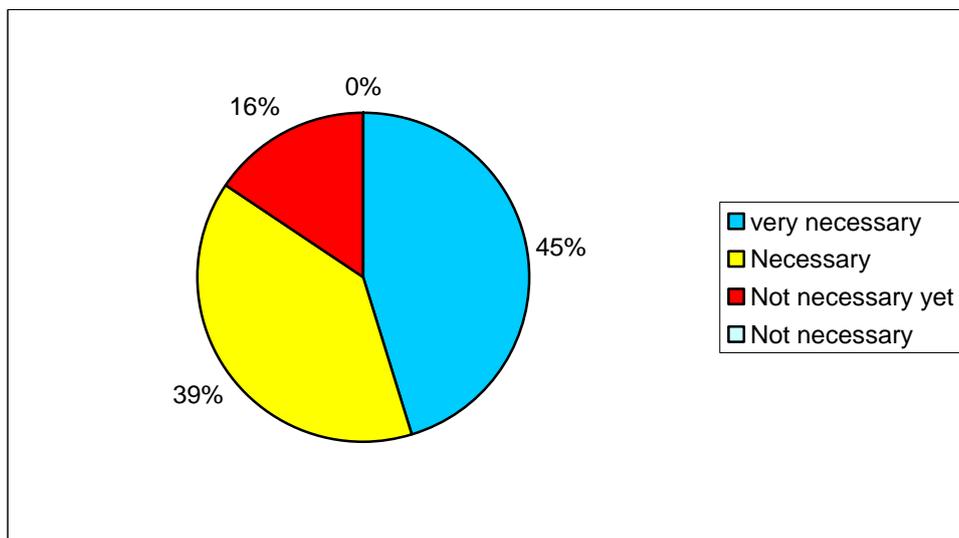
This equation proves that M, N, I are collinear or MN passes through the fixed point I .

Arranging suitable learning time in the process of self-study will bring high effectiveness for learning. Although textbooks usually group exercises together according to topic, teachers can divide the kinds in their own way to match their students. For students bad at math, teachers should guide them to plan in advance and to overcome learners' common obstacles which is delaying revision. In an Internet-based research on learning grammar, rhetoric and logic, the highest result achieved when the session of revision is approximately 10 - 20% of the length of time students need to remember the knowledge. To remember something in a week, sessions of revision should be apart from each other from 12 to 24 hours. To remember something in five years, sessions of revision should be apart from each other from 6 to 12 months. Hence, arranging time suitably for revision will be effective for learners in learning in many different fields, especially for students bad at math.

5. Results and discussion

We delivered survey forms to 237 students at high schools in Lam Dong province, Vietnam in order to check their ideas on teaching bad students at math of their teacher. The result is as follows:

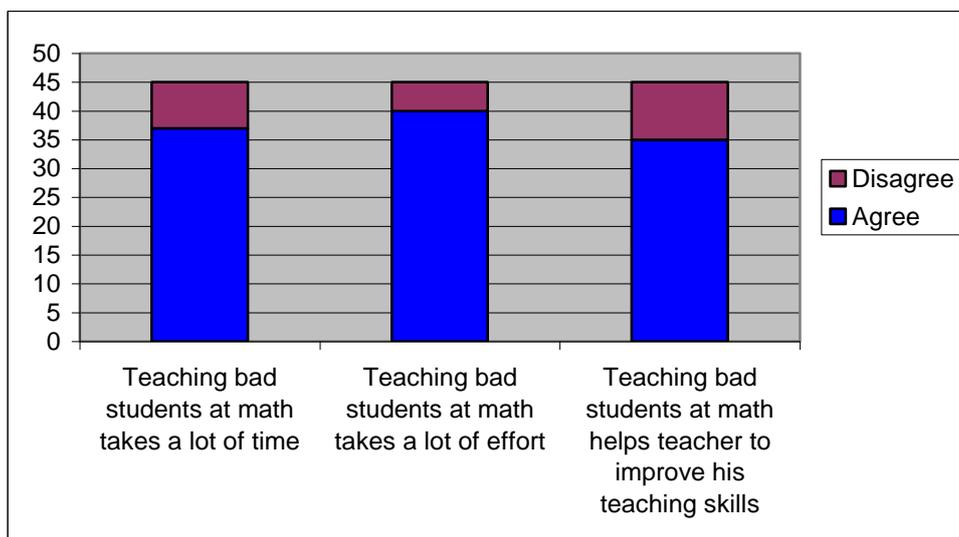
Chart 1.1. The altitude of students toward teaching bad students at math of their teacher



The result shows that 107 students (45%) think that it is very necessary; 93 students (39%) think that it is necessary; 37 students (16%) think that it is not necessary yet; nobody thinks that it is not necessary. It shows that students are interested in teaching bad students at math of their teacher.

We also delivered survey forms to 45 teachers of high schools of Lam Dong province, Vietnam in order to check teaching bad students at math. The result is as follows:

Chart 1.2. The ideas of teachers on teaching bad students at math



From the above chart, the number of teachers who agree that it spends a lot of their time and effort is high.

6. Conclusion

Most students bad at math are students lacking a suitable learning method. If learners are trained to have self-study skills, make good use of their learning time, know how to apply what they have learned to practice, and know how to discover and solve the problems encountered, they will be motivated to learn, which arouse the inherent potential of each person. Thus to reduce the rate of students bad at math in high school, teachers should regularly train students in self-study skills.

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