The role of guidance and counseling teacher in solving students’ learning difficulties in physics

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Abstract. Physics is one of the subjects that are considered difficult, by most high school students taking the science stream in Indonesia. There are many students who have difficulty in learning this subject. Moreover, physics is one of the important subject when students want to continue their education to first tier universities in Indonesia. To overcome this problem, this paper presents a theory that can be used by Guidance and Counseling teachers in overcoming the difficulties learning physics. The theory developed in this study can be applied by the counselor in helping the learning difficulties of the students. This theory was developed with the literature study method which was analyzed using analytical descriptive techniques with an inductive approach.

1. Introduction

There are three scope and responsibility of educational institutions in formal education institutions, namely the field of instructional and curriculum (teaching), the field of administration and leadership and the field of personal coaching which all three must go hand in hand with each other and complement each other in realizing national educational goals. For example, schools or educational institutions that only run teaching and administrative programs without regard to personal development will likely only give birth to capable individuals as cognitive as they are, but will become individuals who tend to be selfish and do not care about society and the environment so that they will be isolated in social life. So it is undeniable that the aspect of personal coaching is very important to be considered in the world of education so that students are expected to become individuals who are not only competent in cognitive matters but also skilled in emotional and spiritual aspects so that the output is a cognitively intelligent person who is devoted to God Almighty [1].

However, the reality of students’ daily lives in school is not always able to run smoothly so as to make the psychology and personality of students not well developed. Among students, often many experience various obstacles, problems, and difficulties that all have a negative impact on the quality of the process and achievement in their learning. Issues that arise can be: problems in the use of learning time, problems of health, finance, friendship, dating, emotional control, self-socialization, internalization of values or morals, religiosity, family and so forth. More specifically, it is very possible that some students are exposed to various learning difficulties, both in the process and the learning outcomes. The learning difficulties referred to can be in the form of academic delays, inaction...
in learning and thinking, low learning motivation, having bad attitudes and habits in learning, emotional control that is unstable and mentally unsound emotional [2].

All maladaptive behavior is a manifestation of the symptoms of learning obstacles or difficulties that students need to recognize, both by the students themselves and by the tutor teacher. The goal is that teachers can help eliminate and solve problems quickly, accurately, and thoroughly. Because the problem is almost owned by all students with various intensities, it is necessary to develop guidance by the Guidance and Counseling teacher to focus more on the problems faced by students both personal and group. Thus the Guidance and Counseling teacher has a very important role and meaning in the personality development of students in school, as mandated by Law Number 20 of 2003 [3]. Where the counselor is one type of teaching staff as well as teachers, lecturers and other educators, who are tasked with realizing a learning atmosphere and a conducive learning process [4]. Therefore, this paper is intended to elaborate the role of the Guidance and Counseling teacher in dealing with the problems of students in learning, especially in physics subjects so as to help them develop optimally and succeed in both study and real life.

Based on the field study that the author did in Senior High School State 15 Padang for students of class XI majoring in science, there were many problems experienced by students in the form of difficulties in learning certain subjects, especially physics subjects. Among the complaints they conveyed are related to teaching materials, learning methods and strategies, concepts that are too abstract and external problems such as pressure from parents and the school in order to obtain high physical value because physics subjects are very decisive subjects related to National Examination (UN) as well as related to the selection of state universities (SBMPTN). This causes stress and pressure on students who feel burdened with these subjects. While stress is defined as a condition in which the interaction between individuals and the environment is assessed by individuals as something that is burdensome or beyond the capabilities possessed, and threatens well-being [4]. As an effort to overcome this problem, the writer tries to find a solution by maximizing the role of the Guidance and Counseling teacher in helping students to learn difficulties in the eyes of physics [5].

2. Method
This research is a literature study. To complete the existing data in the form of learning theories and the role of Guidance and Counseling teachers from various sources, a questionnaire was also disseminated at SMAN 15 Padang to find out the students' responses to the eyes of physics learning. The questionnaire was distributed on June 7, 2018 involving 48 students of the 11th grade of the Natural Sciences program. The purpose of this study is to formulate the role of Guidance and Counseling teachers in overcoming learning difficulties, especially in subjects. Hopefully this formula can be used by Guidance and Counseling teachers in schools in overcoming learning difficulties of students in physics subjects. The stages of the study of literature studies is shown in the Figure 1 [7].

![Figure 1. Flowchart of literature study research flow](image-url)
3. Result and Discussion

3.1. Result of Research

Physics teachers who teach in school everyday do not often meet students who have difficulties in learning and understanding the physical material given. In dealing with students who have learning difficulties, the first step that must be done by the teacher concerned is diagnosing the causes of learning difficulties experienced by these learners by studying the causal factors. There are factors that cause difficulties experienced by students in learning in general are internal factors and external factors. The internal factors that often appear according to Hallen A are; lack of basic skills possessed by students in certain subjects, lack of talent for certain subjects, lack of motivation, personal circumstances, physical factors, heredity factors, not having clear learning goals, poor learning habits and language factors. While external factors are, school environment factors, family factors and social environment situation. To overcome various learning difficulties caused by the factors above, it would be very good if the physics teacher collaborated with the Guidance and Counseling teacher so that the problems faced by students could be found a solution in depth and thoroughly. Because the ongoing problems experienced by students can lead to feelings of stress and stress, which leads to the low ability of students in physics subjects [8].

Associated with the above problem based on research conducted by Taufik and Ifdil (2013) suggests the results of his research related to learning difficulties that give rise to stress levels on students. Where in this study involved a sample of 319 students of the state high school level in the city of Padang. In this study, data on the description of students' academic stress was presented with the following results [9].

| Tabel 1. Data description of academic stress on students Senior High School of Padang |
|-----------------------------------------------|
| Classification | Frekuency | Percentage |
| Low           | 48        | 15.0       |
| Medium        | 229       | 71.8       |
| High          | 42        | 13.2       |
| Total         | 319       | 100.0      |

From the table above it can be illustrated that 15% of students of Padang City State High Schools are at low academic stress levels, 71.8% of students of Padang City State Senior High Schools are at moderate academic stress levels, 13.2% of Padang City State High School students are at stress level high academic. It can be concluded that students of Padang City High School who have the highest percentage are students who are in the category of moderate academic stress level (71.8%). While the academic stress level of public high school students in Padang city based on gender can be seen in the Table 2.

| Tabel 2. Data description of the academic stress Senior High School students of Padang based on gender |
|-----------------------------------------------|
| Gender | Value | Percentage |
| Female | 209   | 66 %       |
| Male   | 110   | 34 %       |
| Total  | 319   | 100 %      |

Likewise with the field study that the author did at Senior High School State 15 Padang by distributing questionnaires to 48 students of class XI Science revealed that most of the students had problems in physics. The following is shown a table of student responses to physics subjects at school.
Table 3. Students' responses to physics subjects at school

| No | Statement                                                   | Yes | No  | Amount |
|----|-------------------------------------------------------------|-----|-----|--------|
| 1  | Do you think learning physics is easy?                      | 16  | 32  | 48     |
| 2  | Are the teaching materials used in physics learning interesting? | 15  | 33  | 48     |
| 3  | Is the physical material taught easy for you to understand? | 19  | 29  | 48     |
| 4  | Do you focus on the physics material presented by the class teacher? | 33  | 15  | 48     |
| 5  | Are you trying to get the best physics grades in class?     | 46  | 2   | 48     |
| 6  | Is the value of physics in the last semester as you expected? | 24  | 24  | 48     |
| 7  | Is there a solution from the Guidance and Counseling teacher when you have difficulty learning physics? | 20  | 28  | 48     |

From the table above, it can be seen that most students have difficulty in learning physics, even though they have tried to focus and earnestly in learning. In the statements in points 4 and 5, it can be understood that the seriousness of students in learning physics in the high school 15 of Padang is still very high, but the results they get in the semester exams are only partially in line with their expectations. Besides that the statement in point 7 shows that most of them have not yet got a solution to the learning difficulties they face from the Guidance and Counseling teacher in school.

3.2. Discussion

From the explanation above, it can be clearly seen how the learning difficulties of students in the eyes of physics in school have become a fundamental problem in this subject. To solve this problem, in this study the writer formulates and offers the role of Guidance and Counseling teachers in helping students' learning difficulties in physics subjects at school. This formulation refers to the basic functions and duties of the Guidance and Counseling teacher as written by Dede Nuraini (2016). The results of the formula are as follows:

3.2.1. Facilitator

Guidance and Counseling Teachers are expected to be able to direct students to understand themselves to strengthen their goals in learning physics and find relationships so that they can learn physics well.

3.2.2. Motivator

Guidance and Counseling Teachers as motivators can provide motivation and convey to students who have problems the importance of learning physics seriously and how useful physics is in everyday life. BK teachers can provide various modeling and examples of the application of physical concepts in everyday life so that students are motivated and ready to return to enthusiasm in learning.

3.2.3. Mediator

This function is important to be done by the Guidance and Counseling teacher if the problem of learning physics experienced by students is caused by conflict, both conflict with friends in class and conflict with the subject teacher concerned. In mediating Compton and Gala way provide techniques and skills that can be used in carrying out the role of mediator, finding the value of equality from the conflicting parties, helping each party to recognize the legitimacy of the other party, helping each party to identify common interests, avoiding winning conditions losing, localizing the conflict to a more specific matter, conveying the importance of continuing a good relationship, facilitating the communication of the parties to the conflict.
3.2.4. **Inspirator**

Guidance and Counseling teachers are expected to be able to inspire students to learn physics well. Inspiration can be in the form of a story or life journey of physics scientists and encourage students who have problems in order to imitate one of the physics scientists who are considered appropriate to the life journey of the students concerned.

3.2.5. **Demonstrator**

As a demonstrator, it means that the teacher Guidance and Counseling is also required to understand the curriculum and syllabus from the subject of physics and can provide information to students in the form of tricks to learn physics so that it is not boring and provides certain methods for each physics material to be more easily understood. In carrying out the demonstration, the Guidance and Counseling teacher can collaborate with the physics teacher related to the students.

Before making guidance to students who have problems in learning, the teacher must identify the problems that are being faced by the students concerned. After the Guidance and Counseling teacher succeeded in identifying the problem he was facing, then proceed with finding a suitable solution to the problem of the students. The Guidance and Counseling teacher must be able to place himself in the problem of the student whether he is a facilitator, motivator, mediator, corrector, inspirator, demonstrator or a combination of several roles. Important information and complaints obtained from students should be submitted to the physics teacher concerned so that they can conduct evaluations and find common solutions to the problems faced by students [9].

4. **Conclusion**

In carrying out education is certainly not free from problems. Creativity and enthusiasm in finding solutions to these various problems has made our education world become more mature and mature so that it is not giddy in facing the challenges of the times and circumstances in preparing intelligent, noble and fearful generations of God, God Almighty. Guidance and Counseling Teachers are one of the answers to learning problems experienced by students. So that the Guidance and Counseling teachers are required to be creative and innovative in carrying out their duties and responsibilities, especially in solving the problems faced by students in learning. Hopefully the solution that the author offers is useful and an alternative for teachers Guidance and Counseling in solving problems faced by students especially in physics subjects.

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