

PROBLEMS FACED BY SCIENCE STUDENTS IN PHYSICS LABORATORY AND REMEDIES TO SOLVE IT

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ABSTRACT

Physics is module that fully depends on the nature. It should be taught by direct contact with the nature while doing experiments. But most of institution makes the experiments as a cook-book method. Due to this reason innovative ideas from the students are reduced now days. There will be a deviation from objectives of laboratory work. This article is primarily directed on reasons of failure in laboratory and suggesting some ideas to promote the methodology of doing experiments.

INTRODUCTION

Learning is seen as a dynamic methodology, which depends to activity. We can state this way, learning ought to be attempted in reality. John Dewey trusted that learning by doing empowered the students to build up their basic reasoning aptitudes and apply it in their future. Students learn best when they are connected with the learning information. They require the experience to contact, feel and measure the analyses. Some of the time it might prompts the disappointment. A Chinese saying "Failure is the mother of inventions" since failure demonstrates the students more than whatever other experience that they will ever understanding. This article discusses the problem concerning the use of the laboratory as didactic tool in the educational process. The effective and efficient use of time spent in the laboratory is the necessity for all educational institutions but especially for physics laboratory.

TEACHERS ROLE IN LABORATORY

Students seek after the instructors, so they should have clear goals while demonstrating the

experiments. Ensure that, teachers should give enough time for course of action and make the students to think and layout their arrangement related to that particular experiment. If they need to train physics lab properly, they should not simply depend upon lab manual. Before students going into the lab, educators ought to ask viva questions related to the experiments and influences the students to figure freely to and unique reasoning. Students have ability to state the principles, ideas, thoughts and wonders of relevant experiments. Teachers should make the students to apply this procured learning to everyday life. She should give proper demonstration of the experiment. Now and again teachers may be failed. In the event that she can't get proper result, she could reason out the issue should unveil to the students. Students need to watch her and endeavor new things in the lab.

STUDENTS ROLE IN LABORATORY

Innovations can be stirred by the students when they know the unmistakable thought regarding

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experiment. In every way that really matters, they do the experiments by cook book method. Rather than this, they approach the lab in the purpose of mark basis. They are not setup to think separated from experiment. They should begin to think as unique thinking. For example, if they see their face in the mirror, their mind begins to deduce that related phenomenon reflection, refraction and total internal reflection and so forth.

Mean while what are things considered by them ought to be kept in their mind. Ordinarily their motivation is just finding exact solution instead of getting information from the experiments. For example, acceleration due to gravity is 9.8m/s^2 . If their answers like 10m/s^2 or 9m/s^2 then just they will start to think the clarifications behind finding unmistakable arrangement.

“Failures are the mother of invention” students regret this. Once in a while they do experiments without knowing the use of individual apparatus. They are not enthusiasm to check whether the apparatus is in working condition or not. They would incline toward not to adjust or do the fundamental calibration of the gadget. They have to imagine by their own one of a kind the marvel of the experiments. Relating the theory concept to the experimental analyses will make new findings.

PHYSICS LABORATORY IN SCHOOL

Most of the juncture curriculum didn't match with the laboratory experiments. So students couldn't have a basic concept related to the laboratory experiments. In order to promote the physics experiments curriculum should give the basic ideas and knowledge to do the experiments.

LABORATORY SET UP

To enhance the growth of physics laboratory knowledge among students it does not fully depend on teachers and students alone,

sometimes not sometimes most of the time flow occurred due to the insufficient of lab equipments. When we concern about laboratory it should have all the equipments related to the experiments in working condition. Sometimes students applied the procedure properly but the equipments are not in good condition. On those occasion students just get discouraged. So laboratory should have well organized equipments, and updated apparatus. Importantly laboratory space will be more and well contacted with the nature.

CONCLUSION

The laboratories have long been a distinctive feature of science education. During the laboratory course, students should follow procedural understanding as well as conceptual understanding and practical skills instead of following cook book method.

Better to get same result, students freely start to think their own idea and design their own method and try to carry out measurements in a different angle. They supposed to know that each and every measurement absorbed from the experiment is information that leads to create a new discovery.

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