SCIENCE INVESTIGATORY PROJECT: DRILLING STUDENTS TO LEARN THROUGH INVESTIGATION

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Nowadays, there are many ways on how students can learn better. There are strategies, techniques and approaches applied by the teachers so that the students will be able to learn effectively. It is important to engage them in different activities that are conducted outside the classroom because that will give them the opportunity to discover more things and have direct experiences wherein they can get a lot of information through their own discovery. One of the best ways to achieve this is through science investigatory projects wherein they will learn and discover new things through investigations.

Rizalina G. Gomez (2013) stated in her study that in the conduct of the investigatory projects, the students exhibited a greater understanding of science concepts and skills in quantitative analysis. She also included that results of her study showed that the students’ skills in conducting investigatory projects generally improved with increased exposure to this collaborative teaching tool. This means that SIP is effective teaching strategy because this give students more efficient learning which improve not only their knowledge about Science but also develop other skills that they have or they could get.

Also, since the Department of Education is proposing to establish a student-centered learning process, science investigatory project could be one of the best ways to make this kind of learning environment possible. At a young age, children will be equipped with capabilities necessary for the higher level of education which are researching, discovering, investigating, processing and rationalizing information that they have gathered. Students who are engaged with investigatory projects are more likely to achieve
higher-level thinking skills which can make them more competitive and productive individuals.

According to Odinah L. Cuartero (2016), Science investigatory project make them gain a considerable understanding of the nature of obtaining solutions to problems or answers to questions in a systematic and scientific ways. Thus, critical thinking and having keen observation will also be developed in this kind of teaching strategy because they have to deal with data, facts and other things to be considered in order to come up with desirable outcomes. It also teaches them not to jump into conclusions because further investigation must be done first before claiming that the results are accurate.

Errors in science investigatory projects are inevitable and sometimes, they have to repeat the procedures and find out what is wrong. That is why patience and determination, as part of affective domain, can also be developed. It is because SIPs require patience due to thorough investigations, extra time and effort, gathering data and a process of trial and error. Intelligence and capabilities that students have are not enough for an investigatory project works because it also requires perseverance, good behaviour and right attitude toward work.

It is about time to defy the traditional norms of teaching students. Learners must also be responsible of their own learning and must not always be dependent of their teachers because sometimes, all they have to do is just to serve as guides while they are discovering on their own in able to learn. These kind of teaching strategies empower students to achieve more and discover many other things by themselves. It also gives a rewarding feeling for the students which enable them to perform well even more which can eventually turn them into holistic individuals.
References:

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