ARE SCIENCE INVESTIGATORY PROJECTS STILL USEFUL?

by:
Lizzette T. Fabian
Teacher I, Hermosa National High School

“Students’ engagement in Project-Based Approach significantly increased their self-efficacy in conducting science investigatory projects and developed skills in collaborating, problem-solving, and critical thinking”. – Rizalina G. Gomez, Philippine E-Journals

One of the exciting activities in the Science department is the conduct of Science investigatory projects. There are also contests in the division, regional and national level for this particular event. Inside the classroom, the Science teacher guides the students in making their own investigations and have them written. This strategy is called project-based approach. (Gomez, 2013)

How important are science investigatory projects?

Studies have shown that enhancing the learning research skills while the learners are at their young age will eventually provide the students other types of skills that will definitely help them in doing most of their undertakings in their lives in the future and over a lifetime. Cuartero (2016) stated that Science investigatory project (SIP) develops students’ interests and process skills (observing, comparing, classifying, measuring, gathering and organizing, predicting, inferring, evaluating, synthesizing, and interpreting data) in learning science. As these skills engage the students to do their efforts in absorbing huge amount of information, such processes will not just be helpful in their school endeavor, but will be very serviceable to their everyday lives as well. As an educational activity, SIPs could be a great source of student engagement, student involvement and preparation to more research-based and output-based aspects of the teaching-learning process. It involves experiments or construction of models. Cuartero
(2016) further added that doing science investigatory project is similarly performing hands-on learning or commonly known as learning by doing.

Accomplishing this type of student project could develop various skills inclined with scientific methods and molding one to possess the characteristics or qualities of a scientist. During our old days, our Science classes always give us opportunity to become little scientists in our own ways. We deal with experiments and records the results. We tend to be investigators and become enthusiastic with our findings. When these process skills are included in your teaching, students will become critical thinkers and develop self-confidence of what they are doing and what they are going to do.

In my Science class, SIPs have always been an important part of the whole undertaking for one school year. Students have become passionate over answering certain questions in life or inventing something useful. As simple as they could be, the SIP results are something my students could be proud of. They are the scientists. They are the problem-solvers. They become critical thinkers. And whenever it is the time to accomplish their SIP, their passion and determination to finish until conclusion and recommendation is very evident, thus, making the SIP adviser also passionate to continue on implementing this remarkable undertaking.

So, are science investigatory projects still useful? Think about the skills to be developed of the 21st century education. Maybe it is now time to include making SIPs a part of your Science teaching and learning.

References:
