

## ***Experiencing Meaningful Learning***

---

Carmina Villariba-Tolentino, PhD

*Manuel S. Enverga University Foundation, Philippines*

### **VEXATION**

In our changing society, students need to possess a variety of skills and strategies in order to learn. College students from universities of developing countries are expected to acquire knowledge, to interpret and communicate their information, and to solve problems and make decisions. In doing all of these, students are required to have a wide range of critical and creative thinking skills and strategies which they can apply to a variety of situations. As a science educator, I expect my students to apply what they know about a certain concept to novel situations. More so, other science educators expect students to self-regulate and define their own learning goals, evaluate their own achievement and share this accomplishment to others. When students can do all these, one can say that they "understand" that particular concept. Or, one can say that **meaningful learning** has occurred.

However, as a science educator, there's always a problem regarding how we can authentically assess if they (students) really have experienced meaningful learning. Although, I have applied so many tools that can identify students' learning experiences, still those tools were not enough to truly evaluate if students have appreciated what they have learned and understand the extent of its meaning to their future. Sometimes it gives us so little time to do how we would like to assess our students because of the task that we need to produce evidences that will prove what students have learned but not enough evidences on how they learn. And what is frustrating is that you want to document if they were able to have fun while learning, if they shared these experiences to others and if they learned new concepts based on their previous learning. However, the questions are, "can you give them a grade for having fun while learning, for sharing with others what they have learned and how they used their previous learning to make new ones?" Is experiencing meaningful learning associated to their co-learners or must it come from their mentor?

### **VENTURE**

#### ***How can you truly determine the existence of meaningful learning among students?***

Meaningful learning is a very dynamic concept which radiates so many connotations from its proponents. It does not only link learning with critical thinking, creative ideas, and previous or prior learning but it also makes learning fun, exciting and fulfilling. My vexation to truly understand and determine how it occurs is, one has to make an in-depth observation of every move that students make. Or to make it easier for science educators, you can do this by requiring science major students to make a journal or to add their reflections to every project or homework they make.

Journals and reflections can be considered as an added work for science teachers but it can be common task to other science educators or yet to some preservice teachers. Through these, one can capture ones thoughts and experiences that a teacher cannot see through his/her observations. Moreover, students' may experience learning and understanding more when they are not inside the classroom or laboratory, some may have experienced it when they are with their peers or through socialization with other people other than peers, classmates, or teacher.

- So how can you really capture or determine from students' journals or reflections if these learning are indeed meaningful to them?
- Sometimes it would take years to know if meaningful learning exists but can it be possible to determine that it can exists within a day, perhaps a week or a month?
- Can giving them activity and discovery-based learning in groups or letting them connect with other people outside the school do the job?
- Or it is the role of a science teacher to lead them to experience meaningful learning?
- According to Zisk (1998), teacher motivation greatly influence student attitude towards the subject and learning. Another is that, students must find relevance in the curriculum so they can see how it connects with their lives and that the learning environment must be friendly, conducive, and pleasant.
- If so, teachers must create a curriculum that is based on context, culture and community and provide a conducive learning environment in order to guarantee meaningful learning.

My venture is to determine if meaningful learning exists among preservice teachers in their everyday classroom or laboratory experiences through reading and analysing their journals. At the same time, creating a curriculum that is culture and context-based, with more activity and discovery-based learning schoolworks and evaluating it through portfolio development and assessment. These ventures could be old or may have been done by many of us (science educators), but I do believe that with hardwork, giving extra time and patience to preservice teachers, one can determine if meaningful learning exists among them.