SECTION 1: PERSPECTIVES ON EXPERIENTIAL/SERVICE LEARNING

Experiential learning as theory, not method

Alex IP Yuen Kwong

1 Department of Biological Sciences, Faculty of Science
National University of Singapore

Recommended citation:
Experiential learning as theory, not method

**JNUSTA**: *What is your view about experiential/service learning? Could you share with us your understanding and views about the issue?*

**Alex**: I may have a different understanding/opinion about experiential learning from Professor Amy Tsui. To me, “experiential learning” is a theory about how people learn, and NOT a teaching method. It may not have universal application, but it provides a framework for understanding learning in many situations. As a term “experiential learning” is not equivalent to those used to describe a certain teaching method or strategy, such as service learning, project learning, action learning, problem-based learning, game-based learning, experience-based learning, or experiential education.

Experiential learning is the “process of making meaning” from direct experience which can be staged or left open. There are several models but I often refer to David Kolb’s Experiential Learning cycle which prescribes the four stages of concrete experience, reflective observation, abstract conceptualisation, and active experimentation, which are highly relevant to science education. Experiential learning focuses on the learning “process” of the individual, and in that sense it differs from “experience-based learning” or “experiential education”. “Experience-based learning” is a teaching strategy based on “experiential learning” that teachers can adopt to facilitate students’ learning, while “experiential education” is a broader philosophy of education that concerns issues related to education objectives and structure and the teacher/student relationship which together enhance and facilitate experiential learning in students. Since “experiential learning” prescribes direct experience and reflection, experience-based learning often contrasts with didactic/rote learning in schools.

Andresen *et al.* (2000) provided a list of criteria for experience-based learning. The authors state that for learning to be truly experiential, the following attributes are necessary in some combination.

- The goal of experience-based learning involves something personally significant or meaningful to the students.
- Students should be personally engaged.
- Reflective thought and opportunities for students to write about or discuss their experiences should be on-going throughout the process.
- The whole person is involved, meaning not just their intellect but also their...
senses, their feelings and their personalities.

- Students should be recognised for prior learning that they bring into the process.
- Teachers need to establish a sense of trust, respect, openness, and concern for the well-being of the students.

I would add to the above list that the outcomes of concrete experience, reflective observation and abstract conceptualisation must lead to active experimentation, and active experimentation should be the focus of assessment which would naturally lead to another cycle of experiential learning.

Can “experiential learning” be assessed? Since experiential learning is a theory of learning and it stresses understanding the learning process (not necessarily the learning outcome), it is more appropriate to research on the application of the theory to various types of learning or learning situations instead. However, it is natural that the learning process would result in some changes in the learner, and therefore the learner is in the best position to assess those changes or outcomes of learning through self-reflection.

In contrast, it is definitely possible to assess the outcome of “experience-based learning” which is a teaching method. Let’s examine “studying what red is” versus “experiencing what red is”. A student can learn about what the colour ‘red’ is and study in detail the physics of light. S/he can answer any scientific question about the colour ‘red’ and perhaps do well in exams. However, if s/he is colour blind, s/he would never really understand what ‘red’ is because s/he would have never experienced it. S/he would not know how to use red to express emotion due to a lack of experience and s/he would never be able to use red correctly in painting. However, even in the case of a normal person who not only studies but can also see red, s/he may not know how to “use” red if s/he did not reflect on his/her experience of red on various occasions, or conceptualised how red could be used in painting, or tried out how to use red to express his/her emotion. The best way to stimulate/facilitate experiential learning in such a situation is to expose the learner to different paintings, to see and to feel the red color, to evaluate how red can interact with other colours, and to interpret the emotion being conveyed. Then the learner should be provoked to think about how to use red color. If the learner has achieved experiential learning of red, s/he would be able to apply red to express his/her emotion in a novel/creative way to a new situation/context (i.e., active experimentation).

In the above example, what I want to bring out is the fact that experiential learning does not only concern the cognitive domain, but also the affective and psychomotor domain of learning. Hence, the learning outcomes to be
assessed should not be restricted to knowledge and intellectual capacity. And the assessment method should appropriately cater for the determination of the desired learning outcome.

In science, project work or field work, when executed in a certain way, can be a type of experience-based learning that facilitates experiential learning in students. However, for true experience-based learning in project work, the desired learning outcome must include items like persistence, accuracy and precision, curiosity and decision making, and so forth. And, these must also be assessed besides content matters. Journal preparation is a tool that may induce reflection and hence facilitate experiential learning. However, it may not be a good tool for assessment because it may or may not induce reflective observation and abstract conceptualisation, and does not guarantee the initiation of another cycle that begins with active experimentation. To me, the best way to assess the outcome of experiential learning is to test students’ ability to apply, through active experimentation, what has been learned to new situations, to create new ideas, to solve new problems or existing problems in new situations, and/or to make balanced judgments or decisions in a difficult or controversial situation.

REFERENCES
