4.9 Reflection

Findings

✓ Using ‘Frameworks’ for reflection (Hallock, 2012), this tool was developed by a professor in Utica College’s education program. It was designed for capturing students thinking. The figures below are the three aspects of this tool: students are asked to draw three figures and write on the square with their beliefs about the topic. In the triangle, students should write in each axis three things that they remember the most. Finally, in the circle, the student should write things that they still don’t understand:

✓ Reflexive and reflective thinking, a link to agency and autonomy: To understand the link that reflexive and reflective thinking has with the agency and autonomous learning. It is essential to understand what conditions autonomous learning has. Figure 11 shows the structural conditions in an autonomous learning environment compound by four components: Context, setting, situated activity, and self. The key element that links autonomy with reflective thinking is the contextual mediation that students have in the instruction. The study focused on this context mediation in English learners. However, the study’s findings highlight the relevance the context and language can have on liking and promote reflective thinking (Gao, 2013).

✓ Reflection for learning: This study reports from a teaching practice perspective how reflection is used and contextualized in higher education. The study also reports what are the capabilities required to develop to reflect, as well as this study explores if reflection can be a catalyst for higher-order or deeper learning. The study following five stages for developing theory creates and reflection learning theory. This paper introduced three ecologies to inform their theoretical mode, these ecologies are: The learner, the learning ecology and the experiential-learning ecology (Harvey, Coulson, & McMaugh, 2016).

  o The learner ecology has four elements denominated four “Cs”: Cognitive, Communicative, Contextual and Conditions
  o The learning ecology, it has four considerations to take into account “Ps”: Predisposition, Program, Planned and Participation.
  o The experiential ecology also requires four considerations that are key elements: Type of placement and the conditions of the placement.
John Dewey’s exploration of thinking and reflection: “Reflection involves not simply a sequence of ideas, but a consequence—a consecutive ordering in such a way that each determines the next as its proper outcome” (Dewey, 1910). John Dewey’s suggest some elements in the reflective thinking that involve every reflective operation. These are a) state of perplexity; and b) an act of investigation towards to find information that support and corroborate or invalidate facts. For instance:

- **The state of perplexity** is an extension to a challenge to the mind (I do not as yet know, so) that makes the belief uncertain involving either a question or problem in an experience of a sudden change.

- **The act of search or investigation**: initially fact came as the uncertainty that in nature induce perplexity. However, the act of looking for information and explanation to confirm that the beliefs were held good. Interestingly, the mental operations in this process.

Donald- Schön Knowing-in-action and Reflection-in-Action: The difference between knowing-in-action and reflection-in-action is that the first one refers to the formal knowledge. This formal knowledge can be built from daily experience, and it can also be evidence in their daily routines. On the other hand, reflection-in-action is the process of reviewing (going back) an action when new perceptions become. There is also a Reflection-on-action, and even though it is difficult to distinguish when the reflection-in-action occurs and the reflection-on-action start. Schön mentioned that it is important to develop learning environments that allow practitioners to dialogue with between professionals and client, or managers and employees take place (Schön, 1987).
Figure 11: Fink taxonomy of significant learning

Figure 12: Interactive nature of significant learning