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## Why Reflect?

*It is the language of reflection that deepens our knowledge of who we are in relation to others in a community of learners.*

*- Carole Miller and Juliana Saxton, University of Victoria*

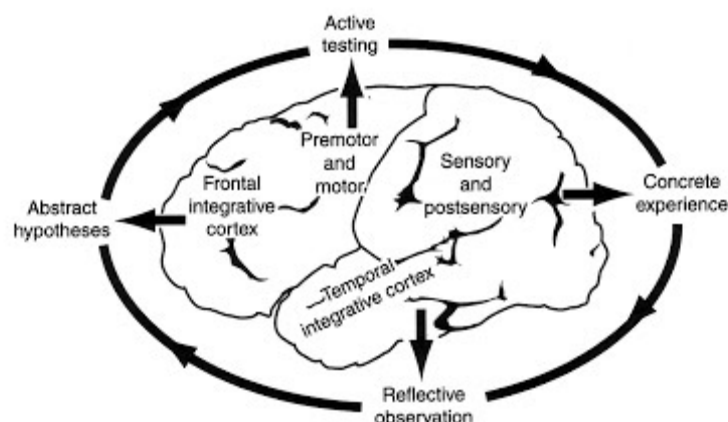
What are the pedagogical and physiological foundations of reflection for learning? Why is reflection important for learning? What does the literature say about how reflection supports learning?

Learning/Process Portfolios involve the focus on Plato's directive, "know thyself" which can lead to a lifetime of investigation. Self-knowledge becomes an outcome of learning. John Zubizarreta (2004, 2009), in his insightful books on Learning Portfolios in higher education, describes the primary motive of a learning portfolio: "to improve student learning by providing a structure for students to reflect systematically over time on the learning process and to develop the aptitudes, skills and habits that come from critical reflection." (2004, p.15)

The major theoretical roots of reflection can be found in John Dewey, Jürgen Habermas, David Kolb, and Donald Schön. John Dewey has stated, "We do not learn from experience...we learn from reflecting on experience." The Learning Cycle, developed by David Kolb, based Dewey, Piaget, and Lewin, is based on the belief that deep learning (learning for real comprehension) comes from a sequence of experience, reflection, abstraction, and active testing. James Zull's (2002) fascinating book on the biology of learning, points out evidence that the learning cycle arises naturally from the structure of the brain (p.19).

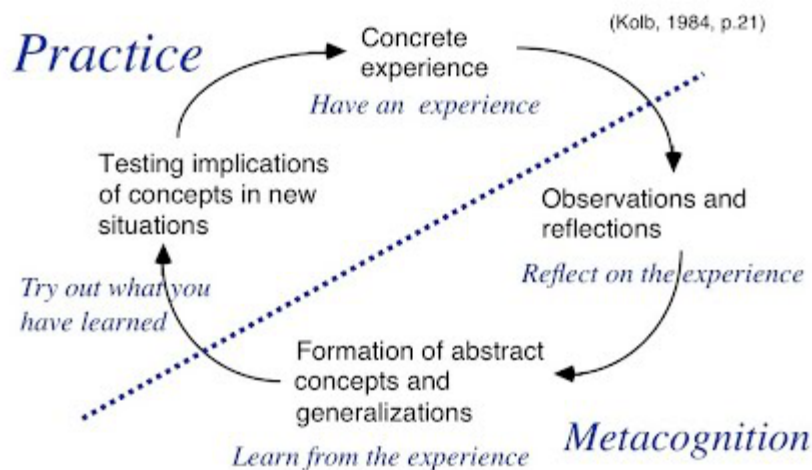
Reflection Cycle Image above:

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Zull's overlay of Kolb's Experiential Learning Model over the structure of the brain (p.18, shown above),

and Jennifer Moon's further elaboration (shown on the right), provide further support for the importance of reflection in supporting deep learning. Zull points out, "Even if we experience something that has happened to us before, it is hard to make meaning of it unless it engages our emotions." (p.166) He also points out that reflection is a search for connections (p. 167) and suggests that we have to seriously consider the role of emotion if we want to foster deep learning (p. 169).



Even if we were able to decrease our emphasis on speed and information and increase the possibilities for reflection, we still would have to give our students the kind of experience that would produce dreams- experiences that engage their emotions. (p.168)

Roger Schank (1991) points out the importance of stories in learning, that recalling and creating stories are part of learning. In fact, stories engage all parts of the brain; Zull points out that learning is deepest when it engages the most parts of the brain. Jennifer Moon, the most recent researcher on reflective practice, provides the following definition:

Reflection is a form of mental processing – like a form of thinking – that we use to fulfill a purpose or to achieve some anticipated outcome. It is applied to relatively complicated or unstructured ideas for which there is not an obvious solution and is largely based on the further processing of knowledge and understanding and possibly emotions that we already possess (based on Moon 1999)

Moon points out that one of the defining characteristics of surface learning is that it does not involve reflection (p.123). She points out the conditions for reflection: time and space, a good facilitator, a supportive curricular or institutional environment, and an emotionally supportive environment. Moon further points out the qualities of tasks that encourage reflection:

- Ill-structured, 'messy' or real-life situations
- Asking the 'right' kinds of questions – there are no clear-cut answers
- Setting challenges can promote reflection
- Tasks that challenge learners to integrate new learning into previous learning
- Tasks that demand the ordering of thoughts
- Tasks that require evaluation

## Storytelling as Reflection

Portfolios provide a powerful environment in which students can collect and organize the artifacts that result from engaging in these challenging, real-life tasks, and write the reflections through which students draw meaning. Part of the reflective process is to have students tell stories about their experiences which brain research shows can help students embed these experiences into their long term memory.

Donald Schön (1988) discussed storytelling as a mode of reflection:

"...for storytelling is the mode of description best suited to transformation in new situations of action.... Stories are products of reflection, but we do not usually hold onto them long enough to make them objects of reflection in their own right.... When we get into the habit of recording our stories, we can look at them again, attending to the meanings we have build into them and attending, as well, to our strategies of narrative description."

For those who consider the term “storytelling” to be too informal, Mattingly (1991) recommends using the term “narrative inquiry.” He points out Aristotle’s use of narrative as the natural framework for representing the world of action. Mattingly also elaborates on the “everyday sense-making role of storytelling,” that stories reveal the way ideas look in action. Narrative provides explanation. Our motivation for telling stories is to wrest meaning from experiences.

Clandinin & Connelly in Schön (1991) call stories “unpretentious narrative.” Stories are a fundamental method of personal growth through reflection, which is preparation for the future, and deliberation, of past considerations. Reflection does not always have to be in written form. For some students, reflections can be oral, shared with peers or teachers. However, as Schön notes, we need to capture those stories in our portfolios to make them objects of reflection. With the addition of multimedia technologies, these stories can be captured, in either audio or video formats.

Janice McDruy and Maxine Alterio (2002), two educators from New Zealand have written a book called *Learning through Storytelling* in which they outline their theory of storytelling as an effective learning tool. They have linked the art of storytelling with reflective learning processes supported by the literature on both reflection and learning as well as making meaning through storytelling.

## Resources

McDruy, J., Alterio, M. (2003) *Learning through Storytelling in Higher Education*. London: Kogan Page.

Moon, J. (1999) *Reflection in Learning and Professional Development*. London: Kogan Page.

Schank, R. (1991) *Tell Me a Story: A New Look at Real and Artificial Memory*. Atheneum

Schön, D. (1988) “Coaching Reflective Teaching” in P. Grimmett & G. Erickson (1988). *Reflection in Teacher Education* (pp. 19-29). New York: Teachers College Press.

Schön, D. (1991) *The Reflective Turn: Case Studies in and on Educational Practice*. New York: Teachers College Press

Zubizarreta, J. (2004). *The Learning Portfolio*. Bolton, MA: Anker Publishing

Zubizarreta, J. (2009). *The Learning Portfolio: Reflective Practice for Improving Student Learning, Second Edition*. Jossey-Bass

Zull, J. (2002) *The Art of Changing the Brain*. Sterling, VA: Stylus Publishing

Excerpts for this document are from Helen Barrett's [White Paper: Researching Electronic Portfolios and Learner Engagement](#), created initially for The REFLECT Initiative and adapted for a paper published in IRA's Journal of Adolescent and Adult Literacy, March 2007. Reflection cycle image source: <http://celt.ust.hk/teaching-resources/action-research>

## Opmerkingen

Je hebt geen toestemming om opmerkingen toe te voegen.

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