## **Making It Stick - Ideas for Effective Learning**

Rosemary Caffarella (2013) remind us,

Estimates of transfer of learning since the 1980s have generally been low. Recently, studies show estimates still remain low at about 10 percent (Awoniyi, Griego, & Morgan, 2002). Much of this expensive training and continuing education is wasted because of "continued low transfer. [Rather], practitioners have emphasized and developed sophisticated delivery devices at the expense of the critical connections between the training site and the work [and other environments]" (Brinkerhoff & Montesino, 1995, p. 264).

Nobel laureate Daniel Kahneman (2011) observes,

Memory holds the vast repertory of skills we have acquired in a lifetime of practice, which automatically produce adequate solutions to challenges as they arise, from walking around a large stone on the path to averting the incipient outburst of a customer. The acquisition of skills requires a regular environment, an adequate opportunity to practice, and rapid and unequivocal feedback about the correctness of thoughts and actions. When these conditions are fulfilled, skill eventually develops, and the intuitive judgments and choices that quickly come to mind will mostly be accurate.

## Ideas for helping learning stick

**Immediate application**: put the new learning into play as quickly as possible especially in a setting similar to the real application of the learning and then...

**Deliberate Practice**: "is the breakdown of expertise into a series of smaller, attainable practices. A deliberate practitioner engages in structured activities that improve performance in a specific area. The goal of deliberate practice is not just to reach your potential but to build it, to make things possible that were not possible before. It takes a long time, and it's hard. But to quote one of today's great philosophers, 'It's supposed to be hard. If it wasn't hard, everyone would do it. The hard...is what makes it great.' Thank you, *A League of Their Own*'s Jimmy Dugan" (Ericsson, 2016). Clark Aldrich summarizes the concept well with, "If I had six hours to learn anything, I would spend four of it practicing."

**Feedback, feedback and more feedback**: Basically, feedback is information about how we are doing in our efforts to reach a goal. Advice, evaluation, grades—none of these provide the descriptive information that students need to reach their goals. Decades of education research support the idea that by teaching less and providing more feedback, we can produce greater learning (Bransford, Brown, & Cocking, 2000; Hattie, 2008; Marzano, Pickering, & Pollock, 2001 as cited by Wiggins, 2016). Wiggins asserts, feedback is learning! Feedback should be user-friendly, actionable, timely, ongoing, consistent, and progress towards a goal.

**Drawing**: "Researchers at the University of Waterloo have found that drawing pictures of information that needs to be remembered is a strong and reliable strategy to enhance memory. We discovered a significant recall advantage for words that were drawn as compared to those that were written. Participants often recalled more than twice as many drawn than written words. We labelled this benefit 'the drawing effect,' which refers to this distinct advantage of drawing words relative to writing them out." (Wammes, Meade, and Fenandes, 2016).

**Connecting to past experience**: connecting to past experience speeds to learning dynamic. David Ausubel suggests, "The single most important factor influencing learning is what the learner already knows. Ascertain this and teach [the learner] accordingly" while David Kolb recommends, "Learning must occur in conjunction with what adults already know."

Remember, in "Telling ain't training!" Stolovitch and Keeps (2011) remind us "Learning is change"...instructors do not simply transmit information; we change people and that type of change typically is derived from experience...not information. "Learning is an adaptive change in behavior resulting from experience." - Suzanne Corbin and Matt Wilson of MIT's Brain and Cognitive Science Department (2007). Perhaps Einstein said it best, "Learning is experience. Everything else is information."