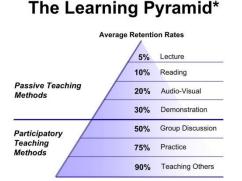
Leadership, Discipleship, and Learning – Jessie Cruickshank

There are many different theories of learning and styles of teaching, but they are beyond the scope of this paper. There are, however, two main categories of engagement in learning: passive and participatory. Lecturing and watching videos falls within the 'passive' category, while experiential education is a participatory engagement of the whole person.

The experiential education learning environment is different from more traditional learning environments because it is based in community and relationship, treating individuals as whole persons. Experiential education seeks to engage the learner holistically by understanding that each person has knowledge, experiences, feelings and opinions, and brings those aspects of personhood to bear in a social environment. No one learns in a vacuum.

Cognitively, learning is defined as creating a long-term memory. Traditionally, learning was defined by being the recipient of information. But as the Learning Pyramid chart below demonstrates, this is an inappropriate assumption.



*Adapted from National Training Laboratories. Bethel, Maine

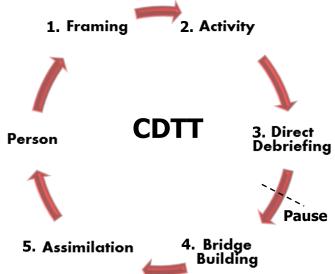
Research coming out of the fields of neuroscience and cognitive psychology has given us greater insight into the learning processes in the brain. Research results support some best teaching practices while demonstrating others to be harmful. Research has also shown how the learning process changes depending on how the context and learning environment changes. Enough research has been done that we can start to see patterns in the processes and begin to piece together a larger view of learning and teaching.

Co-Constructed Development Teaching Theory (CDTT) (Schenck & Cruickshank, 2015) is based upon the almost 3000 books and research

articles. It is the first biologically-based model of teaching undergirded by decades of scientific research. Also, because it connects teaching practices to processes in the brain, as new research refines our understanding of the brain, the model can correspondingly adapt.

The brain is the most complex thing in the universe. It is actually much more complex than the universe itself. Yet there are processes that have been shown to be fundamental to being human. CDTT works from those fundamentals and identifies where adaptation and differentiation can occur.

CDTT is a five-stage conceptualization of teaching and discipleship, starting with the whole person in mind. **Framing** is where the facilitator intentionally sets the atmosphere of the learning event or organization. It is the management and stewardship of the non-conscious processes of learning. Learning requires resources - neurons, glucose, hormones, and time. The better the facilitator can steward these non-



conscious processes, the farther along the cycle a learner will be able to move.

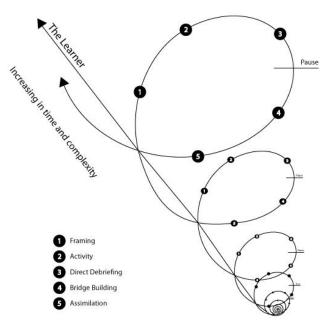
Activity is what most people traditionally consider the 'lesson.' Yet it is just a vehicle for communicating and interacting around what the facilitator wants to teach or the capacities the organization wants to develop. It is not the point of the learning event. If the activity is set up to be the main or only focus, it is unlikely that any long-term memories pertaining to the concepts will be developed. The likelihood of memory formation proportionally decreases the more passive the activity is for the learner. While conducting the activity, non-conscious process must continue to be stewarded.

Direct Debriefing is where the activity is reviewed and discussed, looking to salient (the most important) points. Nonconscious process continued to be stewarded, but here the learning moves to conscious realm to a greater degree. All revelations, epiphanies, and Ah-ha moments must happen in the conscious mind. But it takes scaffolding to get there. In Direct Debriefing, you are beginning to help create that scaffolding. This is also the place where the facilitator begins to loosen control on the learning event and hear what ideas are emerging for others.

The Pause is a new and breakthrough component in the concept of learning. There is little research on this part, but our experiences as educators have demonstrated that including it in a learning event makes a profound difference. Research is currently being conducted on this new area by others in order to understand it better. We do not know how long it should be or if it needs to reoccur in several places. Essentially, the Pause is a contemplative state where the learner has the chance to reflect on what they are learning. It allows time for memory stabilization and integration with other brain processes, such as autobiographical memory. Every documented epiphany process included a Pause.

Bridge Building is where the scaffolding continues to be intentionally built. The facilitator asks questions to allow the concepts to be looked at in a new light in order to see patterns and connections between concepts. It is the most challenging stage as it requires a dance-like conversation as assumptions, misunderstandings, and other questions are revealed. Sometimes the questions or gaps in understanding facilitate another progression through the cycle and another activity. Again, the point of this stage is to carefully and intentionally build the scaffolding of the concepts desired to be taught, connecting them to the individuals previous learning and life narrative (autobiographical memory).

The final stage, **Assimilation** is completely learner-managed. This where the learner decides how they want to apply the learning event to their own life. The facilitator has completely relinquished control of the learning event by this stage. When successful, Assimilation looks like an Ah-ha moment. These do not have to be occasional and miraculous, but they can be intentionally facilitated. Each Ah-ha will be individual, but in our experience using and refining CDTT, students experienced an Ah-ha moment at a minimum of 83% of the time. These results were consistent, whether in the classroom with genetics, a wilderness environment with intensive discipleship, or online learning with brain theory. The brain was created to learn, and it can do so amazingly when stewarded well.



CDTT is a fractal and scalable. This means that it is a repeating pattern that can happen in a short time with a small number of people, or it can happen over a long time with a large number of people. Whether it is an individual, an organization, the learning developmental process is the same.

The best leaders guide a people and organizations through development cycles using timely processes. But this can get tricky and confusing without a meta-theory of development. Having a framework that helps a leader know *what to do next and how to go about it* is invaluable. Likewise, if discipleship is conceived of as a process of accumulating information through a passive learning environment, then disciples will never be made. It is important to know how we learn, individually and corporately, so that resources, time, and effort are not wasted. At best we operate inefficiently, at worst we can crate harmful envornments.

that invalidate peoples' experiences. Knowing how people learn helps us make disciples and be better leaders.

Schenck, J., Cruiskshank, J. (2015). Evolving Kolb: Experiential education in the age of neuroscience. Journal for Experiential Education, Sage Publications