Experiential Learning - starting the conversation

My 15 year-old grandson, Cavan, experiences snakes like no one else I know. He owns five snakes: he volunteers his time for a snake breeder; he has a deep knowledge of genetics, and animals; and he is a snake breeder. No one needs to encourage Cavan to continue learning about snakes. He uses all the tools available for research when needed. Cavan's experience with snakes has carried over into greater motivation to do well in all his subjects at school even though they are not as engaging as snake handling.

That's the kind of learner we want in our training programs—someone in whom a fire has been lit and who now owns his one learning. So how do we create a similar outcome in our learners?

During the last 40 years much has been learned about how the brain works and how effective learning can occur. The results are summed up in the concept of experiential learning, more specifically defined as "learning through reflection on doing".

This should encourage you because TEE provides a sound framework within which we can build learning experiences that are even more transformational. Consider these elements of TEE:

- learning is happening in the community within which the learner resides
- · what is learned can be immediately applied
- learners discover truth through personal study, prayer and with and from other learners
- there is the opportunity to be supported and encouraged in learning and growth

We, as participants in the "Exploring New Horizons" conference are practitioners in the field of learning and are privileged to be involved in creating and delivering learning experiences that will enable others to know God in a deeper way, be transformed, and become agents of transformation in families, church and the wider community. We are stewards of the learning process and are called to continually sharpen our tools so as to increase the potential for transformation among our students.

So what has been learned in the past 40 years about how God created the human brain to be a learning system? Actually, researchers tell us that the brain has four learning systems that are discrete but work together. They are:

- 1. Processing of sensory data
- 2. Learning knowledge by rote off by heart
- 3. Understanding: how the brain creates and stores ideas and concepts
- 4. Imagination and creativity: being innovative and ingenious

Let's delve into this massive subject a little.

- 1. Most people are born with fairly equal capacities in systems 1, 3 and 4. We can all learn most of the things we need to know to live our lives successfully using these systems. Therefore if we use these systems in the learning we provide, there is a high potential that people will actually learn.
- 2. System 2, learning by rote, is where there is a high variation in capacity between individuals. The strength of this capacity seems to depend mostly on what we inherit from our parents. Rote learning is the most difficult of the four systems. Think about learning to read and write. In English we have to remember 26 letters, the size of each shape, the sounds of each shape, and the words derived from letters. No wonder that it takes between 5-7,000 hours to learn to read and write in English. Compare that to learning how to drive a car. Most of us can get basic proficiency in a few hours. Yet, driving a car is a complex task. Consider what is involved in braking a car. The human brain has to dynamically compute what rate of change in speed is necessary for the distance in which you have to slow down. Within a short space of time most of us can do this automatically.
- 3. Societies world-wide relied on systems 1, 3 and 4 for educating and training most of their people for all of human history until 200 years ago. For most of us much of our schooling as a child and often as an adult used rote learning methods. It turns out that those who are not genetically well-disposed to rote learning can still have excellent recall if their learning involves a fuller engagement with all the learning systems we possess. Perhaps we should increase the ways of learning we are naturally good at and reduce the ways that we are not so good at.
- 4. Research shows that if we minimize rote learning and introduce knowledge "just in time", and not "just in case", we will increase the amount of learning that takes place as well as increasing the possibility that all students will benefit at a similar level. My grandson, Cavan, retains far more factual knowledge about snakes, breeding and genetics than he would have if he had learned it in the classroom. He says that he knows more about snakes than any other subject he is studying in school.
- 5. Learning system 3 is about generating ideas and concepts. This is especially important because it requires activity to fully involve this learning system. Embedded in this learning system is the principle that if a feeling of excitement (and even emotion) is present then learning takes off in amazing ways. It goes like this: some kind of prompt causes excitement; we become engaged; this leads to curiosity; which leads to questions; which leads to the intake of knowledge; which gives meaning to our experience; and then the ability to apply the new understanding. Learning is enhanced if, after the process stimulated by the prompt, there is an repetitive process of reflection, acquiring new knowledge and formulating new meaning. As educators we talk about creating the desire to learn. It is the same idea. Desire comes from the emotional part of us. The initial

prompt for Cavan in his learning and engagement with snakes was an invite by a school friend to a snake expo. There he saw many snakes, but the highlight was to see a clutch of eggs about to open. This aroused his curiosity. Even being bitten by a snake did not dampen his enthusiasm.

Think about the implications of how having a satisfying experience provided for our students in TEE programmes might effect their learning.

Reflect and make notes on what you might do to increase the rich experiences that take place in TEE courses. Also write down any questions that surfaced as you read this.

In addition to discussing these topics and your reflections and questions at the conference, we will look at an educational programme that is very similar to TEE but uses an experiential learning model as one way to harness what is now known about what kind of learning will increase the potential for transformation.

Finally, here is a question for you to consider as you prepare for this session. As you reflect on your life and ministry think of a lesson you learned that has been highly influential and central to how you operate today (other than coming in to relationship with Christ). What process occurred that embedded this lesson into your thinking and behaving? What was the prompt that engaged you in beginning to learn this lesson?

I am looking forward to being with you and learning from our interactions together.

Blessings, Richard Morris

P.S. I will be bringing resources on brain and learning research so ask me for these materials if you are interested.