








Getting to Know You

<p>What was your favorite subject in school? Why?</p>	<p>What hobby engages you when you have time?</p>
<p>What is your favorite book or movie?</p>	<p>What is your least favorite activity?</p>

Cambourne's Conditions of Learning

-  **Immersion** – Learners are “saturated by, enveloped in, flooded by, steeped in, or constantly bathed in that which is to be learned.” (Cambourne, pg. 185).
-  **Demonstration** – Learners must have many demonstrations of what is to be learned and then attempt new learning.
-  **Expectations** – The learner must hold expectations for himself, but the teacher must also hold high, realistic expectations for the learner.
-  **Responsibility** – Learners be permitted to make some decisions about what, when, and how they will learn.
-  **Approximation** – Learners must be free to “approximate” learning, that is, to take risks and make mistakes. Mistakes are essential for learning to occur.
-  **Use** – Learners must have ample opportunities for using and practicing new learning. This must take place in relevant settings while doing authentic tasks.
-  **Response** – Learners must have appropriate feedback from knowledgeable others.

Immersion

As Cambourne suggests, immersion is a critical aspect of all learning. Just as the avid fishing enthusiast spends hours at the tackle shop checking out the latest equipment and every free moment trolling the waters, most engaged learners are immersed in their chosen subject. Child care classes in high school tapped into this concept long ago when students carried computerized babies that cried, wet, and had to be fed on demand—even in the middle of the night. If you want students to understand what it’s like to have a baby, then immerse them in childcare. Thus it is with learners in a classroom. If we want students to learn to read, they must be immersed in text. If we want them to become scholars of world history, they must be surrounded with biographies, documents, maps, historical texts, pictures and all types of primary sources. Imagine learning to use a computer with only a textbook that describes its functions or learning to play a musical instrument with only a “how-to” guide. Without immersion, the subject becomes a dry treatise, something that is viewed from the outside instead of experienced from within. Students can learn about a topic short-term for the purpose of passing a test or reciting facts, but those who internalize concepts and catch the fire of learning are those who co-create with the subject.

One of the easiest ways to ignite students’ passions is by creating a setting of immersion: a classroom overflowing with interesting supplemental texts, objects and resources. Young adult literature and nonfiction texts that tap a variety of interests are as close as the nearest bookstore or catalog, at a hefty discount for educators. Magazines related to the subject are also compelling to learners because of the visual aspect of the presentation. Photographs, graphics, and short articles that can be read in one sitting give students a chance to view the world through another medium. Current newspapers and magazines will eventually pull in reluctant readers as more motivated students share and discuss their discoveries.

Demonstration

Many excellent teachers are brilliant in their content areas, but they have trouble transferring their knowledge to students because they don't model what they know. Telling students *what* to do cannot replace showing them *how* to do it. The old adage *show, don't tell* would be apt advice for teachers whose goal is to foster deep learning in all their students.

Brian Cambourne notes that demonstration, much like immersion, is “the ability to observe (see, hear, witness, experience, feel, study, explore) actions and artifacts. In good elementary classrooms, demonstration is a natural part of learning. Children experience the joys of reading by listening to their teacher's voice transform words into magical escapes. They watch their teacher manipulate letters into meaning on the board before attempting writing themselves. They even participate in demonstrations by providing the content for the morning news while their teacher makes it visible. By the time students get to middle and high school, however, this pattern of learning is abandoned in favor of a more regimented system of blocked learning segments, seating charts that control social interaction and a syllabus that pre-determines units of study. A chapter is assigned, comprehension questions are answered, content is discussed, a test is given, grades are recorded, and teachers check off having “covered” the standards. Then, it's on to the next chapter or unit for a replay of the “learning” scenario.

As teachers come to understand the power of demonstration as the infusion of knowledge and skills intertwined with the artifacts and actions of learning, they begin to rethink learning itself. In secondary classes, students actually can become a part of the demonstration as they incorporate what is being demonstrated into their own schema, the compilation of all the experiences and knowledge that they possess.

Expectations

Most good teachers will tell you that they know it is important to have high expectations for their students. They are aware of research that shows how expectations can actually change the performance, attitude, and behavior of students. The same student will perform differently for a teacher who expects him to do well than for one who has low expectations. Our own experiences bear out this principle. We all remember a parent, teacher or coach who “believed in us,” and we were able to achieve more than we believed possible. We may also remember an experience when someone doubted or ridiculed our abilities and the resultant fear or doubt crippled our performance. There is little worse than being cast in a negative concrete expectation that leaves little hope of breaking out of the mold. Expectations are both powerful motivators and commanding deterrents.

This phenomenon is often referred to as the “self-fulfilling prophecy effect” whereby a student’s performance or behavior is influenced by a teacher’s expectations. The result of such judgment is closely related to motivation and self-confidence, both necessary components for success. This same theory addresses parental expectations and confirms that beliefs in children’s performance can significantly affect their child’s development, abilities and capabilities. As Cambourne wrote, “Expectations are subtle and powerful coercers of behavior.” Having high expectations for students goes beyond a superficial statement such as, “I know that you can succeed.” Students are savvy creatures and they can accurately interpret attitudes, non-verbal clues, intonation and actions. Teachers who believe that students are born with a fixed intelligence send out invisible clues, much like laser rays, that pierce students, convincing them that they are incapable of rising above some sort of pre-determined intellectual ceiling. The truth is that intelligence is fluid and malleable and responds to a variety of factors, including motivation, interest, readiness, and emotion.

Expecting that students can and will learn is a first step in creating an environment that nurtures learning. Cambourne is clear, however, that such expectations cannot exist without a genuine relationship between the student and teacher. The message should be unequivocal from teacher to student: I like you, I have confidence in your abilities, and I value you. I care about your accomplishments, no matter how small, and I see you as a person, not just a student who happened to be assigned to my class.

Responsibility

How do our students view responsibility? Is it a stick with which we prod and coerce them into behavior or actions that we wish to see exhibited— and that may be, admittedly, good for them? Or do they see the act of “being responsible” as one that will buy them extrinsic rewards? While actions that model responsible behavior may have positive, short-term effects on learning, *true* responsibility involves intrinsic fulfillment. According to Cambourne, responsibility means that learners make their own decisions about “when, how and what ‘bits’ to learn in any learning task. Learners who lose the ability to make decisions are disempowered.” He makes the point that when very young children begin to talk, they are permitted to make some decisions (i.e. take responsibility) because they are provided with language demonstrations that are not “specially arranged in terms of simple to complex.” He points out, “No one decides beforehand which particular language convention or set of conventions children will attend to and subsequently internalize. Learners are left some choice about what they’ll engage with next. Learners are able to exercise this choice because of the consistency of the language demonstrations occurring in the everyday ebb and flow of human discourse”(Cambourne 1995, 185).

In considering Cambourne’s theory that students must make their own decisions about “when, how and what” bits to learn, teachers can start off slowly and gauge their students’ reactions and learning.

Approximation

One of the most important elements in Cambourne's theory of learning is the condition of approximation, where learners feel safe to "approximate" learning, that is, to take risks and make mistakes. Cambourne makes clear its importance: "Freedom to approximate is an essential ingredient of all successful learning"(1988, 70). He reminds us of how young children approximate as they begin to learn to talk. "Learner talkers are not expected to wait until they have all of the systems and sub-systems fully intact before they are allowed to talk. If this were the case they would not begin to produce audible speech until they were nine or ten years of age" (Cambourne 1995, 185). Furthermore, there is no anxiety associated with such early learning. In fact, every utterance, from a grunt to "mama," is met with warm approval, enthusiastic support, often loud applause. It is through this cycle of attempting the task, receiving feedback, and approximating learning that children begin the process of becoming fully functioning human beings; they learn to walk, speak, eat and interact socially with others through a process of trial and error.

The condition of approximation is really an application of the scientific method. Cambourne reiterates, "When learning is looked at as a form of hypothesis testing, it becomes obvious that approximations (errors) are absolutely essential to the whole process" (1988, 67). It is, in fact, synonymous with the process of hypothesis, inquiry and discovery: trying first one "educated guess," learning as much from the "guess" as from the success and moving in total absorption to deeper learning. Without the freedom to inquire as a natural part of learning, the imposed ceiling may have long-lasting effects on learners' confidence in their intellectual abilities as well their ambition to try anything that does not come with an assurance of success.

Indeed, all learning thrives on the act of approximation. It is often only when children leave the secure nest of acceptance and encouragement and enter the arena of formal education that problems in learning occur. To subvert this process by failing to provide a safe environment where students can continue to experiment with learning is counterproductive and cruel. When learners are penalized for making mistakes by receiving low marks on a report card, being made to repeat a grade or enduring any other form of humiliation, all bets for deep, intrinsic learning are off.

Use

Most of us are not motivated to learn unless there is a very specific, authentic use for the information. We don't read tax rules if we have a trusted accountant; we don't read the instruction manual for programming our cell phone if we have a teenager to program it for us; we don't read the "changes to your credit card" statement if we don't use that credit card (or even if we do). Students are not much different from the rest of us. If they are asked to read something that may apply to them at some future time or for which they can find no relevance, they most likely are not going to become engaged in the learning. We may create a purpose by testing them on the material, but soon after the test that information will be quickly relegated to a nonessential file in their brains. In fact, research exists that describes the "discrepancy between perceived and actual success" for learning (Brooks & Brooks 1999, 8). Perceived success is "performance," such as a high grade on a test without the in-depth understanding or application of the learning for future endeavors.

Learning is directly related to its employment, that is, its relevance, purpose, and meaning as defined by the learner. Brian Cambourne describes this principle simply: "In order to implement the principles of 'use' most effectively in classrooms, teachers need to create settings in which learners experience an urgent need to read and write in order to achieve ends other than learning about reading and writing. Learners need time and opportunity to use, employ, and practice their development control in functional, realistic, and nonartificial ways" (Cambourne 1988, 74).

Response

Response is a powerful force: a stimulating motivator or a suffocating inhibitor. Recall someone's response to your own learning that stands out as significant, either negatively or positively. Think of a time that you responded to students' learning in such a way that it made an obvious impact on them. What factors set that particular response apart from the hundreds of thousands of other responses you uttered to students in your classes?

Learning, according to Cambourne, must include the condition of response: feedback from exchanges with more knowledgeable others. He clarifies the concept of "response" by saying, "While exchanges may vary in detail and richness. . .they have certain things in common: a) they are readily available, frequently given, non-threatening and **with no strings attached**; b) there is no penalty for not getting the conventional form correct the next time it is produced. There is no limit to the number of exchanges that are offered and given" (Cambourne 1988, 40).

Rely on some of the following prompts as a starting point for responding rather than evaluating student work.

1. Why did you choose to . . . (work the problem in such a way, read that particular book, include this topic in your project)?
2. How might your thinking have changed if you had. . .?
3. I was wondering . . .
4. Have you considered. . .?
5. Your approach to this assignment is different than I expected. I have some questions:
6. I'm not sure I understand.. Will you explain. . .
7. I had an experience similar to the one you are describing. What happened was. . .
8. This is a difficult concept to learn. Sometimes doing this will help. . .
9. Look again at what you wrote here. It's still not clear to me. Could you add details, examples, etc.?
10. You have a unique angle to this project. I think you ought to pursue this and consider submitting it (for publication, in the science fair).

Response (cont'd)

11. You have some interesting insights, but your (organization, grammar, sentence structure, etc.) will distract the reader from your ideas. Let's see how I (or a reference book, another student, internet site) can help you with that.
12. I want to know more. What else happened?
13. How does this part of your project relate to your thesis (or goal, purpose)?
14. There's something happening in your paper that I can't quite put my finger on. Do you feel comfortable asking _____ to read and respond to it?
15. This part of the assignment is so well thought out—it's brilliant! Toward the end, however, you seemed to lose some of your momentum. Can you figure out why?

In other words, respond to students' attempts at learning as you might to your own child who is having difficulty with homework, a spouse who needs your advice on a project, a peer who asks what you think about a teaching practice. You should give the student an honest response—not as an expert, but as a fellow human being who is there to help.