# Approach to Educating

# Christopher M. Barlow

My goal is for students to learn more than I can teach them.

I believe that education is something that happens in the mind of the student, and my job is to manipulate and enrich their environment to increase that learning. Part of that input is my lectures, but I expect them to learn far more than the words that I say.

Let me discuss a few concepts that guide me in this process:

# Understanding Knowledge

I support the belief that knowledge enables a person to take effective action, and that the goal of education is to provide knowledge in a format that enables a person to create new knowledge as appropriate to a situation.

Explicit words, books, videos, lectures, or giant data bases are attempts to build knowledge in others, but they are not knowledge. Knowledge is an aspect of the minds of people.

Being able to repeat back words on an exam or solve carefully constructed problems is a trivial kind of knowledge if the person cannot use that knowledge when encountering real world situations.

The kind of whole knowledge needed for real world success is a connected mix of best practices, relevant abstract concepts, and internalized tacit understanding.

As an aspect of the person, this wholistic knowledge is integrated with the whole of a the person's other knowledge, beliefs, values, and goals.

#### **Experiential Learning: Real life more than cases**

I am a firm believer in the experiential learning model, the idea that a person best learns by a blending of abstract concepts and concrete experience through a process of active experimentation and reflective observation. This process, strongly promulgated by David Kolb (one of my lead professors at Case Western Reserve University) strongly matches the underlying model from my lifelong experience in deliberate problem solving.

In this process, abstract concepts are well understood because they are solidly grounded in experiences of the learner, and internalized methods are well grounded in available theory.

The basic method of this process is for a learner to reflect on experience in the light of various abstract concepts and theories, develop an approach to action, and test that approach in the real world, then repeat the process. This can be applied by giving the students experiences to reflect upon, whether

class room role plays or out door adventures, or by having students work on real world situations of themselves and classmates.

Where the case method has an advantage over memorizing of academic theories by having the student practice the application of theories on situations, the experiential model connects to the student's real experiences, unedited by advocates of a particular theory and with no guarantee of success. The knowledge developed is connected to their own work and goals, and of immediate usefulness.

# Social Learning: Imitation and Belief

People learn all kinds of interesting things by copying the behaviors of others, whether language, presentation skills, or ways to present themselves in a group. Students in a class learn a great deal from the behavior of others in a class as well as from interactions about the material, sharing experiences relevant to the ideas.

But there is another funny thing about knowledge. Belief is a critical part of knowledge. Philosophers have tried for centuries to determine the difference between belief and knowledge and basically found no difference. Forming belief and trust in the knowledge is a critical element in whether the student will ever use it in the real world.

While a certain amount of belief is formed by our own judgment of new knowledge, a big driver of belief is the reactions of people we trust to ideas and practices. Lectures that get large groups of people to react positively to ideas is likely to build far more belief in the knowledge than just reading a book or watching a video lecture.

Classroom activities that allow students to share their own reactions to ideas and their experience with ideas go a long way toward building trust in a set of knowledge. I am convinced that a student who hears approval of an idea by a fellow student builds more belief and deeper knowledge than can be gained from just listening to the teacher.

#### **Bias Toward Employed Adult Learners**

For management courses, people with organizational experience get the most out of this experiential approach, especially when they can discuss ideas with other experienced managers and immediately test new knowledge in their own job situations. Therefore, I have a strong preference for teaching adults with several years of organizational experience who are currently employed and can immediately test their developing knowledge in the workplace. Younger students without organizational experience and experienced people without a current employer can learn a great deal in this environment as long as they do not make up more than about 20% of the students in a class.

#### **Building cognitive complexity**

Part of my agenda in every course is to push students to increase their ability to think complexly and strategically.

Elliott Jaques makes a great argument that levels in an organization are associated with qualitative differences in the complexity of thinking, which are easily detected in the kinds of arguments people use in debate and discussion. He also shows that people grow at their own rates through their lifetime in their capacity for complexity. While his research seems to show that people have fixed competencies at any particular point in time, I argue with him that various management analysis tools and facilitative methods seem to enable people to perform above their measured "natural" competency.

In my current writing, I break the idea of complexity into two different factors. First, there is the complicatedness associated with having lots of variables and interactions in a system affecting an outcome. Second is the ability to simultaneously process conflicting goal sets and types of knowledge, what the psychologists refer to as "cognitive complexity".

My courses both seek to give tools to help students handle more complicated situations and to give students practice discussing real world problems in multiple simultaneous contexts. This is done in the grading of their written work and in the class discussions.

# **Structuring a Course**

First of all, I am a strong believer in text books and expect students to get most explicit knowledge and concepts from reading texts before coming to class. I take steps to ensure that they read the material before class and limit my lectures to setting context for coming readings, disagreeing with the text, and providing supplementary concepts not included in the text.

In most classes, the student has substantial reading to do every week and two assignments to submit: a discussion of the key points of the reading and an experiment with applying the knowledge of the course in the real world. These two single page submittals are e-mailed to my assistant a couple of days before class and posted on the web after the deadline for all to see. Students read over each others homework before class and share their reactions and ideas through an on-line web discussion.

With this preparation, I am able to use class time for in-depth discussions of material, role plays and other experiences to build skills and test ideas, student to student interaction, student project planning meetings, and my lectures to contextualize and supplement their reading.

Each course has team projects in which they must integrate concepts to understand a real world situation. Each course also has an individual term project which integrates course knowledge in a useful way for the student.

#### Grading as manipulation.

My courses require a large amount of work by students, much of which must be synchronized. For a student discussion exercise to be useful, it is important that each student be prepared.

I have decided that it is my moral and ethical duty to overcome their good judgment. Most of my students have very busy lives, with other courses, jobs, families, and other real life stuff. As important as studying is, they also have to meet other priorities, and will often figure they can catch up on the material. Therefore, each of my reading assignments must result in a written submittal that is a significant

part of the grade, and which is discounted at least 50% if it is late. As a result of this policy, my students report to me that they read a far greater portion of the assigned readings in my course than in other MBA courses.

Overall, my grading is based on an added point system that rewards them for a volume and quality of work. This flexible approach is especially relevant because I expect each student to get a different course, because each student has a different background and a different goal. I push students to do assignments which are most relevant to their own lives and goals, because that knowledge will be of the greatest use for the longest time.

# The Cyber Campus Experiment

Because of the overwhelming interest and enthusiasm for distance learning, and because of my own skepticism, I decided to experiment with a course delivered primarily by Internet resources. I began with the core course in Organizational Behavior because I felt that it would be the most difficult to deliver in this mode. Interestingly, the course was a great success not only in student satisfaction, but in meeting my educational objectives for them. I have repeated this course offering as well as delivering Organizational Theory and Design in this mode and found it a successful approach.

What probably made this experiment successful was that it basically replicated the above design using Internet interaction to replace about half of the class time. This worked effectively with employed adult learners, but I would expect reduced impact with less experienced or unemployed students, although there were some in the classes.