

Chapter 1

Rationale for the Learning Culture project

In 2006, as the Poudre Fire Authority (PFA) Training Captain responsible for planning and developing new and continued fire service training to 36 fire companies (basic work unit of the fire service - 3 to 5 people on a company), I conceived of the need for changing the existing educational model (Pedagogical model) of how training was developed and delivered at the Poudre Fire Authority. Basically, changing from a Pedagogical-Objectivist training culture to a Andragogical-Constructivist learning culture. Using Andragogical and Constructivist models, I developed a series of 7 web pages in support of 18 educational subject domain offerings via the PFA Intranet. These web pages were followed-up by 258 field constructive learning environments (CLE). ([Appendix C](#)).

Previously, the educational model was to develop and deliver one class at a time. The training division, or an instructor with subject matter expertise, developed a class in the form of an outline, Power Point, and/or multimedia. These courses were delivered 12-18 times, over 3 days to fire companies. This necessitated the movement of 36 companies, and the focus was on the instructor (Objectivist-Pedagogical Model) to deliver class and practical materials at each class. Because this model emphasized the instructor as the main source of information, which made it very time intensive, only a very few classes were developed each year for delivery. Most were not professionally developed with lesson plans which detailed learning goals, outcomes, and objectives.

The 7 web pages I developed in 2006 included a facilitator's guide. This guide was a detailed lesson plan which included learning goals, outcomes, and specific

objectives to accomplish the goals and learning outcomes. The CLE's that followed these web pages were a mirror image of the web facilitator's guide. The primary reason for developing the facilitator's guide as part of the website offerings was to give a professionally developed lesson plan, and guide, to the fire company captains who are the primary instructor's for their crews.

For each domain offering produced by the PFA training division, the battalion chiefs and captains were advised they were not required to attend the training division facilitated CLE's. They would be able to construct their own learning utilizing the online facilitator's guides. PFA has approximately 150 firefighters, many who are on vacation, sick, or on emergency responses, during the times when these CLE's were delivered by the training division. It was imperative the company captain would be able to provide the make-up training for their firefighters who missed the scheduled classes.

Statement of purpose

My Capstone Project purpose is to create a document which can be primarily utilized by fire service personnel that details how to move from a culture where the focus is on the trainer, to one where the focus is on the learner, and to where the academic principles of Andragogical educational theories (as adult learners) are the focus. I propose to substantiate the assumption is true that fire service training is initially a pedagogical model, which becomes an Andragogical model as firefighters develop past recruit status. There are components of this project document that may fit both models, especially when new paradigms or technology are introduced during classes.

In the fire service, the primary provider of instruction, the company officer, is not an educational professional. Therefore there is a significant need for academically proven subject domain information that is available to help these front line educators. My attempt to provide this domain information utilized Web and hyperlink technology to build subject domain information web pages. These web pages include facilitator's guides that lead the officers through instructing and facilitating learning with their crew members, followed up by constructive learning environments. The web page domain information, facilitator's guides, and constructive learning environments are the basis of my Training Culture to Learning Culture (LC) project.

Educational and practical relevance

As a fire service educator, I have observed -- through many planning sessions and course deliveries -- how difficult the planning and implementation of training has become for most fire organizations. As any organization has dynamics specific to their discipline, the fire service has an extremely critical need to gain new knowledge in literally dozens, if not hundreds, of subject domain arenas. As I pursued my M. Ed. curriculum an apparent pattern began to develop in my mind that focused on the Androgogical theories espoused by Alexander Kapp and Malcolm Knowles. (<http://en.wikipedia.org/wiki/Andragogy>).

Specifically, my belief that most fire service educators don't consciously understand the dynamic difference between a Pedagogical or Andragogical model, and who has the power and responsibility for how instruction and learning takes place. I've focused also on the predominant educational theories, and I've chosen the Constructivist

theory of education as my main delivery model in direct support of these Andragogical concepts.

Target population and learning community

My target audiences for this “Training Culture to Learning Culture” project are the officer’s who supervise and educate fire service personnel, acknowledging the primary educator is the fire company officer. A change in culture is essential to empower the company captain as a facilitator of collaborative learning, by supporting the development of this learning culture.

The PFA serves a population of approximately 150,000 people, and covers a geographical size of 235 square miles. The PFA is comprised of twelve career fire companies, operating from three 24 hour shift schedules, for a total of 36 fire companies. The minimum manning for the PFA is 126 online firefighters, with the actual number usually being approximately 140 - 150. There are 10 support firefighters and officers that are spread between fire prevention, training, and the office of emergency management.

My Second Relevant Learning Culture: Cozumel Mexico Fire Department Training

Beginning in 1998, I began formal fire service education to the firefighters of the island of Cozumel, Mexico. In 2001 we began inviting other firefighters from the surrounding cities of Quantana Roo State: Cancun, Playa Del Carmen, Tulum, Chetumal, and various air port and military firefighters to an annual fire academy. It has been during these Mexican fire academies where I've witnessed the power of the Andragogical models. In 2007, we will conduct our 9th Bombero (firefighter) Academy.

Initially, I found myself very inept at the technical Spanish language to instruct the very technical and dynamically changing environment that defines the fire service as a peculiar learning model. By utilizing interpreters to impart my lesson plans, I found the only way to accomplish this effectively was to immediately establish an incident command system (ICS), and teach through this ICS using the commanders and officers to facilitate the training. Quite by accident this became my preferred method of instruction, whether in the US or Mexico.

This learning model we were using put the focus back on the learner, being one level removed from the instructor as the focal point. Both pedagogical and andragogical methods were and are employed during our training of Mexican firefighters. We would typically begin with some form of formal class -- initially a pedagogical model -- that stressed the instructor having the information that they needed. It soon developed into imparting well translated documents that they could read as I covered the high points with the interpreters. Once they had the proper domain information in their language, they were able to construct their own learning as the class progressed. Eventually they were well within an andragogical model, where the instructors were facilitators in the collaborative learning of the firefighters.

Due to the language barrier, I was unable to converse on a deep personal level, beyond what the interpreters were capable of translating. This barrier allowed me to stand back and watch the interactions of the men, instead of how they would be relating to me if I were talking to them directly. They responded to the ICS that was in place, and we built on that leadership by asking the company officers to critique with their crews and relate their input of what they learned to the entire class. This facilitation gave the

class many hours of clarification and understanding that I do not believe would have been shared had this not been the case.

As our team of fire service instructors and professional interpreters has grown, so has our understanding how our Andragogical-Constructivist Learning Culture model has impacted our training in Mexico. We are currently developing a website where solid domain information will be posted, complete with facilitator's guides, pictures and multimedia to support their constructive learning environments.

Enculturation of our Mexican firefighters into a Learning Culture is an essential goal for these firefighters to continue to develop. This is simply because there are no sustainable models for them to receive consistent modern firefighter education and training. They must become comfortable with the premise that by acknowledging, as adult learners who intrinsically desire to have the responsibility and control over their learning, this is how they will plan to learn. Future Course offerings they receive, whether in a Pedagogical or Andragogical model, will be designed to enhance their own responsibility to learn. A significant part will be understanding, and adapting to, instructors who don't possess adequate adult learning mindsets or skills.