

Instructor delivers course lecture on the monitor with video link from remote site.



DISTANCE LEARNING

SOMETHING FOR EVERYBODY

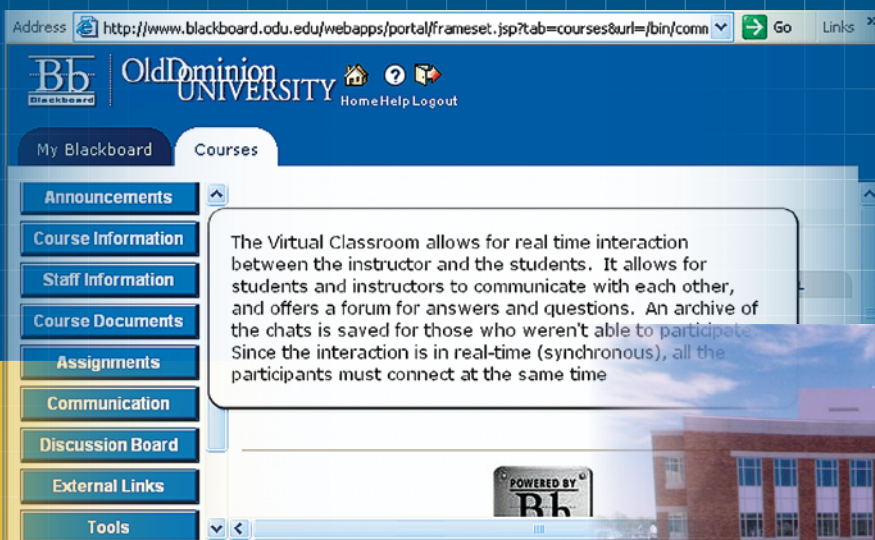
In surveying circles, it seems that when someone mentions continuing education (CE), somehow the word “mandatory” gets attached to it. Unfortunately, many surveyors tend to view mandatory continuing education as some sort of taboo. In some states CE is a requirement to retain registration, in others it is optional. I am registered in Nevada, which requires 30 Professional Development Hours (PDH) per two-year period, and in Arizona, which has no CE requirement. Conveniently, things I do in Arizona (such as classes I take or teach, and activities with the Arizona Professional Land Surveyors) count toward my PDH requirement in Nevada. Continuing education doesn't always involve sitting in a classroom listening to an instructor; there are other options.

The one thing that has become a staple in my CE diet has been distance learning. In 2001 I made a choice to leave a firm, where I had spent seven years, and venture out on my own. As I was packing up my office, I reflected on the many experi-

ences I'd had during those years. I'll admit I was somewhat apprehensive as to what might come next. Then the mail came. In my last official act as survey manager, I sorted through my mail, closed the door, and rode off into the sunset. Little did I know that as I ended that chapter in my life, clutched in my hand was a key that would open a door to a whole new world. That key was a marketing flier for the Old Dominion University (ODU) Distance Learning site that was operating on the campus of Yavapai College in Prescott, Arizona.

While living in Pennsylvania in 1988, I had completed an associate's degree in mechanical engineering from Penn State University. My mother urged me to get a bachelor's degree as well. I always said I would do that some day. Over the next several years, I took a class here and there, attending seminars on engineering and surveying, until one day I just stopped. I figured I knew it all. I passed my LSIT exam, followed by the LS exam in Arizona. For a time I felt I had it made—no more studying! But deep down inside I seemed to be missing something. In reality,

>> By Thomas A. Liuzzo, LS



Left: “Blackboard” enables students and teachers to connect in a Virtual Classroom.

Right: Gornito Center, home of ODU Teletechnet in Norfolk, Virginia



I really wasn't “missing” anything; I was just hungry for something more. That “something” was knowledge. And I was about to feed that hunger.

Taking a Leap of Faith

I had already started my own business and was working out of my home when I came across the ODU marketing flier again. I decided to drive to the campus of Yavapai Community College to see what this ODU Distance Learning was all about.

Being a surveyor I had been exposed to civil engineering, so I figured that I could stoke the fires of my alter ego and get an engineering degree. To my surprise the school offered a civil engineering degree with a survey option. This bit of information made my trip even more appealing. With more states leaning toward the need for a four-year degree for licensure, I figured I could take a class or two to see what I could do with this. After meeting with the site advisor, I began the arduous process of gathering my past transcripts and finding out what credits ODU would accept. Several letters, meetings, and personal checks later, I was admitted.

My admission was on a provisional basis while my 20 years' of records were evaluated. The end result was that I needed nine specific courses to complete my bachelor's degree in civil engineering technology with the survey option. I began to reluctantly move forward, asking myself, “Why do this? You are

licensed, you are running your own business, so why?” In the end I just decided to ignore the doubts and keep going.

In addition to reviewing my transcripts, ODU evaluated my experiential learning or “life's work” as I like to call it. Having achieved my LSIT and LS in both Arizona and Nevada, I was eligible to receive credit toward several required classes as a result of holding those licenses. In order to obtain that credit, I had to put together a portfolio of my work that included project details and examples of the project deliverables. At the time this seemed like a tremendous effort, but this document evolved into the Statement of Qualifications for my company, in which my business partner and I now employ 17 people and serve the entire state of Arizona.

Soon after starting that semester, ODU enhanced the survey program by creating an accredited degree in geomatics & GIS. It was overwhelming to think that my little gem in Prescott, Arizona now connected to Norfolk, Virginia, and that it was going to provide me not only with a degree in my profession and give me exposure to courses that would affect the future of the surveying profession as well! But I was still hungry for more. Being in business, I added a minor in Engineering

Management. Then I just had to work toward the goal I had set for myself.

How Do They Do That?

Old Dominion University's Distance Learning program, or Teletechnet as it is sometimes called, was implemented in 1994 as a partnership with the Virginia Community College System to provide quality higher education to students at a distance. The Teletechnet program has more than 27,000 annual registrations at 38 sites around the nation. Classes are also broadcast to ships at sea all over the world so that military men and women can continue to pursue their degrees while serving their country.

As I mentioned earlier, back in 1988, after I had obtained my associate's degree, I could not wait to go to work and get that paycheck rolling. I always promised myself that I would return, but 12-hour days six days a week soon became the norm, and I just couldn't find the time. That is, until ODU found me and I did something about it.

With the wide selection of undergraduate and graduate degrees that ODU offers, entire families can go to college or study together, which makes study time also quality family time. When the entire family is involved, or at least Mom and



Students at a remote site prepare for class while a local site advisor checks equipment.

Dad, scheduling study time becomes second nature. When our kids see my wife and I study, it also sets a good example for them and their own study habits.

For surveyors not interested in obtaining a degree, ODU offers a Certificate of Survey Science that covers key courses and provides an excellent survey foundation. Four of our employees are working toward a survey certificate right here in our office by using ODU's video stream option. Students can attend the class live via satellite or watch the tape at a later date. Most classes are one session per week for three hours.

Keeping in Touch

In terms of student support, I have always been able to get assistance from my site advisors here in Prescott, as well as keep an open line of communication with my instructors. The faculty at ODU has a reputation for being hands on with real world projects and research. Several of the faculty members have many years of work experience prior to entering the teaching field. For example, some have worked on a study of how to enhance border security in southern Arizona. In the spring semester of 2002 I visited the Norfolk campus and met with Joe Betit, who was then Department Head. As a result of that meeting, he introduced me to Donald Wilson, who was providing the CET 314 class with a semester-ending seminar. Additionally, Dr. Guoqing Zhou who provides survey, GIS and photogrammetric instruction, was the keynote speaker at the 2006 APLS

Conference held in Tucson. This spring, for Dr. Zhou's CET 305 class, I was the local mentor for the field laboratory. I provided the assistance and equipment for local students to fulfill a course requirement that has always been difficult for those working from a distance. I also mentored four of my employees and one additional student who works as a drafter for a local structural engineer.

Why Pursue Continuous Education?

It is ironic that as technology progresses, it seems to be dumbing down our profession. There are fewer surveyors today who can hand-calculate vertical curves because the calculators do that for us. When was the last time you ran a Compass Rule adjustment on a traverse? When was the last time you ran a traverse? Fewer surveyors can continue working when the batteries in their equipment die. Higher education might be the survey community's last hope of preserving our history and traditions.

When a surveyor gets licensed, he or she feels empowered, ready to take on the world. I was one of those "empowered" individuals, but I quickly learned that our exams, however thorough, test us on the minimum knowledge it takes to practice. What about moving our profession forward? What about preserving our profession for the future? That is where continuous education fits in. Whether from obtaining an advanced degree, or from attending seminars, we owe it to our profession.

I started with an associate's degree in mechanical engineering from Penn State, became a drafter, and eventually a surveyor. Twenty years later, I have a bachelor's degree in geomatics & GIS, with a minor in engineering management, and I am working toward a master's degree in engineering management. I am involved with my professional society in Arizona supporting my fellow land surveyors as an adjunct faculty member for Phoenix College, where they have developed an associate of science program in survey that can be used toward the BS program at ODU. I have been part of the development of two companies that employ more than 25 people, and I attribute the majority of our success to my experiences and lessons received from higher education, particularly those experiences obtained at Old Dominion University's Distance Learning Program. I use that knowledge daily in my work with employees and clients. Together we achieve project goals, preserving the history of surveying and establishing new lines to the future. *AS*

Note: If you wish to find out more about the opportunities available through Old Dominion University's Distance Learning program, visit <http://dl.odu.edu/>

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