

Training! How do we find the time?

Dean A. Sankey

University of Wisconsin-Stout

817 So. Broadway

(715) 232-2258

sankeyd@uwstout.edu

Abstract

The Art & Design Department at UW-Stout is the largest in the University of Wisconsin-System with approximately 860 students enrolled in the program. Each of these students must use the Art Process Lab while in the program. The Art Process Lab has many different types of power equipment which presents a wide array of mechanical hazards if not used properly. It was evident we were faced with several different challenges some of which include: reduction of personal injury; reduction of staff and institution liability; students working unsupervised; students under-trained; training of 250 freshman, 200 sophomores, 75 Juniors, 75 Seniors, plus 25 to 30 other students and staff each year; training new staff each year; and graduating a more qualified student.

In order to provide quality training to our students and staff it was felt the training needed to be hands-on, no more than 25 could be trained at any one time and one part-time staff member would be needed. By providing a more thorough training, those trained felt more confident using the equipment; a better quality finished product was created, and faculty and student employees felt more confident training and supervising others. The students and staff were also more realistic on the amount of time and effort needed to construct specific projects. Collaboration was essential between the art department administration/faculty and the campus safety & risk management department.

To accomplish the goal of training everyone, the powered equipment in the Art Process Lab was divided into 5 different categories---Yellow, Blue, Orange, Green and Red. Each category required not only different training but frequently the equipment became more complex and therefore requiring more advanced training. It was felt that not everyone needed to be trained on all equipment but everyone would need the yellow (introductory) training involving the most common pieces of equipment. Blue, orange and green level training would be needed by more advanced students. The "red" pieces of equipment are to be used only by the lab supervisors.

No new capital equipment purchases were needed but existing electronic equipment, such as a scanner, printer, and a computer were used.

Introduction of the Organization

The University of Wisconsin-Stout (*UW-Stout*) is one of the 13 publicly supported universities in the University of Wisconsin System. The UW System designates UW-Stout as a special mission institution, forged from the heritage of its founder, Senator James Huff Stout, a Wisconsin industrialist. Stout believed that people needed advanced education to prepare them for America's developing industrial society. To implement this vision, Mr. Stout founded a private institution called the Stout Manual Training School in 1891. In 1911, the training school became a public institution named Stout Institute and received teacher-training accreditation in 1928 with programs centered on industrial arts and home economics. In 1932, Stout was accredited as a college and received Master's degree accreditation in 1948. In 1971, UW-Stout became part of the UW System when a State of Wisconsin law combined its two public university systems under one Board of Regents. In March 2007, The University of Wisconsin Board of Regents unanimously approved a resolution designating UW-Stout as "Wisconsin's Polytechnic University".

University of Wisconsin-Stout, as a special mission institution, serves a unique role in the University of Wisconsin System. UW-Stout is characterized by a distinctive array of programs leading to professional careers focused on the needs of society. These programs are presented through an approach to learning which involves combining theory, practice and experimentation. Extending this special mission into the future requires that instruction, research and public service programs be adapted and modified as the needs of society change.

Statement (Restatement) of the Problem/Initiative

It was an accident waiting to happen! It was not uncommon to see an art laboratory, including woodworking/welding filled, beyond reasonable limits, with minimally trained students working all hours of the day or evening while using dangerous equipment. Much of this equipment could easily dismember the operator or bystander in only a fraction of a second. To make matters worse, many of the student supervisors felt ill-prepared in identifying shop hazards or misuse of shop equipment and were often found doing their homework or chatting with friends instead of providing valuable shop "supervision." The million dollar question was how do we provide lab access and properly train over 600 students a year with limited resources?

It was felt that all the students needed some training but everyone did not need the same level of training. The more advanced the students the more training they needed. The instructor along with the shop supervisor had to decide what equipment each student really needed to use. By identifying only what was needed helped focus the training and made all efforts more efficient.

After the training needs were identified the question of, "how to effectively train a large number of students," still needed to be answered. A part-time, limited term employee was hired to help supervise the lab and provide most of the training. Training sessions were scheduled at the beginning of each semester.

In addition to the needed training, record keeping and equipment maintenance needed to be improved. A standard data base was used to record the dates of training,

who was trained, along with the category of equipment they were approved to use. Following the manufacturer's recommendations individual equipment inspection sheets were developed. Should a piece of equipment break, and injure a student, it is important to prove the equipment was properly maintained. Documentation is crucial for optimal liability protection.

Design

Planning started several years before the program began. Meetings were held with department faculty, campus safety director, and administrators. An inventory of shop equipment was taken. Equipment manufacturer's operational manuals were reviewed.

Expenses amounted to hiring a part-time limited term employee (1040 hours/year) and new equipment signage (~\$500) was purchased. Besides the initial time it took to develop this training program it is felt that since the shop runs much more efficiently valuable time is actually being saved. The existing shop office computer and printer were used. The yearly budget ramifications consist of the part-time limited term employee's wages. We view the budget costs as being minimal compared to what a liability claim could cost the university. We are also seeing a better qualified, more confident student.

Implementation

The goal was to train over 600 students per year. This required hiring a part-time limited term employee to provide the bulk of the training which created about 30% more work for the department. When training is being provided the shop is not available for use. Several training sessions are provided throughout the day early in the semester. It is a commitment and understanding by all that the training is an expected part of the curriculum. Since this is an expectation it has been accepted and runs smoothly.

Benefits

Discuss the benefits enjoyed by implementing the best practice. Cost savings, efficiencies, personnel performance improvements, student satisfaction or other benefits that occurred as a result of the best practice implementation.

We view the training program as a win-win for everyone. The student's performance has improved greatly. Students are producing a higher quality finished product and are more confident with their work and willing to try different things. Shop injuries are down. The shop is running smoother, more efficiently. Students need less individual assistance when using shop equipment. Student's satisfaction has increased. Some students have remarked how they really appreciate the training which makes them to feel more comfortable when using the equipment.

Retrospect

In retrospect, a separate training lab would help. Yellow training will take approximately 2.5 to 3 hours. Blue, orange and green training take about 2 hours each.

The lab is not available for others to use when training is being conducted and off hours use of lab is not permitted. In retrospect, we should have had this program in place years ago.