



51st UA Instructor Training Program

The United Association has a continuing concern for the high quality job performance of its members. They believe that you, the instructors who teach the apprentices and journeymen of the piping trades, are the key persons in maintaining the high level of performance for which we have been long recognized. We are determined to retain our enviable position in this regard.



Quality craftsmanship is an outcome of good teaching in our training programs. Therefore, the United Association Instructor Training Program is designed for you. Our aim is to help you improve your teaching techniques, broaden your manipulative skills, and expand your store of scientific and technical knowledge relating to your trade. We encourage you to make the most of the unique opportunity provided by the United Association.

The United Association Instructor Training Program for instructors of journeymen and apprentices is designed to:

- Increase UA Instructors' proficiency in the techniques of instructing and in the use of instructional materials, particularly those prepared and/or recommended by the United Association.
- Acquaint instructors with the philosophy and principles of education, especially trade, industrial, and technical education.
- Provide learning experiences in the principles and the fundamentals of the applied knowledge subjects such as science, mathematics, drawing and electricity.
- Broaden and deepen the understanding of the instructors in the



technical aspects of the crafts and bring information to the instructors about the latest developments in this area, as well as in the skills phase of the work of the UA journeyworkers.



The United Association of Journeymen and Apprentices of the Plumbing and Pipe Fitting Industry returned to the Washtenaw

Community College Campus in Ann Arbor for the 51st United Association Instructor Training Program - ***"New Directions In Instructor Training"***.

The program also boosts the local economy, bringing an estimated \$3 million in additional revenue to restaurants, hotels, retailers and other local businesses, according to the Ann Arbor Area Convention and Visitors Bureau.

The UA Program, under the direction of President Maddaloni and George Bliss, Director of Training for the UA, is the most prestigious in the construction industry. It was developed for the instructors of the journeymen and apprentices to help improve their teaching techniques, broaden their manipulative skills, and expand the



store of scientific and technical knowledge relating to the trade.



2004 has been an exceptional year with: ***1,705 registered and attending class, over 245 instructors and 234 graduating. Participants come from all over the United States, Canada, and Panama, and for 328 this was their first year.***



UA Local 190's Instructor Delegation with General President Martin Maddaloni and UA Director of Training George Bliss

Orientation

Instructor Orientation - The first order of business for the Apprentice and Journeyman Instructors is Sunday at Orientation. Instructors not only have the opportunity to hear from UA and College dignitaries, but also learn about the



upcoming week



work's activities. UA General President Maddaloni (***pictured right with WCC President Larry Whitworth to his right***) spoke of the rich history of the leadership of the UA and the UA Instructor Training

Program. He also gave those in attendance an update on the activities of the UA and discussed future plans.

UA Director of Training George Bliss (***right***) also spoke on the outstanding history of the UA

Instructor Training Program.



Teacher Orientation - While those activities



were ongoing at the EMU Convocation Center, back at WCC, Assistant Director of Training Steve Allen was welcoming those individuals from the industry, colleges, and UA Training Department who will be teaching the various classes.

Bookstore



The bookstore is always one of the busiest places during registration, in particular. Instructors have the opportunity to get the books they



need for class, and review books that they might want to utilize back at their home Local Union.

Copper Installations-Advanced Theory and Techniques



The objective of this course is to teach "how-to-teach" methods for up-to-date



installation techniques as they industry. Experts



copper

techniques and procedures employed in successfully teaching the subject. Subjects covered in this course included new and existing tubes and fittings, their standards, their applications and a detailed look at the recommended joining techniques, hanging and support, expansion and contraction considerations, "soft" soldering and brazing techniques for tubes from one-quarter inch (1/4") to twelve inches (12") in diameter, bending, applications for pulling branches from mains and how to recognize the common types of corrosion.

apply to the ever-growing piping discussed and demonstrated

Pneumatic Controls



The fundamentals of pneumatic control, basic control theory and



definition; VAV control with discussion of velocity reset control; calibration and discussion of single and dual thermostats, transmitters, plus single and dual receiver controllers were covered, at length, during this course. The class confronted the current myth that "pneumatics are going away" by discussing pneumatic control applications dealing with heating, cooling, humidity and static pressure.



Performance Evaluation

During this class, the nature and need for performance evaluation is presented, along with its' relationship to instructional objectives. The process of performance evaluation, planning and instrumenting along with performance tests is defined at length. The principles of conducting performance tests and the performance results for evaluation are reviewed and emphasized along with the need for observation of performance evaluation in progress.

Trailers

The mobile training units have



become an important tool in the training of the UA



Instructor. It is another way to enable Local Unions to share the training they have developed. Utilized at UA Training Week, they travel the country the rest of the year educating apprentices and journey workers.

Medical Gas Instructor



This course reviewed all the governing standards for medical gas piping systems -- that is Chapter 5 of NFPA 99 2002 Edition along with ANSI/ASSE 6010 Professional Qualification Standard for Medical Gas Systems Installers and ANSI/ASSE 6050 Professional Qualification Standard for Medical Gas Systems Instructors. The course also

included code interpretation, correct piping installation and testing, requirements for installer qualification, and requirements for brazer

qualification in accordance with ASME Section IX.

A written exam was administered at the end of the course. Participants who successfully passed this course qualify for a certification as a "Medical Gas Instructor of the United Association" issued by the National ITC Corporation (NITC).

The general and specific information needed to develop local training programs throughout the United Association are provided during this course.

Fundamentals of Rigging

With Safety First in the instruction, the basic fundamentals of rigging were presented in the course.



Rigging safety in basic knots and their uses, wire rope and webb slings and their applications in the trades were reviewed. Also, signaling methods and practical, safe uses of "Rules of Thumb" in every day installations in the piping industry was an integral portion of the class.



Distance Learning Teaching Techniques



This course covered the use of tele-learning delivery techniques and equipment.

Topics include presentation

guidelines for instructors, planning distance learning classes, and methods for converting conventional class materials into a format suitable for video.



The course also covered the use of blended approaches to delivering distance learning such as combining tele-learning with web based assignments. Hands-on practice using tele-learning equipment will be provided. Just one more example of the UA making sure that all our instructors have not only the newest technology, but also the knowledge on how to effectively use it.



Omnibus Course

This course provided multiple topics to be used in the classroom.

Subjects were presented in either one or two class sessions, so that up to five different areas of interest were able to be explored.

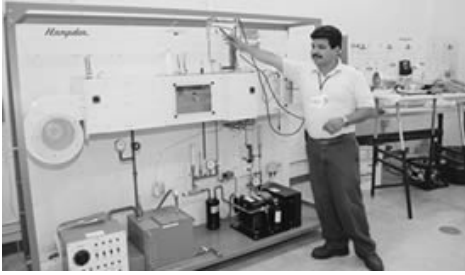
Subjects were presented in either one or



Examples of this year's subjects are: Synthetic Piping Materials and Related Systems, Cast Iron Soil Pipe and Metric Conversion. Other subjects may be added as time and relevance permitted.

Hampden Air Conditioning Demonstrator (H-ACD-1)

This demonstrator provided students with experience operating and



servicing a pilot tube pressure sensor and U-tube manometer for measuring airflow, a refrigerant flow meter, wet and dry bulb thermometers and gauges for measuring evaporation and condensing pressures.



The variable speed blower, the moisture injector, the duct heating elements and the eight interchangeable end plates with size orifices all combined to provide an enormous variety of operating conditions for instructor presentations.

The Hampden Air Conditioning Demonstrator is part of Level 2 equipment available through the International Training Fund (ITF) grand system.



Computer Applications in United Association Training

Computer Applications in United Association Training is an advanced course in Computer



applications.

Emphasis was on how UA Instructors can use the instructional purposes in local United Association

Trade Teaching Overview and Conditions for Learning

This course is the introductory professional



course for United Association (UA) trade teachers. It provides UA instructors with an understanding of:

- Trade education in the American education system
- Goals of trade education,
- The uniqueness of trade education, and
- The responsibilities of good trade teachers in structuring a learning environment where change takes place.



Instructors are taught to: Recognize differences in learning outcomes; Develop skill in the design of instruction to meet different learning needs; Develop a strategy for analyzing the content requirements of trade related learning; and Lesson plans to articulate their design of

a learning environment.

The Instructors are also exposed to the services that are currently available through the UA Training Department.

Structures for Learning



The course in Structured Learning combines the need of setting objectives for what students will learn and the need to measure what they have learned.

The first part of the course focused on the levels of objectives in trade education; the role of setting objectives for daily instruction; the nature of behavioral objectives; identifying the

elements of behavior/skills; and identifying consistent standards of performance. The second part of the course focused on the principles of evaluating learner progress and the nature of measurement, testing and evaluation. The students learned the developing multiple-choice questions as well as matching/written items; and avoiding bias in grading.



Keeping It All Together



Congratulations to the UA Training Department staff, a few of who are pictured above, for the exceptional job they do on this programs and to facilitate training for the UA members all year long.

Whether part of the Visitor's Bureaus, MCA Association, or Local Union it's a pleasure to work on UA week with the UA Training Department to make everyone's time here pleasurable.



Around The Campus



L. to R. - The mandatory welding picture with sparks - We swear, he's smiling on the inside



L. to R. - I am so glad I don't have to cook for this group - They always look like they are having a good time, as long as I stand behind and remind them



L. to R. - Sorry, Training Trailer, no ice cream sold here - Hollywood Birk teaching a class on how to get on TV, that's a natural - The Blues Brothers have nothing on us



Enjoying the camaraderie of Registration



L. to R. - Stop and think - I'm sure there is a reason it's BLUE ! - And they say I'm not a funny guy !



L. to R. - Okay, if I look thoughtful I can probably get my picture in the newsletter - You know as soon as the Instructor get back we're going to have to turn off the ball game





L. to R. - Honest I can teach you what all these things are and how they work - Sure we made it into the newsletter, but nobody can see who we are



L. to R. - You really don't think they are going to buy that for an excuse for leaving early do you??? -The Union that lunches together - stays together

Congratulations on Your Commitment and Have A Safe Trip Home

What a terrific week this has been. The community has been tremendously happy to have you here. **And, in particular both UA Local 190 and the Greater Michigan PMC have felt it an honor to be a small part of the week**

.We look forward to the UA returning to Michigan, and along with the Michigan State Pipe Trades and representatives from the Michigan Mechanical Contractors Association, we sincerely hope your stay has been a happy one. We know, with the excellent curriculum of the UA Instructor Training Program that it has definitely been an educational one.

Congratulations to both UA General President Martin Maddaloni, and UA Director of Training George Bliss. This is an amazing UA Training Staff, and we congratulate them on the exceptional job they do on this program. As well as all year long assisting Local Training Programs

We hope you a have safe trip home, and that we'll see you again next year!

**Ronald House, Business Manager
UA Local Union No. 190**

**Sandra Miller, President
Greater Michigan PMC, Inc.**

