First off, I hope that you and your families are healthy and safe in these very difficult times. With that, I’m happy to report that the Education and Training Department is up and running smoothly. We have been back in the office on a rotating schedule since June 1, and when not in the office, the staff has been and will continue to telework. Due to everyone’s diligence, since the beginning of the pandemic, we have not encountered any issues.

Many Instructor Training Program (ITP) and regional training classes have been offered online. Since the middle of March, over 2,250 students have registered or taken 74 online classes. This is an amazing number considering there were 2,000 in-person students at ITP last year. We will continue to run regional training classes online, but all in-person training is on hold until March 31, 2021. Our instructors have been kept informed via webinars run by the ITF. Every Tuesday, until the end of the year, the ITF and WCC will run “Tech Tuesday”—a 15-minute webinar at 12 EST, which will involve a variety of topics.

MISSION STATEMENT

The mission of the UA Education and Training Department is to equip United Association locals with educational resources for developing the skills of their apprentices and journeypersons. By thus facilitating the training needs of the membership, we maximize their employability and prepare them for changes in the industry. We are committed to making training opportunities available across North America, allowing members to acquire new skills and remain competitive in the industry regardless of geography. In this way, we are determined to meet the needs of the piping industry and enhance employment opportunities for our members, while remaining fiscally responsible to the beneficiaries of the fund.
The new ITF grant system rolled out on November 1 and has been very successful. The ITF and UA Canada issued more than $2M in COVID safety grants to U.S. and Canadian locals. The new HVAC COVID mitigation grant is now available (see Mike Galfano’s article for details).

The following are some statistics on OLR and Blackboard usage and on our webbooks:

**Online Learning Resources (OLR)**
- Over 26,500 total users
- 26,600 are students
- 7,750 new users January – October 20
- This accounts for a 42 percent increase since January 20

**Blackboard (Bb)**
- 17 upgraded Master Blackboard classes created this year
- 79,000 total Bb users
- 20,600 new Bb users January – October 20
- 35 percent increase since January 20
- 14,600 total Bb classes
- 5,300 Bb classes added since January 20

**Webbooks**
- 33,500 webbook credits issued
- 13,800 credits redeemed or 37 percent
- 575 percent increase in webbook credits redeemed January – October 20, over all of 2019
- There are new charges for webbooks (see Dianne Lash’s article for details).

On October 17, 2020, NABTU held its Virtual Tradeswomen Build Nations (TWBN) conference. The UA held its separate UA Women’s Caucus with 60 locals participating. General President Mark McManus had a question-and-answer session with National Recruitment & Outreach Coordinator Laura Ceja. Also featured were Cheryl Ambrose, Health, Safety and Environmental Administrator; Alanna Marklund, UA Canada National Manager of Youth, Diversity, and Indigenous Relations; and Assistant Director of Education and Training Ray Boyd and myself.

At the UA Women’s Caucus, we spoke briefly about the ITF working on the development of apprentice interviewer training. In October, we held a pilot class consisting of BMs, BAs, TCs and contractor representatives. Early next year, it is anticipated that we will have a train-the-trainer class prepared. Once the class is completed, we will announce the dates for virtual classes.

Additionally, the International Training Fund recently partnered with APT Metrics, creating a steering committee to identify the best practices for apprentice selection. This committee is a diverse group, containing women and men of all ethnicities. It includes management and labor from all of our trades throughout the U.S. APT Metrics has visited many locals and interviewed local union officers, training coordinators, apprentices, and contractors to facilitate a unified apprentice selection process. To aid in this process, the ITF sent out a survey to all U.S. locals and contractor organizations asking questions about their apprentice selection practices. I would like to thank those who participated. We received over 300 responses, and those responses will be put to good use. The information, as well as the interviews and input from the steering committee, will be used to develop apprentice selection criteria. The criteria will be vetted and will be defensible and it will offer an avenue for our locals to become more diverse when seeking the best candidates for our apprenticeships. This program should be available by the middle of next year.

I would like to thank the ITF staff for all their hard work, which has resulted in keeping the department running at 100 percent during this pandemic. I would also like to thank the doctors, nurses, first responders, and essential workers for all that they do each and every day to keep us Healthy, Safe, and Strong! Please continue to use commonsense when it comes to your safety and the safety of your families.

In closing, I’d like to wish you and your families a wonderful Holiday season and a healthy, happy, and peaceful New Year.

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**Training Welders for Success in the 21st Century and Beyond**

Submitted by Randall Gandy, UA Training Specialist

Welding has been used in the building trades for decades, and during that time, welding technology has evolved allowing for better, more efficient, and reliable welds. Just as we have seen many advancements in welding technology, the UA welder training resources has also evolved, promoting more knowledgeable and qualified apprentices in a shorter period. In today’s world, apprenticeship programs are faced
with the challenge of teaching task not craft. Individuals entering our apprenticeship programs often possess minimal mechanical skills. Therefore, it is important that we teach the fundamental of welding, not only in welding shop exercises, but as part of classroom theory as well. This ensures that students understand both the theoretical and hands-on basis of welding.

Traditionally, a qualified welder would refine their skills by burning a countless number of rods in a weld booth before they even stepped foot on a job. The UA is leveraging technologies to provide instructors and students with the foundational welding knowledge needed to achieve a higher level of training success.

The UA Education and Training Department is proud to announce Phase 1 of the Instructor Resource Library (IRL) Welding Fundamentals SMAW which can be found at www.UAOLR.org. This collection of instructor resources contains many training videos and related animated resources that focus on welding essentials such as safety, the welder’s body position, electrode and puddle travel angle, and in addition, step-by-step overviews of common welding activities that can be used in the classroom environment.

Additional resources also introduce apprentices to common types of welding defects and related testing methods to aid in preparation for the UA Weld Certification 2 (using 6” Sch. 40 6010/7018). The students will have the opportunity to review critical methods required to produce quality welds which the UA is known for. With the high demand for qualified workers steadily increasing, the UA Education and Training Department has never been better positioned to empower our membership with industry-leading training.

UA Residential Service Tech: Equipment Training Packages

Submitted by Richard Benkowski, UA Training Specialist

In 2017, the ITF launched an accelerated residential service tech program, followed by an ITP offering for residential troubleshooting (ITP 6061). To support those initiatives, Pioneer Pipe built 12 trainers that have become the hands-on lab in, not only 6061, but ITP 6028 and the apprentice contest. The next step is to offer equipment ONLY packages for the local instructors to teach the apprentices (building trades, plumbing, and MES) to build the system from start to finish. For the comfort of the local instructors, these packages offer the same equipment that they trained on in Ann Arbor. The ITF has partnered with Allied Supply to enhance local training efforts to meet the demand for residential service technicians. This offering has two separate packages: gas fired with add-on air conditioning and heat pump with electric heat.

The purpose of the program is to teach apprentices to build the split system. The local lesson plans should include, but not be limited to the installation of split system components, how to size and install refrigerant piping, wiring of high-voltage and low-voltage devices, and commissioning and measuring performance of the indoor and outdoor units. For best result, local instructors should participate in related curriculum at ITP listed in Table 1.

To be eligible for the grant, a local must have an instructor who has successfully completed ITP 6000, ITP 6001, and one other course of related ITP curriculum. The training packages are priced separately, but both may be requested on the same grant submission. Freight is NOT included in the offering. Packages cannot be itemized and will ship directly to local training centers. For more information contact me at richb@uanet.org.

Table 1: Related ITP Courses

- ITP 6000 - Teaching HVACR Service Apprenticeship Curriculum
- ITP 6001 - HVACR Basic Electricity
- ITP 6002 - Comprehensive Management of New Refrigerants
- ITP 6028 - HVACR Flow Measurement and Concepts
COVID Relief Part II: Building Readiness

Submitted by Richard Benkowski, UA Training Specialist and Michael Galfano, UA Training Specialist

Earlier this year, the ITF Board of Trustees provided grant relief for locals to reopen their training centers safely due to COVID concerns. This grant provided financial assistance for COVID-related personal protective equipment, signage, and sanitizing and cleaning supplies. The next round of COVID-relief grants will address building readiness of UA local training centers. Local training centers are constructed based on size and need of local membership. Therefore, a mix of unitary and applied HVAC equipment provides comfort and safety for instructors, students, and membership. Additionally, specialized ventilation for welding, brazing, or burning may operate to remove smoke and contaminants. All equipment and systems should be assessed to determine appropriate control measures for increased ventilation, particle filtration efficiency, and air flow treatment. Possible mitigation devices could include MERV (Minimum Efficiency Reporting Values) filters and/or UVGI (Ultraviolet Germicidal Irradiation) solutions.

Purpose

The ITF Board of Trustees has approved a one-time UV protection and/or filtration grant for local education funds to evaluate and update their ventilation systems due to COVID concerns. Per grant guidelines, the ITF will provide a 50/50 cost share on approved upgrades up to $20,000. The deadline to submit this grant application will be September 30, 2021.

Grant Application Option #1

Local training centers are eligible to self-perform and document a building systems’ audit. The ITF will provide an informational webinar and building audit form for UA training directors to understand the purpose and execution of a building systems’ audit. Applications submitted shall require a completed building audit form, a description of the scope of work, and local pricing of itemized equipment. Locals will be responsible for installation of ventilation equipment upgrades.

Grant Application Option #2

Option 2 requires a local training center to obtain and submit a minimum of two quotes of recommended upgrades for their building ventilation system. Quotes must include the scope of work, the requested itemized upgrades, and pricing.

Grant Application Option #3

If your local has upgraded their ventilation systems for COVID concerns prior to this grant, you could also be eligible. Per guidelines, the local will be required to submit the original quote with a description of the scope of work, and the cost of itemized ventilation upgrades. Additionally, a proof of payment is also requested.

More information regarding this grant will be forthcoming, with information on audit webinar, the building audit form, and equipment information.

Please feel free to contact me, Mike Galfano, at mgalfano@uanet.org with any questions or let me know if I can be of any assistance.

New Options for Manual, Webbook Purchases

Submitted by Dianne Lash, IPTJTC Bookstore General Manager

This past spring, as the nation and the world contended with shutdowns related to the novel coronavirus, training at the UA’s local unions was disrupted as training centers were forced to close and traditional teaching practices were upended. It was then that many locals began taking advantage of a digital tool offered by the IPTJTC Bookstore—the UAwebBook. A change in how webbooks now are offered is, in part, due to requests from locals at the start of the pandemic.

Since the introduction of UAwebBooks in 2016, a webbook credit has been issued free of charge for every hard copy manual purchased. This approach was designed to get the new digital tool into the hands of as many instructors and apprentices as possible, providing another interactive way to present information.
Once the pandemic shut down training centers, however, many locals focused on virtual instruction and asked about purchasing webbooks separately. Beginning Nov. 16, that became an option at the bookstore. Locals now can choose to purchase just the hard copy manual, just the UAwebBook for a manual, or the combination of the two.

The cost of the hard copy manual remains the same, while the cost of the webbook alone is 80% of the hard copy manual price, and the cost of the combination set is 125% of the cost of the hard copy manual. Using the *Use and Care of Tools* manual as an example, the cost of the manual alone is $35, the cost for just the webbook is $28, and the price to buy the manual and webbook together is $44.

The three purchase options are available at the online bookstore—shop.iptbookstore.com—via email, or by calling the bookstore at 301-218-1241 to place an order. The item number for the manual alone is the same in the case of the *Use and Care of Tools* manual, 1350. For the UAwebBook only, it is the original item number, plus “W” (1350W), and for the combination, it is the original item number, plus “C” (1350C). Once redeemed, a webbook credit will remain active for five years, designed to take an apprentice through their apprenticeship. During that five years, any time a change is made to the webbook at UAOLR.org, those updates are available to all webbook users. Once the five-year span is over, the bookstore will be offering a subscription service for members who would like to keep their webbooks active.

Although the number of locals redeeming their UAwebBook credits has increased since the beginning of the pandemic, more than 90 locals still have yet to redeem a single credit. More than 90,000 webbooks credits have been issued since September 2016, with more than a third of those being issued since March. Only about 20,700—22%—have been redeemed.

When the program was launched, just seven UAwebBooks titles were available. That initial offering of seven webbooks has expanded to 18 titles, with new titles added as manuals are revised. This year, a UAwebBook has been added for the newly revised *Fuel Gas Systems* (formerly *Gas Installations*), and two more will be available in the next few months—*Advanced Plan Reading and Related Drawing and Advanced Valve Repair*.

The bookstore maintains records of every webbook credit issued. If there are questions about the number of credits a local has been issued, about whether credits are missing, or about whether a local’s credits have been redeemed, the bookstore staff can answer those questions. Call or send an email to iptbookstore@uanet.org or diannel@uanet.org with any questions.

Information about how to go about redeeming and distributing the credits among apprentices is available at UAOLR.org. Sign on to UAOLR.org and click on the “help” button at the top of the Instructor Resource Library. Multiple articles are available there, ranging from describing UAwebBooks and credits, to explaining how to manage and distribute them.
Tradeswomen Build Nations and UA’s Women’s Caucus

Submitted by Laura Ceja, National Recruitment and Outreach Coordinator

The Tradeswomen Build Nations (TWBN) and UA’s Women’s Caucus looked very different this year. Like every other event in 2020, COVID-19 forced us to change the look of the conference, but the show must and did go on! Rubbing elbows turned into chatting on Zoom calls and the roar of the crowd was replaced by the flicker of computer screens. We watched digital counters to tabulate the number of virtual attendees. And this year, the grand total was 1,300 attendees! An amazing number for a virtual event and Zoom call. The event was hosted by Vicki O’Leary, NABTU Tradeswomen Committee Chairwoman and Ironworker’s International Diversity Director. This year’s guests featured Vice President-elect Kamala Harris and a slew of prominent women speakers from throughout the trades. Vice President-elect Harris, a longtime friend and ally of the piping trades here in California, spoke about her support for tradeswomen and building trades unions.

During the conference, I had the distinct pleasure of moderating one of the breakout sessions, which had over 1,000 attendees. The breakout session I hosted was the NABTU workshop to unveil the Virtual Lean In Circles for Union Tradeswomen. This program was established to mentor and retain women in the trades. The Lean In Circles were developed for and by tradeswomen to empower building tradeswomen as they address unique and critical issues of tradeswomen in the workforce. The Virtual Lean In Circles allow women to assume a leadership role by giving them the opportunity to moderate women’s groups at their local. The skills women learn coordinating and administering Lean In Circles translate directly into leadership positions. The Lean In Circles are coordinated by local building trades departments. Check with your local building trades department for availability in your area.

Immediately following the TWBN conference, the UA hosted the 2020 Women’s Caucus. Over 300 participants representing 60 locals, watched as I interviewed General President Mark McManus regarding those issues most important to women in the trades. Our General President told attendees of the importance of women in the trades. He made it clear that women are the future of the trades and that we need to recruit, retain, and support tradeswomen.

Also featured during the caucus were: Alanna Marklund, National Manager of Youth, Diversity, and Indigenous Relations with UA Canada; Cheryl Ambrose, Health, Safety and Environmental Administrator; Jim Pavesic, Director of Education and Training; and Raymond Boyd, Assistant Director of Education and Training. Each of these speakers gave attendees valuable information that will no doubt assist women to enter and flourish in the trades.

This year, the caucus also welcomed some of the UA’s Political Engagement Committee members, Theresa Danko, Business Agent, Local 636; Janet Powers-Pacella, Business Agent, Local 638; and Cristina Barillas, journeywoman, Local 130. The committee members answered questions about the process involved in the endorsement of a candidate by the UA. The discussion laid out the reasons why the UA and its members—both women and men—must support candidates who are pro-union and support the trades, regardless of party.
The caucus was also the perfect place to announce the inception of the UA’s Tradeswomen Heroes Award. The UA, in partnership with NABTU’s Tradeswomen Committee and the Apprenticeship and Training Committee, created this award to honor outstanding tradeswomen. Nominations for this award may be submitted by members to the Tradeswomen’s Committee, the Apprenticeship and Training Committee, the Governing Board of Presidents, Local Council Leaders or Business Managers. This award will recognize four tradeswomen each month—two apprentices and two journey-level workers. Recipients of the award will be highlighted on NABTU’s website and social media pages, and they will also receive a $500 cash prize! Nominees must be in good standing with their local and display outstanding leadership both on and off the jobsite.

October’s winners included apprentice Lorraine Mata, UA Local 467. Congratulations, very well-deserved, Sister Mata! (click the link for more info on Sister Mata’s award: http://bit.ly/uarisingstar)

In closing, next year be sure to support and send any aspiring leaders to this lifechanging conference. Next year, the Tradeswomen Build Nations conference will be in New Orleans, LA. Hopefully, we can all be there together and do more than chat online!

Links to watch the Tradeswomen Build Nations conference in its entirety and nomination forms for the Tradeswomen Heroes award can all be found on our website at this link: http://ua.org/women.

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The International Training Fund’s New Grant System

Submitted by Jocelyn Crowder, Fund Administrator

In August, after more than two years of development, the International Training Fund debuted its new grant system for the U.S. local education funds to apply for a special safety grant. Two hundred U.S. locals took advantage of the special grant and were able to experience the new look and format of the new system. We want to thank all the training directors, coordinators, and office professionals for their patience in navigating the new system as well as for their feedback—both positive and constructive! It was a great test to help us work out the kinks. And everyone agreed that the best part is that we no longer need to use the fax machine! The ITF grant system has officially entered the 21st century!

As of now, the old grant system is no longer active, and the new grant system is ready for local applications. You can access the site by going directly to https://itf.uanet.org or by logging into the UANet and clicking on the ITF Grant Application System (New) link. With all the local education funds set up, you will be able to go right to the Grant Request module and start a new grant. Each time you apply for a grant, you will need to upload the most current financial information for your fund, as well as complete the survey. All the previous grant history of your fund has been brought over into the new system and can be viewed in the Grant History module on your local’s homepage. When you click on Catalog and Monetary Archived Items, you will be able to search by item description, type, category, and approved date. This will be a great tool for all training directors and coordinators to review prior to submitting a new grant, especially if you are new.

The International Training Fund’s Board of Trustees still meet four times a year to review grant requests. There is never a deadline for a local to submit a grant. We accept grant applications every day. The most important thing to understand is that a grant request from start to finish may take up to nine months. We ask that you plan accordingly and keep this timeline in mind when submitting a grant application.

Finally, I want to thank the ITF accounting department and the UA’s IT team for all the blood, sweat, and tears that were poured into this new grant system. We are very proud of the final product, and hope you continue to find it easier to use. As always, if you have any questions you can reach out to the ITF Office at (410) 269-2000.
2020 Technology Updates

Submitted by Lauren Friedman, Instructional Technology Coordinator

In January 2021, Adobe Flash will enter obsolescence. This means that Adobe will no longer issue updates or security patches for Flash, and all major browsers will stop supporting it. To combat this, we are currently working to update all our interactive activities on Blackboard and our UAwebBooks to non-Flash platforms. If you have a Blackboard course with a Flash object in it, you will receive an email shortly letting you know how to request an update.

Blackboard

In 2020, we have revised many of our Blackboard master courses. The redesign is meant to help new instructors get started faster, with a streamlined and unified navigation, better syllabus and lesson plan resources, and additional guides for how to use activities. The revised courses are:

- Applied Science of Instrumentation
- Building Controls
- Crane Signaling
- Drainage Systems
- Fire Protection Systems
- Foreman Training
- HVAC and Refrigeration Systems
- Hydronic Heating and Cooling
- Rigging
- Soldering and Brazing
- Steam Systems
- Use and Care of Tools
- Water Supply
- Welding Practices and Procedures for Pipe Trades

We have also created a self-paced resource course for people who are new to Blackboard. You can self enroll in the UA ITF Instructor Resource either through the link here or by logging on to blackboard.wccnet.edu and following the link on your homepage.

To request copies of any of these courses, please use the Blackboard Request Form.

OLR

On the OLR, we have released two new webbooks:
- Related Math
- Fuel Gas Systems

And two new IRLs:
- Fuel Gas Systems
- SMAW

If you have any questions about the newly released resources, please reach out to Lauren Friedman at lfriedman@uanet.org.