

# Staying Conn

## Virtual Instruction Strategies for Apprenticeship Programs

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COVID-19 forced apprenticeship funds to adapt training methods to meet member educational needs while classrooms were closed. The authors discuss strategies for establishing online instruction and how virtual instruction may be used after the pandemic.



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**F**lashback to March 11, 2020: Cancellations started to pop up on cell phones, and rumors were running rampant regarding stay-at-home orders and travel bans. By Monday, March 16, 2020, apprenticeship training centers in COVID-19 “hot” zones had shut down, and many directors were left wondering, “What now?” It became clear that training funds needed to quickly formulate alternatives to in-person training.

Some apprenticeship training funds had offered online training in the past, but a formidable challenge lay ahead for training facilities and funds that were unfamiliar with the nuts and bolts of virtual instruction. Fortunately, the increased availability and affordability of platforms made it easier to shift to online education during the crisis.

This article will review some of the educational and technical challenges that apprenticeship funds and training centers encountered as they launched online training and offer suggestions for best practices in virtual instruction. It is based on the experiences of the North Atlantic States Carpenters Training Fund (NASCTF) in Millbury, Massachusetts and the International Union of Painters and Allied Trades (IUPAT) International Finishing Trades Institute (iFTI) in Hanover, Maryland.

## takeaways

- Many apprenticeship funds had to begin offering online instruction during the COVID-19 pandemic.
- When selecting a platform for online instruction, apprenticeship funds should consider cost, ease of use, availability and interactivity.
- Online instruction may be offered in synchronous and asynchronous formats. About 2½ hours is an ideal amount of time for synchronous sessions.
- Apprenticeship funds must evaluate and identify team members with the skill sets to deliver virtual instruction as well as select classes that will be the best fit for online training.
- The method of distribution of copyrighted material for online training is an important consideration. Depending on the amount of information that needs to be distributed, funds may want to offer the material in view-only formats or mail required material for classes.
- Following the pandemic, virtual instruction may be a good option for training fund members who live in remote locations or for classes that are more theoretical in nature.

## Mission in Times of Crisis

During a crisis and uncertain times, it is important to be reminded of an organization’s mission when entering the decision-making process. When COVID-19 shut down training centers, the challenge for training fund leadership was to quickly build consensus among trustees, training center coordinators, instructors, apprentices and journeymembers for how to safely meet everyone’s needs. The mission of training funds is to provide up-to-date, effective and accessible training. Looking for opportunities in times of crisis can be a powerful catalyst, and once it became clear that the pandemic and its restrictions would have to be addressed, an opportunity-driven mindset proved to be extremely effective.

## Permissions

Once internal decisions had been made to move forward with virtual learning, the NASCTF and iFTI sought approval from agencies including the U.S. Department of Labor Office of Apprenticeship and state licensing bodies as well as international training authorities, in the case of iFTI. After receiving the necessary permissions, the funds put together the nuts and bolts of their programs. In addition, the training funds got temporary permission from the Council on Occupational Education, a U.S. Department of Education program, to deliver their apprenticeship and instructor training programs remotely.

## Platforms

There are a variety of platforms available for delivering live, interactive, video-based instruction. Cost, ease of use and interactivity are all key factors in selecting a platform. In the case of the NASCTF, virtual learning was a relatively new approach to delivering curriculum. Therefore, the choice of platform was primarily based on ease of use for both the user and instructor. One of the keys to success was identifying employees with strong technical backgrounds. This, along with online videos provided by the developers of the platform, made the transition possible. Novice users of the platform have said they are comfortable using it, and participation in classes has significantly increased since the beginning of the pandemic.

The iFTI had an existing learning management system (LMS) website, an online learning portal and a secure web-based software program for providing training for appren-

tices, journeypersons and instructors during the pandemic. The institute added classes on topics such as teaching online, COVID-19 awareness (in Spanish and French), remote working and more.

## The Team

Choosing team members who would be the best fit for this initiative was a critical element of launching online instruction. One of the biggest challenges for the funds was to take a team of administrators and instructors who had expertise in the delivery of in-person training and evaluate how their skill sets would translate to a virtual environment. The funds identified administrators and instructors who had experience in the technology and felt comfortable speaking in front of a live camera. They were then trained on the platform.

The funds continue to provide lists of virtual resources to team members to keep them up to date on issues such as security, internal roles (job descriptions), methods of delivery (i.e., a move toward smaller class sizes), and optimal times of the day or evening to schedule classes. For example, the programs have shifted from providing instruction to apprentices during the daytime only to offering skill-enhancement lessons to journeymembers during the evenings.

## Selection of Classes

The next step in the process was to select classes that would be the best fit for virtual instruction. Classes such as those required by the Occupational Safety and Health Administration (OSHA) and on subjects such as foreperson/ leadership training, estimating, infection control risk assessment (ICRA) awareness, print reading, silica awareness, COVID-19 awareness, substance abuse and suicide prevention, and diversity and inclusion were in the first round offered by the funds.

Another factor considered when selecting courses was whether they should be delivered in *synchronous* (offered in real time, allowing interaction with the instructor) or *asynchronous* (recorded content available online at any time) formats. For learners who can meet the demands of a specific time schedule, synchronous learning offers the advantages of being able to participate in classroom discussions, which allows attendees to achieve a more in-depth understanding of the subject matter. Asynchronous learning has been a better option for learners who require flexibility and a pace that meets their individual learning styles. Combining synchro-

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nous and asynchronous learning in a hybrid model is becoming a more popular method of delivery and can provide learners with the best of both worlds.

Some classes must be done in a hands-on live setting. The funds are again offering those classes following guidelines from their respective states and the Centers for Disease Control and Prevention (CDC) to protect instructors and apprentices.

## Member Outreach

After the courses and delivery formats were selected, the funds notified all members that virtual training would be available. The notifications provided links to sign-up pages on the fund websites and social media pages, and the funds waited to gauge the interest level for virtual learning. Within the first few days, it became clear that virtual learning was going to take on a life of its own. The response was and still is overwhelming. The iFTI, for example, saw a 30% increase in class sign-ups, and they continue to grow.

The online training classes are optional. The funds understand that this type of delivery method does not fit all learning styles.

Neither fund experienced issues with apprentices lacking internet access. Training can be completed using any device, and many apprentices use their phones to take classes.



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## Lessons Learned

### *Instructor Training*

At the foundation of preparing instructors to deliver curriculum in a virtual environment is an understanding that the quality of training must match the quality of traditional in-person training. This training cannot be a Band-Aid in a crisis, but rather a different way of presenting material that is as effective and, in certain circumstances, *more* effective than traditional settings. The first round of training for instructors focused on the specific skills necessary in a distance learning platform. Training was delivered on the same platform that would be used for the virtual classes.

This delivery method provided instructors the opportunity to get the student perspective in this environment. Initial training covered specific skills such as screen sharing, breakout rooms, muting options, camera positioning and lighting as well as instruc-

tor voice inflection and pacing. Other topics included techniques for keeping participants engaged, such as consistent checks for understanding and problem-solving activities in breakout rooms.

The training sessions were recorded to help instructors evaluate their delivery and effectiveness. Several virtual instructors have reported that this opportunity to review their classes helped to rapidly improve their teaching techniques in this new setting.

### *Assessment*

The use of assessment techniques has always been an important element in effective teaching. In an online environment, these techniques become even more critical to help the instructor determine whether the students are understanding the information that is being shared. Various online testing options have been used successfully to assess and engage students throughout

the courses. Using these testing options helped increase engagement while giving the instructor a snapshot of the group's level of understanding.

Both formative and summative assessments were employed, providing the instructors a clearer picture of which material was being understood as well as where gaps in learning needed to be addressed. Providing all instructors with assessment training and resources has become a critical element in growing the virtual learning program.

### *Protecting Copyrighted Material*

Traditional classroom training typically involves sharing content in a hard-copy format. Moving to online training requires a thoughtful process for distributing copyrighted curriculum while also protecting it. Two methods have been employed to address this challenge. *View-only sharing* provides some level of protection because it does not allow those viewing the documents to down-

load and copy them. This option works well for classes that do not require a great deal of sharing of information and is ideal for eight-hour classes that rely on on-screen presentations and a few handouts.

In cases where large amounts of information in book format were required (e.g., OSHA 30-hour classes, leadership training), a simple solution is to mail hard copies of the required curriculum directly to the participants. Planning this type of class required the funds to close class sign-ups one week prior to the start of the class so that mailings could be distributed in time.

Both distribution models have worked well in helping participants to feel they received the information necessary to successfully complete the class. Internally, these two methods have, to date, assisted in protecting materials that are not meant for general public consumption.

Protecting curriculum is certainly a moving target, and methods for doing so should be updated as the opportunities for virtual learning increase. However, the solutions should not be so restrictive that they hinder the mission of providing current, effective and accessible training.

### ***Microlearning vs. Daylong Sessions***

Both funds have found that 2½ hours is the ideal amount of time for keeping students and instructors engaged in a synchronous training session. For sessions that run between four and seven hours, small breaks—combined with breakout discussions and mini research assignments—have

been effective. The funds also have implemented a hybrid approach to scheduling times for classes that require more than eight hours of instruction. With this approach, the class opens with two shorter sessions followed by one long session and then two shorter sessions. Spreading this out over a one- or two-week period allows instructors and learners the opportunity to build momentum while increasing the ability to stay engaged for longer periods of time.

### **The Bright Side of COVID-19: Long-Term Change**

From surviving to thriving, COVID-19 has provided opportunities to adapt training methods that meet educational needs during the pandemic and beyond. After the pandemic, virtual learning—if delivered using proper teaching and assessment techniques—can provide career-building opportunities that may not have been otherwise available for members who are in remote locations. In addition, a hybrid approach could provide more time for hands-on learning in live shop settings. (i.e., taking the theory portion prior to coming to the training center for the hands-on portion). Virtual learning is here to stay and will be incorporated as a hybrid model and considered a best practice.

COVID-19 also has helped training funds assess how well their organizations are prepared for change and growth. Organizations that use the pandemic as a catalyst for positive change and growth will have created a culture of learning that will be able to continually adapt to a continually changing landscape in the arena of training and education. 📌