Experience, education, and certification: Will the real trump card please stand up?

"True education makes for inequality; the inequality of individuality, the inequality of success, the glorious inequality of talent, of genius." Felix E. Schelling (1858-1945), American educator

IT'S AN AGE OLD PARADIGM: when the cave kid graduated from hunting school and went on his first safari, the older hunters scoffed at his education and decried his lack of experience. He might know the proper way to hold a spear but would he freeze if a tiger attacks? It's no different today. Every year throngs of college grads infiltrate the job market, triggering an avalanche of comments and judgments from the techs in the winters of their career about the quality of work and the work ethic of the techs in the springs of their career. In the words of one very experienced tech, "Nothing pays off like real world experience."

If a good education with a lack of experience is a compromised position, what about an experienced tech with a lack of education?

Certification provides a means of identifying legitimate products and services while it serves to guide consumers and helps them make informed decisions...

Truth #1: Nothing pays off like experience and education.

Many people in our industry lack one or the other. Winston Churchill is rumored to have had an exchange with British Labour party member Bessie Braddock in which Braddock accused Churchill of being drunk. "I may be drunk," he replied, "but you're ugly and tomorrow I shall be sober." The person with an education but a lack of experience will one day wake up with experience; not all people with a lack of a formal education will acquire the knowledge that comes with a good education.

There is a real need for training to help bridge the gap between experience and education in our industry. The more experienced among us might disagree. "I've been working as a stage hand for 30 years," some say, "and I do just fine. Why do I need to pay good money for training or certification?"

Truth #2: Experience doesn't always teach the right lessons.

Case in point: I once worked a show where I noticed a broken equipment grounding wire on not one, but all of the followspots. Experience might dictate that it's not a big deal because, after all, they've been broken for months or years and no one has been injured yet. But all it takes is one ground fault to the chassis of the followspot and then the next operator who comes along and completes the path to ground through his or her body will be injured or killed. This could happen even if the operator is wearing rubber soled shoes because the followspots were on metal scaffolding that was erected on the ground, so all it would take is for someone to simultaneously touch the followspot and the metal railing.

The broken equipment grounding wire is not an isolated incident. There are many other potentially hazardous situations lurking in the field. We often fall into habits and use techniques that were passed down from the previous generations or that were pioneered by trial and error. Most production companies typically send out power distribution systems with 4/0 AWG without bothering to calculate the actual needs of the system. And why not? It's worked since the dawn of the touring industry so why change now?

Truth #3: The world is changing around us.

The answer is that the production landscape is rapidly changing. As we make the shift to LEDs and alternative sources, many of which have switch-mode power supplies, we're changing the nature of the loads we're connecting and powering. These nonlinear loads generate more harmonics which cause more current to flow in the neutral, which happens to be the only conductor that is not protected by an overcurrent protection device (OCPD). One day we may wake up and find that there are too many preventable accidents.

Okay, so maybe we do need more training and education but do we really need to have a certification program?

At a recent information session about the Entertainment Technician Certification Program (ETCP), an individual raised

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some interesting questions about the program. What are the benefits of becoming certified? Why should anyone in the industry care about becoming certified, particularly in Canada where only a licensed commercial electrician is allowed to tie in power?

In our industry we are typically working in the proximity of large audiences and where there is a potential for many people to be injured or killed. We're not alone. There are lots of other industries whose work affects the health and safety of the general public. Take, for example, the pharmaceutical industry. If they don't get it right the consequence is the potential injury or death of hundreds of thousands of people. To add to their concerns, they have the unique problem of counterfeit drug manufacturers and distributors. According to the World Health Organization, more than half of all drugs purchased from unregistered online pharmacies are counterfeit. How do they battle this problem? They certify legitimate drug manufacturers. That way the consumer knows what he or she is getting. That's how most industries sort out the known quantities from the unknown. Certification provides a means of identifying legitimate products and services while it serves to guide consumers and helps them make informed decisions about what to expect.

Truth # 4: Certification not only benefits you, it benefits your clients too

Still, the gentleman in the audience had a good point: If, in Canada, only licensed commercial electricians are allowed to tie in power, then what's the use getting an ETCP certification? And the answer is that there *is*

ETCP Exams offered at USITT 2011

All three ETCP examinations will be offered at USITT's 2011 Annual Conference & Stage Expo in Charlotte, NC.

Entertainment Electrician Exam: March 11 (2:00 p.m.) Arena Rigging Exam: March 12 (9:00 a.m.) Theatre Rigging Exam: March 12 (2:00 p.m.)

If you would like more information about the application deadline or would like eligibility requirements or applications sent to you, please contact Meredith Moseley-Bennett, ETCP Certification Manager, at certification@esta.org or 212.244.1505. Complete information is also available on the ETCP website: http://etcp.esta.org.

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no use . . . unless you believe that we as entertainment electricians are as capable and knowledgeable as a commercial electrician. After all, we all put our FR pants on one leg at a time. The reason they have been entrusted with the responsibility and not us is because they have a rigorous training and certification program in place and have for years. In order to become a licensed master electrician you must be at least 18 years of age, have at least three years of experience, and pass the qualifying exam. It's not much different than the qualifications for becoming an ETCP Certified Entertainment Electrician. It might take some time, but once the ETCP reaches critical mass it can carry the weight of a commercial license in our venues. We just have to get behind it with a sustained effort.

Certification also serves as a barrier to entry against unqualified personnel. Do we really want anybody who walks in off the street tying in feeder tails? Of course not. We want qualified people in skill positions for our own safety and for the safety of those around us. The *NEC* defines "qualified personnel" as "one who has skills and knowledge related to the construction and operation of the electrical equipment and installations and has received safety training to recognize and avoid the hazards involved." It's the combination of skill, knowledge, and training that gives us a certain level of safety in potentially unsafe situations. The experienced professional should welcome with open arms the chance to use certification as added job security by reserving skill positions for trained and certified personnel.

Truth #5: Certification not only benefits your clients, it benefits you too

Still not convinced? I worked a gig last weekend and I saw a dimmer rack with Camlock pass-throughs and no protective covers over them. The connectors on the back of the dimmer rack were buried in piles of hastily run cables strewn about the deck. The passageway was narrow and ripe with trip hazards. It was an accident looking for a victim. If a licensed commercial electrician were to see it they may not recognize the hazards because they typically don't see portable dimmers or Camlocks. We work in a very specialized industry and we have unique applications of unique gear. There is a need for licensed production electricians who are familiar with these situations just as there is a need for licensed commercial electricians who would recognize potentially hazardous situations that we wouldn't. Certification is a safety issue, both for us and for those around us.

But the authority to maintain autonomy over our domain does not come without a price. The price is that we have to educate ourselves continually, support and strengthen the certification process, and lobby for the right to practice our jobs without outside interference. Is it easy? For many people, no, it's not. Not everything worth having is easy. Is it worthwhile? Only if you make job safety a high priority.

Being certified comes with other benefits a well. In addition to helping you stay safe, it can raise your status in the industry, qualify you for more work, and potentially inflate your paycheck. It won't happen overnight, but it will happen.



79 PROTOCOL Richard Cadena is the author of Electricity for the Entertainment Electrician & Technician, Automated Lighting: the Art and Science of Moving Light, and Lighting Design for Modern Houses of Worship. He is also an ETCP Certified Entertainment Electrician, an ETCP Recognized Trainer, and the training director at the Academy of Production Technology www.APTxl.com.

ETCP Infosession at LDI2010

Are you interested in learning what the Entertainment Technician Certification Program is all about? Have you heard the buzz at work or on the jobsite about ETCP Certification? Council representatives will discuss the examination process, information and schedules, and answer questions from the audience. The panel will be moderated by Dennis Dorn, Professor at University of Wisconsin-Madison and USITT Fellow; Tim Hansen, Oasis Stage Werks and ETCP Council Chair; Eddie Raymond, Vice-President of IATSE Local 16 and SME Co-Chair Rigging Skills; Bill Sapsis, President of Sapsis Rigging and SME Co-Chair Rigging Skills; and Ken Vannice, Leviton and SME Chair Electrical Skills. Meredith Moseley-Bennett, ETCP Manager, will also be present to answer questions about registering to take the exams. The Infosession will be held in room N119 on Friday, October 22, from 11:00 a.m. to 12:30 p.m.; candidate handbooks and applications will be available at the session. Come and find out for yourself how ETCP is making the industry safer every day!