TEACHING TECHNICAL RESCUE

Strategies for developing your instructor skills

Story & Photos by Tom Pendley

What makes a great instructor? Nearly everyone remembers an instructor who was exceptional in their ability to share their knowledge and experience. If you want to teach technical rescue, then you want to inspire your students and give them the knowledge and skills that will prepare them to meet all rescue challenges.

I believe we are all students on various levels who need to learn different things, and teaching is in itself a learning process. This article won't make anyone a qualified rescue instructor, but it will define the process and provide some good tips to develop your teaching skills and tighten up your rescue program.

PREREQUISITES

Today, more than ever, we need good rescue instructors. Most agencies need to find a balance between developing their own instructors and sending members out to get training from a reputable school. Unfortunately, budget constraints usually limit the number of members who go for training. As an alternative, often the most experienced members train other members in-house. *The classic example:* A department sends out two members for training and then asks them to train the rest of the team.

Seniority and experience should not be the only criteria for choosing your rescue instructor.

Hazardous hands-on training, such as learning to get over a strainer, needs close one-on-one instructor supervision.

If you teach technical rescue to your own department members, you need to make yourself as legit, qualified & credible as possible.

Although those are important criteria, passion and enthusiasm are also crucial.

To teach a rescue instructor class for the state program, the basic criteria include two years practicing as a technical rescue technician, a letter of reference from a current rescue instructor and a letter of endorsement from their department's training division. Many rescue instructors believe that two years of experience practicing technical rescue is a bare minimum to teach high-risk operations.

CREDENTIALS & CREDIBILITY

If you teach technical rescue in-house to your own department members (or any other high-risk discipline), you need to make yourself as legit, qualified and credible as possible. This seems

In this photo, an instructor supervises a student knocking down an unstable column of soil prior to beginning shoring operations. The instructor must define the acceptable risks and make the operation safe.

Be as prepared as possible for the classroom lecture. Have an extra bulb for the slide projector, plenty of fresh white-board markers and allow sufficient time if you plan to hook up your laptop to a data projector that you haven't used before.

obvious, but there are several reasons. First, any instructor should work hard to be as prepared and qualified as possible to teach in their field. You owe it to the students and yourself. Second, if (God forbid) you have an incident or serious injury connected to your training, your credentials and qualifications will help back you up. If you choose to teach on the road freelance or at a private school, you must be very experienced, competent and certified by the highest authority or program you can find. You must also be insured and have a solid resume and list of references.

You can obtain an instructor credential via several avenues. The most common: Go through a private company's rescue program and ultimately take their instructor course. However, this can be the most expensive way to get certification. Many state fire service programs hold or sponsor instructor-training programs. State-sponsored programs are desirable because they teach the recognized state curriculum. A state or government teaching credential adds a lot of legitimacy to your program.

Another option that requires a lot of effort and may prove somewhat less credible: Create your own training program and certification process. This entails having an agency or a group of agencies form an association or a consortium that will establish curriculum, administer records and provide certificates.

COURSE RECIPES

Teaching anything properly involves both the actual instruction and course development/administrative functions, with the latter often receiving the least attention. However, investing time in a good recipe for preparing and delivering your classes will result in a better product and greater enjoyment on everyone's part. It also increases the odds that the department's training documentation and legitimacy requirements are met.

Course development is a lot of work. When we (several veteran instructors) sat down and revised the Arizona State Fire Marshals Technical Rescue curriculum, we based it on the NFPA 1670 standard for technical rescue training and applicable OSHA standards. Since that time, NFPA 1006 standard for Professional Certification of Technical Rescue Technicians has been released and provides a solid reference to base training curriculum.

Safety is the top priority at all rescue training. The instructor saw this corner shows signs of failure and removed students from the area just minutes before it fell, snapping both beams of the ladder below.

THE LESSON PLAN

Every class should have a lesson plan prepared and approved prior to delivery of the training. This essential plan provides consistency so different instructors can deliver the same content time after time. It also lends legitimacy to the course by showing its connection to local and national standards, provides a user-friendly outline and includes a narrative base for detailed background on the topic. *(For a sample lesson plan, visit www.firerescuemag.com.)*

The basic model for a lesson plan includes six parts.

1. Title: The official name for the course;
2. Class description: Sums up the purpose for the class in about a paragraph and lists NFPA, OSHA and other related standards;
3. Learning competencies section: Sums up what the student should understand and be able to perform after taking the class;
4. Resources needed: Simply lists all of the materials needed to put on the class, including equipment, handouts, audiovisual and other supplies;
5. Outline: The framework of the class. It should be easy for any instructor to follow the outline and meet the objectives of the training. The outline will provide times and

tips for each section and specify any special needs for a particular part of the class; and

6. Narrative: The meat behind the outline. The narrative is the written version of the course content. As expected, the narrative is usually the most difficult aspect of developing a lesson plan. You may end up writing a small book for a 20-hour class, which requires a lot of effort, or you may use a published work for your narrative.

Do we ever teach classes without lesson plans? Sure, tell me who hasn't. However, a lesson plan pays off by ensuring quality training that is consistent and repeatable by multiple instructors. An outline will also help you look like the pro that you are should OSHA or a similar agency audit your program.

KITTENS IN THE BASKET

When you teach high-angle rescue (or a similar high-risk operation) to new team members, think of them as a basket of kittens or puppies. That is, they are enthusiastic, but know very little about the procedures, risks or hazards. Often, the hardest thing is to remember to tell students everything you know, right down to the simple basics that we often take for granted. New students need to know every detail. Your job is to train them and keep them safe. Having an outline prepared and using note cards will help you remember everything and stay on track.

OLD HANDS

Teaching continuing education to your seasoned rescuers can be tough. It's not too uncommon to run into crews that are burned out on training. Also, if you are a new instructor, you may need to adapt to the group. Make use of their experience and get them to engage in the class by encouraging lots of participation and knowledge sharing. Take the role of facilitator rather than instructor.

INSTRUCTOR-TO-STUDENT RATIO

This is a safety concern and may vary with the type of class you teach. One instructor can lecture to 50 or more students in a classroom setting, but there are few situations in technical rescue training where the course content is entirely lectured. As a general rule, the ideal ratio for high-risk operations is five students to one instructor. A five-to-one ratio allows for plenty of individual instruction and, most importantly, it ensures that an instructor can safety-check all critical aspects of the operation. The instructor-to-student ratio can be as high as 10 students to one instructor for lower-risk operations or operations where one instructor can comfortably safety check all aspects of the operation. I'll say it again, though: A five-to-one ratio is ideal.

SAFETY

Safety is a core component to technical rescue. As an instructor, you need to integrate safety into all aspects of your training. The first level: the instructor's safety plan, which must be prepared prior to any training. The instructor's safety plan is essentially a hazard analysis for the training. To create the written safety plan, walk through the training step by step and identify all hazards and potential hazards to students. Document the hazard and the method of removing, isolating or avoiding the hazard.

The instructors should meet just prior to the training and discuss the safety plan along with the training plan. All instructors should agree that all hazards have been identified and that a plan to

Most hands-on rescue skills require a small instructor-to-student ratio. In this case, one instructor teaches five students how to construct a raker shore.

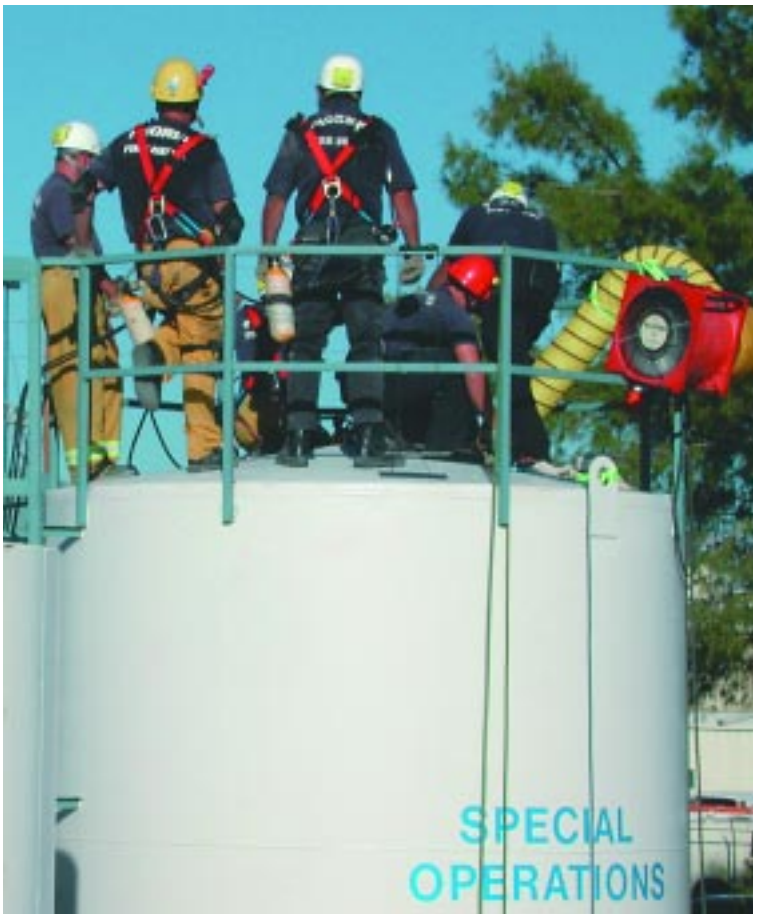
deal with each one exists.

The second part of the safety plan: the safety briefing for the students. Conduct a general safety briefing at the start of each training day and, in some cases, at the beginning of a particularly hazardous procedure. General safety tips for the students include:

- Always assign a designated safety person for team-based evolutions;
- Make sure at least three pairs of eyes safety check everything before a student goes over the side (or into the hazard area);
- Always check the setup before the student enters the hazard area. Do it yourself;
- Safety check each other and watch out for each other;
- Make sure everyone understands that anyone can stop the operation at any point if they see a safety problem;
- Speak up if you see something unsafe. Remember, in eight out of 10 fatality accidents, someone had information that could have averted the accident, but they assumed that the information was known to others when, in fact, it was not;
- Keep in mind that nothing is ever so urgent that there will not be time for a safety briefing and a safety check;
- Tie in—every time—within six feet of the edge unless the edge is loose and sloping, and then tie in well within the safe area; and
- Keep your rescue area neat and clean. A tidy rescue area is more efficient and makes it easier to spot safety problems.

STUDENT PERSONALITIES

There are many different types of students. Most are motivated and eager to learn



This vertical confined space entry has a group working on top of the tank and on the ground. At least two instructors are needed to supervise the operation.

technical rescue. Sometimes teaching to your own department is harder than teaching to a mixed group because your colleagues may not behave well. In general though, it is helpful to understand a few of the different problem personality types and how to deal with them.

The Resident Expert

Problem: This type of student has an answer for everything and is constantly chipping in their ideas on how the procedure should be done.

Solution: Take this person aside at the first break and ask for their help. Explain the need for consistency and simplicity for the other students. Ask them to make mental notes about their ideas and bring them to you at the break, not in class. If they can't stop putting in their two cents, put them on the spot on a tough procedure or question, and it may cause them to keep a lower profile.

Mack the Knife

Problem: This type of student has an attitude or a behavior problem and disrupts your program.

Solution: Sometimes you can disarm this person by giving them some strokes in front of the class. Ask them for their opinion and extend the olive branch publicly. If they still disrupt you, then it's time for a quick private meeting. Lay it out hard; tell them the problem must stop immediately or they should leave. Kicking someone out is a drastic step, but it may save the class for the other students.

An instructor positions himself near the edge to supervise this high-angle litter operation. (Note the instructor's safety line.)

The Kernmantlely Challenged

Problem: This type of student is high maintenance for the instructor in that they are nice, but don't seem to get what you teach no matter what you do.

Solution: If this person is just having a hard time, but can learn and perform the procedure, work with them and bring them along with a little extra one on one. If you have a particularly strong student, you can pair them up and have the strong help the weak. If this person just can't get it, keep moving and then at the break or the end of the day, go over the problems and see if there is a workable solution. At the very least, the problems must be documented for instructor and department records. In the worst cases, the student may need to be told that they are not ready for the class.

FINAL THOUGHTS

If you want to be a better rescuer, work to be a good instructor. Teaching took my skills and knowledge to much higher levels than they would have reached if I had never taken on students. Remember, though, there is great responsibility in teaching. The student depends on you for knowledge, inspiration and safety. Do not let them down.

12 Tips for Better Instruction

- Teach by example. Don't ask student to use a safety procedure and fail to use it yourself.
- Lecture outside when you must, but avoid wearing sunglasses if possible, and try not to make the students look into the sun.
- Remember that time is a critical factor in rescue. The stopwatch can be a valuable tool to show the students 1) how long it takes to perform a certain procedure, and 2) how dramatically repetition of the procedure reduces the amount of time required for that procedure. *Caution:* Do not let speed compromise safety. Emphasize fast and clean work. Stop the evolution if it is not clean and within safe limits.
- Incorporate scenario-based training whenever possible and make it as realistic as possible. Remember, we play like we practice.
- Avoid trying to accomplish too much in a given time period. Students need a little stand-around time to watch others and to process what they are learning.
- Do the extra legwork ahead of time to get all equipment together, reserve facilities and preplan any training sites you haven't used before.
- Bring your voice up a level so everyone can hear you clearly. It's not unusual to be hoarse after teaching outside all day.
- Treat students with respect and remain humble. Your credibility will go up in the long run, and the students will be more receptive.
- Ask everyone to introduce themselves, and find out each student's experience level. Some students are more suited to assist with demonstrations or help weaker students.
- Remain flexible and adapt to changing conditions and the needs of the group.
- Use familiar terminology. Remember, you must explain everything before you can use it.
- Keep your handouts simple and to the point. Large text and bulleted lists encourage students to read the handout.

Instructor Experience & Qualification

- Take an NFPA 1041 Fire Service Instructor course;
- Let your training department know you are interested in teaching and ask to get plugged in as an assistant in house classes of any kind;
- Become a CPR instructor. It's great experience teaching beginners hands-on skills;
- Apply to get a vocational teaching credential and take their instructor course at your community college if it offers fire science courses;
- Keep up on current events. Read the trade magazines, purchase current textbooks and take classes in your field; and
- Remain open minded to new techniques and equipment and be willing to let go of obsolete ideas.

Rescue Editor Tom Pendley is a captain/paramedic with the Peoria (Ariz.) Fire Department and a member of its technical rescue team. Pendley teaches technical rescue for the Phoenix Fire Department and is currently a technical rescue instructor for the Arizona State Fire Marshal's office. He also is the author of The Essential Technical Rescue Field Operations Guide. *He can be reached at 623/533-1234 or tom@desertrescue.com*