

The NDTs of NDT • Part 2: Need Decent Training



In the previous issue we discussed some of the challenges that the NDT community at large faces – from aging infrastructure that requires more NDT inspection, to regulatory agencies requiring stricter controls. This is compounded by a shortage of qualified technicians. We can sit here and accept that we are living in Now Dire Times, but that would only be complaining and accepting a terrible future that we could change for the better. I would rather work in an industry where NDT can mean Never Dull Times or Nonstop Daily Thrills. So how can that happen? By each and every one of us doing our part and taking action.

One major issue that was covered in the previous article was that the technician pool is aging and all this experience will be retiring in the near future. A good place to begin to make our industry develop into a New Delightfully Thriving industry would be to start with the youngsters entering the field.

Need Decent Training

Our industry is one based on certification, and a prerequisite to certification is training: theoretical and practical. It doesn't matter what certification standard you work to because they all set out a minimum amount of hours. That is fine for documentation purposes and to be able to put a check mark in the appropriate box during an audit. Let's be honest though, we all know that all training is not created equal. I have met several people throughout my career who have legitimate (and some illegitimate) training certificates, but during discussions with them I have

trouble believing they actually passed these courses, their understanding of the subject matter being so minimal!

The problem with the training is twofold: on one side of the spectrum is the employer who is looking to get as many people certified as quickly as possible so they can become revenue generating. The other side is the technician who is just looking to get a job so they can start making the big bucks. So what do we do? We have to start taking training seriously and understand that we are there fundamentally to learn; not just to put a check mark in the box of an audit checklist.

Of prime importance to the transfer of knowledge is the teacher. We Need Decent Teachers! We all had teachers in our lives that encouraged us and kept our attention, the ones we remember fondly. I am sure I am not alone when I say I also had teachers who were a lot better than NyQuil for putting me to sleep. The teachers we choose to train the next generation must be capable of keeping the class interested. Gone are the days of blackboards and chalk, transparencies, and pointing sticks. The classroom has become a dynamic environment, and it is more important than ever to use all that technology has to offer to transmit knowledge. The younger generation has grown in an environment of videogames and interactive software- we can't expect them to just sit there and watch and listen to a monotone instructor reading a PowerPoint presentation.

So how do we ensure we have the right trainer? An important consideration in choice of instructor is that they have to "know their stuff". Once the



We just discussed some of the big issues in the theoretical or classroom training. The practical training must also be completed as required by The Natural Resources Canada National NDT Certifying Body. On the job training is a crucial step in the development of a NDT technician, but they must have a firm grasp on the practical aspects of performing inspections.

The next concern is how the trainees are greeted once they finish their classroom training. They need to be coupled with experienced technicians who can show them how what they learned (in what was hopefully a very exciting class) is used out in the field. This can only be done through the use of a structured mentoring program. There are many technicians out there who are getting older and have so much experience and many stories to tell - it would be a shame to let them retire without keeping their legacy alive and passing their knowledge on to others.

It is very important to the newcomer that they get exposed to as many different day to day scenarios as possible and preferably from as many different technicians possible. This enables the newcomer to see that there can be more than one way of doing the same thing and each way can reinforce the theoretical training they received. It also immerses them in different social situations and promotes positive working relations with a team. As technicians, we have to share our experiences; it is the only way to strengthen the next generation. I may have been lucky, but when I started I worked in a small shop. Not one piece that had an indication on it left without passing through my hands. Every time a technician found something they would call me over and say "...look, what do you see? What kind of defect is this?" I know that time is money, but how much longer did it take for the apprentice to walk over and learn from what the mentor had found? How much did that cost? One thing is for sure: for my experience and training it was priceless! Let's take those few minutes and share, it will become a habit in no time and we can all go back home at the end of the day with a sense of pride knowing that we passed on a little bit of ourselves.

To recap, to turn our industry into a New Delightfully Thriving industry we have to start by providing the next generation with the right training; that means the right instructor, the right course content and the right mentoring.

So, now that we have the training covered, in the next issue, we will go over the individual technician, how can we put the right people in the right place, select the right crew, and build your New Dream Team.

instructor is in front of the classroom and they are facing the students, they instantly become the expert on the subject. They must have the real life experience to answer the questions that the students may have or they face the possibility of losing credibility. It is not enough to say that a person is certified to Level 3 that they automatically have the qualities of a good instructor. Having knowledge is just one piece of the puzzle. Does the person have the skill to communicate the information adequately? Can they tailor their style to the group in order to make the learning as easy as possible for the class? Do they keep students interested by being able to make a link between what they just taught and real world examples? Most importantly, does the instructor want to be there to teach the class, or are they there just to make some extra revenue while waiting for a higher paying job to come along during the next plant shutdown? Think back to any great teachers you may have had during any learning experiences in and outside of the world of NDT. I can guarantee that you can answer "yes" to many if not all of the questions above. THAT is what makes an excellent instructor/trainer.

Now that we have the right trainer, we have to keep in mind that the syllabus has to be adequate to today's demands and that they meet the minimum requirements set out by NRCAN or any other certification requirements there may be in a specific industry. We have to teach them what they need to know and test them to make sure they really understand. Employers pay for the courses and deserve to get a good return. This puts the training facility in an uneasy position when students did not really grasp the subject matter at hand. Can they actually get a failing grade? Can the training facility make the customer unhappy and send them back their employee without a training certificate? As many teachers (and students) understand, a teacher doesn't fail a student, a student does this themselves. An instructor can help to the best of their ability, but if a student does not try, does not ask questions, or does not attend classes, there is little that an instructor can do. High schools, colleges and universities all have excellent students, so-so students and the few that fail – NDT training should not be any different.

If you remember, in the beginning of this section, I mentioned that a prerequisite to certification is training, both theoretical and practical.



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