Online Training: The Human Factor

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Why use online training

• Consistent high quality training
• Improved productivity
• Lower global training cost

Challenges

1. From the students’ point of view
   1. The learning experience
   2. Work vs. training
   3. Getting answers

2. From the teachers’ point of view
   1. Evaluating students
   2. Effects of online training on practical training
   3. Adapting to online training
Blended learning
ONLINE + IN-CLASS

Online training
• For the theory
• To familiarize with the concepts of calibration, scanning and data analysis
• To familiarize with real data

In-class training
• To setup an instrument, calibrate a setup, scan and analyse data
• To acquire the manual skills needed for scanning

For a good blending
• The online theory should be instrument neutral
• The instrument specialization should occur during the in-class training
• The online theory must be harmonized with the in-class theory
**Challenge:** Providing an online experience that necessitate no explanation as to its functioning

**Solution:** A clean user interface presenting only the necessary information combined with a step-by-step learning process
**Challenge:** Going through a 600+ page training can be daunting

**Solution:** Provide an easily accessible dashboard and an internal search engine
Challenge: Evaluating the level of understanding

Solution: Provide self-evaluation tests with in-question link to the page presenting the underlying theory
**Challenge:** Juggling work and training

**Solution:** Give a 60-day period to complete the training. Train for an hour each day.
Challenge: Switching from work to study

Solution: Use the flexibility of online trainings to study when and where it is most efficient

Open 24/7
Students’ point of view
WORK VS TRAINING

**Challenge:** Commit to a 1-hour-a-day schedule and take time to revise

**Solution:** Have a teacher monitoring the student’s progress
Challenge: Insuring that the theory is well understood

Solution: Videos and animations remain available for the duration of the training
**Challenge:** Answering the students’ questions within a reasonable time frame

**Solution:** Having a forum monitored by the assigned teacher
**Challenge:** Insuring that the online training covers all required theory

**Solution:** The online training should be vetted by the teachers giving the in-class training
Teachers’ point of view
EVALUATING KNOWLEDGE

Challenge: Insuring the students’ level of knowledge is sufficient to perform the practical training

Solution: Administrate a final theoretical exam online and a theoretical exam in-class on the first day
Challenges: How to learn to calibrate, scan and analyse data without an instrument

Solution: The use of online interactive training exercises
**Challenge:** Getting familiar with real data

**Solution:** Design the online interactive exercises to use real, scanned data from calibration blocks, tank walls and welds.
**Challenge:** Teaching a class of knowledgeable students

**Solution:** Use discussions between students rather than lectures
**Challenge:** Settling arguments

**Solution:** Use the same online material the students used to settle arguments
Conclusion
ONLINE TRAINING: THE HUMANFACTOR

• Students appreciate the flexibility offered by online trainings
• Teachers appreciate having better prepared students
• Companies appreciate having their employees close-by while they study
Thank you!