eLearning

The future of NDT-Trainings

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Agenda

General NDT training information
- State of the Art
- Reputation of eLearning
- Our Vision of eLearning

eLearning @ Testia - Types of trainings
- EN4179 trainings
- Device trainings
- Other trainings
State of the Art

- Face to face trainings in training centers
- Courses have to be booked in long time in advance
- Fixed locations and dates
- Participants and Trainers have to meet personally
- Each user has to create his own training for new devices and technologies
If you think about eLearning:

What crosses your mind?
Reputation of eLearning
Facts About Conferences

We are all Multitasking Talents!

- 65% Do other work
- 63% Send an email
- 55% Eat or make food
- 44% Text
- 25% Play video games
- 9% Exercise
- 6% Take another phone call

Places where you take part!

- „The Closet during a party“
- „McDonald’s Playplace“
- „Fitting room while trying on clothes“
- „The beach... it was a video call so I kept my tablet up so that my bikini didn’t show“

Survey by InterCall 08/2014
Our Vision of eLearning

- Interesting
- Interactive
- Organisation-wide trainings
- Timesaving
- Reduce Costs
- Worldwide trainings
- Individual
- Work-Life-Balance
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EN4179 – Three-Step-Strategy

Challenging Trainings
- High costs, long duration

Short  Middle  Long

Big educational differences of participants
- Maths
- Physics

Location independency
- Final Exams
- Equipment
Short Term Approach

⚠️ Online pretests to check for math and physics skill gaps
⚠️ Based on the test results rating what needs to be trained before classroom training

⚠️ 100% online based individualized private lessons
  – Focus on math and physics
  – Reducing skill gaps
  – Self paced online Learning
Middle Term Approach

Face to Face Classroom

Blended Learning
- Online Collaborative Classroom
- Self Paced Online Learning

Hands-On
Final Exams

Device/Software
Knowledge Check

Private Lessons
Online Theory

Short  Middle  Long

Testia GmbH
Long Term Approach

Online based training
- Complete online theory training
- Independent online training without supervision
- Live online trainings

Web based practical device training
- Delivery of NDT equipment devices to customers
- Send test parts to the participants
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Device training

⚠️ 100% online, live device training
  – Worldwide possibilities for trainings
  – Small Training groups for a personal productive atmosphere
  – Collaborative training design

⚠️ Training for simple products where travel costs are too high for profitable offline trainings
  – Customized trainings for emerging technologies

⚠️ Interactive course design, **NOT** only PowerPoint
Device training

⚠️ Cooperative course design, **NOT** only PowerPoint
  - Audio conference
  - Tests and Pollings (Q&A)
  - Live device demonstrations
  - Remote control of Software and Devices
  - Playback of specialized Videos

Live device Demo

Damage Drawing with Whiteboard
Device training

⚠️ Guarantee of knowledge transfer
  - Knowledge checks through quizzes to guarantee success
  - Measurement of engagement and presence

⚠️ First online training for the ELCH available

⚠️ Gecko/Thermography Training under preparation

Quizzes to guarantee understanding
Demo
Training for NDT Equipment

- IRT Devices: Gecko
- UT Equipment: DolphiCam, Smart NDT Tool, Linetool
- Other equipment: Exoscan, OMA, Ultis,
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Inspection of CFRP structures

- Inspection of Monolithic and Sandwich Components
- General built-up and manufacturing processes
- NDT Inspection Techniques EN4179 and non EN4179
- Possible defect types
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Conclusion

- eLearning will revolutionize NDT training
- In Long-Term view eLearnings can replace a large amount of current classroom trainings
- Cooperative course design for a high engagement of participants
- Cooperate wide trainings without travel costs and lost of work power
- First eLearnings are available for device trainings
Questions?

Questions!?  

Thank you for your attention!