Digitalisation and Training

Expert Series Webinars

Assessing the impact of digital delivery on learning; quality control and growth of GWO standards

3/10/17 September 2020

GLOBAL WIND ORGANISATION
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Vice Chair, GWO Training Committee
Renewable Operations Staff Competency and Development Team Manager (2016-Present)

- Royal Air Force
- MSc Safety, Risk & Reliability Engineering (Heriot-Watt University)
Elisabeth Mygind
Member of GWO Training Committee
Head of Technical and Safety Training, Operations

- Established safety and technical framework and developed digital training tools and simulators
Brian Smedegaard Pedersen
Training Development Specialist 2015-present

- 19 years with Vestas
  - Technical Instructor
  - Project Manager
  - Service Technician
Jakob Bjørn Nielsen
Director, Training and Operations

- Air Force Officer
- Supply Chain Engineer
- Training leadership roles
  - Royal Danish Air Force
  - MHI Vestas
  - Siemens Gamesa Renewable Energy

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Jakob Lau Holst
CEO

- 15+ years in the wind industry
- Board member WindEurope/EWEA 2005-2012
- Chief Operating Officer, Danish Wind Energy Association 2008-2016
Introduction
- Why Digitalisation & Training?

Key developments in digitalisation
- Why GWO introduced requirements for digital learning
- Why GWO introduced BSTR-P

Case study – Implementing digital solutions for GWO Training
- CADPeople & MHI Vestas – Safety ‘N’ Mind

Panelist and audience Q&A
Key Developments in Digitalisation
Challenge

- Covid-19 lockdown
  - <86% reduction in availability of GWO training (wks 11-20)
  - Risk of skills fade as participants unable to refresh
  - Employer duty of care
  - Responsibility to ‘keep turbines spinning’

Opportunity

- Business imperative?
  - Solution for (some) skills fade
  - Demand from some TPs
  - Employers challenged on cost + per diem for training days

- Better/equally good training outcomes?
  - Achieve learning objectives in a new way & innovate
  - Retain focus on learning objectives
Key developments in digital 2020

Requirements

- **Requirements for Training Providers (v9)**
  - Digital delivery defined as unique setting for GWO Training Providers on par with ‘Fixed Facility, Mobile, On Site’. (36 TPs certified)

- **Requirements for Certification Bodies (v7)**
  - Remote audits permitted in certain circumstances

Standards

- **BSTR-P**
  - Virtual classroom-based version of BSTR, provides 6 month validity to address potential risk of skills fade when normal training unavailable.

- **All other standards**
  - Potential for digital delivery of all GWO standards, esp theory/classroom elements + selected practical elements with tools such as virtual/augmented reality
Case Study
MHI Vestas Safety ‘N’ Mind
**Training concept**

**Distributed learning**
- Online access to e-learning modules
- Progressive slides with video and interactive exercises.
- Prepare students for class room and onsite training in product maintenance and service.
- Assessment to certify level of knowledge

**Class room training**
- VR training
- Situational awareness
- Concept, bigger picture
- Simulator
- 3D simulator for instructor training in:
  - Product review / Hands on
  - Fault diagnostic
  - HSE
  - PPE

**Onsite training**
- Online access to Instructional manuals
- Interactive manual
- Interactive application with visuals, real time 3D and animated step by step instructions.
MHI Vestas Safety ‘N’ Mind

Gameification

Points mean prizes...

Tap boxes to learn

Alert  Verbal
Pain  Unresponsive

Show Info  OK!
Feedback time!

Go to menti.com and use the code: 54 54 35 2
1) How do you describe ‘good training’ and how do we transfer this to a digital setting, while maintaining quality?
2) What are the practical steps required so training delivery can maintain the necessary quality in a digital environment?
3) How can we ensure we recognise different learning styles and keep the learning process as inclusive as possible?
4) For training providers considering digitalisation, what are some of the first steps they should take?
Your questions
Feedback time!

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Join us next week

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