REMOTE LEARNING AND EXAMINATION BY USING ASSISTED REALITY IN MARITIME VET EDUCATION

TCA Schools go green and digital, Bonn
May 5th 2023
THE CONSORTIUM

• PARTNERS
  • Universidad La Laguna (Tenerife, Spain)
  • SAMK (West Finland)
  • MCAST (Malta)
  • University of the Aegean (Greece)
  • Ceronav (Romania)
  • Solski Center Nova Gorica (Slovenia)

• ASSOCIATED PARTNERS
  • Knowledge Insight (Reseller)
  • KOTUG International (Launching Customer)
  • Wärtsilä Voyage
THE MISSION

RELAR wants to:

• Bring geographically separated trainers & trainees closer together through remote technology

• Inspire professionals in experimenting and optimizing AR applied in maritime education & training

• Proove the concept of remote coaching & skills training

• Facilitate the achievement of learning outcomes by means of using AR

• Reach out to other sectors
RELAR WANTS TO MAKE IMPACT

IN TERMS OF:

• RAISED AWARENESS AND PROVIDED GOOD PRACTICE EXAMPLES ON USING AR TECHNOLOGY IN THE EDUCATION & TRAINING SYSTEM

• IMPROVED ACCESSIBILITY AND AVAILABILITY OF EDUCATIONAL AND TRAINING PROGRAMS IN THE MARITIME AND LOGISTICS SECTORS

• MORE PERSONALISED EDUCATION & TRAINING
## Global Adoption Across Industries

### Automotive
- Ford
- Audi
- Honda
- ABB
- Siemens
- Schneider Electric
- Rockwell Automation
- Emerson

### Manufacturing
- 3M
- Honeywell
- Teradyne
- Rockwell Automation

### Chemical, Pharmaceuticals
- AstraZeneca
- Johnson & Johnson
- Merck

### Oil & Gas
- Shell
- ExxonMobil
- Total
- Schlumberger

### Construction
- Skanska
- Burns & McDonnell
- IAC

### Food & Beverage
- Pepsi
- Nestlé
- Mars

### Power & Utilities
- Xcel Energy
- Vestas
- SSE
- GE Renewable Energy

### Transportation, Logistics and Audit
- UPS
- DHL
- Walmart
- Coca-Cola Hellenic Bottling Company

### Manufacturing
- P&G
- Komatsu
- Siemens

### Oil & Gas
- Halliburton
- Schlumberger

### Chemical
- Dow
- Eastman

### Pharmaceuticals
- Pfizer
- Merck

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Remote coaching

AUGMENTED & ASSISTED REALITY
SKILLS TRAINING USING DIGITAL WORKFLOWS
Remote Operations, Coaching and Skills Training using Assisted Reality

ROCSTAR

Pilot Implementation Partner
Local Vocational Education Partner
STC Group
DIGITAL WORKFLOWS
## Workflows

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<tr>
<th>Name</th>
<th>Status (with versions)</th>
<th>Last Edited</th>
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<td>Ab Initio October 5, 2022 at 10:43:39 AM GMT+2</td>
<td>v2 Published</td>
<td>Jan 30, 2023, 1:51:42 PM</td>
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<tr>
<td>E-Learning Demo November 8, 2022 at 2:25:06 PM GMT+1</td>
<td>v4 Published, v5 Draft</td>
<td>Nov 22, 2022, 2:36:49 PM; Nov 23, 2022, 8:50:02 AM</td>
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<td>Jan 30, 2023, 1:52:35 PM</td>
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<td>v8 Published, v9 Draft</td>
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<td>Remote Learning demo - Injectors November 23, 2022 at 11:05:54 AM GMT+1</td>
<td>v7 Published, v8 Draft</td>
<td>Nov 28, 2022, 3:03:00 PM; Jan 30, 2023, 1:35:00 PM</td>
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WORKFLOW CREATION
WORKFLOW STEPS

Remote Learning demo - Injectors

Step preview

RealWear HMT-1

Chapter 2: Fuel Injectors

1/11 - Step 1

Create New Step
INSTRUCTIONS

Step preview

Remote Learning demo - Injectors

After this workflow you will be able to describe the basic functionality of a ship's diesel engine fuel injectors.
Which component is responsible for timing the injections?

- Camshaft
- Pushrod
- Rocker arm
- Spring pump
Step 7

Disassemble the injector for inspection of the needle and needle housing following the video on the right.

Remote Learning demo - Injectors

7/11 - Step 7
REFLECTION/FEEDBACK LOOP
TASK ACCOMPLISHED

Remote Learning demo - Injectors

You have finished the injectors workflow.

9/11 - Step 9