



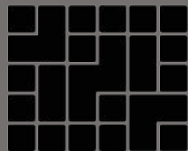
Co-funded by the
Erasmus+ Programme
of the European Union



SOFT SKILLS FOR
HARD HATS

PURDUE
UNIVERSITY

Coventry
University 



PS18

Polytechnic Summit
2018. Lima - Perú

Coventry University, UK

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Soft Skills for Hard Hats

Content

- About Coventry University
- Erasmus + Programme
- Soft Skills for Hard Hats-Developing Managerial Skills for Construction Workers project rationale and partners
- About CU SIM Centre
- Development of SSHH Project
- Project website and demonstration of on-line tool
- Q & A

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2017 - Gold winner

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Coventry University - main campus



- Faculty of Arts and Humanities
 - Faculty of Engineering, Environment and Computing
 - Faculty of Health and Life Sciences,
 - Faculty of Business and Law
-
- **Gold for outstanding teaching and learning**
Teaching Excellence Framework (TEF)
 - **2nd in UK for Teaching Excellence (TEF)**
Times Higher Education metrics ranking 2017
 - **Top 6 for Student Experience**
The Times and Sunday Times Good University Guide 2018
 - **Ranked No.12 UK University**
Guardian University Guide 2018
 - **97% of graduates employed or in further study**
DLHE survey 2015/16 – six months after graduating
 - **Queen's Award for Enterprise**
International Trade 2015

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School Energy Construction and Environment

•Three distinct areas

- Energy Oil & Gas
- Construction Civil Engineering & Building
- Environment Geography & Disaster Management
Humanitarian Engineering

•Approx. 2000 students

•100 academic staff

- 5 Profs/Readers,
- 70 Principal, Senior & Lecturers,
- 8 Assistant Lecturers.
- 8 Technical Support Staff

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Erasmus+ Programme

Erasmus+ is the European Union programme for education, training, youth and sport.

It runs for seven years, from 2014 to 2020, with organisations invited to apply for funding each year to undertake creative and worthwhile activities.



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Soft Skills for Hard Hats-Developing Managerial Skills for Construction Workers

- Project duration – 2 years
- October 2016– October 2018

Project partners



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About the Project- Rationale (1)

Why?

- lack of transversal skills in on - job promoted trade professionals

Aims

Aimed at the first level managers at construction site.

- To use in formal learning setting or individually
- To merges general with vocational education

Target audience

- Apprentices, teachers and trainers, businesses/training in construction industry



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About the Project- Rationale (2)

How?

- On-line training tool focusing on “soft skills”
- Combines visual input, individual learner’s choices and professional feedback
- Learner’s “journey” through everyday decision making scenarios
- Based on the real life scenario/approach used in CU SIM centre.

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Coventry University Simulation Centre



•CU Simulation Centre

- 10m Curved Screen
- 8 standard rooms
- 1 meeting room
- Observation room



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2nd
Ex

Times High
2



• Multi Sector

- Construction
- Emergency Services
- Oil and gas
- Retail
- Utilities
- Automotive

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Experiential Learning

- Immersive
- Safe
- Feedback
- Reflection



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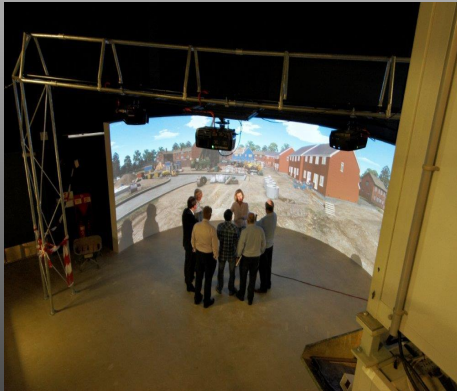
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Practice

- Learning outcomes
- Scenario and injects
- Feedback
- Observers

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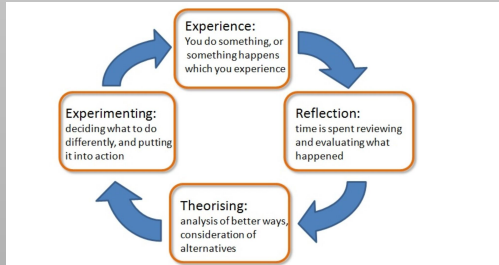
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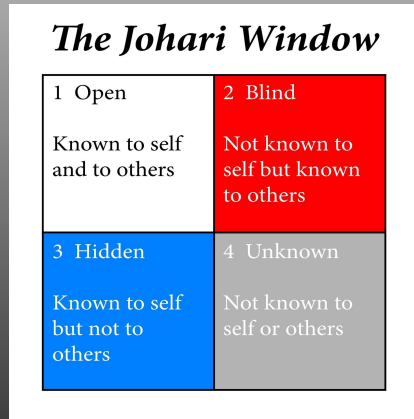
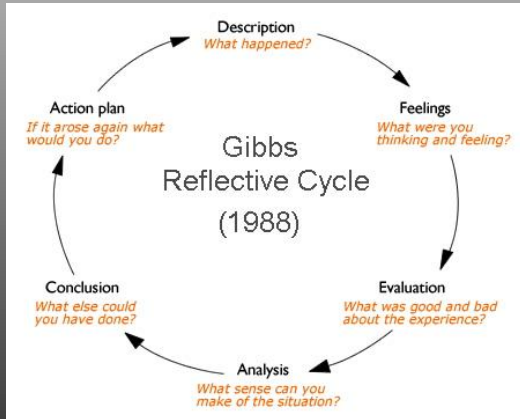
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Theory

Kolb
Gibbs,
Scaffold of learning (ZPD)
Johari
Learner retention



Cycle of continuous development – adapted from Kolb's Experiential learning Cycle



Development of the Project Output



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Development of the project

The approach

- Principles of SIM centre experience replicated on-line
- Complementary learning experience with potential to be either preparation for SIM or authentication of learning
- **Which transversal skills?** – desktop research prior to project application – data from SIM centre
 - **Communication,**
 - **Leadership,**
 - **Problem solving and**
 - **Working in teams.**



Development of the project

Overall framework



Intellectual outputs	IO 1 Teamwork	IO2 Leadership	IO3 Communication	IO4 Problem Solving
Scenario 1 LO	Dealing with difficult people	Planning/organising/time management	Active listening	Defining the problem
Scenario 2 LO	Communication	Decision making and prioritising	Non-verbal communication	Creating possible solutions
Scenario 3 LO	Effective delegation	Role model/integrity	Choosing an appropriate mode of communication	Making decision or not making decision
Scenario 4 LO	Influencing	Responsibility	Job site cooperation	Implementation
Scenario 5 LO	Supporting	Motivation	Communication with different stakeholder	Lessons learned

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IO1 TEAMWORK

Dealing with difficult people	Communication	Effective delegation	Influencing	Supporting
<p>“At the end of the course the learner understands that as a foreman you will need to identify the disruptive behaviour, understand the group dynamics and the reactions of the group and lastly address the issue with honesty and tact. The learner also has learned a basic strategy can to deal with difficult people: Step 1: Acknowledge the problem, Step 2: Draw attention to the behaviours, Step 3: Determine the solution, Step 4: Make them accountable.”</p>	<p>At the end of the course the learner will understand key skills required to run an effective team meeting. The learner will appreciate importance of asking instead of telling approach, listening attentively, questioning, building consensus among meeting participants, effective participation of all team members. The learner will understand importance of his role in keeping conversation flowing in the direction of the team’s goal as well as effectively summarising decisions and assigning actions.</p>	<p>At the end of the course the learner will be able to understand why is it the important to delegate. The learner will learn strategies and be able to understand key questions related to delegation:</p> <ol style="list-style-type: none"> 1. What task can be delegated? 2. When is delegating necessary? 3. To whom to delegate? 4. How to delegate? <p>The learner will also understand that responsibility and control of the delegated task remain with him.</p>	<p>At the end of the course the learner will realise how influence can help him work more effectively with the team. The learner will be able to implement several strategies to implement that skill. In the construction environment influence is most effectively exercised by focusing on actions rather than words, by building trust with co-workers, by being reliable and consistent whilst being flexible and assertive.</p>	<p>At the end of this course the learner will be able to recognise and provide appropriate support for his team. The learner will identify some key skills required to provide appropriate support to his team such as making sure they have right tools for the requested task, provide encouragement, praise and constructive feedback, be available for his team for ideas, questions, suggestions and complaints too.</p>



Development of the project Intellectual Output Learning Outcome

Development of the project

How did we do it?

- Decision tree format
- User's perspective – semi - immersive - listens, reads, watches and through immersion virtually acts – encompassing all learning styles
- Feedback – general feedback related to the skill and individual scenarios' feedback
- Evaluation: external experts review/report and testing with the users



Development of the project Intellectual Output Framework



Setting the scene:

- Description of the set up
- Characters—names, ages, descriptions



Green	Red	Green	Red	Green	Red
Yellow	Red	Green	Red	Green	Red
Red	Red	Green	Red	Green	Red

Scores:

- Green: Good response
- Yellow: Medium response
- Red: Bad response

FEEDBACK

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Development of the project Collaborations

- Process of working on Erasmus + project – exchange/ transfer of knowledge with partners - Open University- Netherlands



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Challenges

- Limitations of on line platforms to enable spontaneous responses – “the journey” through scenario is pre-set
- Time and funds available to produce high quality output
- Supporting partners in scenario writing
- Language limitations /Cultural differences
- Project management and implementation

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Managerial Skills for Construction Workers



Project website and on-line tool

- <https://softskillshardhats.eu/>
- <https://softskillshardhats.eu/course/teamwork/>



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Any questions?