#### VISIONARY ANALYTICS

## BUILD UP SKILLS 7<sup>th</sup> EU exchange meeting

Workshop on cross-craft understanding

Context, definition and approaches

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### **Visionary Analytics**

- Research based policy advisory founded on March 2012, specialising in education and innovation policy areas
- Relevant experience:
  - Contributed to facilitation of earlier BUS EU exchange meetings
  - Drafted EU overview report
  - Assignments in the area of apprenticeships and green skills
- Role in this project:
  - Supporting organisation of BUS EU exchange meetings
  - Analysis, monitoring and evaluation of BUS PII & Horizon2020 EE4 projects



#### Why we are talking about crosscraft knowledge and skills?

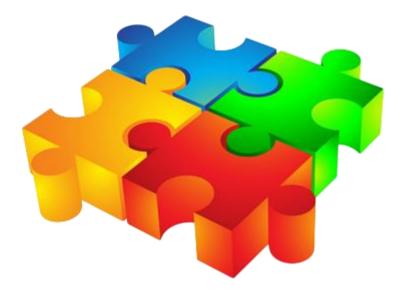


# Why we need cross-craft knowledge and skills?

- Conflicts in <u>work character</u> of the modern economy:
  - Flexible
  - Increasingly specialised
  - Efficient
- <u>Technological changes</u>, including:
  - New raw materials
  - Modern equipment
  - New technologies of energy production
- RequirementS for nearly zero energy buildings not only in terms of design, but also in terms of <u>implementation</u> leading to many problems at the intersections of the different work areas
- CHALLENGE: coordination between occupations and their 'borderline' skills



## What is cross-craft knowledge and skills?





### Definition

- Ability to grasp own work as part of the overall project. Ability to know needs of other areas, other professionals
- Cross-craft (-trade/-occupation) knowledge and skills:
  - Thermal bridges
  - Permeations of air-tight envelope and of thermal insulation
  - Moisture proofing at the plinth
  - Installation of windows, steam break
  - Fundamental knowledge in thermal physics, heat and moisture transfer techniques in different environments
  - Science, Technology, Engineering and Mathematics (STEM) skills
- Soft/ basic/ transferable knowledge and skills:
  - learning to learn, leadership, language skills, computer skills, problemsolving skills, analytical and communicative abilities, self-management or project management skills, risk management



## How to develop cross-craft knowledge and skills?





### Examples of approaches to ensure cross-craft understanding

- Ireland: Safe Pass registration card linked to obligatory training course (updated every 4 years) for all construction site workers on basic issues of health and safety
- Adjusting incentives, so that they motivate workers to gain such cross-craft knowledge (e.g. judgement of quality of worker's work based on his contribution to the entire process)
- Austrian cross-craft project: development of new financing concepts to fund relevant training courses
- Germany: "train-the-trainers" is done through a one day in-classroom course, that focuses on cross-craft issues, and the special issues for the respective profession are provided to them through e-learning
- Other approaches:
  - Special courses, strengthening coordination between disciplines
  - Professional's on-the-job training booklet
  - Promotion by more qualified/experienced construction workers



#### Questions

- 1. Is CCU more needed/ different for:
  - Employees in large companies than for SMEs?
  - Older employees than for younger ones (recent sh
  - Foreign workers than for national workers (due to language problems, also different construction requirements)?
  - Large construction sites than for small ones?
- 2. What are incentives to ensure CCU for workers, site/ quality managers, employers, training institutions, trainers, etc.?
- 3. What are the best ways to teach CCU?
- 4. What are the sources of information on CCU and where to find them?



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#### Thank You