C2 Short-term staff training

Guidelines for individual work

30th October (Friday)

10:15–11:15	2nd session (asynchronous individual work) OER resource center piloting: skill level examples
11:15–12:30	3rd session (synchronous) OER Resource center feedback session

30th October (Friday)

14.00–15.00	4th session (asynchronous group work) • Skill level examples • Localisation of DUCK course	Jón Freyr Jóhannsson, Grzegorz Kunikowski László Ketskeméty Begoña Arenas

1. The task is to create or start to create a skill level example on your own.
2. The aim of the exercise is to see, how clear is the task using the template given, would teachers and trainers be able to follow the instructions
3. We would also be pleased to add your example to the Online resource center as well
4. Please use the template at the end of this guideline to create an example of a skill.
5. You will find the list of the skills in this guideline.
6. If you need more information on a given skill, please login to http://lms.dataunderstanding.eu/login/index.php with the username and password and from the Courses you are enrolled, choose the DUCK course: http://lms.dataunderstanding.eu/course/view.php?id=4
7. The examples task in the course: http://lms.dataunderstanding.eu/mod/assign/view.php?id=74

8. The skill level examples already done are available on the project website: http://www.dataunderstanding.eu/examples/

Data understanding and Communication course

Module 1: Problem formulation

Skill 1: Identify the issue

- Unit 1: Basic identification
- Unit 2: Distinguish between types of issues

Skill 2: State and refine the questions

- Unit 3: Correctly recognize the type of a question
- Unit 4: Formulate the question of a given type
- Unit 5: Choose the best type of question for a given problem

Skill 3: Precisely defining terms and objects

- Unit 6: Making definitions more precise
- Unit 7: Identifying ambiguities and defining difficult terms

Module 2: Data analysis

Skill 1: Understand data

- Unit 1: Distinguishing data, concepts, attributes and examples
- Unit 2: Basics of important representations: tables, linear models, trees, rules, clusters
- Unit 3: Getting, extracting, organizing, enhancing and cleaning data

Skill 2: Understand statistics and probability

- Unit 4: Explore types of data, probability and expected values
- Unit 5: Explore variability, distribution, asymptotic
- Unit 6: Basic tools for statistics

Skill 3: Premises and assumptions

- Unit 7: Distinguishing conclusions, premises and reasons
- Unit 8: Identifying and evaluating assumptions
- Unit 9: Evaluating source reliability

Skill 4: Reasoning

- Unit 10: Being able to efficiently analyse simple data
- Unit 11: Knowing key categories of disputes
- Unit 12: Knowing reasoning strategies
- Unit 13: Knowing reasoning fallacies

Skill 5: Arguments architecture

- Unit 14: Know the main steps of analysis
- Unit 15: Constructing the argument
- Unit 16: Organize the argumentation

Module3: Data communication

Skill 1: Core data communication skills

- Unit 1: Knowing the core concepts of data communication
- Unit 2: Choosing the best communication method for a given communication goal
- Unit 3: Identifying the best possible visualization type for a given data / problem type
- Unit 4: Tools for data communication

Skill 2: Writing skills

- Unit 5: Writing good leads
- Unit 6: Making definite claims and proposals
- Unit 7: Writing out arguments
- Unit 8: Detailing and meeting objections

Skill 3: Oral presentation skills

- Unit 9: Define the issue that activates the mind of the audience
- Unit 10: Reaching out to audience
- Unit 11: Signposting arguments
- Unit 12: Using visual aids and infographics sparingly
- Unit 13: Getting and using feedback
- Unit 14: Ending in style

Activity and Example Template

Title Compulsory element, that is, a word or a short sentence that is characterising the whole example. In longer mini-projects differently titled examples will be linked together with the same ID. Titles may be therefore redundant.	
Author As the whole Resource Centre will be a freely usable Open Educational Resource, it is important that for later reverence there is an author, or authors of the example. Author should be natural and not legal person.	
Language The language of the activities by default is English. However, there is a possibility to create language versions of the activity. Possible language extension: Polish, Spanish, Hungarian.	
Module This is a compulsory element, select one of the three DUCK modules. 1. Problem formulation 2. Data analysis 3. Data communication	
Skill This is a compulsory element, a roll down menu to select one of the 38 DUCK skills (see attached list)	

Sector Compulsory field to place the example in a global educational sectorial map. It can be: 0. General 1. VET 2. Secondary education 3. Adult education (CPD)	
TAG It is an optional field to give a free tag to the example for later filtering.	
Description This is the main, compulsory part, where the problem, the issue, the question, or in case of mini-projects the business case is written in detail: the data problem to be solved. In skill level examples, it is just the explanation of the example to be solved.	
Data This part is not compulsory, because in some cases there will not be data, joust text or table to be communicated. However, most of the cases either given data, or data to be searched, or data that was found in a previous part (mini-project) can be put here.	
Model This part is not compulsory, because only Module 2 related examples need models to build to solve the problem. Apart from data models approaches, tools, links to applications can be listed here to select from.	
Calculation This part is not compulsory, because in some cases there will not be calculation. However, if there is a longer calculation that has to be followed, that will come here.	
Solution This is a compulsory part of the template. This is the solution to the problem or	

question raised in Details part. The exact solution can be textual or numeric, but not necessarily “user friendly”. That comes on the next part.	
Presentation This is a non-compulsory part of the template. If the Solution is complex to deal with the presentation of the solution separately, it comes here. It can be infographics; it can be a slide show, oral presentation, and video, what is best fit to the solution itself.	