Academia+

Counsellors' Study and Training Exchange Programme for
Key Challenges of European Labour Markets and Societies

Intellectual output 2
Future of Jobs

Counsellors Study and Training Exchange Programme (C-STEP)

Unit 4: New skills and competences

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Table of contents

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Unit4. New skills and competences

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1. Content of the Unit 4: " Unit4. New skills and competences"

The unit description for all online training days in the Academia+ project should be understood as a helpful basis if you would like to hold a similar training for the covered topics within the online training days of the project. Therefore, this unit description is written in present tense and anonymous (although you find names of all speakers and lecturers of the online training in the original material on Moodle) and gives you detailed information about how to use the presentations, group exercises, conference meeting tools and group work tools.

2. Learning outcomes

By focusing on the above-mentioned contents, Unit 4 aims to meet the following learning outcomes:

- Understand the meaning of soft skills, as a core competency on the current Industry 4.0

- Learn about ESCO and new hard skills (technological skills)

- To know about upskilling/retraining of staff

- Be aware about the updates on education

3. Structure plan

Unit 4 is a whole day online training which combines input sessions with group work and self-learning sessions as well as plenary discussions. In the morning it focuses on an introduction to the new soft skills and new hard skills. The afternoon, emphasizes the issue with upskilling/retraining of staff and updates on education.

An overview of the structure plan can be seen below and is explained in detail afterwards.

Time	Topic	Method, media and material	Outcome	Comments
10.00	Introduction of the facilitator and the participants and the course topic & goals			
10.15	New soft skills The soft skills: ability to adapt easily to new challenges/surroundings, adaptability, resilience, emotional and social intelligence; teamwork and coordinating with others, interpersonal skills; problem solving; social and communication skills; intercultural competence; creativity; critical thinking, cognitive flexibility, decision making; people management; service orientation; negotiation.	PPT Presentation group work in breakout rooms mentimeter (plenum) template with tasks prototype development paper and scissors	Participants gain in-depth knowledge of the meaning of soft skills, as a core competencies on the current Industry 4.0 (interdisciplinary skills for future workers) and they gain some input of these skills participants realise that in innovation processes creativity includes understanding what the client needs participants realise the importance of service orientation participants run a needs analysis participants get to know the process of innovation participants deal with complex problems participants get to know the idea of agile work	PPT presentation (15 min.) group work in breakout rooms (Jane) (55 min.) (groups of 2) *(40 breakout rooms, randomly)(reopen the same breakout rooms every time)* excercise to develop a product (like wallet) related on the input from the ppt presentation speaker gives each group a task, which is divided into several steps (e.g. partner interview, developing an idea of a prototype based on the answers, test of prototype, evaluation of prototype through another partner interview, …) participants get the task for step 1, discuss in the group, speaker gives the next step, participants discuss in groups and so on survey through mentimeter regarding new ideas, lessons learnt and relevance for career counselling (5 min.) ask participants to send (voluntarily) a picture of the template with notes and of the prototypes) to academiaplus.info@gmail.com

11.30	Short break			
11.45	New hard skills ● IT-related hard skills Data Science, robotics, Software programs, 3D printing, IT, AI, Social media, technology literacy, data-based decision management, data driven manufacturing New technological skills and competences, attitudes and experiences, both digital and in terms of innovation, entrepreneurship and creativity	PPT Presentation	Participants learn about ESCO and new hard skills (technological skills) which are relevant to develop in the current/future labour market based on the effects of digitalization in the labour market	Presentation of the topic using a PPT, followed by a Q&A at the end (directly asked by participants by raising the hand)
13:00	Lunch break			
14:00	Upskilling/retraining of staff Digital literacy, Retraining and learning different skills, Lifelong Learning, work-based learning; digitalization of industry	PPT Presentation group work plenum discussion answer garden	Participants gain an insight into the challenges arising from developing future-proof skills for Industry 4.0 They discuss how this technological change is accompanied by talent shortages, mass unemployment, and growing inequality so, reskilling and upskilling today's workers will be critical	speaker focuses on the effects of changes on the labour market on changes in needed competencies. He will discuss how the training market reacts on this changes and shows good practice examples like so called additional qualifications in metal and electrical professions participants develop in groups ideas, what consequences arise for counselling situations and discuss them afterwards in the plenum *(how*

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				many breakout rooms) *Links for the Chat:* ● www.kahoot.it · https://answergarden.ch/1822917 *Breakout-Rooms for Business- Game:* *- 5 participants in each room (possibility to share the screen)*
15:15	Short break			
15:30	Updates on education need to Change school curricula – skills needed in the future workforce	PPT Presentation group work plenum discussion answer garden	Participants discuss updates on education in the view of the 4th revolution. The need for reform in basic education is simply not possible to weather the current technological revolution by waiting for the next generation´s workforce to become better prepared. Instead it is critical that businesses take an active role in supporting their current workforces through re-training, that individuals take a proactive approach to their own lifelong learning and that governments create the enabling environment, rapidly and creatively, to assist these efforts.	speaker will present the project: guiding schools which focuses on changes vocational and study orientation discusses needed changes in this orientation process *(Plenum?)* participants discuss in groups how counselling and career guidance need to change regarding to the corona pandemic speaker presents a newly developed app for vocational and study orientation wie kann Beratung unter Corona bedingungen stattfinden speaker presents a historical view of curricular questions and discusses a future view with the participants in the plenum *Breakout-Rooms for Group work:* *- 5 participants in each room (new mixture of people, possibility to*

3

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				share the screen)
16:45	Wrap up and final discussion		Summary & Sharing	
17:00	End of day			

Several people and professionals support in the design and development of the training sessions, among others: guest speakers/lectures (those who do the whole presentations, in charge to provide the training input/contents); moderator/s (usually support with the introduction by the speaker, the interventions, the closure of the sessions and sometimes, with certain technical aspects…); a person who is taking care to make notes and support participants by the email (academia.info@gmail.com) and help with phone numbers; a personal technician who is in charge of recording the sessions and to split/distribute the groups in breakout rooms for the group work, etc.; a person responsible to provide links on the chat and/or other additional material, taking care of checking and answering the chat.

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4. Detailed description of the structure plan

All the material are provided via the **Moodle learning platform of Academia+ project.** More information on:
https://www.academiaplus.eu/moodle/course/view.php?id=6&section=1

The Moodle Structure

Moodle was chosen as the platform on which all the material is provided. One of the advantages of Moodle is a clearly arranged overview with which the material can be presented.

The chosen structure on Moodle follows generally the respective structure of each day of the online training. Every speaker with his or her session have their own section on the course page. You can find the presentations, videos, exercises, sample solution etc., always in the respective section of the speaker. The files you can find there are always numbered in ascending order. So the session can be worked through like a learning module. There are longer input presentations, exercises on various aspects and also smaller contributions from our speakers.

For Unit four you will find the first documents numbered 0. These are the complete presentations of our speakers from unit 4.

How to use the documents on Moodle:

The provided documents are always available as PDF files to ensure a usage on most devices. Videos are inserted as a stream directly from the Moodle page so you don't need a separate flash or media player. Sometimes we added a YouTube link on the page or on the additional material. In most cases, when our speakers have shown a video on their session, you can find this on the video (recording of the session) we prepared on Moodle. So, the external YouTube link is additional; maybe if you want to watch it again or with different subtitles. You also find the links for the YouTube videos in every presentation as you work through them.

In general, there are 7 different types of documents on Moodle.

The videos

Each session has at least one video that consists of the recording of the online training day. As these are made available directly on Moodle, every participant/ interested party can access the videos directly on the platform. No extra software or similar is necessary, so that easy access can be guaranteed.

The presentations

On every session you can find the presentation used by our speakers in the online training. Depending on whether it is a coherent input presentation or a working session with smaller input presentations, you will find one document with the whole presentation or a split presentation. These include a smaller input session from our speaker or preparations for a

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group work or an exercise. These documents are always named with 'presentation' and the specific name of this short session.

The exercises

In different sessions our speakers prepared some exercises and group work. These documents are named with 'exercise' and the specific name of this exercise and they contain two different didactic levels. On the one hand they are prepared for participants and interested people who want to work through the material for themselves. For those there is a small introduction into the exercise and the numbered tasks you have to do. Furthermore, there is also a note how you need to save/ share or send the outcome of this exercise. Depending on the situation you can share your screen or present your outcome or result on Padlet, Sticky notes, etc.

On the other hand, you can find a didactic level prepared for potential trainers, speakers or lecturer who want to host further education/ training, maybe in their own institution or company. For those people and for such use of the material you can find italic additional information in the exercises which are marked with 'Editorial note'. These notes include hints, tips and instructions only for lecturer or teacher. For the most part these are didactic hints or assistance, which software can be used for the presentation of the work results, etc. These notes also contain information on what needs to be prepared in advance of the session/ training. As an

example if you as a trainer want your participants to share their work results on a Whiteboard or with sticky notes, you can find a recommendation about the software we and our speakers used in the online training.

The sample solutions

Safeguarding of work results is extremely important for the success of a further education session/ training. When your participants come from different countries, backgrounds or at least cities/ companies etc. you will receive a huge mass of productive work results and outcome. In addition to the exercises, we provide a specific sample solution. On one side the sample solution we provided on the Moodle platform are the main work results of our participants from the online training. According to privacy policy it's needed to blurry all personal data etc. On the other side, these sample solutions are only intended as additional information. They are not all-encompassing or to be seen as the only solution of the exercise.

Additional material (links, texts, handouts etc.)

According to the respective session of our speakers we provided additional material like links, additional texts or handouts. If additional material be available for the specific session, it will be referred to at the respective place in the video or presentation.

Preparation before the unit:

It is important for a good start to the training, whether it takes place in presence or online, that there is enough time for getting to know each other. So, as you can see in the Moodle structure the first part of the session will be an

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introduction part where the moderator will introduce himself and give a first overview about the schedule for the session. After a short introduction made by the speaker it is also necessary to establish some rules for the session. Especially for an online training with many participants some specific rules of conduct can structure the session and thus contributes to the success. It is necessary to mute/ turn off all the microphones while the speaker is talking. Otherwise, the connection will deteriorate, background noise and any interference will cause anxiety and poor understanding. Depending on the number of participants it is also necessary to turn off the video signal while the speaker is presenting. More video signals mean more data consumption, which may affect the quality of the conference. In small groups or for group work and discussions in several groups it's useful to switch on the video signal.

While using the common platforms (Zoom, Microsoft Teams, etc.) you have two different options for asking questions while an input session. On the one hand you can use the chat. It is very helpful to collect and channel the questions during a longer input session. The questions asked in the chat can then be answered in special Q&A sessions. On the other hand, Zoom and Microsoft Teams provide different actions for participants who want to say or ask something. There is a raise your hand symbol with which you can indicate that you have a question or want to say something. The little hand will then pop up at the speaker's desktop so he knows that someone wants to say something.

The following is a detailed description of the structure plan, which provides an overview of the Unit4: New skills and competences:

Introduction

Today´s online training begins with a short introduction by the moderator who welcomes the group and presents the rules and technical features on the Zoom online seminar.

The moderator introduces the first speaker of the day, the participants and the course topic and goals.

The moderator also provides some brief indications and tips on how to make the course a success. To this end, it is proposed to turn off the participants' microphones, except when they want to contribute and say something. Moreover, is suggested, if possible, switch on participants 'camera, at least during group work.

Participants are welcome to use the chat, but they should be aware that the speaker will not be able to read their comments on the chat while he/she is speaking. So, the participants in the chat can raise their hand symbol with which they can indicate that they have a question or want to say something. The questions asked in the chat can then be answered in special Q&A sessions. In addition, to keep discussions alive participants will be invited to share with the team afterwards.

New soft skills

This session is focused on the soft skills: ability to adapt easily to new challenges/surroundings, adaptability, resilience, emotional and social intelligence; teamwork and coordinating with others, interpersonal skills; problem solving; social and communication skills; intercultural competence; creativity; critical thinking, cognitive flexibility, decision making; people management; service orientation; negotiation.

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The session is structured in different stages: PPT Presentation, group work in breakout rooms, mentimeter (plenum) and activities (template with tasks, prototype development).

The participants have the opportunity to gain in-depth knowledge of the meaning of soft skills, as a core competency on the current Industry 4.0 (interdisciplinary skills for future workers) and they gain some input of these skills. Participants then realise that in innovation processes creativity includes understanding what the client needs, they get to know the importance of service orientation. To this end, participants run a needs analysis and get to know the process of innovation and have to deal with complex problems.

Exercise:

After the PPT presentation, participants are divided in working groups (groups of 2). They work in breakout rooms for 55 min.

The task is to develop a product (like a wallet) related on the input from the ppt presentation.

The speaker gives each group a task, which is divided into several steps (e.g., partner interview, developing an idea of a prototype based on the answers, test of prototype, evaluation of prototype through another partner interview, …)

Then, participants get the task for step 1, discuss in the group, speaker gives the next step, participants discuss in groups and so on.

Finally, participants answer aa survey through mentimeter regarding new ideas, lessons learnt and relevance for career counselling (5 min.)

New hard skills

The second part of this morning learning session deals with "New hard skills". This stands for IT-related hard skills Data Science, robotics, Software programs, 3D printing, IT, AI, social media, technology literacy, data-based decision management, data driven manufacturing and new technological skills and competences, attitudes and experiences, both digital and in terms of innovation, entrepreneurship and creativity.

During this session participants get to learn about ESCO and new hard skills (technological skills) which are relevant to develop in the current/future labour market based on the effects of digitalization in the labour market.

The speaker presents the topic using a PPT presentation, followed by a Q&A at the end (directly asked by participants by raising the hand)

Upskilling/retraining of staff

The first afternoon session is dedicated to "Upskilling/retraining of staff" - digital literacy, retraining and learning different skills and Lifelong Learning, work-based learning; digitalization of industry are addressed here.

The session is structured is different stages: PPT Presentation, group work, plenum discussion and an answer garden.

Participants gain an insight into the challenges arising from developing future-proof skills for Industry 4.0

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They discuss how this technological change is accompanied by talent shortages, mass unemployment, and growing inequality so, reskilling and upskilling today's workers will be critical.

The speaker starts by focuses on the effects of changes on the labour market on changes in needed competencies.

Then follows a discussion on how the training market reacts on these changes and shows good practice examples like so called additional qualifications in metal and electrical professions.

After that, participants are divided in working groups (breakout rooms). The mission is to developed ideas, what consequences arise for counselling situations and discuss them afterwards in the plenum.

Updates on education

The final session addresses the topic: "Updates on education" – The session is focused on the need to Change school curricula – skills needed in the future workforce.

The session is structured is different stages: PPT Presentation, group work, plenum discussion and an answer garden.

Participants discuss about the updates on education in the view of the 4th revolution. The need for reform in basic education is simply not possible to weather the current technological revolution by waiting for the next generation´s workforce to become better prepared. Instead, it is critical that businesses take an active role in supporting their current workforces through re-training, that individuals take a proactive approach to their own lifelong learning and that governments create the enabling environment, rapidly and creatively, to assist these efforts.

The speaker starts be presenting the project: guiding schools which focuses on changes vocational and study orientation discusses needed changes in this orientation process. Then participants discuss in groups how counselling and career guidance need to change regarding to the corona pandemic speaker presents a newly developed app for vocational and study orientation (wie kann Beratung unter Corona bedingungen stattfinden).

Then, the speaker presents a historical view of curricular questions and discusses a future view with the participants in the plenum.

This is followd by the breakout-rooms for Group work activity.

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The seminar concludes with thanks from the moderator to each and every one of the participants, lectures and experts by focusing on the highlights of the day.

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