



Intellectual Output 2 Future of Jobs

Counsellors Study and Training Exchange Programme (C-Step)

Unit 3: Upcoming trends

Authors

Academia + Project Working Team

Editing:

Ana Fernandes

Tiago Marques

Sociedade Portuguesa de Inovação (SPI)

March, 2021





Table of contents

<u>1. Content of the Unit 1: "Industry 4.0 and the impact on labour"</u>	3
<u>2. Learning outcomes</u>	3
<u>3. Structure plan</u>	3
<u>4. Detailed description of the structure plan</u>	1



Unit 3: Upcoming trends

Sociedade Portuguesa de Inovação, SPI (Portugal)

1. Content of the Unit 3: "Upcoming trends"

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 3 aims to meet the following learning outcomes:

- Identify new jobs and competencies which characterize the new world of work.
- Analyse new business models and new approaches for emerging markets and identify new job and skill demands
- To know new technologies and ways of counselling in view of the new trends in the labour market and potential impact on employment demographics

3. Structure plan


Unit 3 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 new jobs and skills and new technologies and industries they will influence. In the afternoon, participants have the chance to do a virtual study visit within a German company and focus on the influence of Digitalization on Career Guidance.

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

Time	 Bundesministerium für Bildung und Forschung	Method, media and material	Outcome 	Comments  Co-funded by the Erasmus+ Programme of the European Union
10.00	Introduction of the facilitator and the participants and the course topic & goals	PPT Presentation		
10.15	New jobs and skills <ul style="list-style-type: none"> ● Automatization of some working processes ● Changing the business model in order to offer better life quality to employees ● Developments in supply and demand (with industry 4.0 companies are customer focused) ● Efficiency gains by companies as well as overall cost reductions ● New professions 	PPT Presentation, individual exercise, plenum discussion group work flinga	Participants learn and discuss new jobs and competencies which characterize the new world of work. In particular, topics such are the following are discussing, among others: <ul style="list-style-type: none"> ● New business models and new approaches for emerging markets ● New professions and working condition ● New job and skill demands ● The most emerging and declining occupations and skills 	show videotaped input presentation Frey and Osbourne (Automatization, potential of substitutability of jobs and workforce) (20 min) individual exercise: Regarding the input, what is the status quo and/or potential of substitutability for my country? Why do I assess it like this? (10 min) plenum discussion (moderation by Christoph): What are the results of the individual exercise? (15 min) group work, breakout rooms (Jane): 3 cluster/groups (1) huge impact on career guidance, 2) maybe there is some impact, maybe not, 3) business as usual for career guidance): people who answered the same in the individual exercise will form a group

	<p>related to new business models and new technologies, the huge development of "digital" professions</p> <p>Internet-based Business models</p>		 	<p>“What impact might our assessment have on career guidance in our countries? How can we profit from each other?”</p> <p>Co-funded by the Erasmus+ Programme of the European Union (20 min)</p> <p>participants are asked to write their 3 essential results of the group work into a sticky note on flinga</p> <p><i>flinga link on chat</i></p> <p>Plenum (10 min). discuss results written on flinga</p> <p>https://flinga.fi/s/FG3A9P8</p>
11.30	Short break			
11.45	<p>New technologies and industries they will influence</p> <ul style="list-style-type: none"> • The use of AI in the recruitment sector • AI - the missing skill sets, what the UK are doing to 	ppt presentation	<p>Participants gain knowledge about new technologies which will have an influence on the way of working in this 4th industrial revolution.</p> <ul style="list-style-type: none"> - The use of AI in the recruitment sector - AI - the missing skill sets, what the UK are doing to address this. 	<p>speaker gives input with ppt presentation</p> <p>menti: https://www.menti.com/pvbiyn91pw</p> <p>Code: 7646 9242</p> <p>Questions for menti:</p> <p>Who will be able to perform Space Exploration more effectively?</p>

	 <p>GEFÖRDERT VOM address this. Bundesministerium für Bildung und Forschung</p>		  <p>Co-funded by the Erasmus+ Programme of the European Union</p>	<p>Humans or Robots</p> <p>Who will be able to perform Medical Operations more effectively?</p> <p>Humans, Robots or a collaboration of the two</p> <p>Q&A towards the end - open questions</p>
13:00	Lunch break			
14:00	<p>virtual study visit</p> <p>“Hirschtec - Agency for digital workplace”</p>	<p>virtual tour</p> <p>Plenum discussion - interview for open questions</p>	<p>Participants have the chance to do a virtual study visit within a German company in order to know in detail different features which are relevant for acquiring in-depth knowledge about the described topics</p>	<p>45 minute video with a virtual tour through the company, their workspace, their tasks and so on, including short interviews with the profession “information”</p> <p>answering open questions (Emma says: participants raise hand, when they want to say something and ask directly and picks people to speak)</p> <p>mentimeter questions:</p> <p>3 or 4 questions:</p> <p>about the profession</p> <p>focus on how this will impact potential employees</p> <p>(safe survey results and send to academiaplus.info@gmail.com)</p>
15:30	Short break			
15:40	<p>The Influence of Digitalization on Career Guidance</p>	<p>PPT Presentation</p>	<p>Participants analyse the influence of the virtual technologies in their daily job as career counsellors. They get positive feedback on how digitalization influences on Career Guidance and also discuss new</p>	<p>lecturer gives input via ppt presentation about the influence of digitalization on career guidance. (30 min)</p>

	<p>GEFÖRDERT VOM</p>  <p>Bundesministerium für Bildung und Forschung</p>	<p>Open questions plenum discussion</p>	<p>ways of counselling in view of the new trends in the labour market – potential impact on employment demographics</p>  	<p>After the input he answers open questions from the participants (ask directly). (15 min)</p> <p>Co-funded by the Erasmus+ Programme of the European Union</p> <p>Tell in advance that participants should collect their questions, then at end of the session they should raise their hands and Emma will pick the order for them to ask their questions</p> <p>Plenum discussion:</p> <p>“In which countries are the influences already visible? Which changes in career guidance are already noticeable?</p> <p>How can we profit from existing experiences in different countries regarding the influence of digitalization on career guidance?”</p> <p>(moderation by Jane)</p> <p>protocol notes of plenum discussion (Emma)</p> <p>no videotaping of the input part</p>
16:50	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.

GEFÖRDERT VOM



Bundesministerium
für Bildung
und Forschung


Academia +



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



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§ion=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 three you will find the first documents numbered 0. These are the complete presentations of our speakers from unit 3.

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



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



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 contribute 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 Unit 3: Upcoming trends.

Introduction

Today's online training begins with a short introduction by the moderator who welcome the whole group. The speaker also introduces the facilitator and the participants and the course topic and goals.

The moderator 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 jobs and skills

The first session of the training day is focused on the "New jobs and skills". Here are addressed themes such as automatization of some working processes, changing the business model in order to offer better life quality to employees, the developments in supply and demand (with industry 4.0 companies are customer focused), efficiency gains by companies as well as overall cost reductions, new professions related to new business models and new technologies, the huge development of "digital" professions and Internet-based Business models.

The session is divided in different stages: PPT Presentation, individual exercise, plenum discussion, group work, flinga.



Participants learn and discuss new jobs and competencies which characterize the new world of work. In particular, topics such as the following are discussed, among others: i) New business models and new approaches for emerging markets, ii) New professions and working conditions, iii) New job and skill demands, iv) The most emerging and declining occupations and skills.

Participants watched a 20 min. videotaped presentation by Frey and Osborne about automation, potential of substitutability of jobs and workforce. Then, the participants performed a 10 min. individual exercise: Regarding the input, what is the status quo and/or potential of substitutability for my country? Why do I assess it like this?

After that, follows a plenum discussion on „What are the results of the individual exercise?“

Next, is time for the group work in breakout rooms:

3 clusters/groups (1) huge impact on career guidance, 2) maybe there is some impact, maybe not, 3) business as usual for career guidance): people who answered the same in the individual exercise will form a group:

- “What impact might our assessment have on career guidance in our countries? How can we profit from each other?”

Participants are asked to write their 3 essential results of the group work into a sticky note on flinga.

To close the session, a 10 min. Plenum to discuss the findings and results written on flinga.

New technologies and industries they will influence

The last morning session is devoted to „New technologies and industries they will influence“. The speaker gives a ppt presentation on the use of AI in the recruitment sector and AI, the missing skill sets, what the UK are doing to address this. As a result, participants gain knowledge about new technologies which will have an influence on the way of working in this 4th industrial revolution: i) The use of AI in the recruitment sector, ii) AI - the missing skill sets, what the UK are doing to address this.

Two questions were then posed as a basis for discussion:

- Who will be able to perform Space Exploration more effectively? Humans or Robots
- Who will be able to perform Medical Operations more effectively? Humans, Robots or a collaboration of the two

The morning ends with a Q&A session - open questions.

virtual study visit “Hirschtec - Agency for digital workplace”

The second part of the learning session starts with a virtual study visit “Hirschtec - Agency for digital workplace“.

Participants have the chance to do a virtual study visit within a German company in order to know in detail different features which are relevant for acquiring in-depth knowledge about the described topics.



A 45 minute video with a virtual tour through the company, their workspace, their tasks and so on, including short interviews with the profession “ information”

The follows a answering open questions – participants should raise hand, when they want to say something and ask directly.

Mentimeter questions: 3 or 4 questions about the profession and focus on how this will impact potential employees

The Influence of Digitalization on Career Guidance

The last session of the day is about „The Influence of Digitalization on Career Guidance“. The session is structured in 3 different stages: PPT Presentation, Open questions, plenum discussion.

The aim of this session is to enable participants to analyse the influence of the virtual technologies in their daily job as career counsellors. They get positive feedback on how digitalization influences on Career Guidance and also discuss new ways of counselling in view of the new trends in the labour market and potential impact on employment demographics.

The lecturer gives a 30 min. ppt presentation about the influence of digitalization on career guidance. After the input the lecturer answers open questions from the participants for 15 min.

The participants should collect their questions, then at end of the session they should raise hands and the facilitator will pick the order for them to ask the questions to the lecturer.

Then follows the plenum discussion:

The discussion will be focused on these questions:

- “In which countries are the influences already visible? Which changes in career guidance are already noticeable?”
- „How can we profit from existing experiences in different countries regarding the influence of digitalization on career guidance?“

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.