DISCO (Distance blended and online counselling) – Conference

27.03.2025

Co-funded by the European Union

This project has been funded with support from the European commission. This publication reflects the views only of the author, and the commission cannot be held responsible for any use which may be made of the information contained therein.
Project number: 2022-1-SE01-KA220-VET-000089994

DIGITIZATION AND AI - NEW OPPORTUNITIES AND PATHS FOR ADULT EDUCATION?

Petra Ziegler, WIAB
DISCO FINAL CONFERENCE
27.3.2025

WIAB
Wiener Institut für Arbeitsmarkt- und Bildungsforschung

AMS
Arbeitsmarktservice Österreich

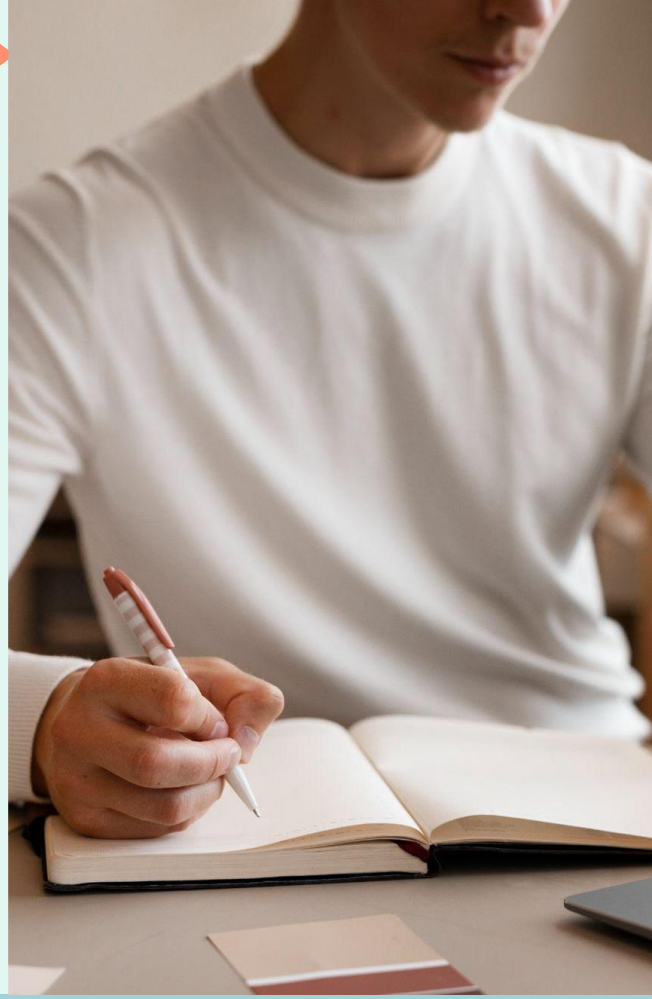
OVERVIEW

- 01 AIMS OF THE STUDY
- 02 CHANGES IN RECENT YEARS
- 03 DIGITAL TOOLS & AI
- 04 CRITICAL ASPECTS OF DIGITISATION
- 05 INSIGHTS & PERSPECTIVES
- 06 CONCLUSION

WIAB
Wiener Institut für Arbeitsmarkt- und Bildungsforschung

01

AIMS OF THE STUDY



STARTING POINT

Lifelong learning is becoming increasingly important due to the constantly changing developments and requirements in people's working and living environments.

There have always been changes, but digitisation means that the pace of change and adaptation to changing conditions is accelerating.

ADULT EDUCATION PROVIDERS:

- New content
- New market requirements due to new knowledge and skills in demand on the labour market and simultaneously shorter half-life of knowledge
- Technology companies that, in addition to providing educational programmes to learners, are also looking for cooperation in the education market

AIMS & METHODOLOGY

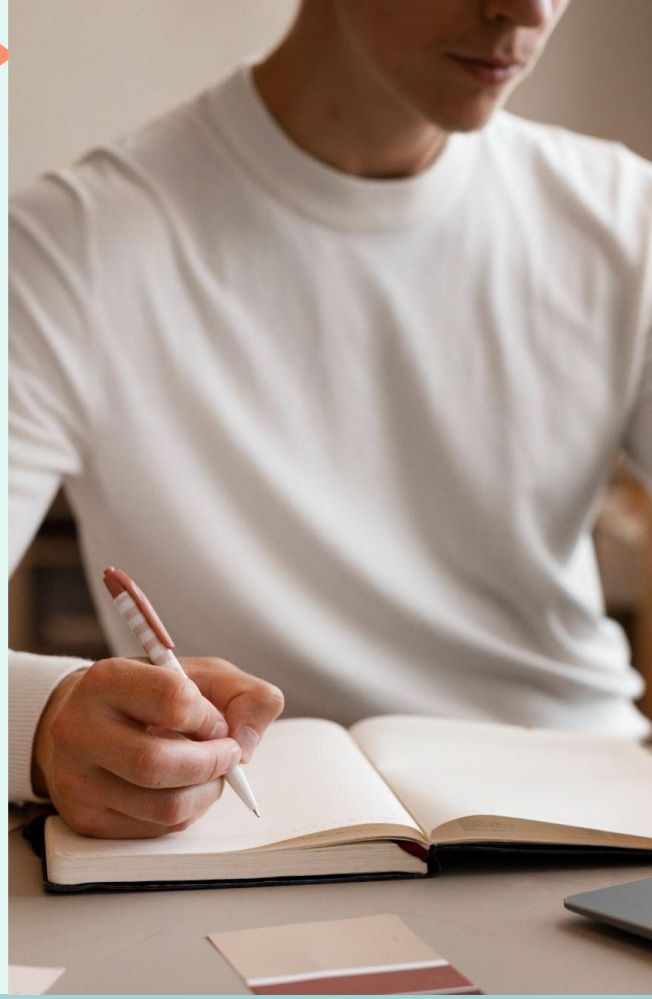
To present an overview of the effects of digitisation on adult education in Austria, based on both literature review and expert opinions.

A desktop research and literature analysis as well as 8 qualitative expert interviews were conducted for this purpose.

WIAB
Wiener Institut für Arbeitsmarkt- und Bildungsforschung

02

CHANGES IN RECENT YEARS



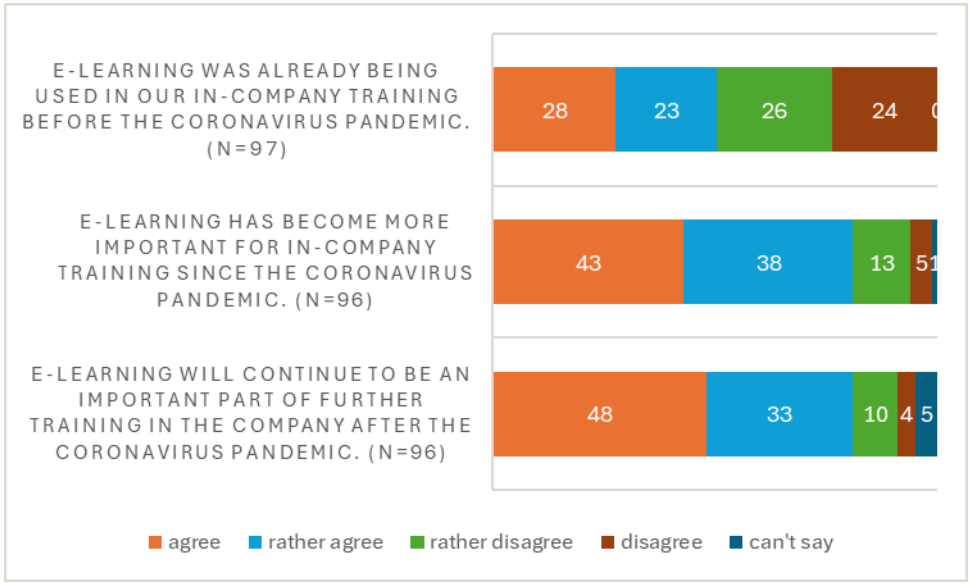
DIGITISATION BOOST

Digitisation was already present as a theoretical and practical topic before the emergence of COVID-19, but the actual use of e-learning was relatively low. The restrictions imposed to curb the spread of COVID-19 hit the education sector particularly hard.

The courses, which had previously mainly been held as face-to-face events, had to be converted from face-to-face to distance formats and adapted to the remaining possibilities.

The measures against COVID-19 have led to increased use of digital tools in all areas of education and in all age groups of the population, regardless of income situation or level of education.

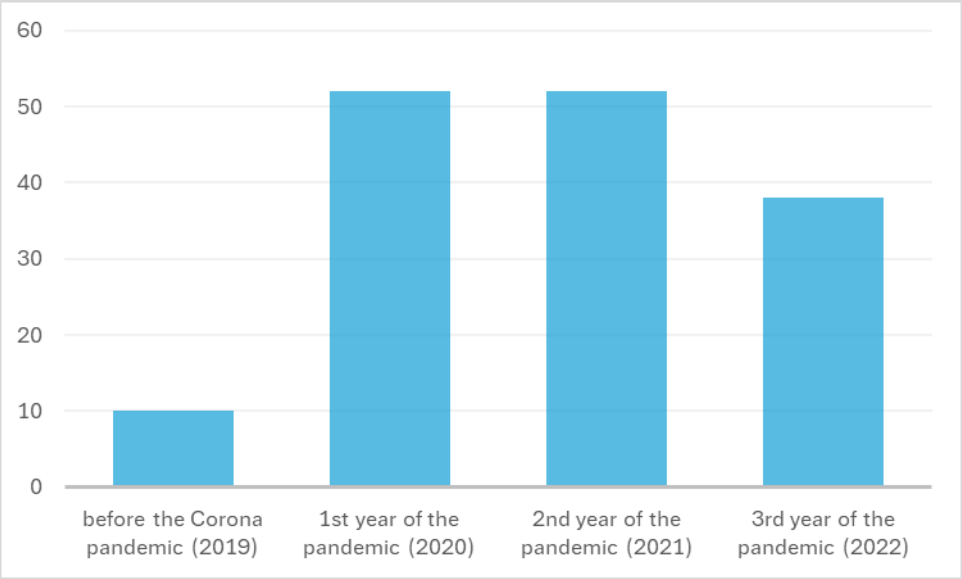
In your opinion, what role did the coronavirus pandemic play for e-learning in the company? (in %)



Quelle: Mayerl et al. 2022, 80. Survey of Lower Austrian works councils

WIAB
Wiener Institut für Arbeitsmarkt- und Bildungsforschung

How large is the proportion of your overall programme that includes e-learning elements (e-learning or blended learning)? - average proportion (in %)



Quelle: Mayerl et al. 2022, 110. Lower Austrian further education provider survey 2022

Very diversified situation:

- The majority of events, if they took place at all, were conducted as e-learning formats
- perception that employees have *'different preferences regarding the choice between e-learning measures and face-to-face training'*
- digital learning formats are not given high priority, they are hardly used or not used at all; e-learning is only used as an '*emergency tool*' (Mayerl et al. 2022, 91ff.).

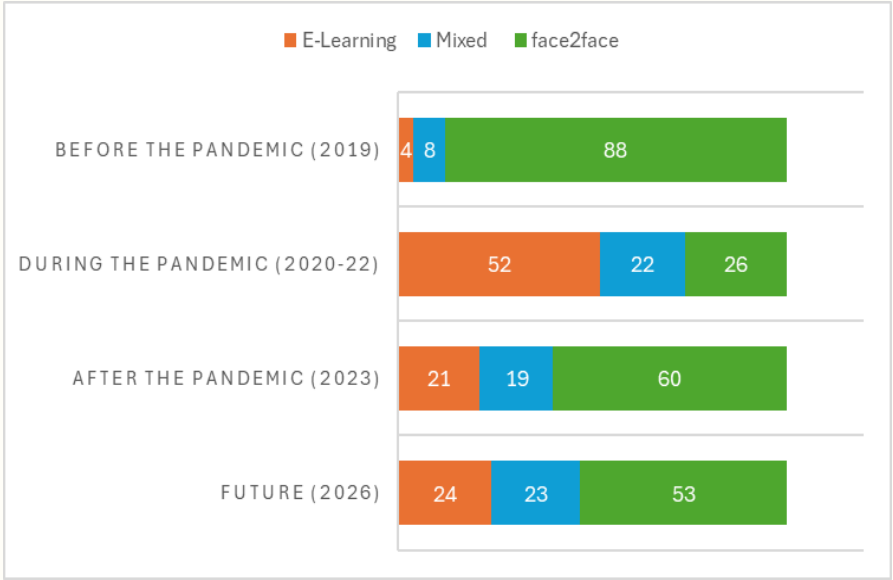
WIAB
Wiener Institut für Arbeitsmarkt- und Bildungsforschung

POST-PANDEMIC SITUATION

The last few years have led to a lasting change in adult education, with digital teaching and learning becoming firmly established. According to WIFI, digital education formats are generally accepted by more than half of professionals and more than 60 per cent of companies; blended learning has become '*indispensable*'.

Nevertheless, pure e-learning programmes are less in demand, while face-to-face interaction with trainers and other participants is once again valued.

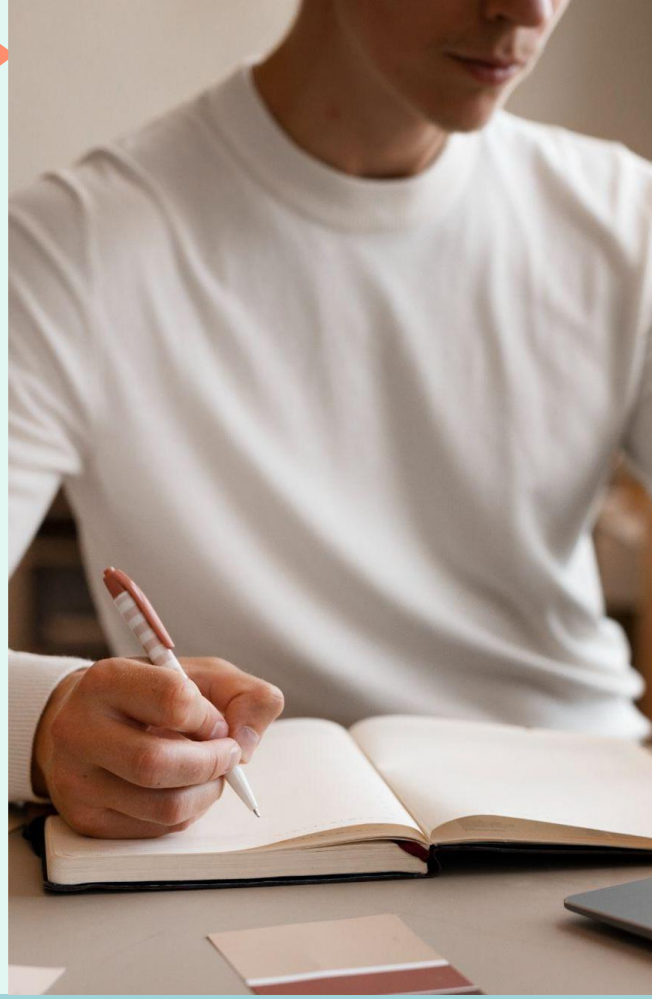
Share of event formats over time (in %)



Quelle: öibf 2024, Survey of Viennese training providers 2023

03

DIGITAL TOOLS AND AI



OVERVIEW

There is a wide range of software solutions for the education sector that focus on various aspects of educational work: from planning, organising and advertising educational programmes to implementation and evaluation.

The table on the right shows selected educational tasks and suitable digital tools and implementations.

Tasks	Digital Implementation
Planning and developing educational programmes	Didactic planning software
Promote educational offers	Websites, information portals, online advertising and adverts
Informing and advising interested people	Online events, chat, consultation hours
Organising registration and application processes, admitting participants	Event management, campus management
Diagnosing and recognising skills	Interest and ability test (online assessment)
Recruit and train teaching staff	Talent management software
Develop learning materials	Authoring tools, audio and video editing
Provide learning environment	Learning platform
Organising events	Virtual classroom, video conferencing
Support communication and cooperation	Social networks
Support learning through coaching and mentoring	Online coaching, online mentoring
Recording and documenting skills	Online assessment, e-portfolio
Organising exams, conducting exams	Event management, PC exams, video conferencing
Evaluate and further develop educational programmes	Online surveys
Ensuring transfer into practice	Community platform

Quelle: Kerres 2018, 42f.

DIGITAL MEDIA APPLICATIONS

Educational work has long utilised a wide variety of media, such as blackboards, diagrams, printed texts, etc., to illustrate and didactically prepare content.

Digital media are often seen as a new class of teaching materials, but in many cases, they are transfers of existing media and aids into an electronic form.

IT applications can either:

substitute (replace): Imitate functions of the analogue model.

augment (intensify, enrich): Perform functions of the analogue model in a more efficient way.

modify: Change or supplement functions of the analogue model and thus create new application possibilities.

redefine: The IT solution opens up new possibilities, e.g. for communication and collaborative content creation, which would not have been possible with analogue media.

WIAB
Wiener Institut für Arbeitsmarkt- und Bildungsforschung

IT-APPLICATIONS UND AI

The progress made in recent years in the development of software systems with artificial intelligence (AI) is having different effects on educational work and has the potential to further change teaching and learning in the coming years.

In any case, a progressive **augmentation** is to be expected - i.e. '*a slight expansion of didactic possibilities through limited intelligent systems' (Dreisiebner*, Lipp 2022, 17-3).

Whether there will also be increased **substitution** - for example, a '*replacement of the teacher's role by artificial intelligence*' (ibid.) - is difficult to predict at present, but is unlikely, at least for the near future, due to the systems not yet being sufficiently developed for such purposes.

The accuracy of the information generated by AI systems is of critical importance, but at the current stage of development it is not possible to blindly trust that the answers generated by an AI are also correct - critical media literacy is therefore required to a greater extent than before in order to be able to deal with the new possibilities appropriately.

USE OF AI

Examples of areas in which AI systems can currently be used by **trainers** include

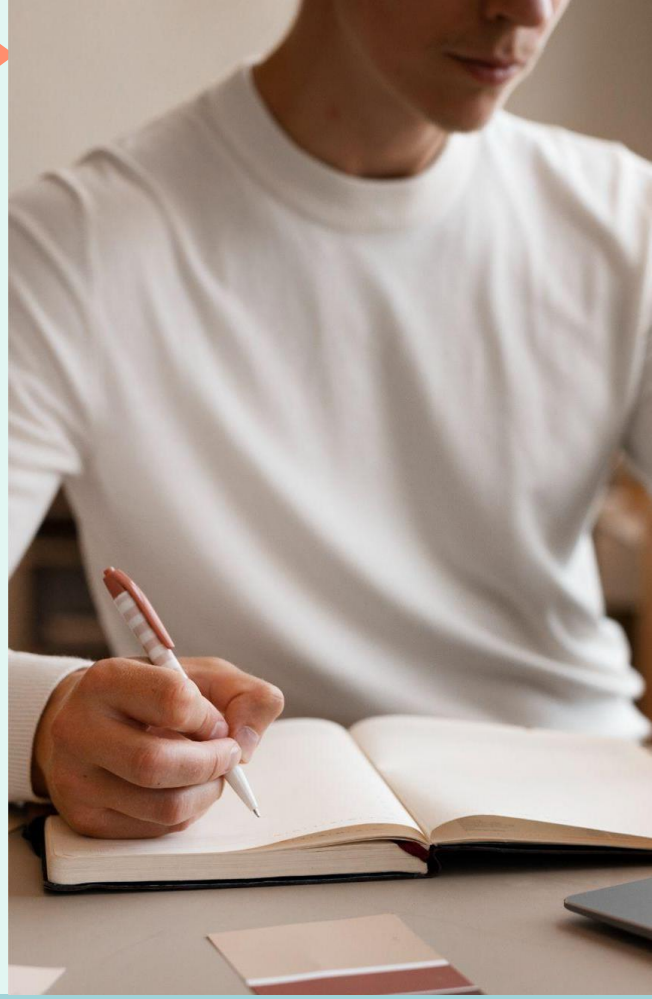
- brainstorming;
- (partially automated) creation of learning materials, interactive teaching elements (e.g. quizzes, estimation questions, topics for small group work) and tests;
- (partially automated) assessment of tests and examinations;
- tasks in the field of learning analytics, for example for the continuous monitoring of learning acceptance and progress.

Learners can also use AI systems: on the one hand, for example, for researching ideas and for autonomous explorative learning with the help of chatbots, which prepare the information available online in a synthesised and easy-to-read form compared to conventional search engines.

On the other hand, learners can also use AI systems for the automated preparation of assignments and papers and thus simulate performance that they have not achieved themselves.

04

CRITICAL POINTS TO DIGITISATION



CHALLENGE: DIGITAL DIVIDE

The majority of adults in Austria have sufficient IT skills and have access to the internet and appropriate end devices. Certain groups have more difficulty participating in digital life and learning or have low media skills.

Correlates with:

- Level of education
- Occupational status
- Professional tasks

Nevertheless: *'More is possible digitally than expected.'*

View of target groups has changed (much variance in terms of competence level).

Use digital learning platform to gain access to further education.

Identify the digital divide and offer individualised support: low-threshold offers according to the available end devices.

Quelle: fit4internet

WIAB
Wiener Institut für Arbeitsmarkt- und Bildungsforschung

CHALLENGE: TRANSPARENCY & DATA PROTECTION

GDPR: Storage and processing of personal data

All work steps undertaken within a software package or a computer system and all files created can potentially be documented and thus analysed at any time with the help of **learning analytics** functions.

On the one hand, anonymised data on the behaviour of course participants and the educational successes achieved can be used to improve educational programmes.

On the other hand, non-anonymised evaluations can conflict with individual personal rights and turn everyone involved into '*transparent people*'.

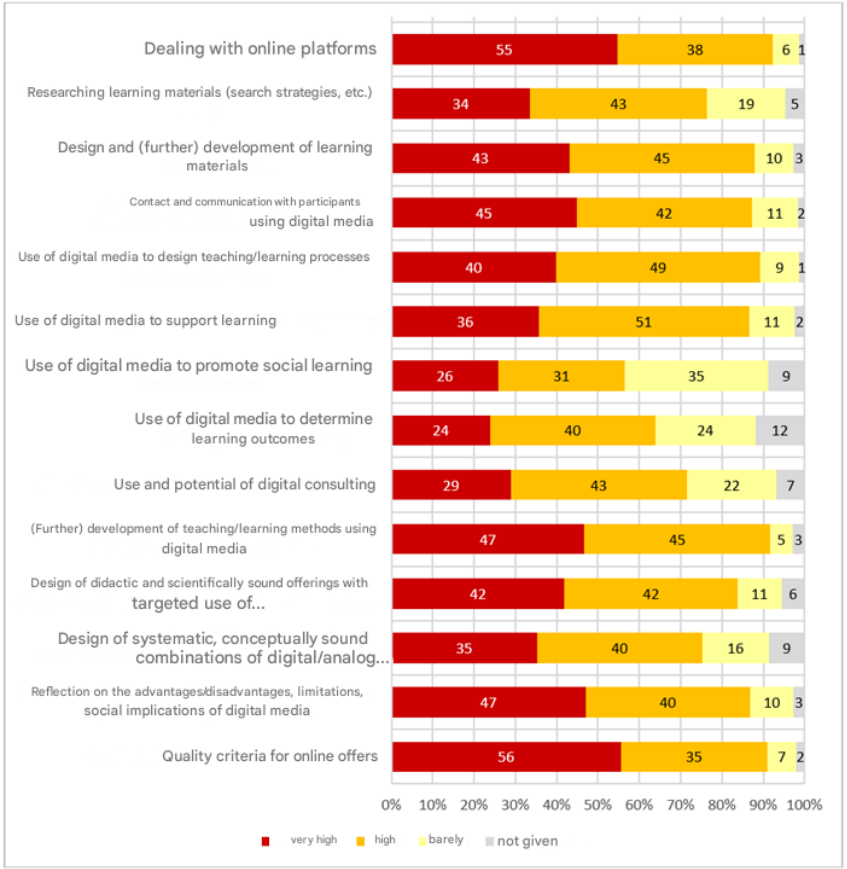
Possible scenario: Linking data from the training software with the company's own HR software may result in disadvantages for employees who do not meet the metrics characterised as positive in the software.

CHALLENGES FOR TRAINERS

Acquire digital skills in order to be able to organise online courses themselves and, in some cases, support participants (EBMooc).

Adapt the use of different media forms to content and target groups. The necessary space should also be given to '*reflecting on the advantages and disadvantages, limitations and social implications of using digital media* (Gugitscher, Schlögl 2022, 10-8)'.

Need for further didactic development & training, in %

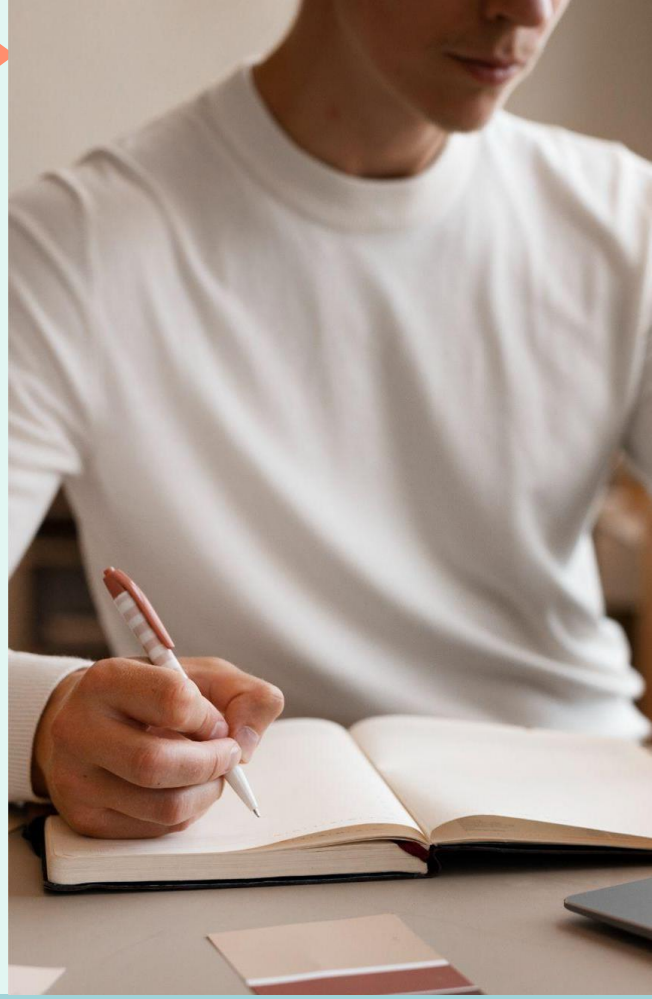


Quelle: Gugitscher et al. 2020, 41

WIAB
Wiener Institut für Arbeitsmarkt- und Bildungsforschung

05

INSIGHTS & PERSPECTIVES



EXPERT INTERVIEWS

All experts stated that the coronavirus pandemic and the associated restrictions have triggered a **surge in digitisation** in the facilities.

And there was a **wide range of different reactions** to this new situation:

- very quickly switched to online services and made corresponding investments in infrastructure
- reacted rather hesitantly, set up a kind of '*digital emergency operation*' and were very happy to return to face-to-face
- started developing e-learning courses and investing in digital learning technologies many years ago - these organisations have also experienced a digitisation boost as a result of coronavirus that *'no other measure has achieved before'*.

„Turbobooster"
„Competence-Booster"
„Wake-up-call for digital work and learning"

EXPERT INTERVIEWS

Current and future trends:

- Augmented and Virtual Reality (AR / VR)
- Artificial Intelligence (AI)
- Learning-Nuggets & Micro-Learning (Smartphone)
- Profiling & Learning Analytics

Challenges:

- Overcoming the digital divide (‘*More is possible digitally than assumed*’)
- Changing customer behaviour (‘*Netflix expectation*’)
- Personalised access and learning support
- New skills for trainers and learners

„Wait-and-see attitude“

„Topic of the Year“

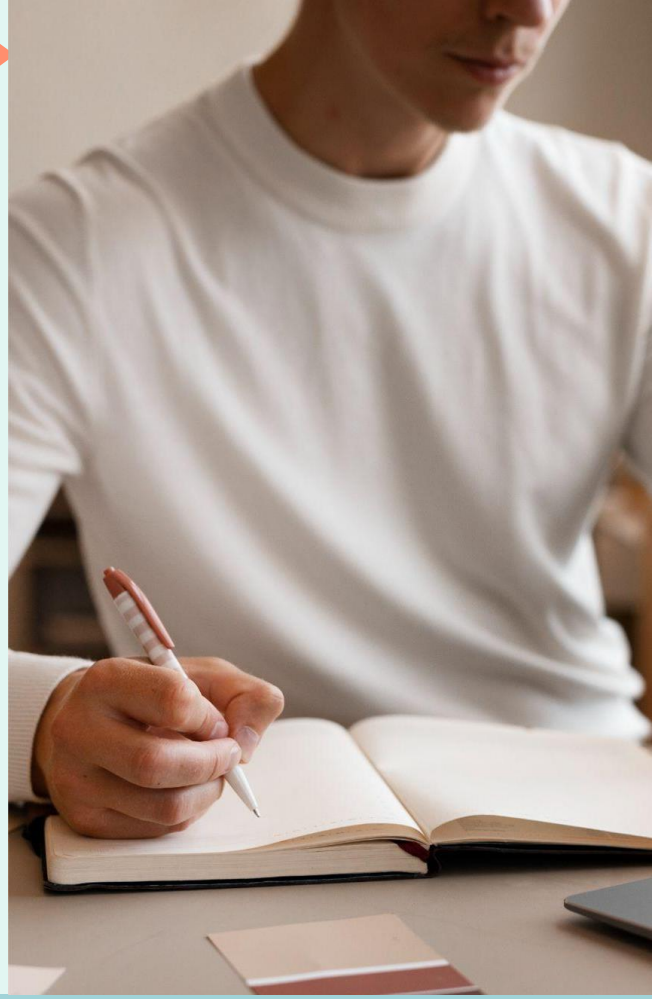
„iPhone moment“

WIAB
Wiener Institut für Arbeitsmarkt- und Bildungsforschung

unboxing AI for AE

06

CONCLUSIO



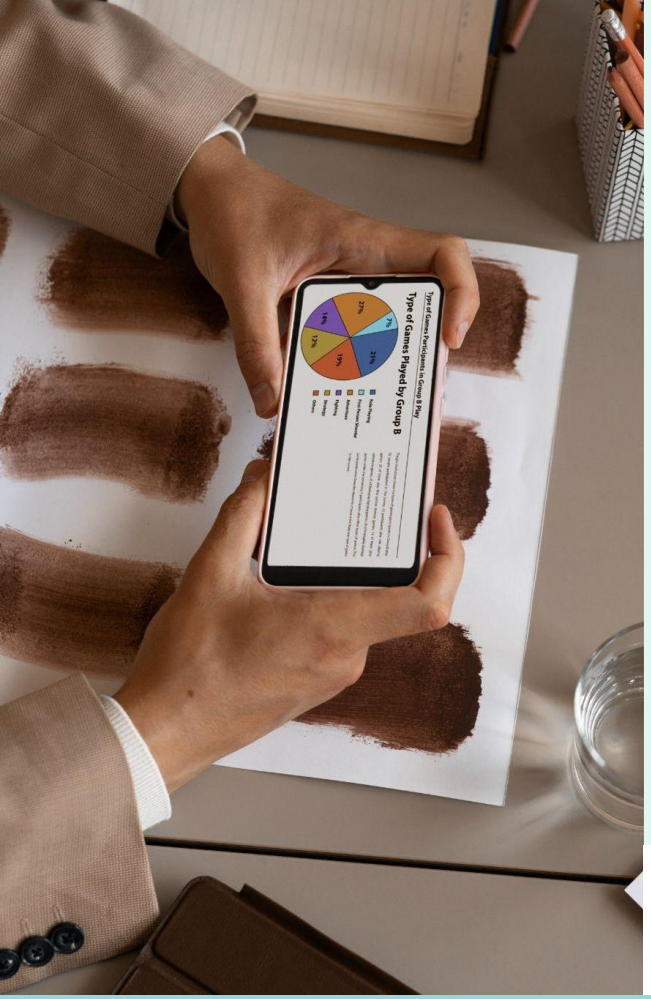
EFFECTS OF DIGITISATION

- Addressing new target groups
- Being able to offer national adult education programmes; competition with other adult education institutions
- Development of new and innovative programmes
- Investment in technical infrastructure
- Standardisation and centralisation in adult education institutions
- Digital skills among trainers

WIAB
Wiener Institut für Arbeitsmarkt- und Bildungsforschung

OUTLOOK

- AI (Learning bots, profiling)
- AR and VR (avatars etc.)
- Learning on Demand & Micro-Learning
- Digital divide: '*no one who cannot or does not want to be in the digital world should be discriminated against*'
- Great need for further education among the population



THANK YOU FOR YOUR ATTENTION

Mag. Dr. Petra Ziegler
ziegler@wiab.at

WIAB
Wiener Institut für Arbeitsmarkt- und Bildungsforschung

AMS
Arbeitsmarktservice Österreich

DISCO
Digital IAG

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

DISCO - Distance, Blended and Online Counseling

Skills for Career Counselors

AGREEMENT NUMBER – 2022-1-SE01-KA220-VET-000089994

Maryna Kaminska, EU project manager

TRIMTAB

This project was funded with the support of the European Commission. The responsibility for the content of this publication lies solely with the author; the Commission shall not be liable for any use which may be made of the information contained therein.

DISCO
Digital IAG

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

This project was funded with the support of the European Commission. The responsibility for the content of this publication lies solely with the author; the Commission shall not be liable for any use which may be made of the information contained therein.

DISCO
Digital IAG

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

6 million jobs lost in 2020 (Eurostat, 2021)

over 60% of career counselors in Europe experienced increased demand (Cedefop (2021)

40% lacked sufficient digital skills to provide effective online support (ETF, 2021)

over 70% of career guidance services moving online (ICCDPP, 2021), the digital divide left many job seekers underserved

This project was funded with the support of the European Commission. The responsibility for the content of this publication lies solely with the author; the Commission shall not be liable for any use which may be made of the information contained therein.

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

DISCO
Digital IAG

The DISCO project aims at improving the digital competences of guidance and career counselling professionals facing radical challenges and changes in their practice.

Specifically, the project supports careers guidance and counseling service providers to plan and implement the necessary **digital transformation** in **Information, Advice and Guidance (IAG)** as part of the cultural change in VET where the digital transformation of the labor market can be fully adopted in the daily work of career guidance officers.

This project was funded with the support of the European Commission. The responsibility for the content of this publication lies solely with the author; the Commission shall not be liable for any use which may be made of the information contained therein.

DISCO
Digital IAG

the DISCO partners found, many of Europe's IAG and career counselors found themselves completely ill-equipped to cope and that trying to do what they used to do in-person or occasionally through other media could not simply be done in the same way ***online***

This project was funded with the support of the European Commission. The responsibility for the content of this publication lies solely with the author; the Commission shall not be liable for any use which may be made of the information contained therein.

DISCO
Digital IAG

PARTNERSHIP

TRIMTAB

Folkuniversitetet
Kursverksamheten vid Uppsala universitet

RINOVA
innovar, crear & regenerar

symplexis

RESET

ДРУЖЕСТВО
Знание
®
СОФИЯ

analyse beratung und forschung
interdisziplinäre

This project was funded with the support of the European Commission. The responsibility for the content of this publication lies solely with the author; the Commission shall not be liable for any use which may be made of the information contained therein.

DISCO
Digital IAG

PARTNERSHIP

This project was funded with the support of the European Commission. The responsibility for the content of this publication lies solely with the author; the Commission shall not be liable for any use which may be made of the information contained therein.

DISCO
Digital IAG

PROJECT RESULTS

Transnational Study

The results of a transnational study representing the basis for the development, planning, implementation and evaluation of blended guidance and career counseling for the target group of the project

This project was funded with the support of the European Commission. The responsibility for the content of this publication lies solely with the author; the Commission shall not be liable for any use which may be made of the information contained therein.

DISCO
Digital IAG

PROJECT RESULTS

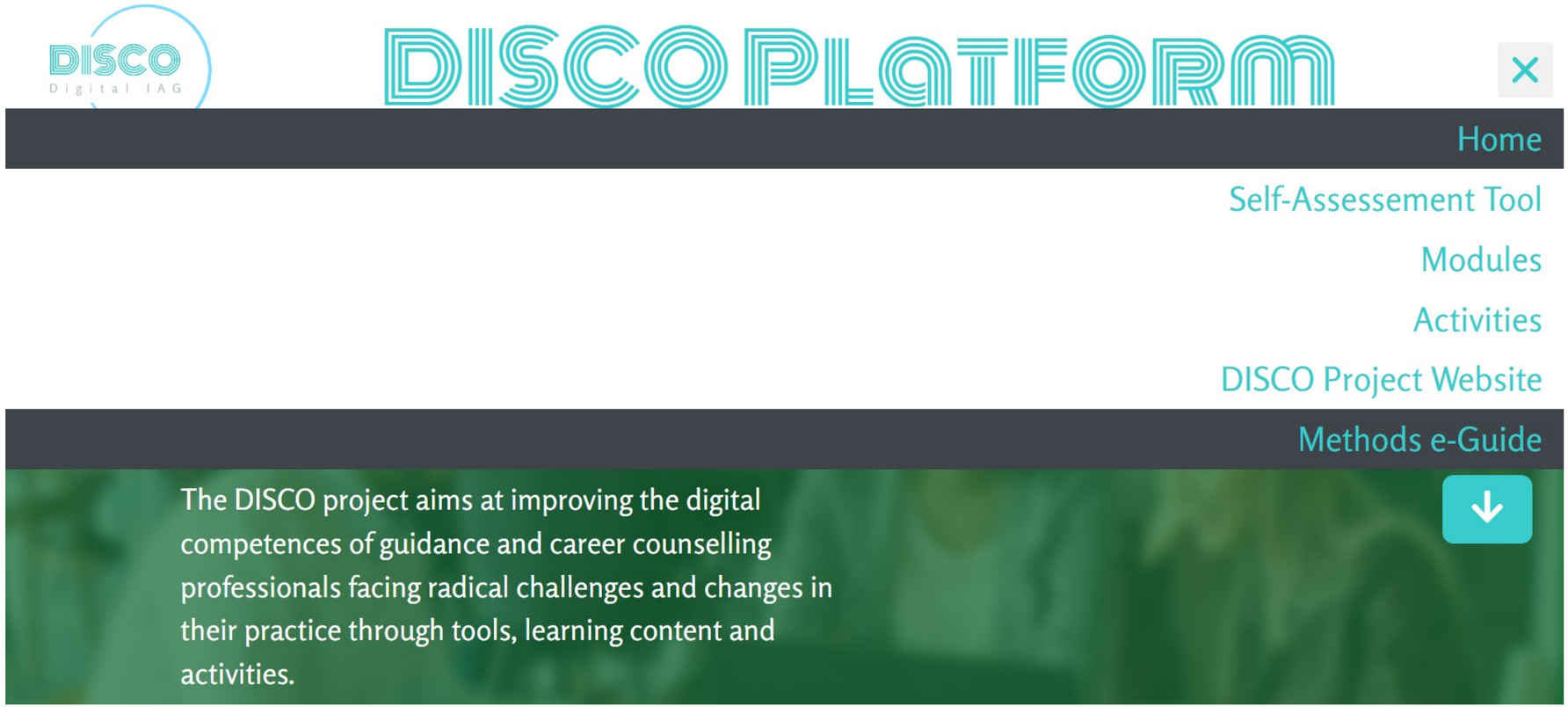
Transnational Study

Competency matrix

the DISCO platform

This project was funded with the support of the European Commission. The responsibility for the content of this publication lies solely with the author; the Commission shall not be liable for any use which may be made of the information contained therein.

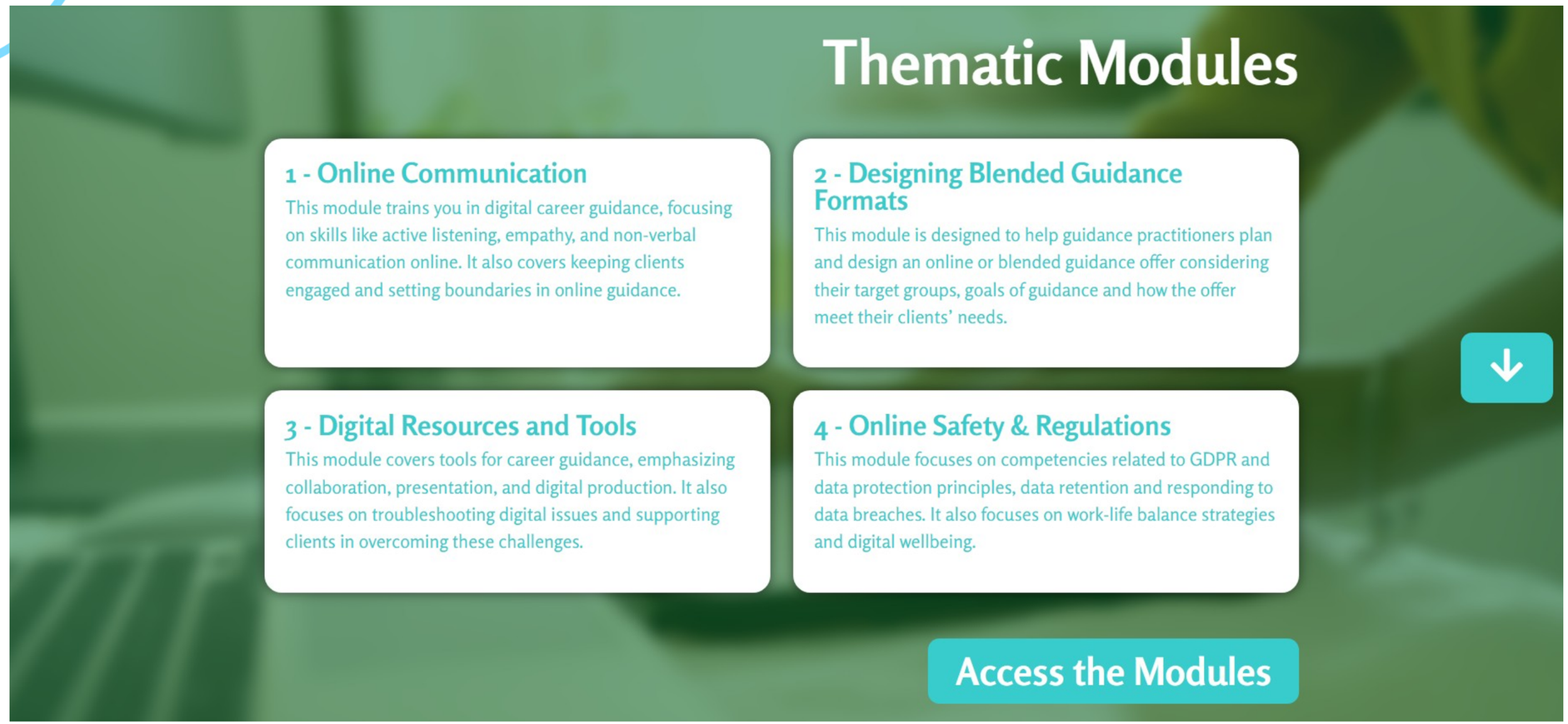
PROJECT RESULTS



This project was funded with the support of the European Commission. The responsibility for the content of this publication lies solely with the author; the Commission shall not be liable for any use which may be made of the information contained therein.

DISCO
Digital IAG

PROJECT RESULTS



This project was funded with the support of the European Commission. The responsibility for the content of this publication lies solely with the author; the Commission shall not be liable for any use which may be made of the information contained therein.

PROJECT RESULTS

This project was funded with the support of the European Commission. The responsibility for the content of this publication lies solely with the author; the Commission shall not be liable for any use which may be made of the information contained therein.

DISCO
Digital IAG

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

At DISCO we aim at long-term integration of digital competencies into national training systems and everyday guidance practice !

THANK YOU for your attention ☺

This project was funded with the support of the European Commission. The responsibility for the content of this publication lies solely with the author; the Commission shall not be liable for any use which may be made of the information contained therein.

DISCO research presentation on distance, online and blended counselling

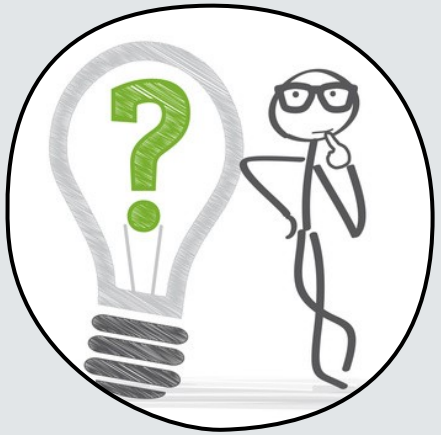
Karin Steiner &
Alexandra Gössl

DISCO
Digital IAG

Co-funded by
the European Union

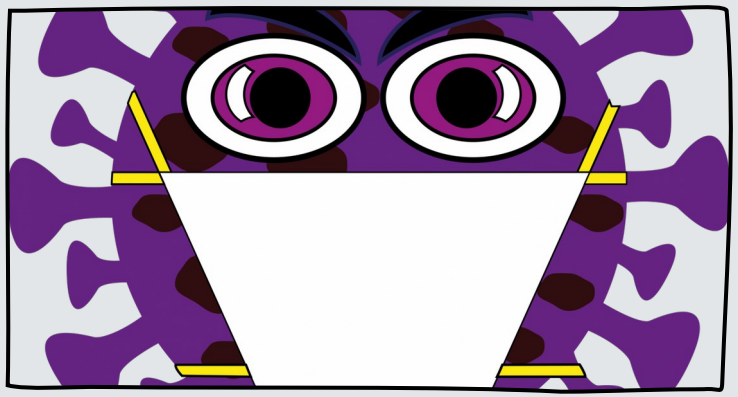
This project has been funded with support from the European Commission.
This publication reflects the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein.

partner countries…..



- Austria (ABIF)
- Bulgaria (Znanie)
- Cyprus (SYMPLEXIS)
- Greece (RESET)
- Spain (RINOVA Malaga)
- **Sweden (TrimTab,** Folkuniversitet)

Project history Covid 19 digitalisation



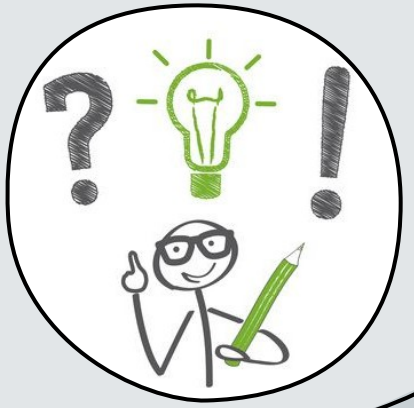
Who led the digital transformation of your company?

A) CEO

B) CTO

C) COVID-19

Why this project?



Corona
Digitalisation
Online guidance

Main questions for this study

How has the work of the counsellors **changed** in the individual countries?

What kind of **skills** are **required** in order to offer online, distance or blended guidance?

What are the **similarities and differences** in the **partner countries** regarding distance counselling?

How have practitioners experienced the last few years?

DISCO
Digital IAG

Information for the study derived from....

- Desk research
- Interviews and focus groups with career counsellors

in all partner countries

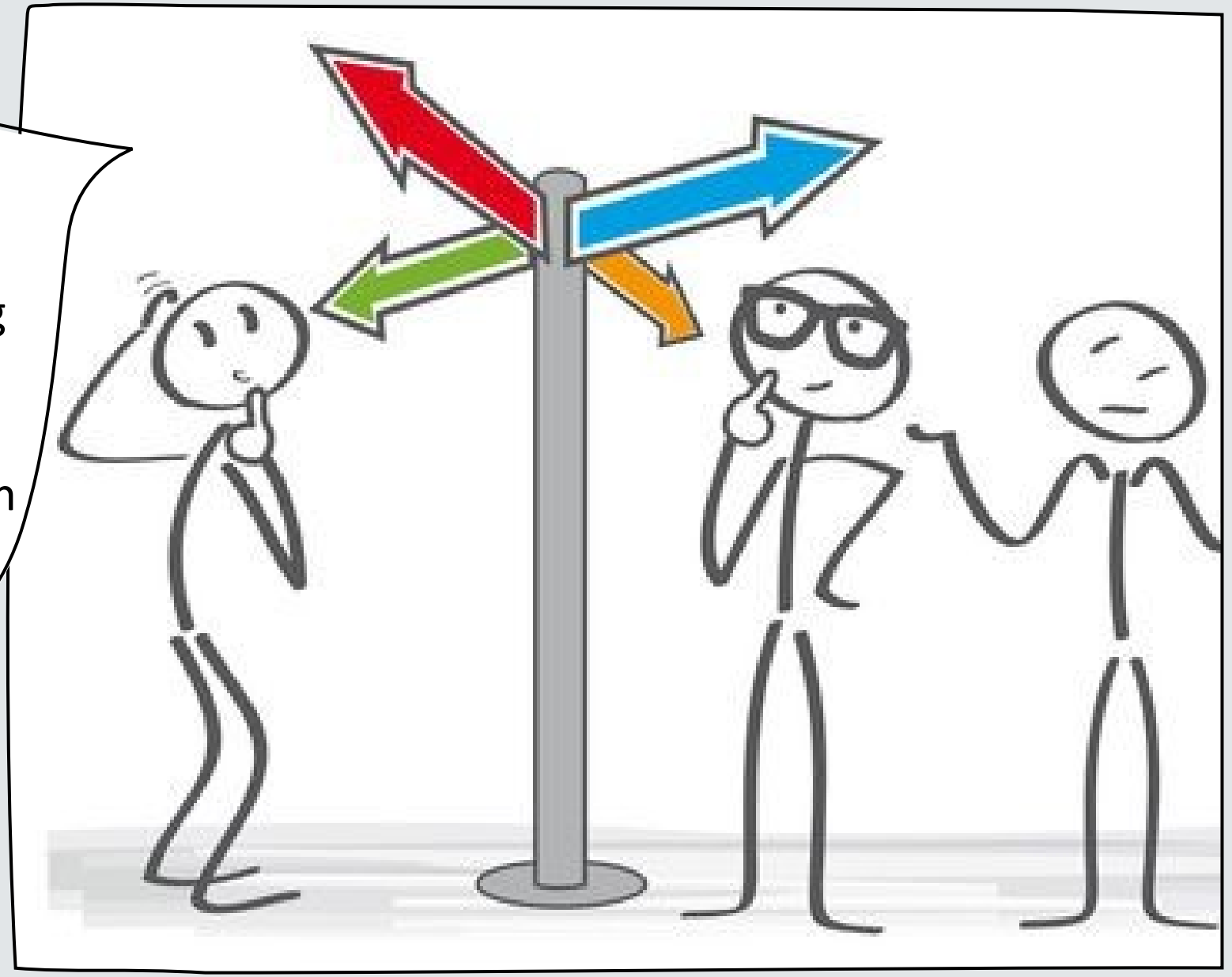
Word cloud from the research report

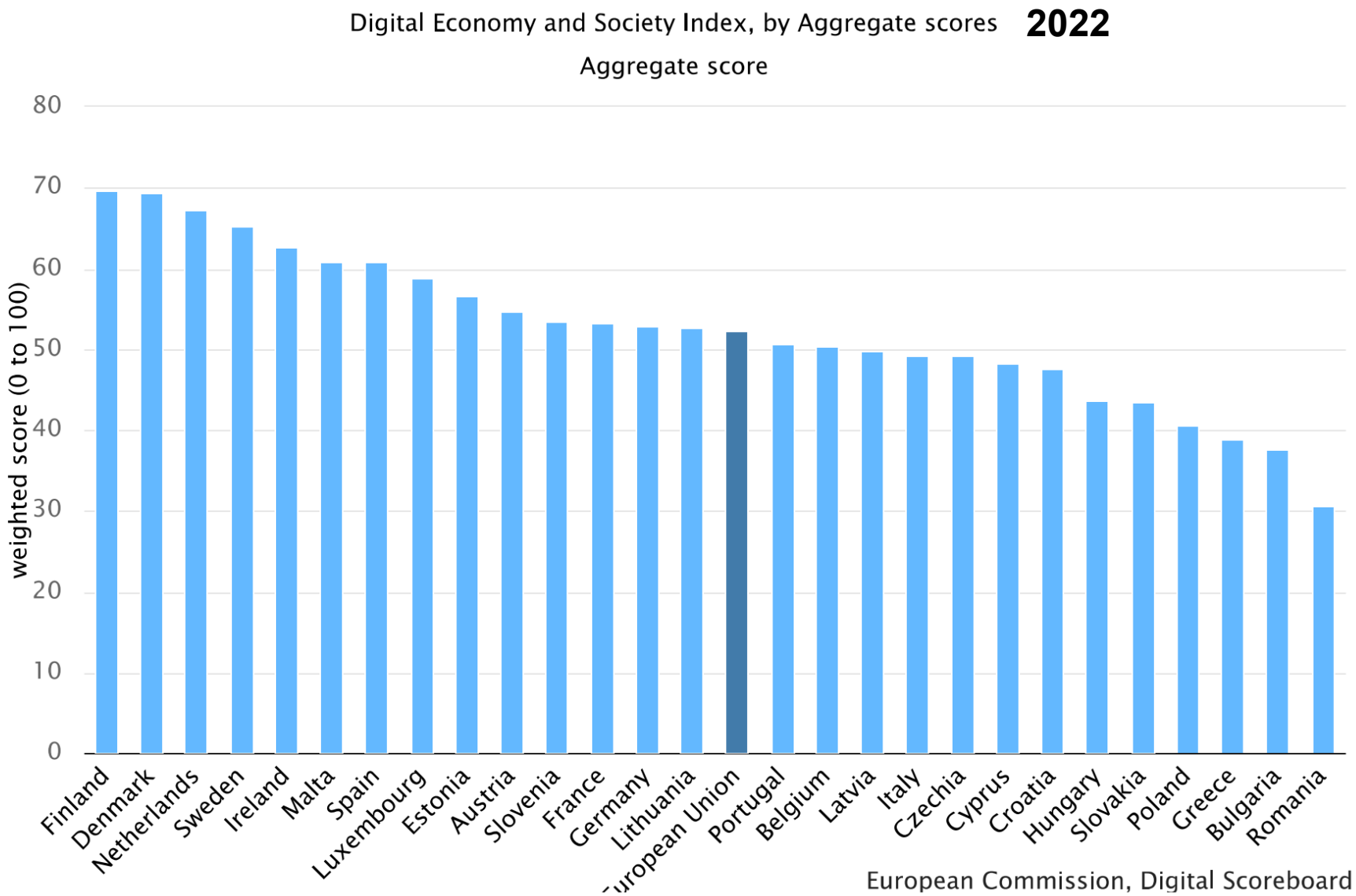
FaCtors and challenges identified in the transnationa l study

Practitoner s Skills

ICT challenges

- Lack of basic digital skills
- Mostly no digital training
- No access to/ lack of – technical equipment
- Problems with connection

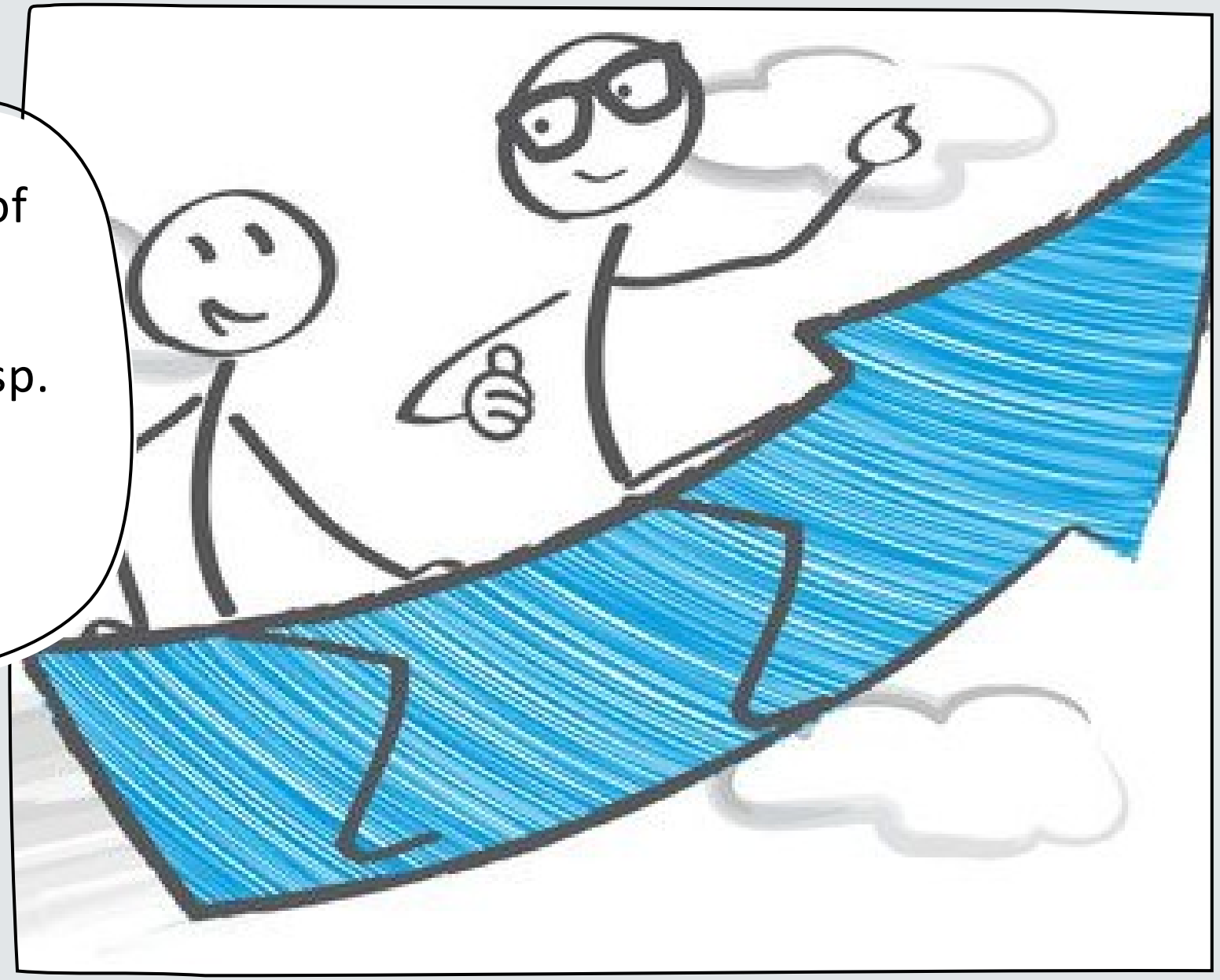




A composite index that summarizes relevant indicators on Europe's digital performance:

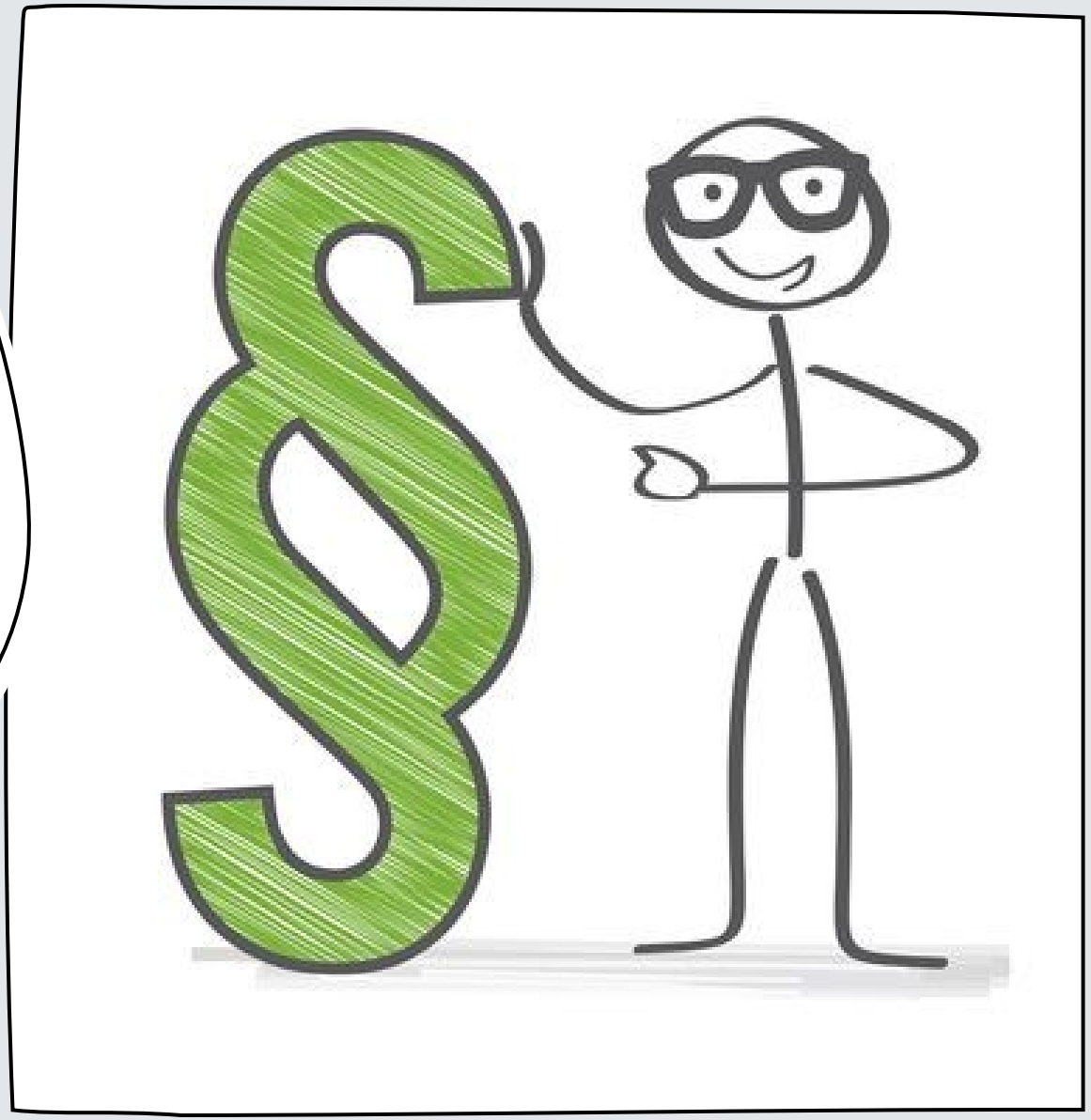
- **Connectivity**
- **Human capital**
- **Use of Internet**
- **Integration of Technology**
- **Digital Public Services**

- Independent learning of digital skills (books, tutorials)
- "Learning by doing" (esp. with tools)
- Independent participation in online courses (i.e. MOOCs)



Autodidactic learning

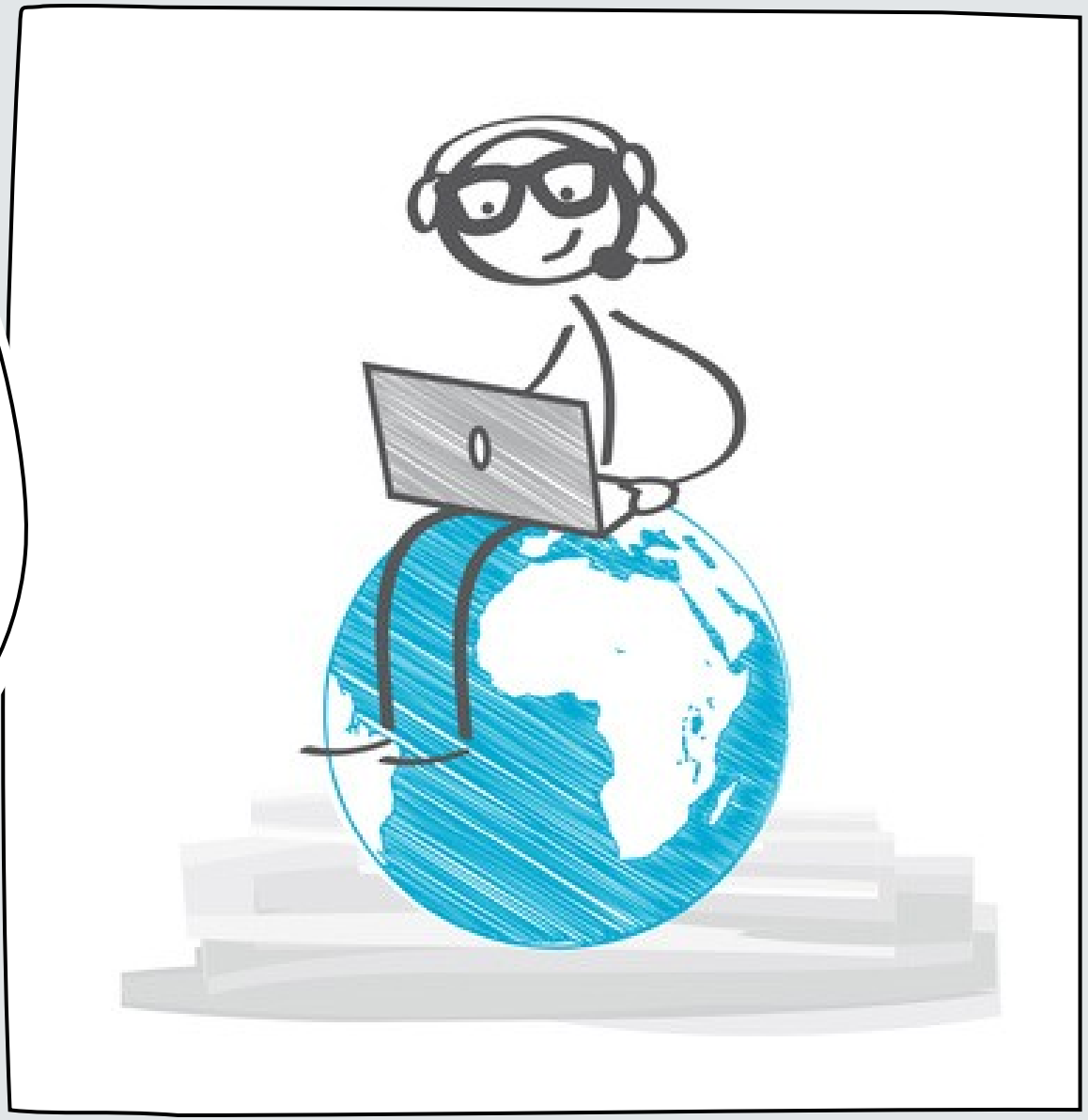
- Lack of knowledge about GDPR
- Often no prior information on personal data



GDPR

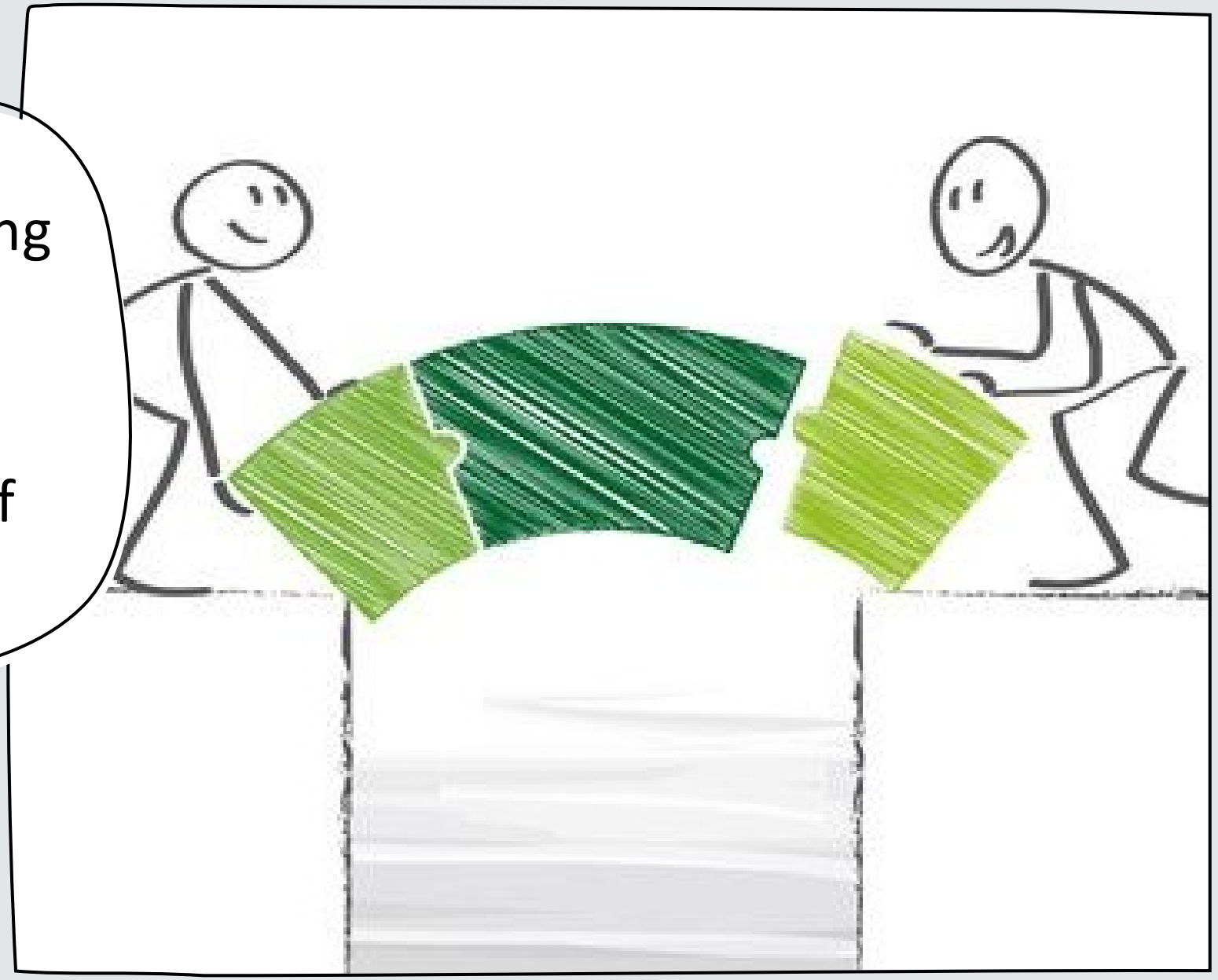
Working with clients

- Communication harder online
- Para- and non-verbal communication significantly limited
- Counsellors have to listen more actively and adapt their way of speaking (i.e. slower)



Communication

- Relationship building considerably more difficult online
- Lower trust basis with clients than f2f



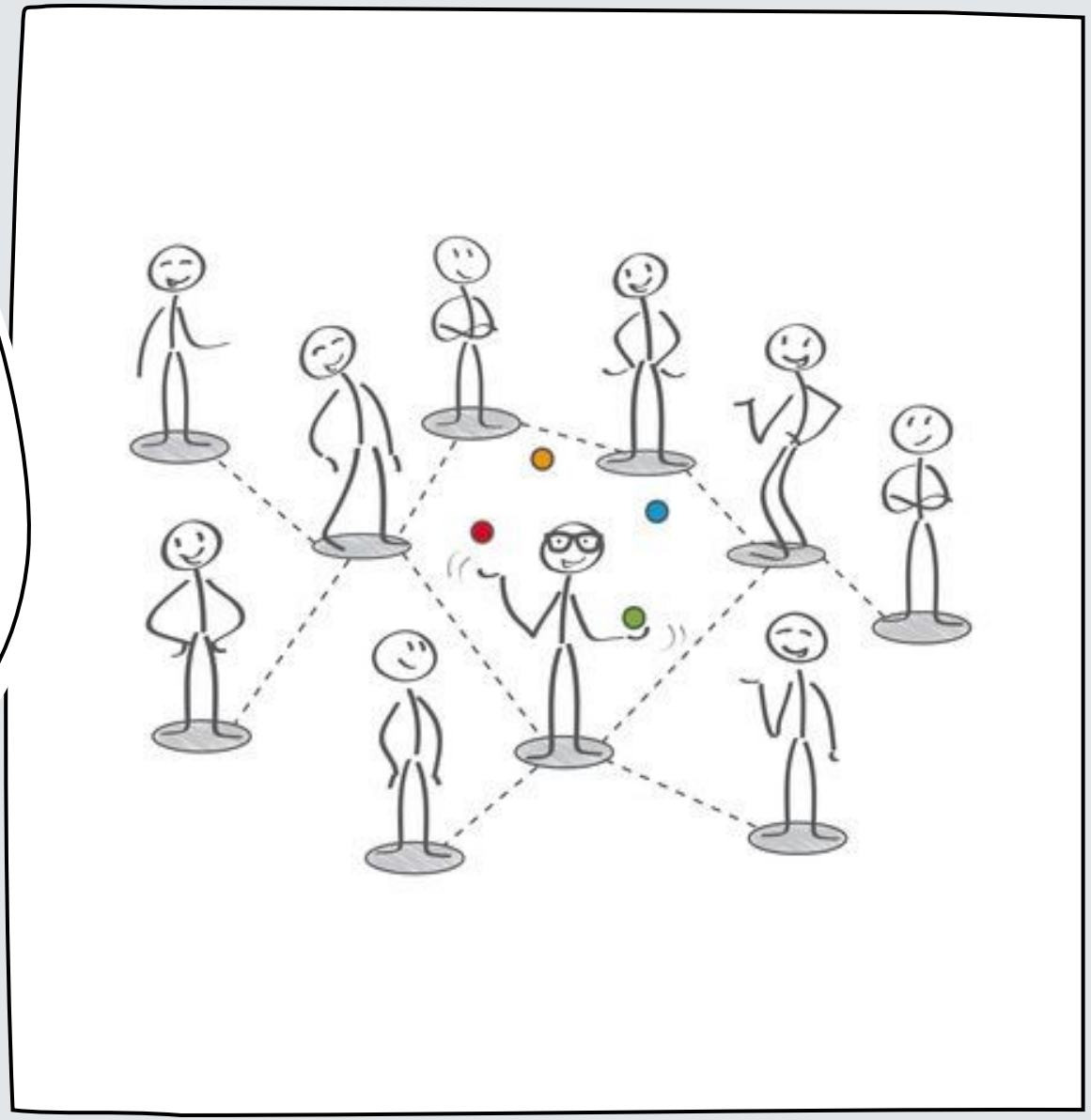
Relationship building

1. Digital setting different than f2f
2. Environments of clients have to be taken into account
3. Online environment is socially more limited

Setting / online environment

Systems and networks

- Networking easier and more often online
- Conferences and national events easier to access
- High quality intervention and peer counselling online
- Social networks often reached out



Collegial networking online & social networks

KEY Conclusions

Still high unemployment rates → guidance still necessary

Digitalisation of the counselling field and more digital counselling online/ from a distance

Levels of digitilisation vary from country to country - conditions for digital work differ from country to country.

Provision of C-VET varies just as much in the individual countries and is organised very differently by the state, as well as privately and legally.

Training for career counsellors differs in each partner country + also has different requirements;

variations of counsellors with no required training in every of the partner countries.

Link to the study:

[DISCO Synthesis report.pdf - Google Drive]

Learning Matrix
DISCO platform and e-guide

The European Commission's support for the production of this communication does not constitute an endorsement of its contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein. Project reference: 2022 1 SE01 KA220 VET 000089994

Co-funded by
the European Union

LEARNING MODULES

Summary Online Communication

Designing Blended Guidance Formats

Digital Resources and Tools

Safety and Regulations in Blended Guidance

ONLINE COMMUNICATION

Career guidance via digital platforms requires different communication skills than in-person IAG.

This module **provides training in areas** such as:

- **Active listening**
- **Empathy**
- **Non-verbal communication in a digital context**
- **Different forms of online communication** (e-mail, chat, video conferencing),
- How to **keep clients' engagement** at high standards
- Boundary-setting in the context of online or blended guidance.

DESINGNING BLENDED GUIDANCE FORMATS

- Made for **guidance counselors** who want **to improve how they plan and deliver online or blended guidance** services.
- Making sure your **guidance services meet the needs** of different people and fit with the goals of guidance.
- Focuses on **understanding who you’re helping**, what your **goals** are, and how to meet people’s needs.
- It’s hands-on, **giving** counselors **the tools and strategies** they need to create and run guidance services that really make a difference and are easy for people to use.
- Whether if counselors are moving their services online or improving what they already have, this module will teach them the skills they need to handle the challenges of modern career guidance

DIGITAL RESOURCES AND TOOLS

- We’ve crafted this module to support their counselling journey by diving headfirst into the digital realm.
- Discover the secrets of online and blended counselling with a toolbox of digital resources to enhance your daily practice. From diagnostic exercises to SWOT analysis, break through barriers with Mentimeter, Padlet, Google Forms and Canva. Explore collaboration and presentation tools like MS Teams, Zoom and WebEx to raise the level of your consulting practice through active learning exercises.

SAFETY AND REGULATIONS IN BLENDED GUIDANCE

- This module focuses on competencies related to GDPR and data protection principles, data retention and responding to data breaches.
- It also covers copyright and creative commons matters when accessing online resources.

LEARNING MATRIX

- In the matrix you will find the Learning Objectives of the thematic modules, and the competences needed or developed based on Knowledge, Skills and Attitudes.

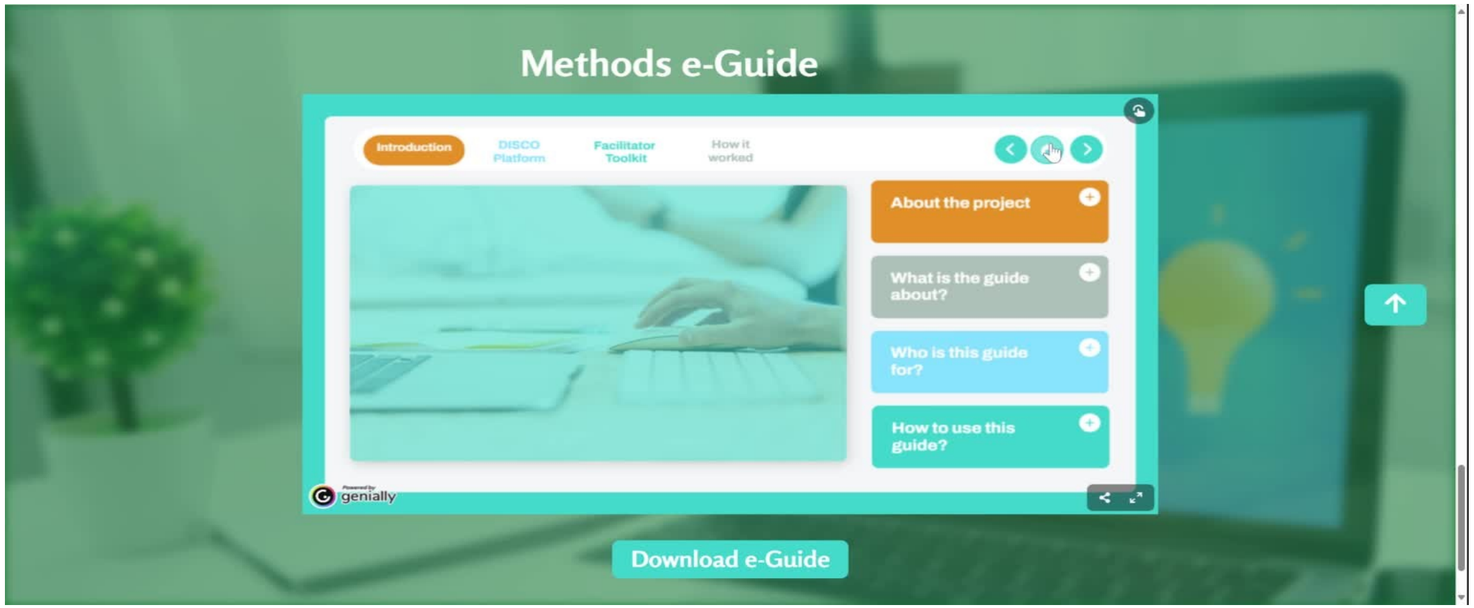
See it here

The DISCO project aims at improving the digital competences of guidance and career counselling professionals facing radical challenges and changes in their practice through tools, learning content and activities.

Scroll down to find out more!

Self Assessement Tool

Explore a variety of engaging activities from all



interactive e-GUIDE

The European Commission's support for the production of this communication does not constitute an endorsement of its contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein. Project reference: 2022 1 SE01 KA220 VET 000089994

DISCOPLATFORM

Learning modules
Initial self-assessment
Reinforcement activities
Interactive e-guide

The European Commission's support for the production of this communication does not constitute an endorsement of its contents, which reflect the views only of the authors, and the Commission cannot be held responsible for any use which may be made of the information contained therein. Project reference: 2022 1 SE01 KA220 VET 000089994

Co-funded by the European Union