ARIEES

Alliance for Responsible and Impactful Investment in Eastern Europe

2021-1-PL01-KA220-HED-000023017

Co-funded by the European Union

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WELCOME TO ARIEES WEBINAR

ARIEES

The project main objectives

Main objectives of the ARIEES project

Help universities (and potentially adult training centers) to improve their entrepreneurship courses by infusing impact investment know-how and upgrading the digital competencies of lecturers/trainers to ensure that the impact investment knowledge can be properly infused into the learners.

The project specific objectives

Specific objectives of the project ARIEES project

- Establish an alumni network at an international dimension & therefore international cooperation can maximize this effort;
- Establish a network of four ARIEES certification centers across Eastern Europe (this can be strengthened via this transnational cooperation);
- Maximize the dissemination and impact capacity of the entire consortium at a wider scale;
- Create and/or extend contacts and cooperation with organizations coming from similar and/or different fields across the EU.

ARIEES - Alliance for Responsible and Impactful Investment in Eastern Europe

The project Partner Organizations

List of Partner Organizations in the ARIEES project

- University of Lodz (Poland) – Leader
- European Business Angel Network (Belgium)
- Helixconnect Europe S.R.L (Romania)
- Universitatea De Vest Din Timisoara (Romania)
- ISQe (Portugal)
- Foundation for Promotion of Entrepreneurship (Poland)

For more details about the ARIEES project go to: **https://ariees.eu/**

WELCOME TO WEBINAR 2

Engagement and motivation of entrepreneurship learners via neuroscience approaches

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WEBINAR STRUCTURE

1. Adaptation of the DigCompEdu competences for the topic of this webinar
2. Barriers and blockers of online education - learning from experience
3. Neuroscience approaches for effective online education
4. Ethics in online education

Adaptation of the DigCompEdu competences for the topic of this webinar

1

Introduction

Introduction

Overview

Being digitally competent is a task for the 21st-century citizen.

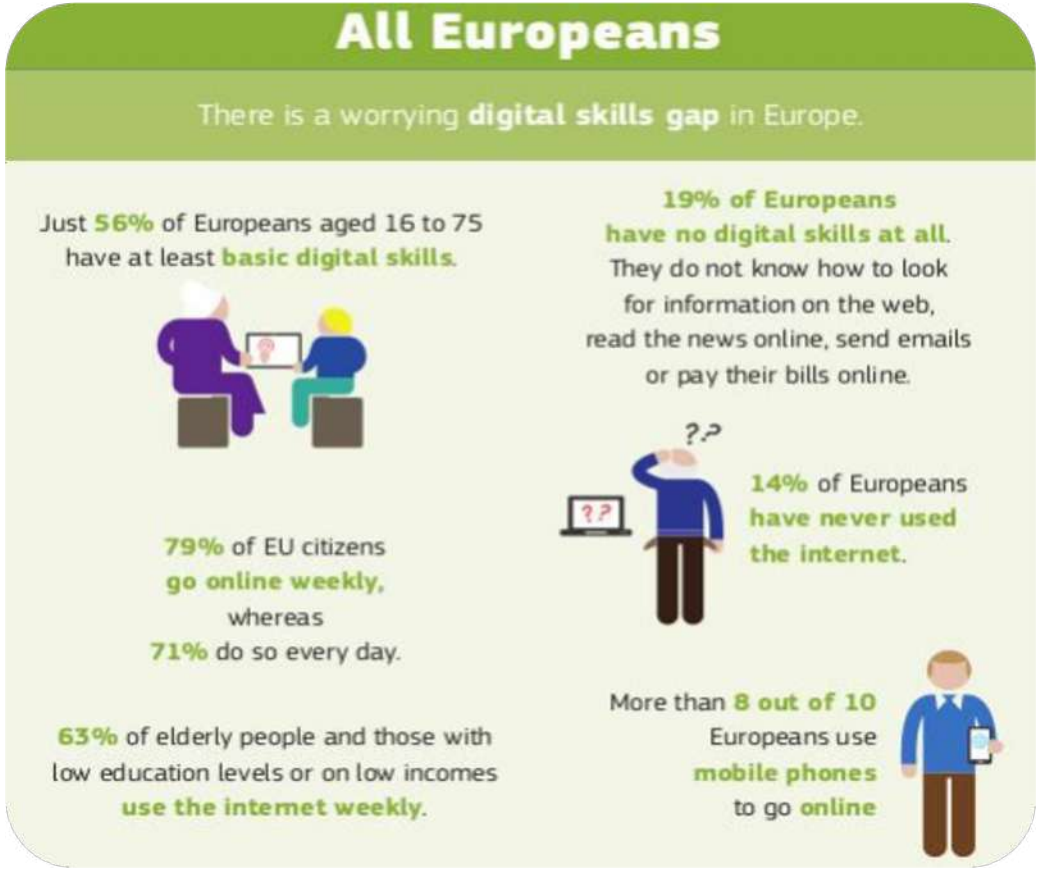
Being digitally competent means using digital technologies in a confident and safe way for various purposes such as working, getting a job, learning, shopping online, obtaining health information, being included and participating in society, entertainment, etc.

Introduction

What is the state of Digital Skills in Europe?

There is a **gap in Digital Skills in Europe**:

- Data shows that, currently, **44%** of European citizens do not have basic Digital Skills;
- **37%** of citizens in the labour force – farmers, bank employees and factory workers alike, also lack sufficient Digital Skills, despite the increasing need for such skills in all jobs.



Introduction

What is the state of Digital Skills in Europe?

The European Commission faces a huge digital skills **challenge**:

Upskilling & reskilling citizens and the labour force.

Equipping people with the right skills

The EU faces a huge digital skills challenge.
We need to upskill and reskill citizens and the labour force.

Policies need to be put in place to ensure that people at all ages have access to the appropriate digital skills. Developing skills is largely under the **competences of the Member States**, but the EU can help.

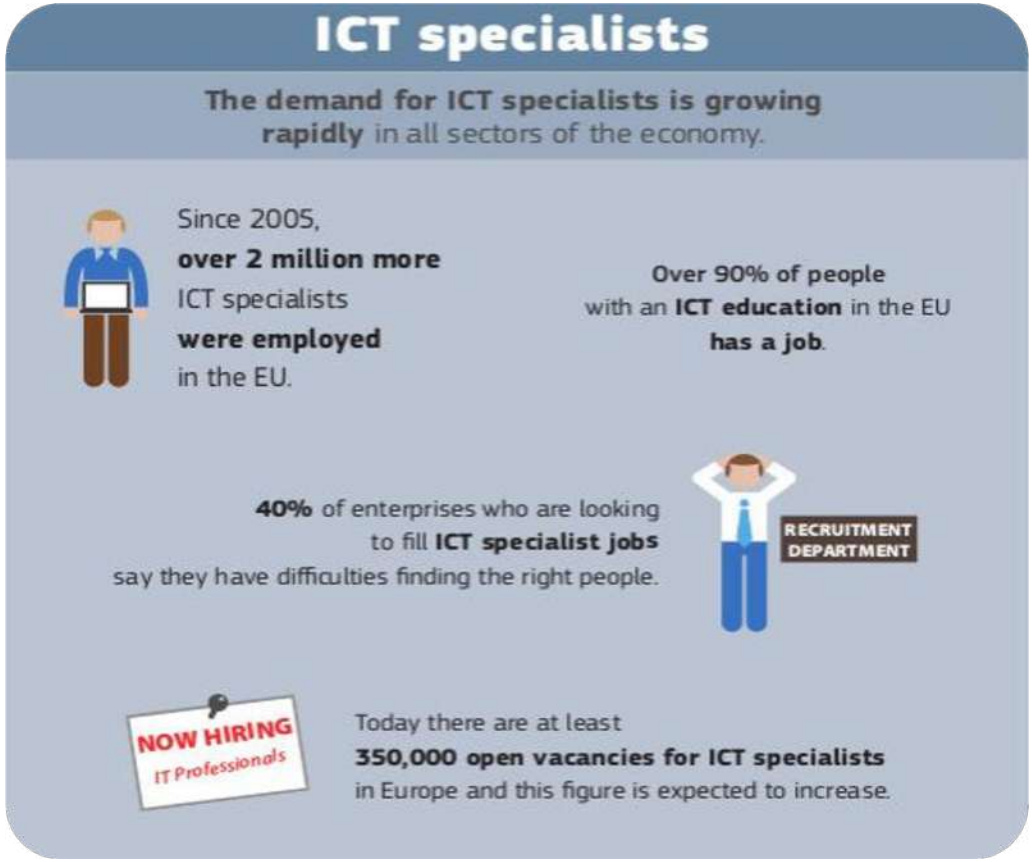
Through the Digital Skills and Jobs Coalition and other initiatives, the Commission seeks to reduce digital skills gaps by fostering the sharing, replication and upscaling of best practices in areas such as training and matching for digital jobs, certification and awareness raising.

The Commission will also launch the Digital Opportunity traineeship programme, which will give around 6,000 students of all disciplines hands-on experience in fields such as cybersecurity, data analytics, quantum or artificial intelligence as well as programming and software development. The first traineeships will start in 2018.

Introduction

What is the state of Digital Skills in Europe?

- The demand for ICT specialists is growing rapidly in all sectors of the economy;
- A lot of people today lack sufficient digital skills, despite the increasing need for such skills in all jobs.

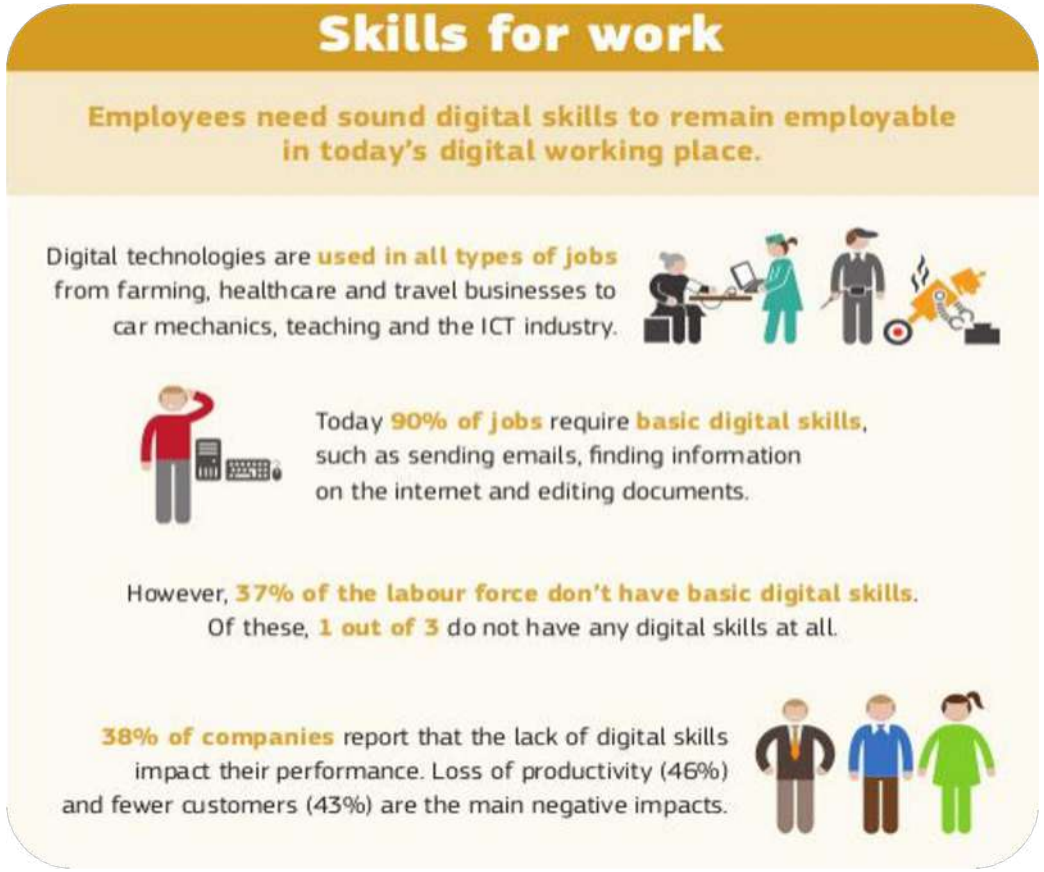


Introduction

What is the state of Digital Skills in Europe?

Employees need solid digital skills to remain employable in today's digitaal working place.

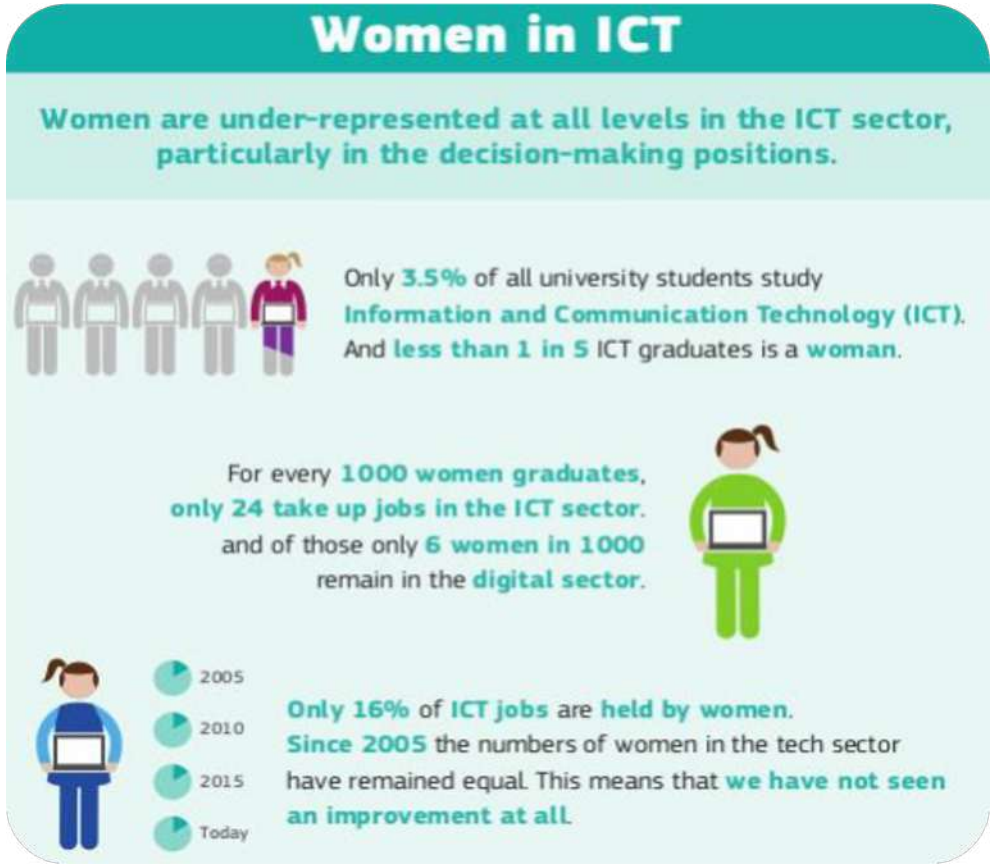
Today **90%** of jobs require **basic digital skills**.



Introduction

What is the state of Digital Skills in Europe?

Women are **under-represented** at all levels in the ICT sector, particularly in decision-making positions.



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The Digital Competence Framework 2.0

The Digital Competence Framework

Digital Competence

Digital competence is one of the transversal competencies that a learner needs to develop.

Learners' digital competence is captured by the European Digital Competence Framework for Citizens(DigComp).

DigComp Framework

The **European Commission's Communication** "A new skills agenda for Europe: Working together to strengthen human capital, employability and competitiveness" proposes ways to address the skills challenges that Europe is currently facing.

The aim is for everyone to have the key set of competencies needed for **personal development, social inclusion, active citizenship and employment**.

The Digital Competence Framework

DigComp Framework

The European Digital Competence Framework for Citizens, also known as DigComp, offers a tool to improve citizens' digital competence. In the fields of education and training and employment, there was a need to have a common reference framework of what it means to be digitally savvy in an increasingly globalized and digital world.

EU Digital Education Competences (DigCompEdu Framework)

DigCompEdu Framework

According to DigiComp Framework, learners can develop their digital competence for the future.

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DigCompEdu Framework

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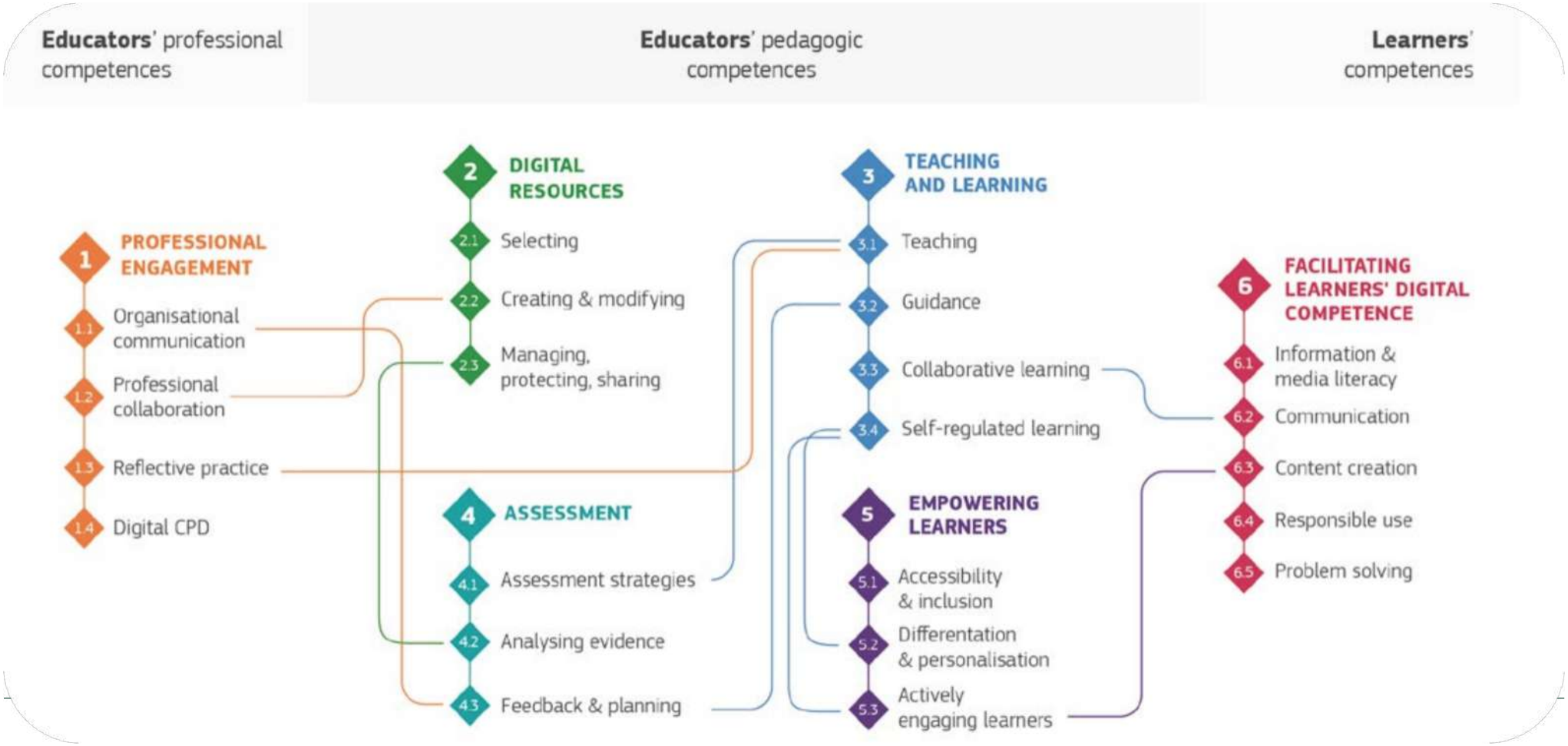
DigCompEdu Framework

The DigCompEdu Framework aims to capture and describe the educator-specific digital competencies by proposing 22 elementary competencies organized in 6 areas (see Figure in the next slide).

The sixth Area details the specific pedagogic competencies required to facilitate students' digital competence: Information & Media Literacy, Communication, Content Creation, Responsible use and Problem Solving.

DigCompEdu Framework



DigCompEdu Framework

Digcomp 2.0 - The Conceptual Reference Model

DigComp 2.0 identifies the key components of digital competence in 5 areas which can be summarized as:

1. Information and data literacy
2. Communication and collaboration
3. Digital content creation
4. Safety
5. Problem solving

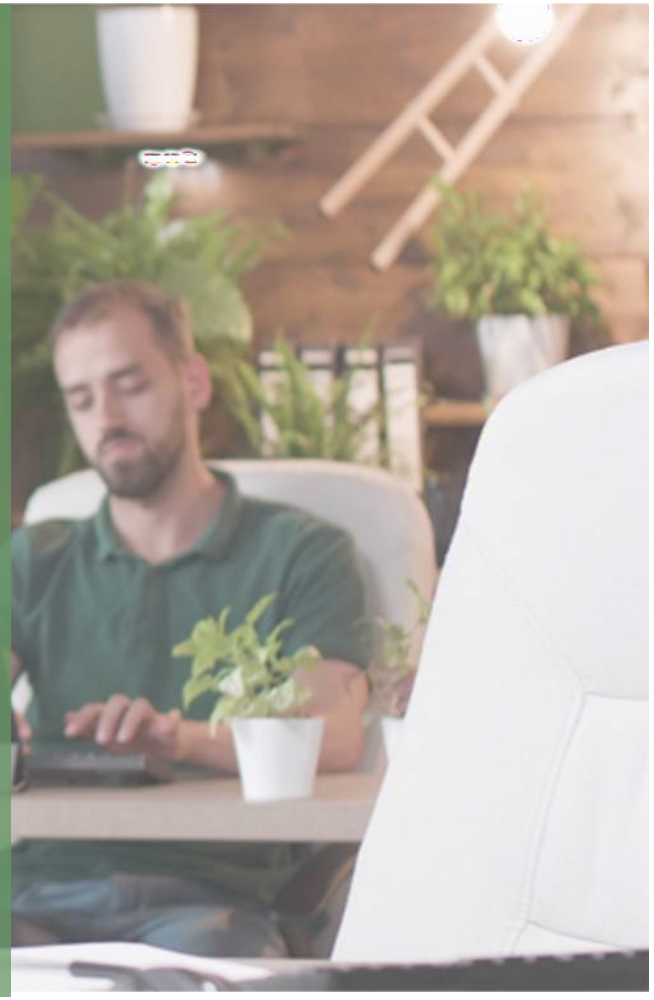
DigCompEdu Framework

1. Information and data literacy

1.1 Browsing, searching and filtering data, information and digital content;

1.2 Evaluating data, information and digital content;

1.3 Managing data, information and digital content to organize, store and retrieve data, information and content in digital environments.



DigCompEdu Framework

2. Communication and collaboration

2.1 Interacting through digital technologies;

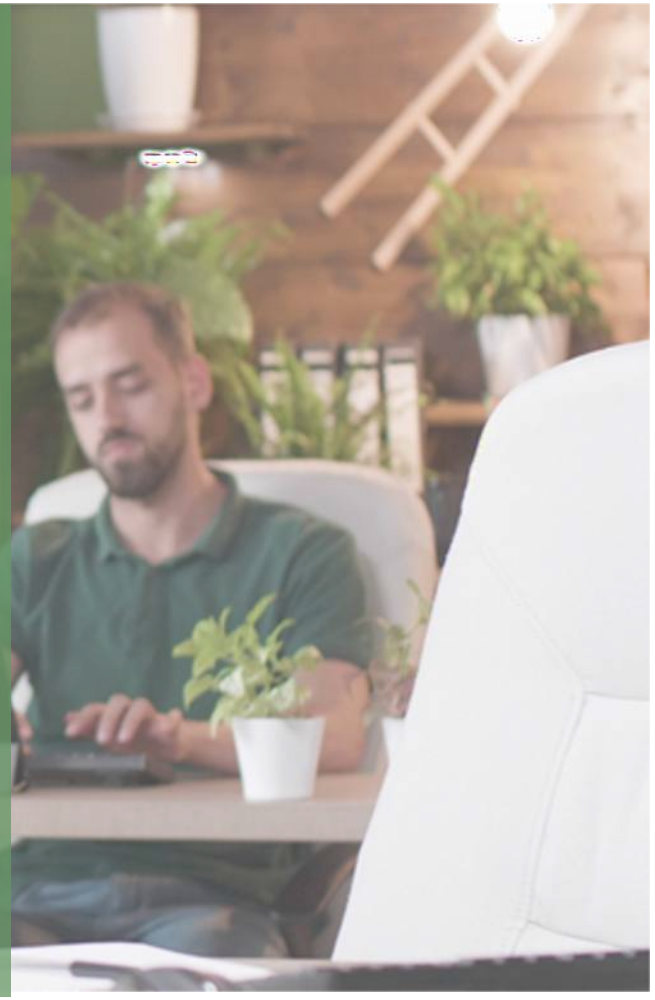
2.2 Sharing through digital technologies;

2.3 Engaging in citizenship through digital technologies;

2.4 Collaborating through digital technologies;

2.5 Netiquette;

2.6 Managing digital identity.



DigCompEdu Framework

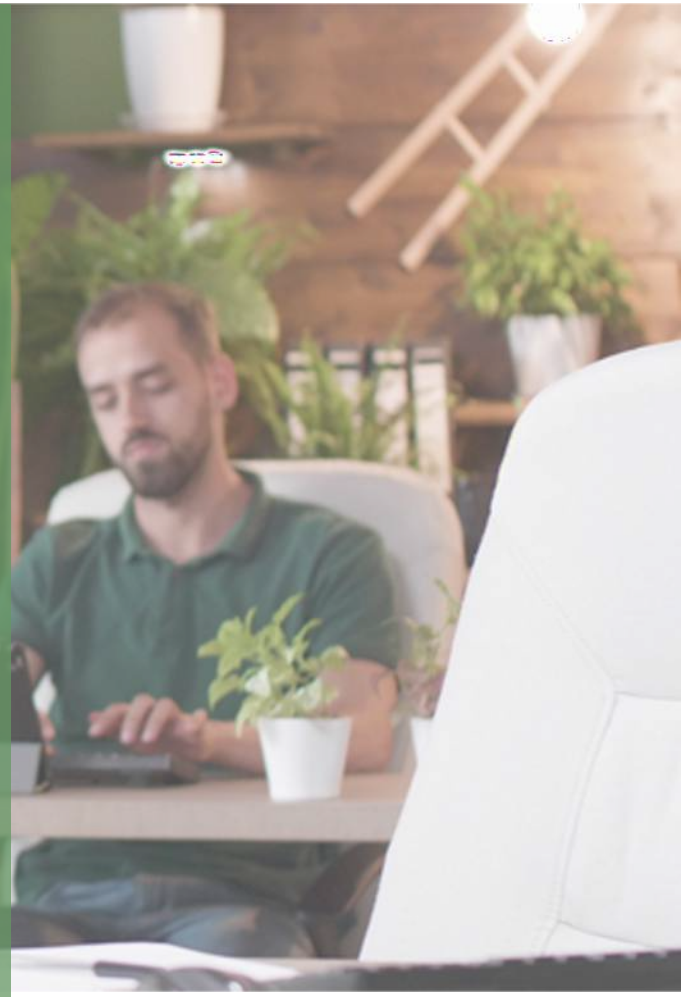
3. Digital content creation

3.1 Developing digital content;

3.2 Integrating and re-elaborating digital content;

3.3 Copyright and licenses;

3.4 Programming.



DigCompEdu Framework

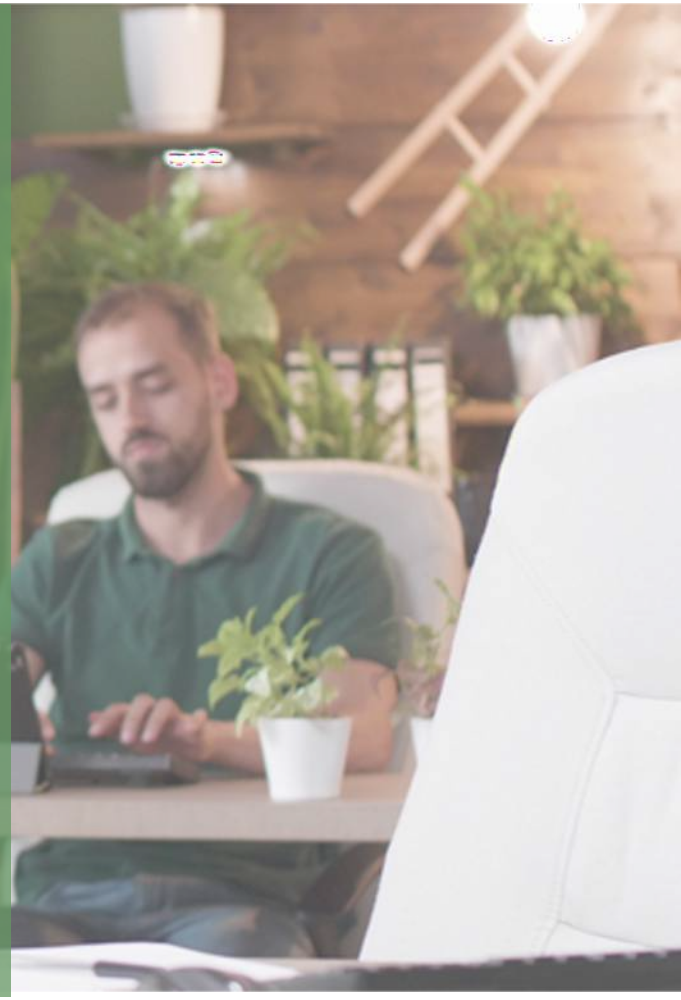
4. Safety

4.1 Protecting devices;

4.2 Protecting personal data and privacy;

4.3 Protecting health and well-being;

4.4 Protecting the environment.



DigCompEdu Framework

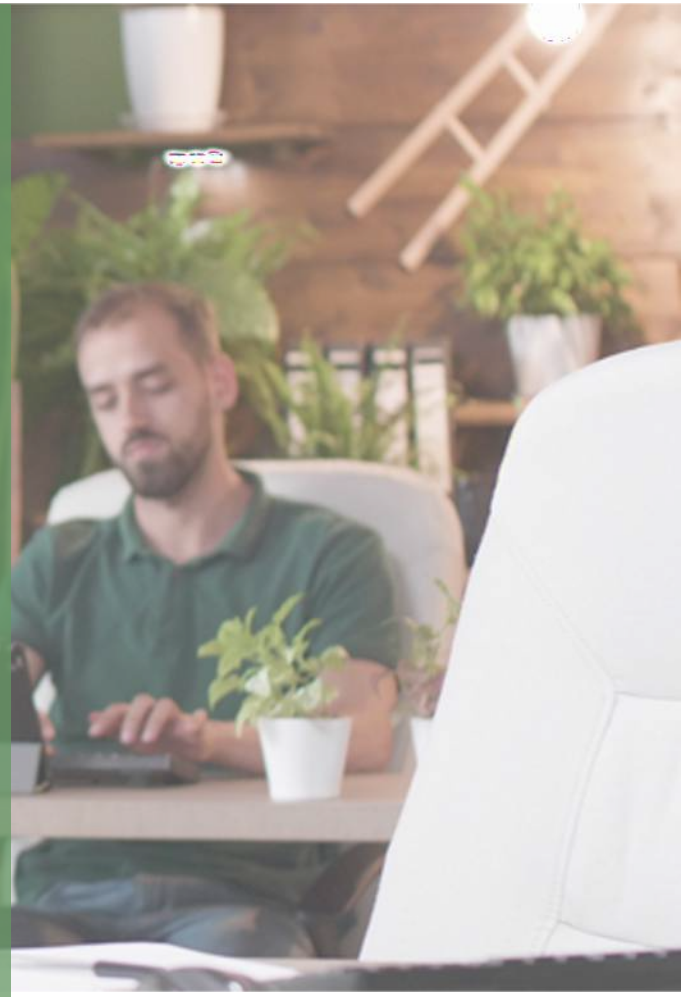
5. Problem solving

5.1 Solving technical problems;

5.2 Identifying needs and technological responses;

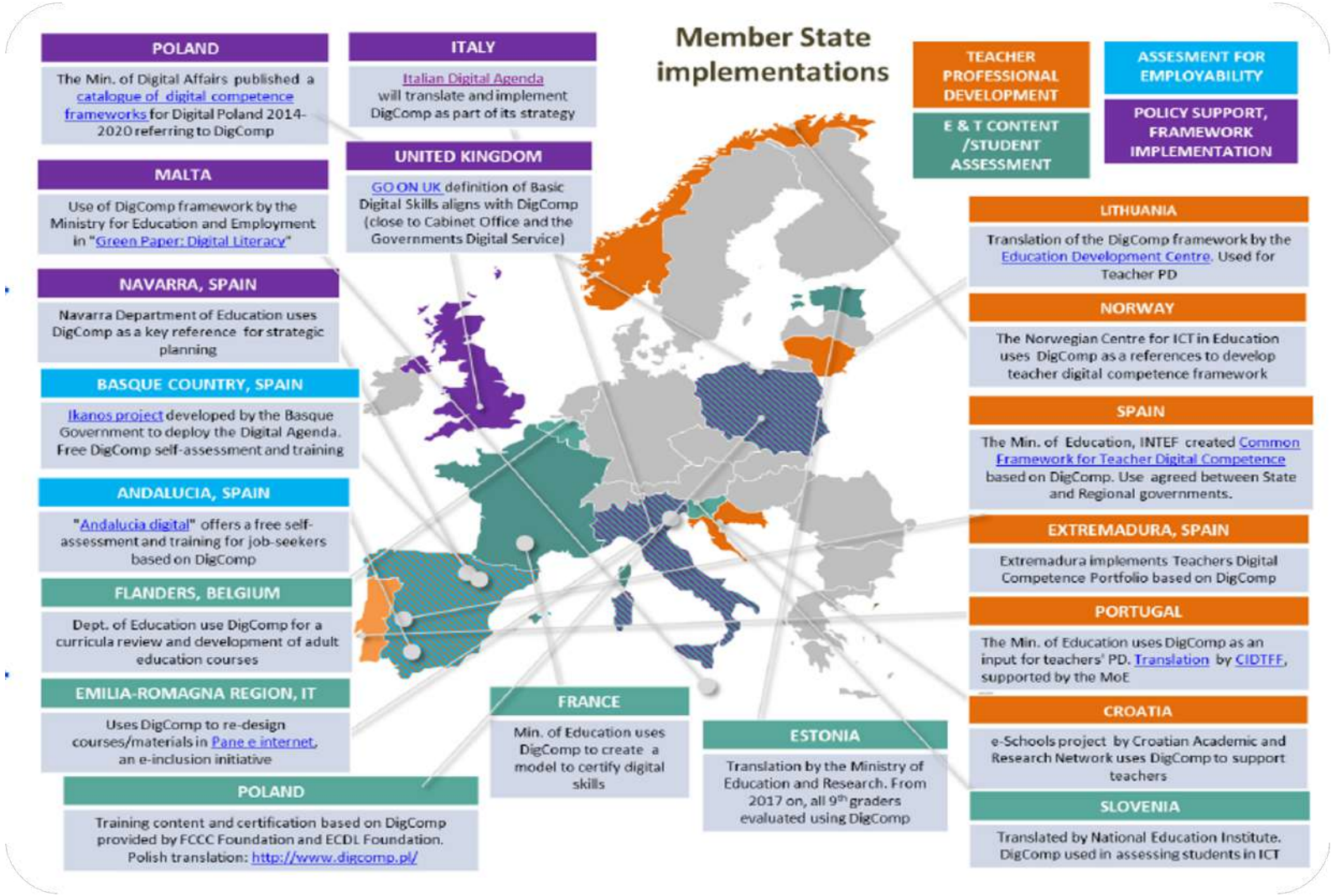
5.3 Creatively using digital technologies;

5.4 Identifying digital competence gaps



DigCompEdu Framework

DigComp in the EU



DigCompEdu Framework

Use Information & Data → To find primary data and content adapted to teaching with a pedagogical treatment.

Is required a **critical evaluation** of the resources available, organizing them, offering new interpretations and generating new research based on the information available.

DigCompEdu Framework

Communication In Digital Environments

Messages in technological environments have different contexts and meanings. Requires attitudes and communication rules to an audience with its own codes of interaction.

DigCompEdu Framework

Security Skills

Personal data must be subject to strong, informed and consensual privacy policies.

Special attention to social networks!

DigCompEdu Framework

Educators' Digital Competence

Establish channels of communication and collaboration.

Selecting the right digital tools.

Tools must be adaptable to the contexts, levels, learning paces and specific needs.

Reflection Exercise 1

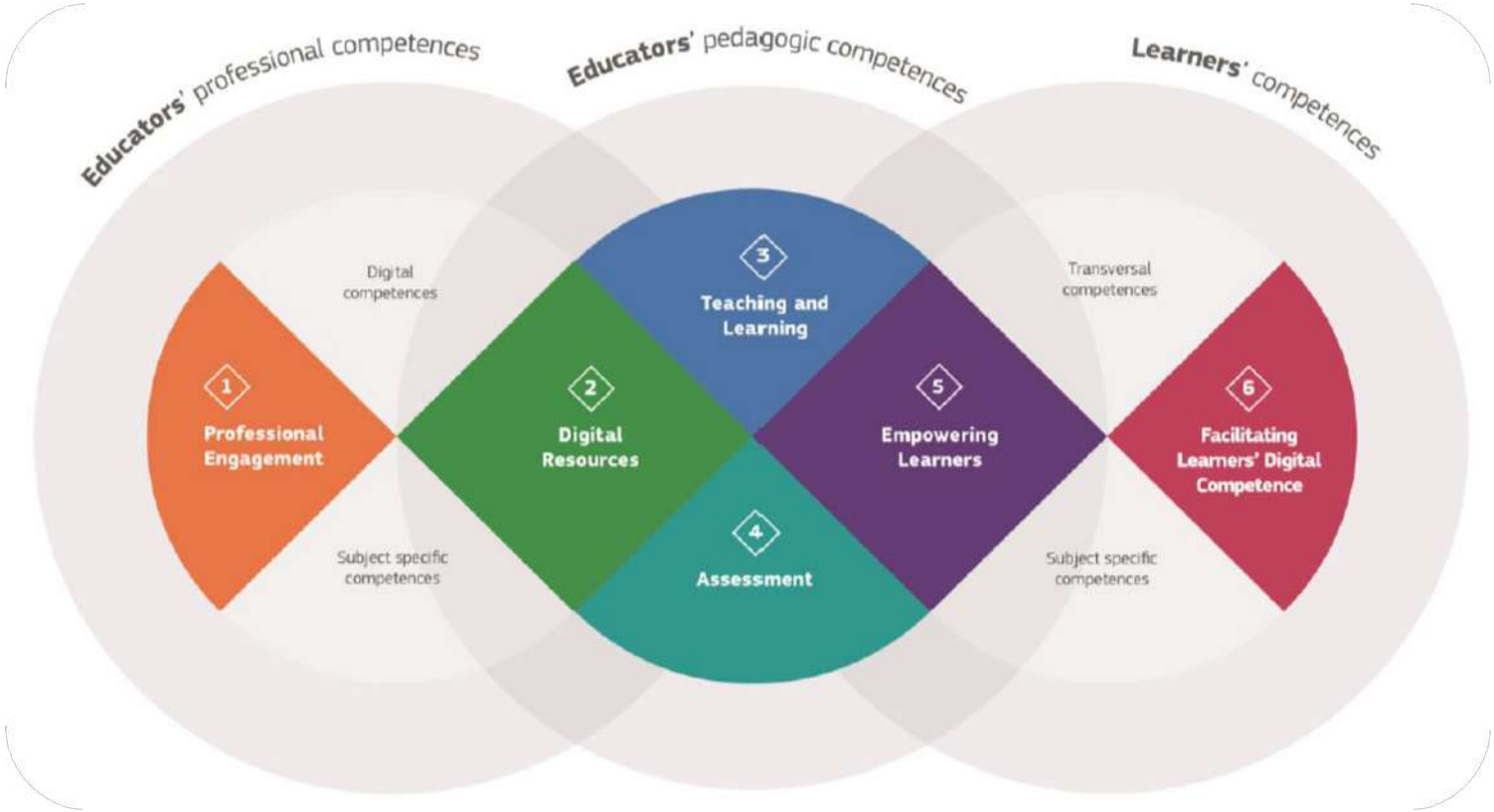
1. On a scale from 1-5, how would your rate your five DigComp competencies?

2. How about the competencies of your lecturers/trainers?

DigCompEdu Framework

Specializing Digcomp For Digital Education

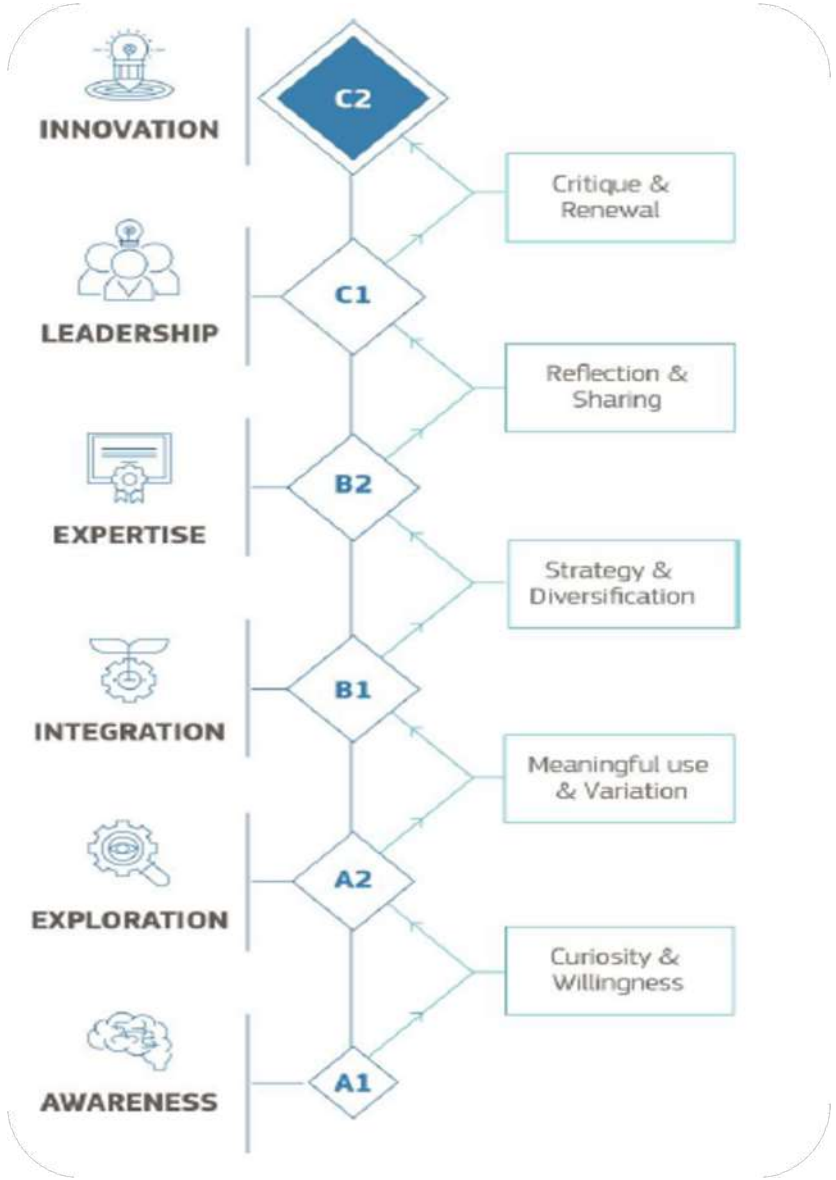
Successful digital education is a blend of suitable competencies from trainers & trainees!



DigCompEdu Framework

Specializing Digcomp For Digital Education

How are the DigCompEdu competencies measured?



DigCompEdu Framework

Pillars Of Digcompedu Implementation

Quality

Green & digital transitions

Inclusion of gender & equality

Qualified Trainers

Reflection Exercise 2

Think what is your first emotion that comes when you hear the term **online education**

- Think about the pros and cons of online education so far
- Think about the best and worst moments so far (in online education)

How are the DigCompEdu competencies measured?

EU Digital Education Agenda

EU Digital Education Agenda

Priority 1

To foster a high-performing digital education ecosystem, we need:

- Infrastructure, connectivity and digital equipment;
- Effective digital capacity planning and development, including effective and up-to-date organizational capabilities;
- Digitally competent and -confident educators and education & training staff;
- High-quality content, user-friendly tools and secure platforms respecting privacy and ethical standards.

EU Digital Education Agenda

Priority 2

To enhance digital skills and competencies for the digital age, we need:

- Infrastructure;
- Support the provision of basic digital skills and competencies from an early age:
- Digital literacy, including management of information overload and recognizing disinformation;
- Computing education;
- Good knowledge and understanding of data-intensive technologies;
- Boost advanced digital skills: enhancing the number of digital specialists and of girls and women in digital studies and careers.

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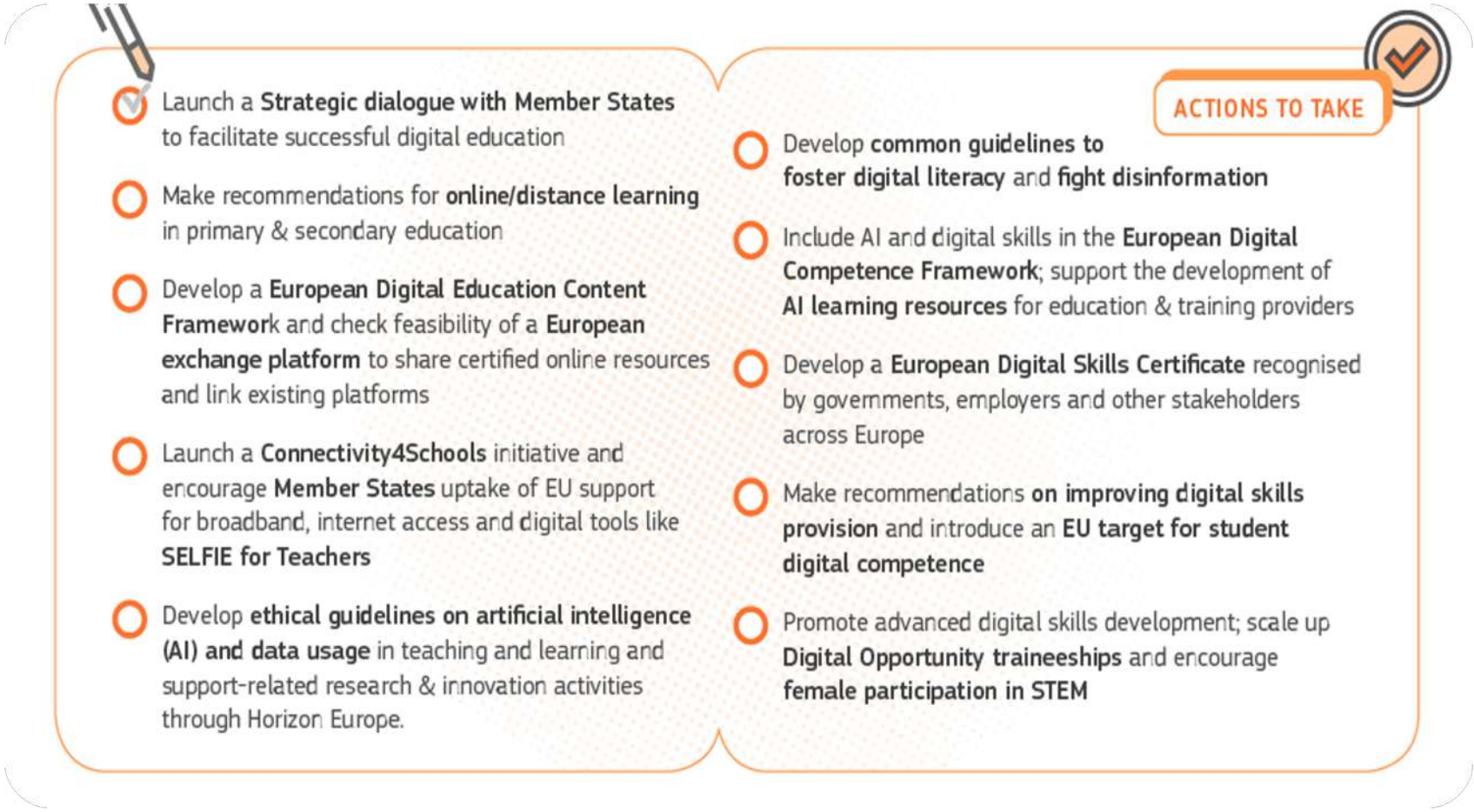
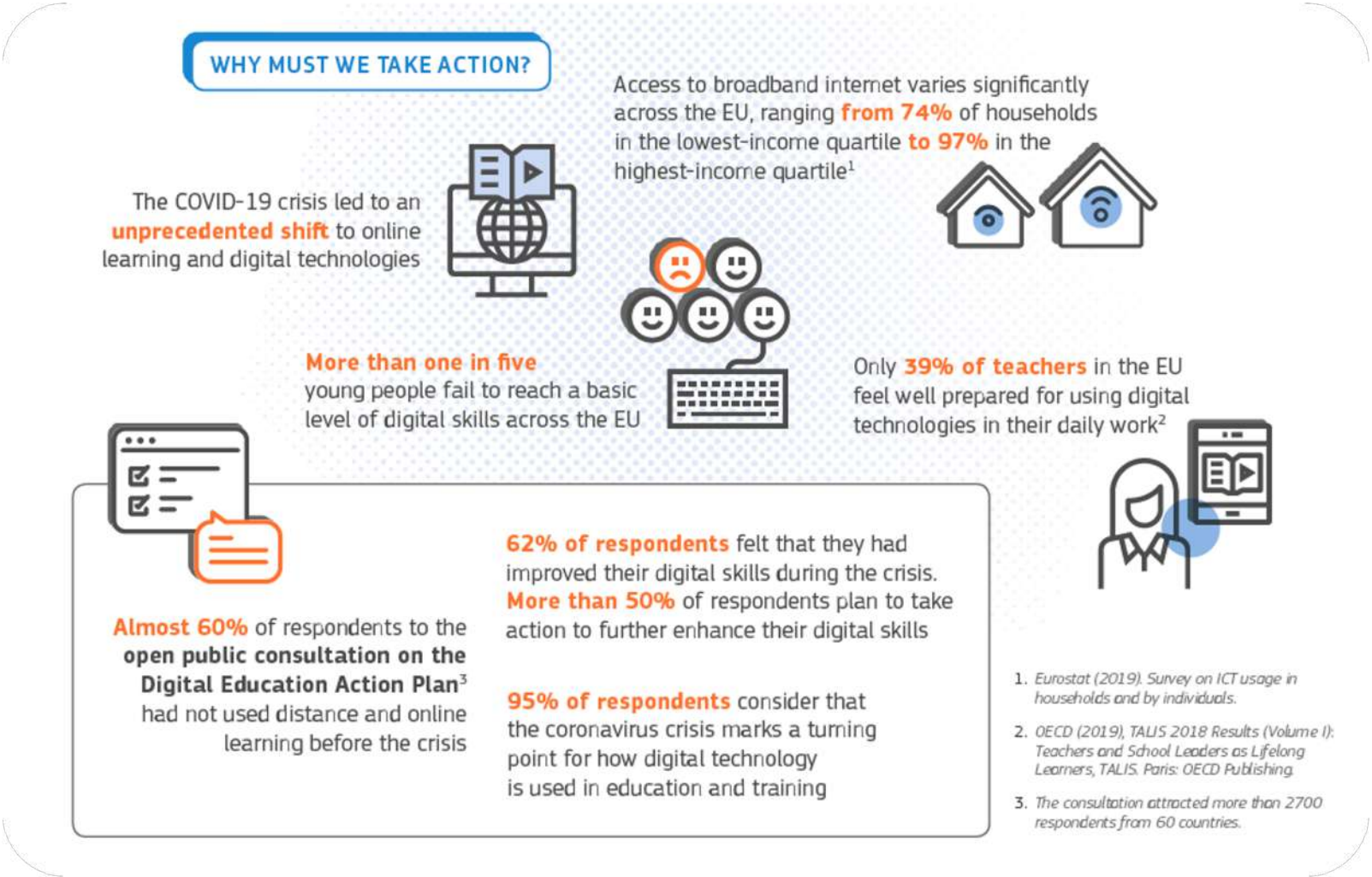
Implementing The Digital Education Agenda



EU Digital Education Agenda

Why to Care?



EU Digital Education Agenda

How To Make Digital Education better in the EU?

Strengthening cooperation and exchange in digital education at EU level

The EU can play a more active role in:

- identifying, sharing and scaling up good practice
- supporting Member States and the education and training sector with tools, frameworks, guidance, technical expertise and research
- fostering cooperation between all stakeholders

by creating a new **European Digital Education Hub** to:

- link national and regional digital education initiatives and actors
- support cross-sector collaboration and new models for exchange of digital learning content, addressing issues such as common standards, interoperability, accessibility and quality-assurance

The Hub will serve as a think-tank, supporting the development of policy and practice, and monitor the development of digital education in Europe, including the implementation of the new Digital Education Action Plan. The Hub will also support user-driven innovation and engaging through the *Digital Education Hackathon**.

* *https://digieduhack.com*

EU Digital Education Agenda

What Is Quality Digital Education ?

Digital education should play a pivotal role in increasing equality and inclusiveness and be a core skill for all educators and training staff.
Digital literacy is essential for life in a digitalised world.

Basic, advanced digital skills and digital literacy is essential for life in a digitalised world.
High-quality education content to boost the relevance, quality and inclusiveness of European education and training at all levels.
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DigCompEdu Framework

Reflection Exercise 3

In your opinion, did you receive high quality online education so far?

What would you change?

ARIEES

Barriers and blockers of online education
learning from experience

2

ENGAGEMENT AND MOTIVATION OF ENTREPRENEURSHIP LEARNERS VIA NEUROSCIENCE APPROACHES

Barriers and blockers of online education - learning from experience

Access to technology to use in online education

2019 research results

- In the EU, there are on average 18 students at ISCED 1, 7 at ISCED 2 and 8 at ISCED 3 per computer (desktop, laptop, notebook or tablet).
- Less than 1 in 5 European students attend schools that have access to high-speed internet (over 100 mbps).
- Only 8% of students attending schools located in rural areas or small towns have access to high-speed Internet.

https://www.parp.gov.pl/storage/publications/pdf/Edukacja-cyfrowa_2020-09-22.pdf

Constructivism in digital education

Learning is a constantly dynamic process,

In a constructivist approach to the education process, the student creates knowledge on the basis of the information and experiences obtained.

Constructivism favors the use of activating methods of education

ENGAGEMENT AND MOTIVATION OF ENTREPRENEURSHIP LEARNERS VIA NEUROSCIENCE APPROACHES

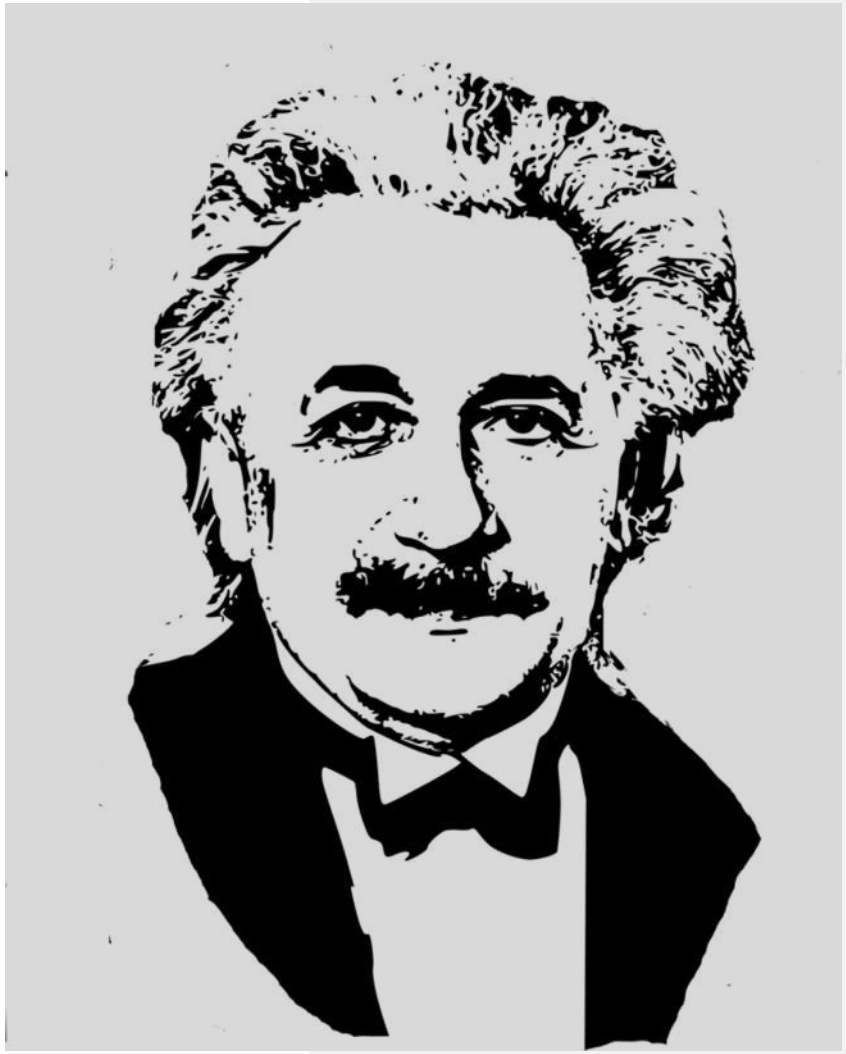
Barriers and blockers of online education - learning from experience

Find simplicity amid exaggeration.

Find harmony among the disagreements.

See an opportunity in difficulties.

Albert Einstein



Activating methods in online or hybrid education

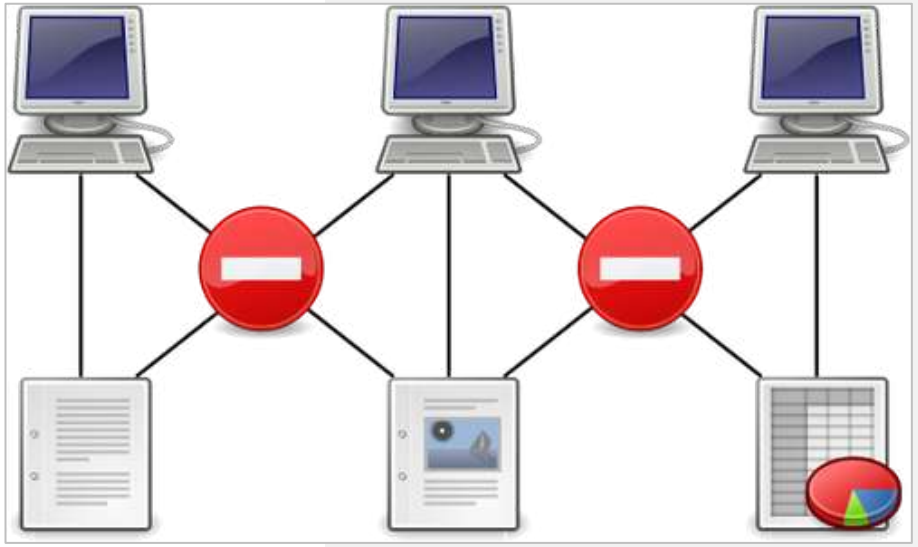
- Project method
- Brainstorming
- Concept map
- Metaplan
- Criteria poker
- JigSaw (puzzle)
- Leading text method
- Fish diagram (Ishikawa diagram)

ENGAGEMENT AND MOTIVATION OF ENTREPRENEURSHIP LEARNERS VIA NEUROSCIENCE APPROACHES

Barriers and blockers of online education - learning from experience

Technological barriers

- no internet access at home,
- no access to a computer at home,
- lack of sufficient technology skills,
- fear of hardware failure.



Psychological barriers - students

- lack of self-discipline,
- no direct contact with peers,
- hindered socialization,
- lack of regularity and skills in organizing working time,
- the emergence of a feeling of rejection,
- feeling of isolation.

Psychological barriers - teacher

- belief in being a "digital immigrant",
- lack of the ability to freely use IT tools,
- fear of cyber attacks,
- hindered disciplining of students,
- attachment to stereotypes,
- not ready for change.

ENGAGEMENT AND MOTIVATION OF ENTREPRENEURSHIP LEARNERS VIA NEUROSCIENCE APPROACHES

Barriers and blockers of online education - learning from experience

Ways to keep online trainees interested?

- Working in groups
- Discussion
- Competition, game or quiz
- Individual work of participants
- Round

Working in groups

- It can be organised through the available grouping options on specific platforms - Breakout Rooms.
- Participants may also connect with each other by instant messaging, e.g. via Messenger or WhatsApp.

- Breakout Rooms, need an introduction - when you move participants into subgroups for the first time they need to be informed:
  - of the technical details and how this will take place,
  - that participants will only see and hear group members,
  - what everyone should do if technical problems arise during the transfer to the rooms.

ENGAGEMENT AND MOTIVATION OF ENTREPRENEURSHIP LEARNERS VIA NEUROSCIENCE APPROACHES

Barriers and blockers of online education - learning from experience

Discussion

- It is one of the most common methods of interaction in online meetings - it allows participants to express their opinions, views, reflections and experiences.

- It is a good idea to use this method by asking questions to participants at times when:
  - we want to know their opinion on a certain topic,
  - we want to focus attention on the topic we are talking about,
  - we want to engage participants in active thinking or mobilise them to be active.

Competition, game or quiz

Tools used to stimulate the attention of participants or to summarise a meeting or specific pieces of material.

- There are many applications that can be used, e.g. Kahoot allows trainers to create quizzes, which work well as knowledge tests or LearningApps, which allows to create crossword puzzle
- The element of competition between trainees in the game has a mobilising effect on participants.

Individual work of participants

Mobilise and involve all participants e.g.:

- having participants print out a worksheet with a summary and conclusions after the training session
- final test,
- text analysis or
- case study.

ENGAGEMENT AND MOTIVATION OF ENTREPRENEURSHIP LEARNERS VIA NEUROSCIENCE APPROACHES

Barriers and blockers of online education - learning from experience

Round

- Involves all trainees taking the floor
- Participants can invite the next person to speak to avoid awkward silences and waiting, and to improve the flow of the training.
- This method can be used to:
  - getting to know the trainees and their presentation at the beginning of the meeting,
  - collecting feedback at the end of the training,
  - to present the results of your work,
  - gathering the opinions of all participants on a specific topic.

Direct communication between trainer and participants

- Chat
- Basic ICT tools
- Shared virtual boards and files

Chat

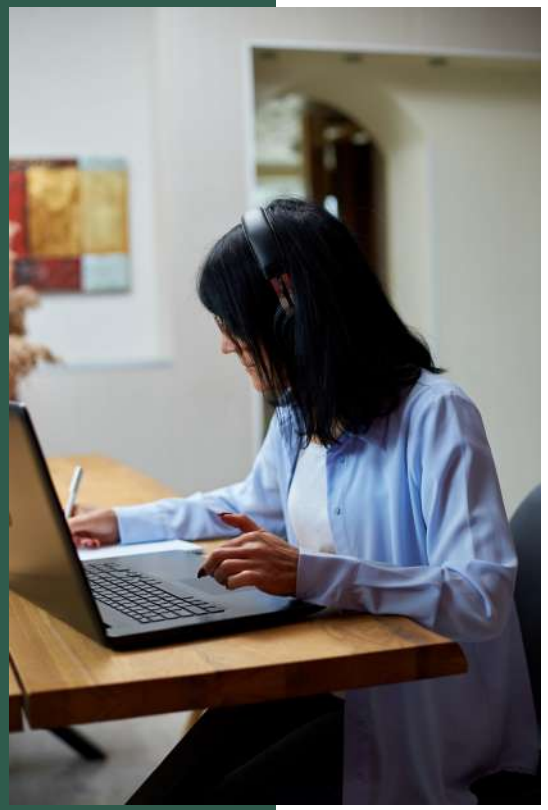
- the simplest method of interacting with participants
- a place that can be used for purposes like: introducing participants to each other during webinars and conferences, asking questions, sending links, training materials, exercise forms, collecting information and short answers etc.
- the trainer can also use the chat in a private version

Basic ICT tools

- enable the trainer, for example, to collect anonymous short answers from participants in a quick way
  - an example of this is Answergarden - simply upload a link to a page so that participants can go to it and write their response.
- this type of tool can be used to: to collect questions, opinions, information, expectations of participants, to write down proposals for contract rules, to generate ideas during brainstorming, to briefly summarise the training, to collect associations, among other things, at the introduction to the training topic stage etc.

Shared virtual boards and files

- enable direct communication and allow participants to work together on an topic identified by the trainer
- enable direct file sharing
- enable visualisation of ideas, joint creation of notes, summaries, conclusions.
- they can be used for many different exercises, e.g. for self-presentation or visualisation of the issues discussed



CYBERSECURITY IN ONLINE EDUCATION

The problem

Cybercriminals take advantage of users' trust, fear, greed, and plain old human errors.

The solution (EUI, 2021)

Security awareness training teaches users to spot phishing, avoid risks online, and use good cyber-hygiene practices at work and at home.

CYBERSECURITY IN ONLINE EDUCATION

Why does it matter (EUI, 2021) ?

- The world is getting more digital:
- Education, Business, banking, healthcare, etc. is all online
- Crime is following the same trend
- Worldwide ransomware attacks
- High-profile hacks in the news
- Phishing emails are more sophisticated each day
- New privacy laws and regulations are being enacted:
- Many sectors require training for compliance

CYBERSECURITY IN ONLINE EDUCATION

Why should learners care (EUI, 2021)?

- Because the online world is so interconnected, everyone is a target
- If just one of your accounts gets breached, criminals can use it to breach others
- Criminals may target personal accounts and data to breach corporate ones, and vice versa
- Fraud and identity theft don't just affect an individual; it can affect user accounts belonging your family, friends, coworkers, and business

CYBERSECURITY IN ONLINE EDUCATION

Types of Cyberattacks

- PHISHING
- EMAIL COMPROMISE
- SOCIAL ENGINEERING
- MALWARE & RANSOMWARE
- FAKE WEBSITES

Reflection Exercise 4

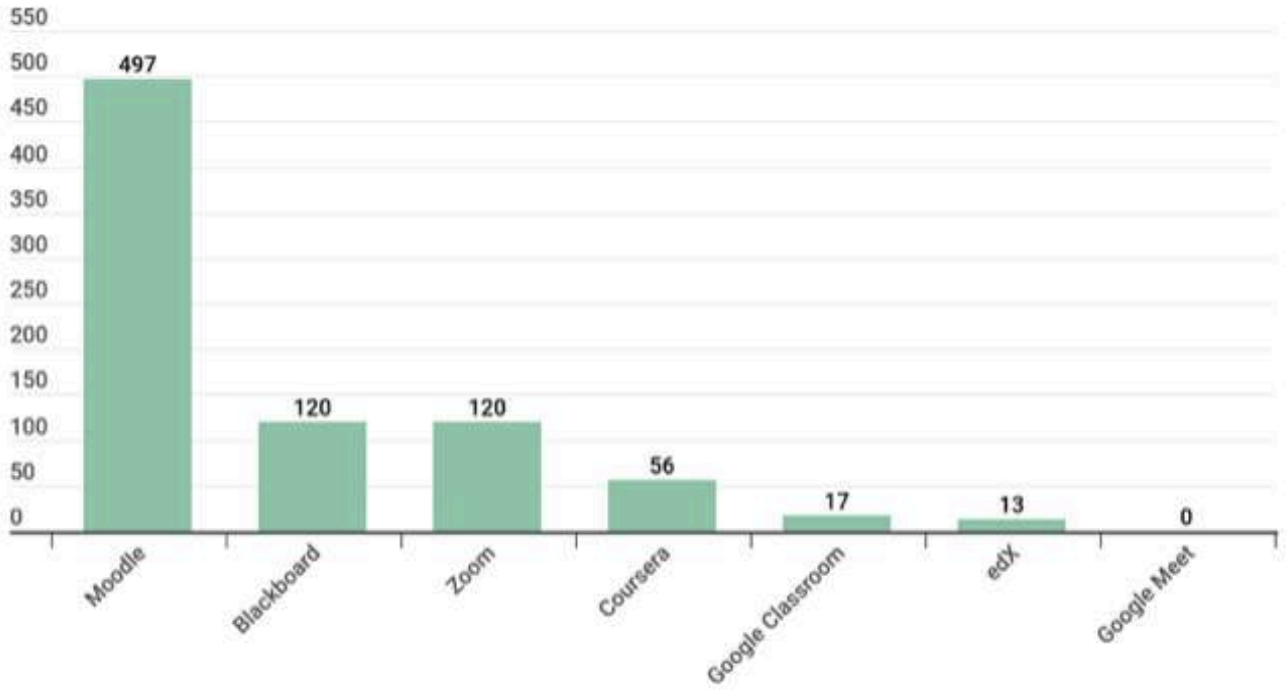
Did you encounter any of such threats ?

If yes, how did you overcome them ?

Did any of such threats impact on your online learning process ?

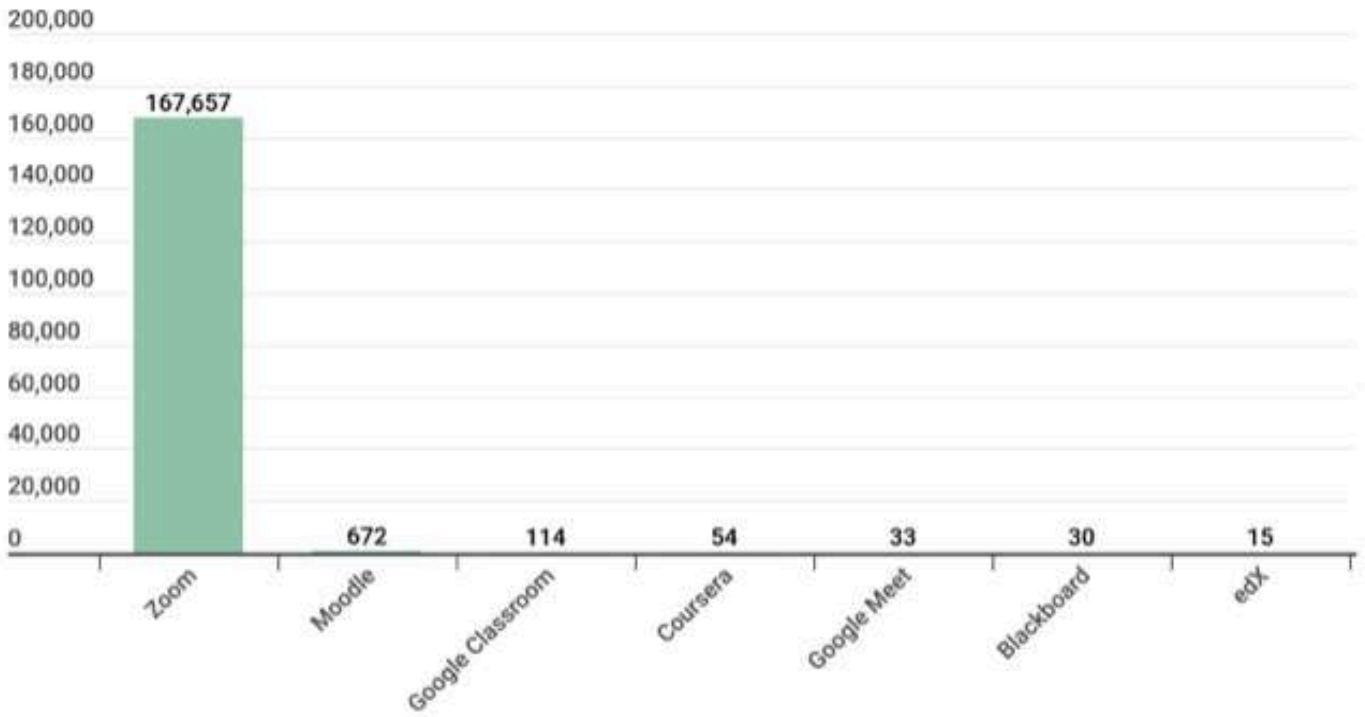
CYBERSECURITY IN ONLINE EDUCATION

Frequency of online threats on learning platforms – before the pandemic (SECURELIST, 2021)?



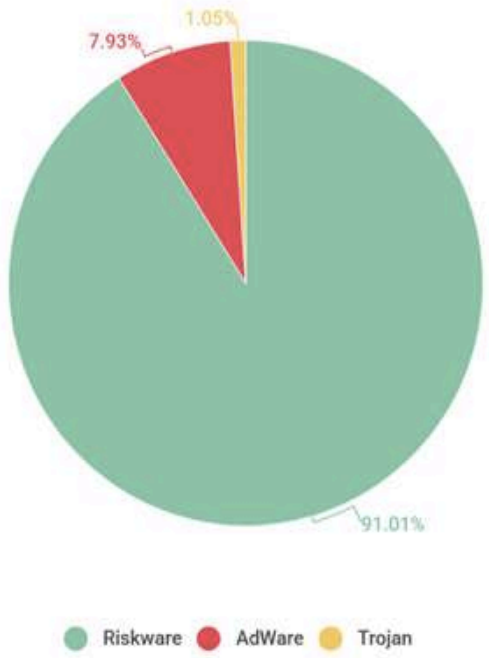
CYBERSECURITY IN ONLINE EDUCATION

Frequency of online threats on learning platforms – during the pandemic (SECURELIST, 2021)?



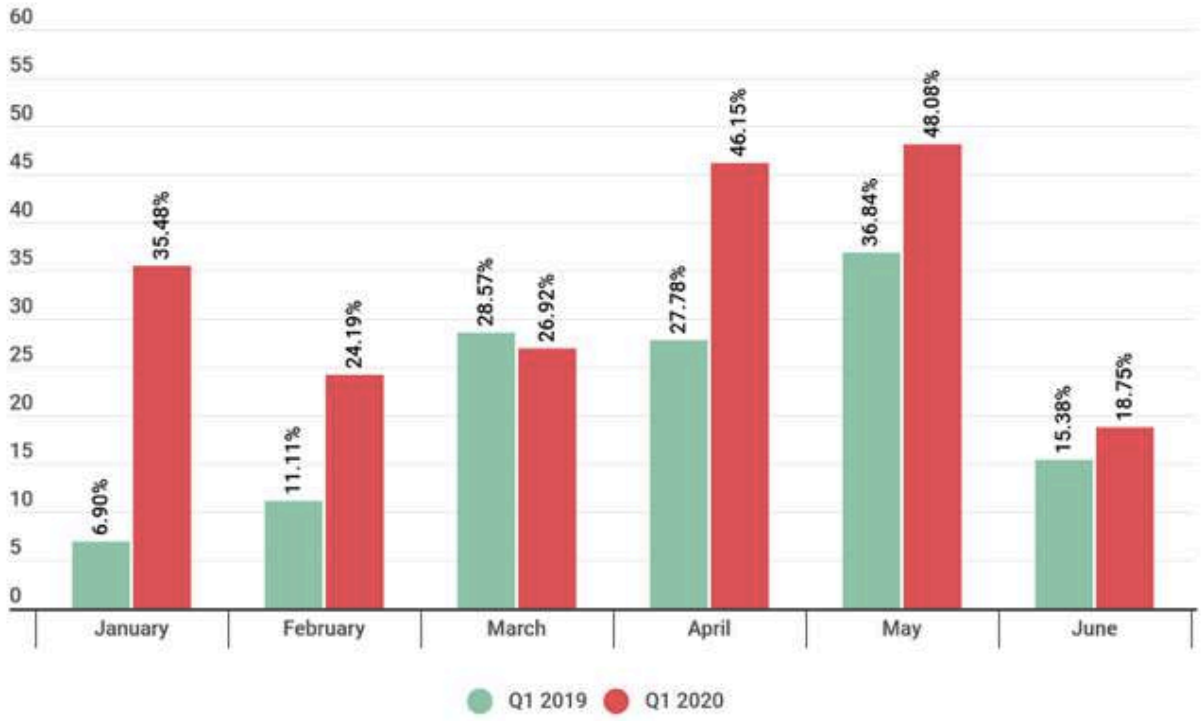
CYBERSECURITY IN ONLINE EDUCATION

Type of threats encountered during 2020 (SECURELIST, 2021)?



CYBERSECURITY IN ONLINE EDUCATION

Threat-increase during pandemic compared to before (SECURELIST, 2021)?



CYBERSECURITY IN ONLINE EDUCATION

How to protect from cyberisks ?

- Rely on secure VPNs and firewalls
- Rely on advanced security keys and complex passwords
- Enable advanced security protection of your educational apps

(i.e. from the tool settings)

- Enable multi-factor authentication
- Enable auto-updates
- Utilise malware scanners and adblocks
- Enable disk encryption
- Attend constant trainings on cybersecurity
- Always verify/preview the link behind any button or the link in the browsert before clicking on it or inserting passwords on screens that might be falsified
- Back up your systems

CYBERSECURITY IN ONLINE EDUCATION

How to protect from cyberisks ?

- Watch for shoulder-surfers
- Shred everything
- Destroy digital data
- Check carefully your mailbox and avoid sending you too much info there
- Engage only with online education providers that you know
- Limit the personal information you share online. Change privacy settings and do not use location features.
- Keep software applications and operating systems up-to-date.
- Using a password manager, use upper and lowercase letters, numbers and special characters, as well as, two-factor authentication (two methods of verification).

CYBERSECURITY IN ONLINE EDUCATION

How to protect from cyberisks ?

- Watch for suspicious activity that asks you to do something right away, offers something that sounds too good to be true or needs your personal information. Think before you click, and when in doubt, do NOT click. Do not provide personal information.
- Use encrypted (secure) Internet communications.
- Protect your home and/or business on a strong, using a secure Internet connection and Wi-Fi network.
- Only share personal information on secure sites (e.g. “https://”). Do not use sites with invalid certificates. Use a Virtual Private Network (VPN) that creates a more secure connection.

CYBERSECURITY IN ONLINE EDUCATION

How to protect from cyberisks ?

- Use antivirus solutions, malware and firewalls to block threats.
- Regularly back up your files in an encrypted file or encrypted file storage device.
- Protect your home network by changing the administrative and Wi-Fi passwords regularly. When configuring your router, use either the instruction manual or speak to your internet-cable provider, to setup the Wi-Fi Protected Access 2 (WPA2) Advanced Encryption Standard (AES) setting, which is the strongest encryption option.

Case study: Crowdfunding as a source of OER financing

Case study: Crowdfunding as a source of OER financing

Why crowdfunding?*

- According to the World Bank, by 2025, the crowdfunding industry will have between $90 to $96 billion dollars invested in it.
- In 2013, there was $5.1 billion, with $2.7 billion invested in 2012.
- The industry of crowdfunding is expanding at an incredible rate.

* based on “Prospects of crowdfunding Education: A Conceptual Framework”, by Annie Stephen and Anita Arul, https://www.researchgate.net/publication/317287933_Prospects_of_Crowd_funding_Education_A_Conceptual_Framework

Case study: Crowdfunding as a source of OER financing

What is crowdfunding?*

- Crowdfunding is an internet-based method to raise capital which involves pooling small amounts of money from individuals.
- Soliciting money from the crowd stands in contrast to traditional fundraising efforts in the past, which involved securing funds from banks, venture capitalists, or financial institutions.
- Creators develop a profile on a crowdfunding platform and explain their monetary goals, planned use of the funds, and timeline for reaching their goals. Individuals enjoy the possibility to contribute to the ideas they believe in, even if they can invest only small amounts

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Case study: Crowdfunding as a source of OER financing

How does it work?*

- The participation through contribution of individuals in the crowd triggers the crowdfunding process and determines the success of the offerings or outcomes of the process.
- The individual subscribes the project based on their intuitive ability and their assumption of success on the performance of a project.
- At times, individuals may facilitate spreading the word and dissemination of information about projects in their online communities and social networks, generating further support.

* based on “Prospects of crowdfunding Education: A Conceptual Framework”, by Annie Stephen and Anita Arul, https://www.researchgate.net/publication/317287933_Prospects_of_Crowd_funding_Education_A_Conceptual_Framework

Case study: Crowdfunding as a source of OER financing

How does it work?

Motivation for consumer participation stems from:

- the feeling of being at least partly responsible for the success of others' initiatives (desire for patronage),
- striving to be a part of a communal social initiative (desire for social participation),
- and seeking a payoff from monetary contributions (desire for investment).

Case study: Crowdfunding as a source of OER financing

What types of crowdfunding?*

There are four different types of crowdfunding

- In donation-based crowdfunding, the crowd donates money or resources because they wholeheartedly wish to support the cause. The crowd donates money and expects nothing in return other than carrying home the satisfaction of having done its bit towards a social cause.
- In reward-based crowdfunding, individuals forming the crowd makes a contribution for a business proposal in exchange for a ―reward,‖ typically the product or service that that particular company produces or provides. rate.

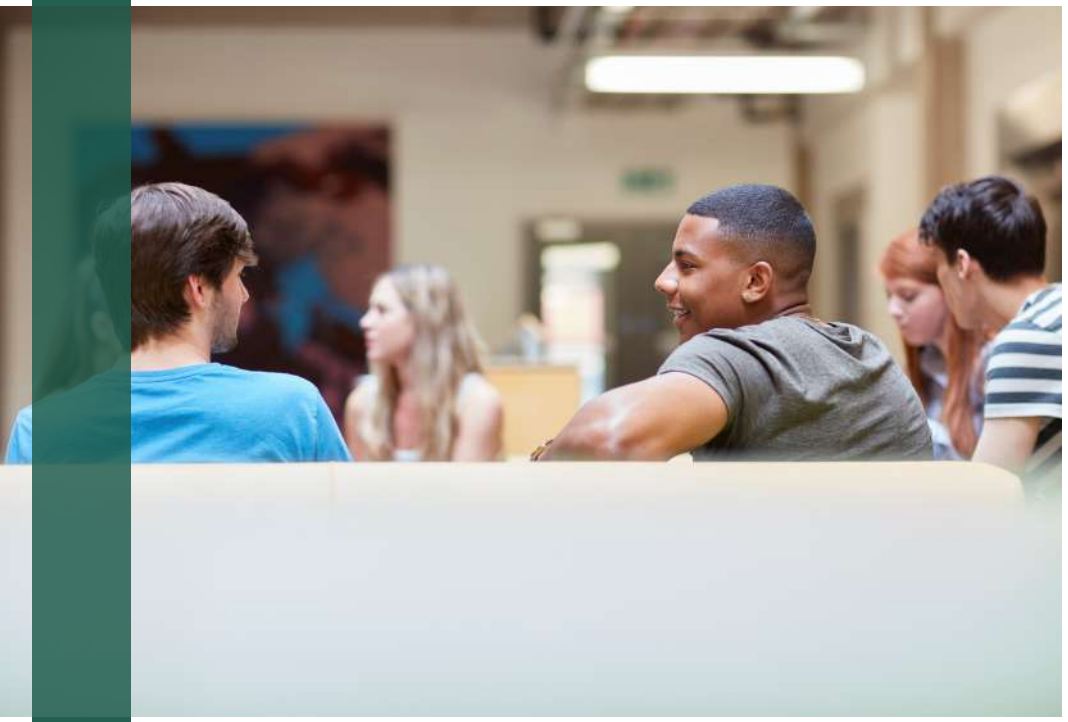
* based on “Prospects of crowdfunding Education: A Conceptual Framework”, by Annie Stephen and Anita Arul, https://www.researchgate.net/publication/317287933_Prospects_of_Crowd_funding_Education_A_Conceptual_Framework

Case study: Crowdfunding as a source of OER financing

What types of crowdfunding?

- With equity-based crowdfunding, members of the crowd become part-owners of the company which is raising funds. In other words, the company sells some or all of its shares to the members of the crowd.
- Debt crowdfunding is another type of crowd funding, where the company raising money does not sell shares, however the collection of money is treated as a debt to the crowd. The individuals lending the money receive the company‘s legally binding commitment to repay the loan at certain time intervals and at a certain interest rate.

Case study: Crowdfunding as a source of OER financing



What is funded?*

- Crowd funding platforms are now being used for a variety of projects such as Technology, Health, Art, Theatre, and Music, literary, Gaming, Sports and the like.
- One of the projects that can be sourced from the public could be education. Education plays a very important role in the lives of mankind; it is the key to innovation and prosperity.
- Higher education faces an unprecedentedly challenging landscape as it seeks to fulfill its public purposes and responsibilities.

* based on “Prospects of crowdfunding Education: A Conceptual Framework”, by Annie Stephen and Anita Arul, https://www.researchgate.net/publication/317287933_Prospects_of_Crowd_funding_Education_A_Conceptual_Framework

Case study: Crowdfunding as a source of OER financing

“Prospects of crowdfunding Education: A Conceptual Framework” by Annie Stephen and Anita Arul

Conclusions of the study

- The majority of the respondents seemed to be not too familiar with the term crowdfunding and the rising popularity and projects that were funded
- Majority of the respondents expressed their willingness to contribute funds for social causes especially those that involved helping the poor and the needy.
- The respondents would surely contribute to the cause of furtherance of education.

Case study: Crowdfunding as a source of OER financing

Crowdfunding the creation of SEEK!, a game-based open educational resource*

- Crowdfunding was used for the development and production of an information literacy game, SEEK!, in 2012.
- Progressing the game beyond a rough and ready prototype required a budget to cover professional design and printing.
- Crowdfunding was investigated and adopted, persuading fellow librarians across the world to contribute towards the costs of developing and producing SEEK!

*file:///D:/google%20drive/academic/predare/_OER/104-102-2-PB.pdf

Case study: Crowdfunding as a source of OER financing

Crowdfunding the creation of SEEK!, a game-based open educational resource

- The crowdfunding approach was also seen as offering an additional benefit, increasing awareness of the game as an open educational resource (OER) that could be shared by librarians everywhere.
- Indiegogo was chosen as the crowdfunding platform because it allowed donations worldwide.
- The pledges were set at a level where the printed
- packs covered printing, postage and packing, plus a small contribution towards design costs.
- The ‘print and play’ offered a slightly larger contribution to the design costs.

Case study: Crowdfunding as a source of OER financing

Crowdfunding the creation of SEEK!, a game-based open educational resource

- Significant promotion of the campaign was carried out using social media, particularly Twitter, as well as library mailing lists.
- During the campaign, which ran over six weeks during August and September 2012, the campaign received contributions of US$1,485 from 55 people, enough to pay for the design work.
- The amount of time and effort spent on promoting the campaign was vital and helped gain 1,400 ‘referrals’ during the campaign period via links sent to social media or mailing lists.

Reflection Exercise 5

Develop a crowdsourcing campaign for OER development

Did you encounter any of such threats ?

If yes, how did you overcome them ?

Did any of such threats impact on your online learning process ?

Neuroscience approaches for effective online education

3

EU Digital Education Agenda

OBJECTIVE

behavioural/neuroscience will be utilized to provide guidelines in terms of how the learning/teaching pace and structure should be developed and tailored for the identified needs (with the implicit transferability potential to other disciplines and even other types of formal education such as adult training).

The AGES Model

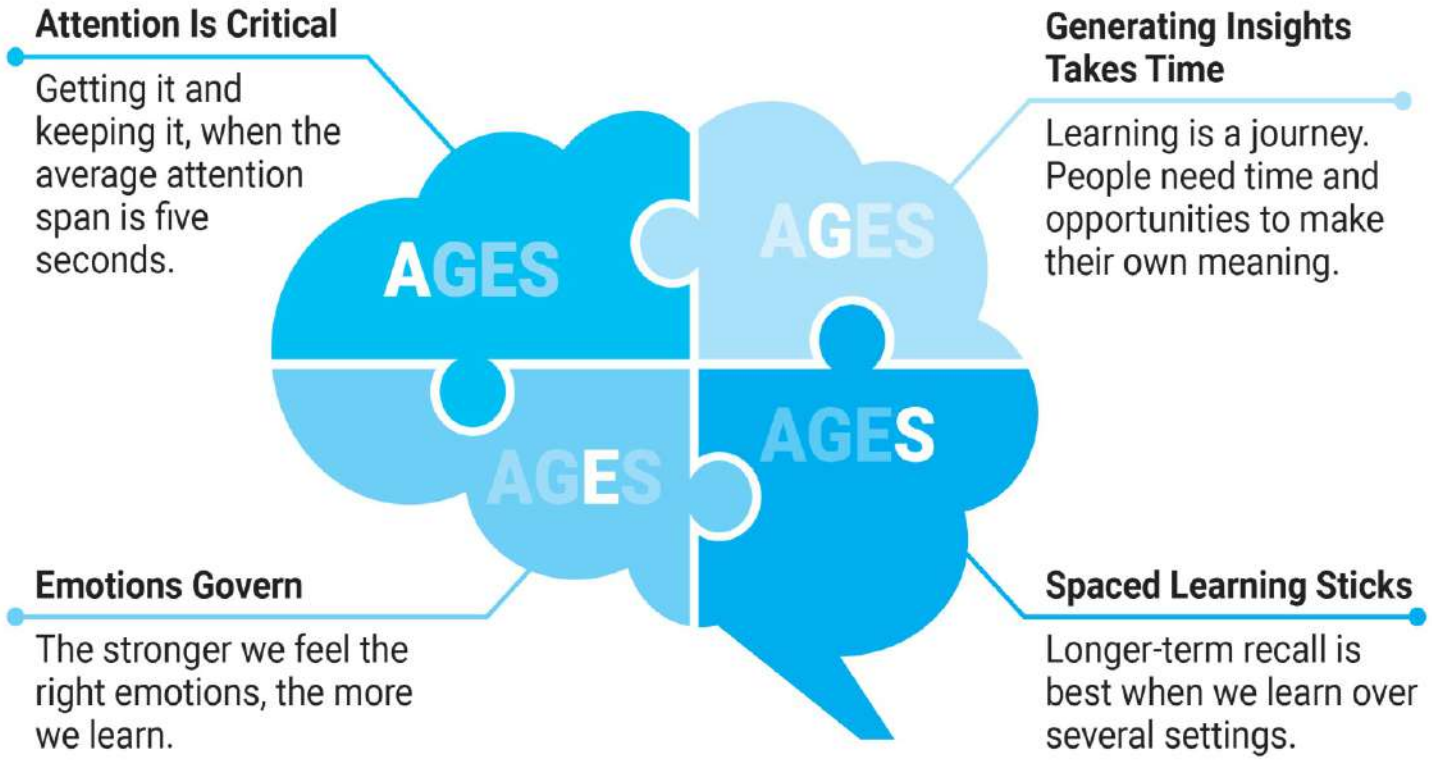
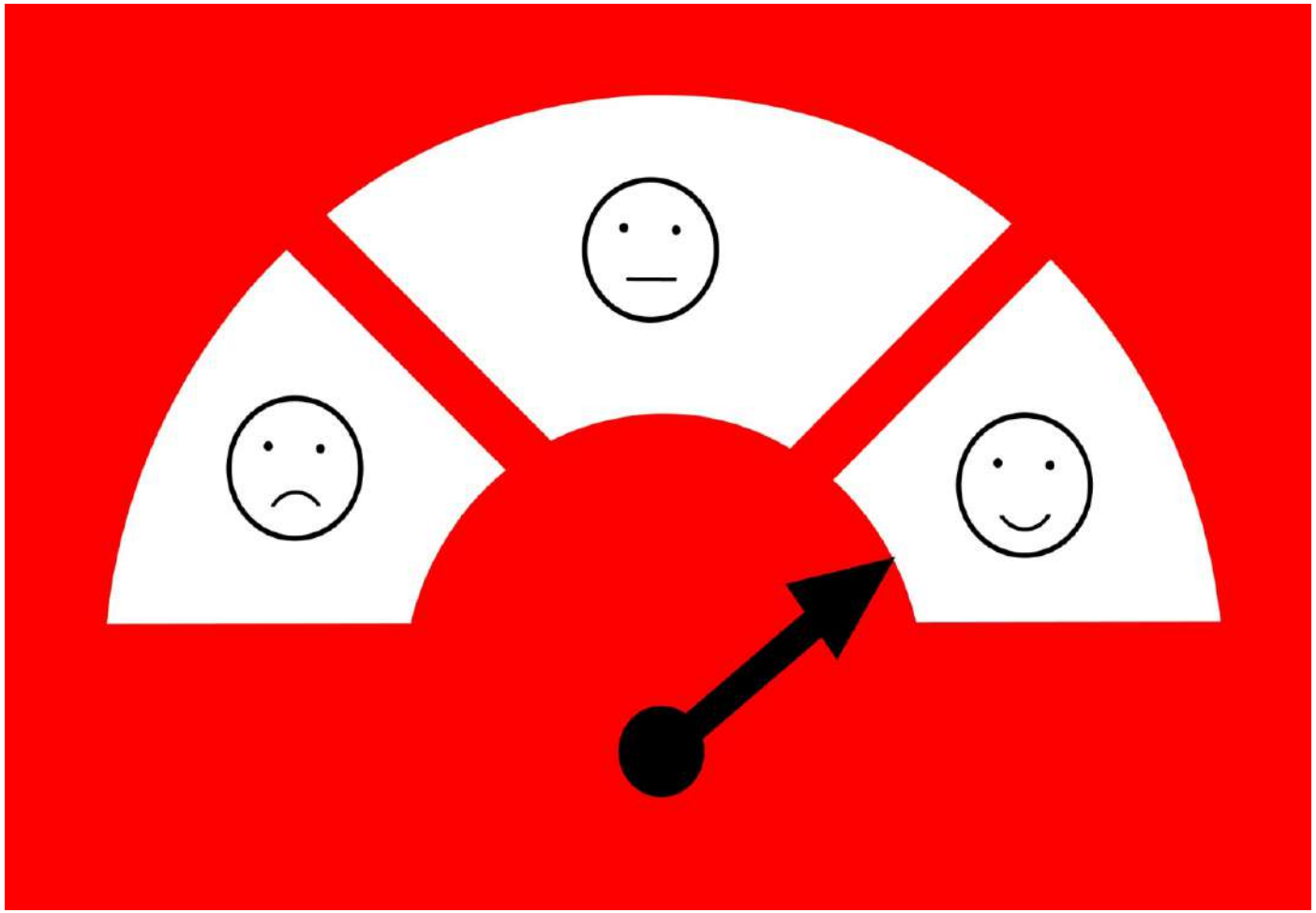


Image taken from https://learningclusterdesign.com/2021/07/12/lcd-and-the-neuroscience-of-learning-ages

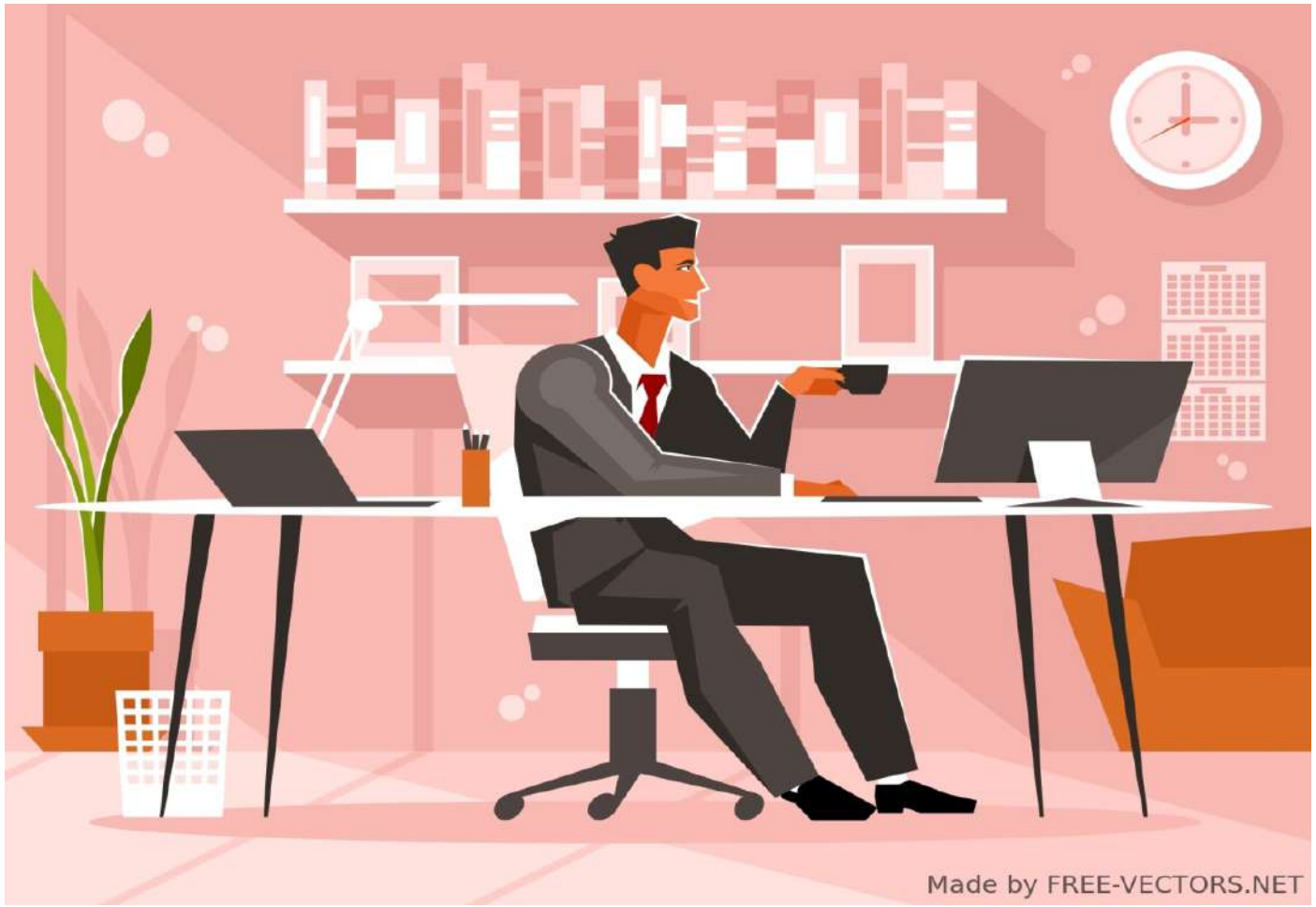
The AGES Model
Attention

The AGES Model
Generation

The AGES Model
Emotion



The AGES
Model Spacing



Strategies to boost attention and motivate students

- Goal setting
- Study anytime, anywhere – liberty of choice
- Increased autonomy
- Collaboration
- Analytical and critical thinking

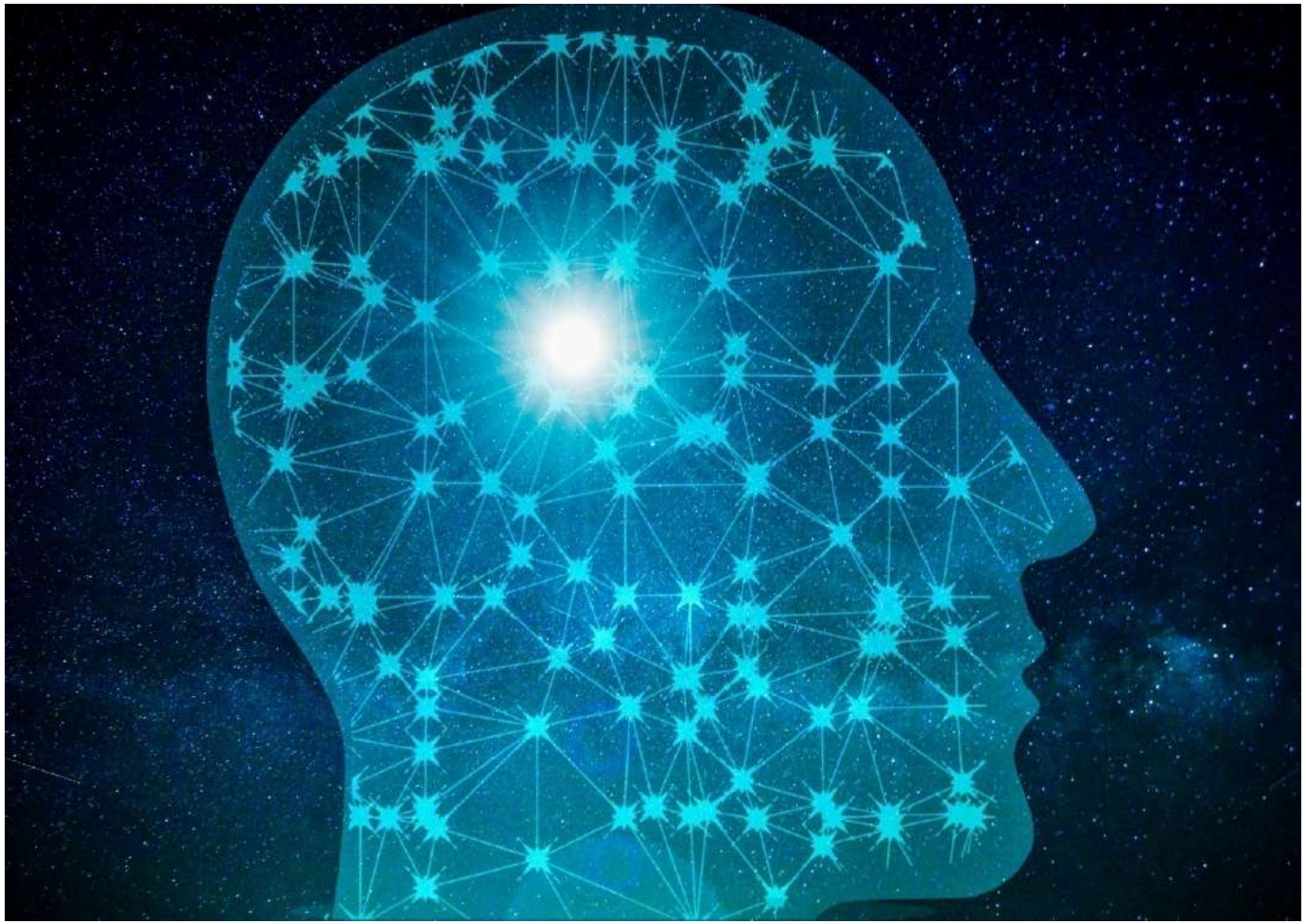
ARIEES

Strategies to boost attention and motivate students

Build engagement and motivation with course content and activities

- provide students with a variety of content
- create a short introduction to each module
- provide clear guidance for completing course activities and gaining deeper understanding of course content
- send out homework due date reminders for each assignment
- encourage your students to ask questions
- allow students to share reflections on their learning
- support students' ability to explore, edit and create

Strategies for generating brain plasticity and learning connections



Strategies for generating brain plasticity and learning connections

Constructivism

The six main characteristics of constructivist learning environments as noted by (Jonassen, 1994) are:

1. Constructivist learning environments provide multiple and complex representations of reality, avoiding simplifications.

2. Constructivist learning environments emphasize knowledge construction in relation to its content instead of knowledge reproduction.

Strategies for generating brain plasticity and learning connections

Constructivism (continuation)

3. Constructivist learning environments emphasize authentic tasks in a meaningful context rather than abstract instruction out of context.

4. Constructivist learning environments provide learning environments such as real-world setting or case-based learning instead of predetermined sequences of instruction.

Constructivism (continuation)

5. Constructivist learning environments encourage practices based on thoughtful reflection.

6. Constructivist learning environments support collaborative learning through social negotiation, instead of competition among learners.

Strategies for generating brain plasticity and learning connections

Connectivism

8 principles of connectivism (Siemens, 2005):

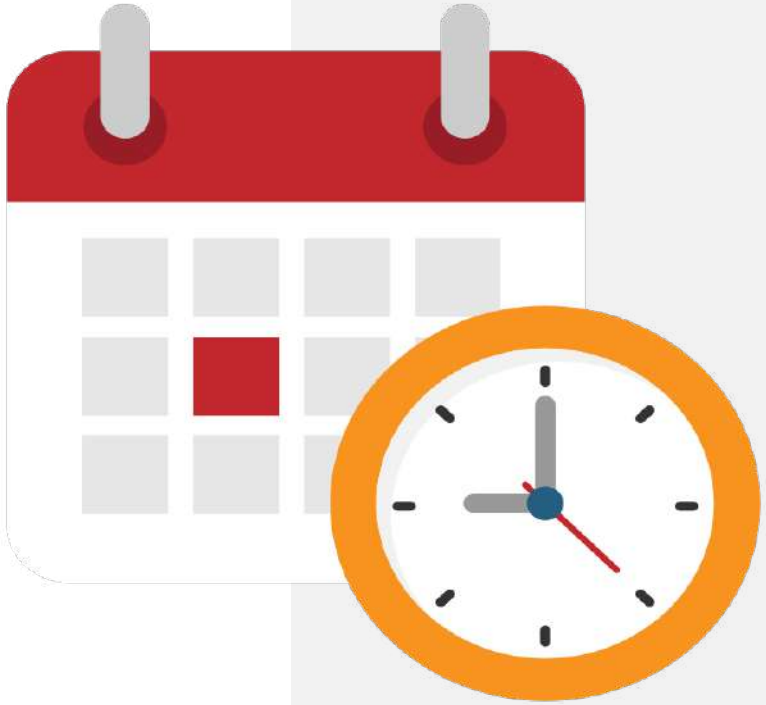
1. Learning through Learning and knowledge rest in diversity of opinions.
2. Learning is a process of connecting specialized nodes or information sources.
3. Learning may reside in non-human appliances.
4. Capacity to know more is more critical than what is currently known.

Strategies for generating brain plasticity and learning connections

Connectivism (continuation)

5. Nurturing and maintaining connections is needed to facilitate continual learning.
6. Ability to see connections between fields, ideas, and concepts is a core skill.
7. Currency (accurate, up-to-date knowledge) is the intent of all connectivist learning activities.
8. Decision making is itself a learning process.

Strategies for understanding timing

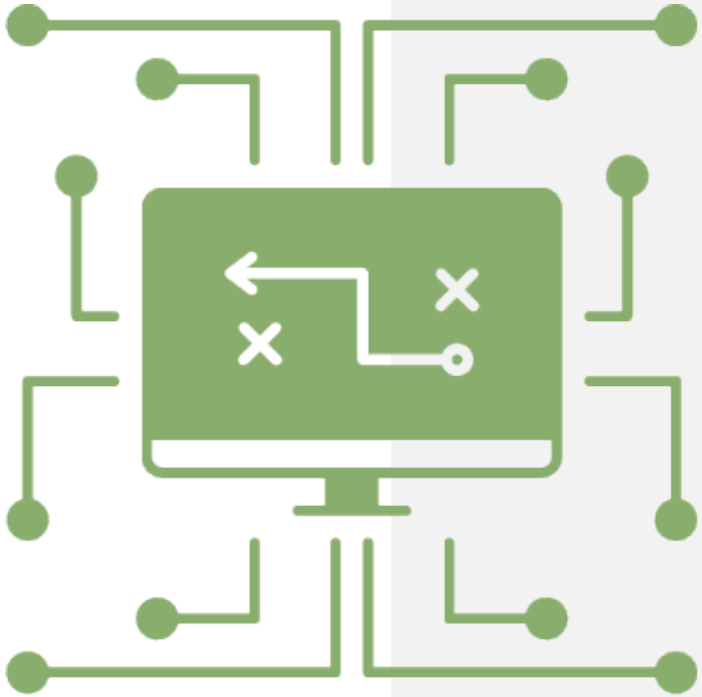


Strategies for generating brain plasticity and learning connections

SMART objectives

Other strategies

- Gamification
- Lesson storytelling
- Holding large online scientific competitions
- Group activities



Ethics in online education

4

WELCOME

« Ethics in online education »

Topics

1. The issue of intellectual property and its protection in the process of distance learning.
2. Application of ethical behaviors to the teaching and learning process
3. Establishing an ethical behavior control process
4. Cultural diversity and its influence on the ethical system.
5. The problem of discrimination with particular emphasis on digital discrimination.

ETHICS IN ONLINE EDUCATION

1. The issue of intellectual property and its protection in the process of distance learning. Explanation of learners responsibilities related to the categories of unethical behavior (plagiarism, cheating, deceptive actions)

ETHICS IN ONLINE EDUCATION

«The issue of intellectual property and its protection in the process of distance learning»

WHAT IS ETHICS?

Is about „what people should do" (Schultz 2005).

„Ethics in education means, granting educational opportunities to anyone on equal basis; disregarding nationality, gender, ideological differences or mental/physical disabilities" (Toprak et al. 2010).

What is right? What is wrong?

ETHICS IN ONLINE EDUCATION

«The issue of intellectual property and its protection in the process of distance learning»

Provisions on the protection of intellectual property:

National regulations

European directives (DIRECTIVE (EU) 2019/790)

Institutional regulations

ETHICS IN ONLINE EDUCATION

«The issue of intellectual property and its protection in the process of distance learning»

Institutional policy should include activities in the field of:

1. Hacking attempt on the institutional computer
2. Using the institution's resources for personal gain (includingg plagiarism)
3. Sending threatening messages
4. Posting confidential meterial outside the institution
5. Forwarding messages without permission

Source: Gearhart 2005.

ETHICS IN ONLINE EDUCATION

«The issue of intellectual property and its protection in the process of distance learning»

After high school students don't understand intellectual property issue. That's why, following information should be provided in distance program handbook/guide:

1. Ethics of examinations
2. Use of sources on papers and projects
3. Writing assistance and other tutoringu
4. Collecting and reporting data
5. Use of academic resources
6. Respecting the work of others
7. Computer ethics
8. Giving assistance to others
9. Respect for academic regulations

Source: Gearhart 2005.

ETHICS IN ONLINE EDUCATION

2. Application of ethical behaviors to the teaching and learning process

ETHICS IN ONLINE EDUCATION

«The issue of intellectual property and its protection in the process of distance learning»

1. How should learners behave during classes?
2. Can they eat?
3. Can they drink?
4. Can they use smartphones or other electronic device?
5. What language should they use?

ETHICS IN ONLINE EDUCATION

«Application of ethical behaviors to the teaching and learning process »

Netiquette – general ethical principles

1. Contribute to society and to human well-being
2. Avoid harm
3. Be honest and trustworthy
4. Be fair and take action not to discriminate
5. Honor the work required to produce new ideas and inventions
6. Respect privacy
7. Honor confidentiality

ETHICS IN ONLINE EDUCATION

«Application of ethical behaviors to the teaching and learning process »

Netiquette – professional responsibilities

1. Strive to achieve high quality in processes and products of professional work
2. Maintain high standards (of competence, conduct, ethical practice)
3. Know and respect existing rules of professional work
4. Accept and provide an appropriate professional review
5. Give comprehensive and thorough evaluations of computer systems
6. Perform work only in areas of competence

….and more.

Source: „ACM Code of Ethics and Professional Conduct”

ETHICS IN ONLINE EDUCATION

«Application of ethical behaviors to the teaching and learning process »

The Code of Ethics for Educators

Putting students first

Promote and uphold healthy relationships

Showing commitment on the job

Never stop learning!

Source: Professional Governmental Underwriters.

ETHICS IN ONLINE EDUCATION

3. Establishing an ethical behavior control process

ETHICS IN ONLINE EDUCATION

«Establishing an ethical behavior control process »

There is no single and best way to control the process of implementing ethical standards!

So, what can you do?

ETHICS IN ONLINE EDUCATION

«Establishing an ethical behavior control process »

What can you do?

- **You can establish clear accountability rules for an ethical culture**
- **Appreciate and praise ethical behavior**
- **Respond to students' ethical problems**

ETHICS IN ONLINE EDUCATION

«Establishing an ethical behavior control process »

Talk with your students/learners about:

- ethical dilemma - ask them to share about their ethical dilemma and self-assess whether they have responded well or badly

- provide environments for your students to discuss ethical dilemmas

Never leave your students without an answer!

ETHICS IN ONLINE EDUCATION

4. Cultural diversity and its influence on the ethical system.

ETHICS IN ONLINE EDUCATION

«Cultural diversity and its influence on the ethical system. »

Why is cultural diversity so crucial?

Students become more empathetic

Learning in a culturally diverse environment can prevent learners from developing prejudices later in life. It enables them to understand people other than themselves because they are more aware of experiences that someone from another cultural group may encounter.

Source: Drexel University School of Education

ETHICS IN ONLINE EDUCATION

«Cultural diversity and its influence on the ethical system. »

Why is cultural diversity so crucial?

Students gain a better understanding of lessons and people

Working with people from different cultures allows you to better understand the topic. It also teaches students how to contribute to a diverse work environment by using their strengths.

Source: Drexel University School of Education

ETHICS IN ONLINE EDUCATION

«Cultural diversity and its influence on the ethical system. »

Why is cultural diversity so crucial?

Students become mode open-minded

Exposing students to a variety of opinions, thoughts and cultural backgrounds helps them build openness later in life. As a result, students will be open to new ideas by adopting different points of view.

Source: Drexel University School of Education

ETHICS IN ONLINE EDUCATION

«Cultural diversity and its influence on the ethical system. »

Why is cultural diversity so crucial?

Students feel more confident and safe

Working in a culturally diverse environment allows students to feel more comfortable and safe with these differences later in life. This enables them to interact freely with a wider range of social groups.

Source: Drexel University School of Education

ETHICS IN ONLINE EDUCATION

«Cultural diversity and its influence on the ethical system. »

Why is cultural diversity so crucial?

Students are better prepared for a diverse workplace

Currently, we have the opportunity to work with people from different cultures and social groups more and more often. This is the result of increasing globalization. Studying in a culturally diverse environment prepares students for future professional relationships.

Source: Drexel University School of Education

ETHICS IN ONLINE EDUCATION

«Cultural diversity and its influence on the ethical system. »

Suggestions for multicultural learning environments are:

1. Using a facilitator
2. Avoiding ambiguity
3. Communicating expectations
4. Providing feedback
5. Being sensitive to verbal nuances
6. Building a relationship

ETHICS IN ONLINE EDUCATION

5. The problem of discrimination with particular emphasis on digital discrimination.

ETHICS IN ONLINE EDUCATION

«The problem of discrimination with particular emphasis on digital discrimination »

What does digital discrimination result from?

- For lack of proper equipment
- For lack of internet connection
- For lack of a suitable place to work
- For lack of appropriate software

ETHICS IN ONLINE EDUCATION

«The problem of discrimination with particular emphasis on digital discrimination »

How to deal with discrimination?

1. Design asynchronous classes
2. Adapt the material to the hourly load.
3. Familiarize yourself with the discrimination laws in your institution
4. Give the opportunity to submit comments and objections

5. Choose tools carefully (should be free for students)
6. Deal transparently with media and technology
7. Develop a netiquette document
8. Be approachable

9. Try to find individual solution for student with discrimination
10. Design barier-free learning materials
11. Considera limited space and technical resources
12. Exchange information and develop solution together

Source: Based on Georg-August-Universität Göttingen

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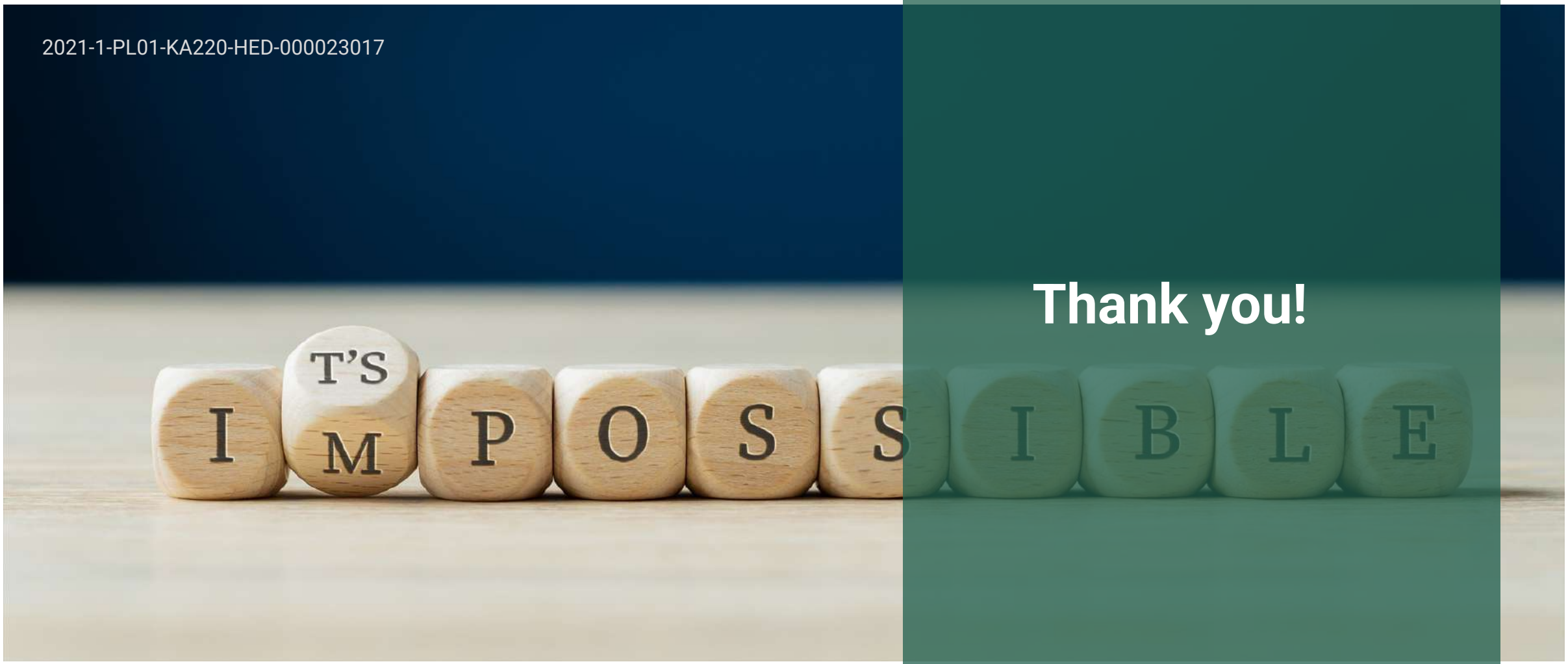

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