BACK 2 BASICS

BRIDGING THE GAP BETWEEN HIGHER EDUCATION AND LABOR MARKET BY FOSTERING DIGITAL SKILLS

Bridging the gap between HE and the labor market

Training course for HE teachers

2021-1-PT01-KA220-HED-000023543

This project has been funded with support from the European Commission. This publication and all its contents reflect 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.

Co-funded by the European Union

BACK 2 BASICS

BRIDGING THE GAP BETWEEN HIGHER EDUCATION AND LABOR MARKET BY FOSTERING DIGITAL SKILLS

Module 0

WELCOMING

2021-1-PT01-KA220-HED-000023543

This project has been funded with support from the European Commission. This publication and all its contents reflect 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.

Co-funded by the European Union

Welcome!

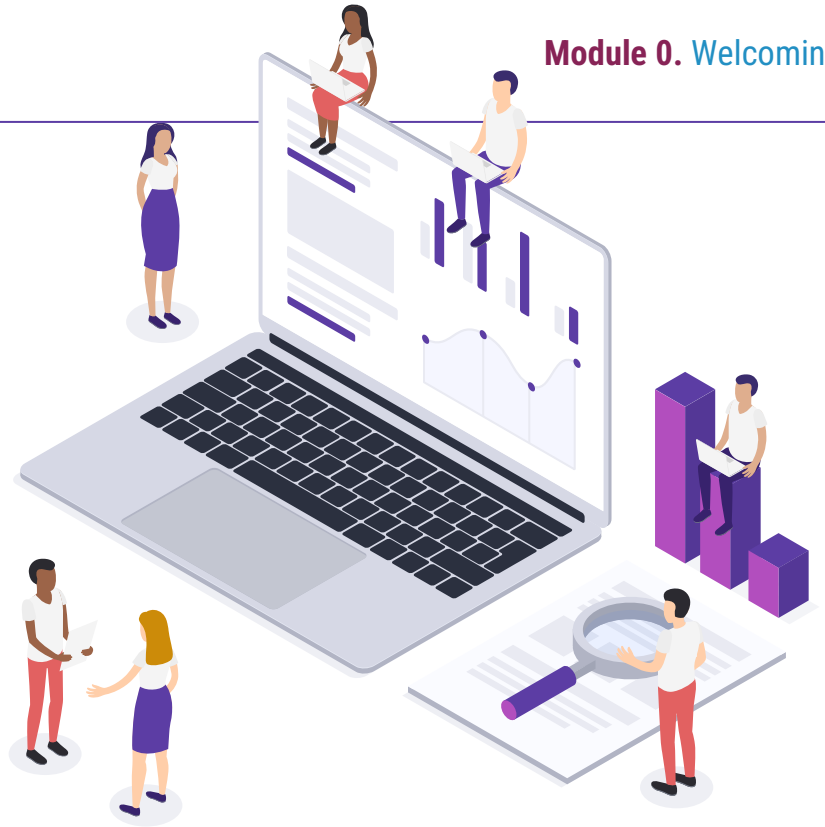
ICE BREAKING ACTIVITY

"Coffee vs. tea, sweet vs. salty"

INSTRUCTIONS:

1. While you are registering, pick up 2 cards based what you like the most: **coffee** or **tea** and **sweets** or **salty** foods;
2. Choose two people with the "same tastes", for example one coffee and one sweet;
3. Use the questions of the cards as a guide to get to know each other, while you have your coffee/ tea and/or sweet/ salty snack;
4. You can do this exercise with as many people as you want;
5. Enjoy your time getting to know the group until 14.55 pm.

The Project



BACK2BASICS

Bridging the gap between higher education and labor market by fostering digital skills

Main Goal

Back2Basics aims at addressing digital transformation in the HE system and bringing HE systems and labor markets closer together, working in the enhancement of digital skills in the HEI in order to train more digitally prepared teachers and graduates.

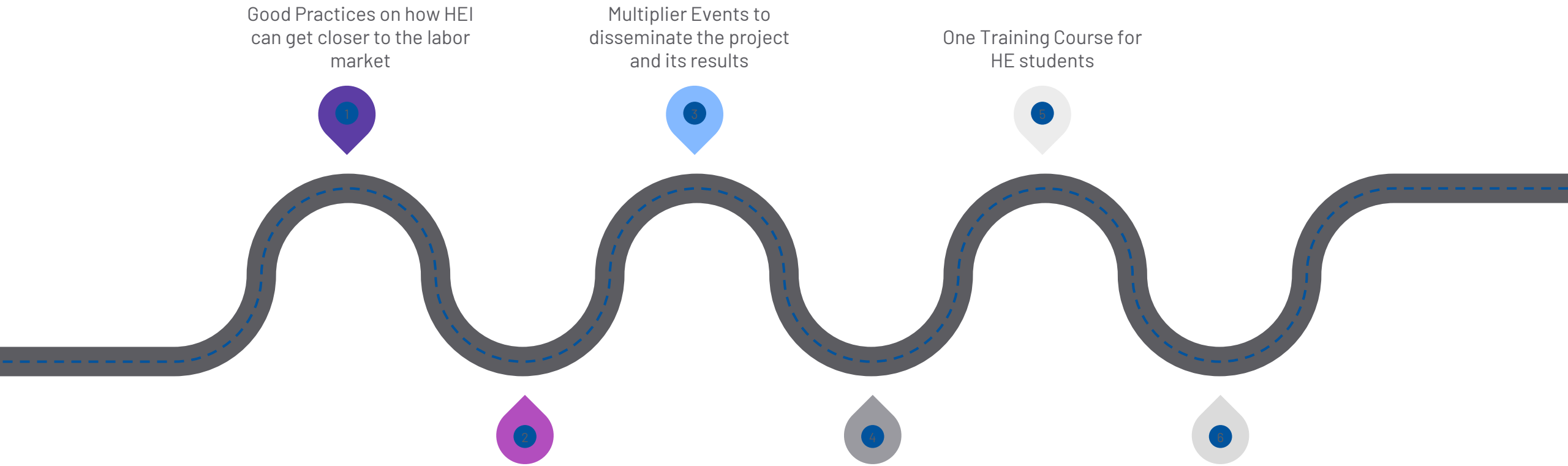
Why

- HE students use ICT tools everyday, but not in a professional manner

- Many HE students lack professional digital skills that would enhance their employability profile

- Many HE teachers not conveying important work-valuable digital skills to their students

What to expect



Consortium

Coordinators

universidade de aveiro

Partners

BIO LIVING

HELLENIC REPUBLIC UNIVERSITY OF MACEDONIA

gri

Gabinete de Recolocación Industrial

DigComp 2.2 - Digital Competence Framework for Citizens

DigComp identifies the key components of digital competence in the five areas and 21 specific competences.
The framework also describes eight proficiency levels, examples of knowledge, skills and attitudes, and use cases in **education** and **employment** contexts.

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

Communication and collaboration
2.1. Interacting through digital technologies
2.2. Sharing information and content 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

Digital content creation
3.1. Developing digital content
3.2. Integrating and re-elaborating digital content
3.3. Copyright and licences
3.4. Programming

Safety
4.1. Protecting devices
4.2. Protecting personal data and privacy
4.3. Protecting health and well-being
4.4. Protecting the environment

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

Based on the framework, the project partners began by selecting the associated knowledge, skills and attitudes that would be the most important and relevant.

4 focus groups (FG) discussions, held in Spain and Portugal.

- The first FG brought together professionals from various fields with experience in working with young graduates.

- In the second FG we wanted to diagnose young graduates who have been on the job market for a relatively short time

we deliver a training course directed mainly at **HE students**, to acquire important digital skills that will enhance employability profiles and be in direct contact with experts from several recruitment/training areas who could helped them improve digital competence.

Back2Basics

DIGCOMP

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

Communication and Collaboration
2.1. Interacting through Digital Technologies
2.2. Sharing information and content through digital technologies
2.3. Engaging in citizenship through digital technologies
2.5. Netiquette
2.6. Managing Digital identity

Digital Content Creation
3.1. Developing digital content
3.2. Integrating an re-elaborating digital content
3.3. Copyright and licences
3.4. Programming (not addressed in this course)

Safety
4.1. Protecting devices
4.2. Protecting personal data and privacy
4.3. Protecting health and well-being
4.4. Protecting the environment

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

MODULE _Cyber Security | Digital Skills and Tools | Digital Communication

Contents/topics	Learning Outcomes
Online Search: keywords Online content: free content/paid content Collecting data by using online tools Recommendation mechanisms: how they work; echo chamber; cookies Infomation source: fake news, ads Collected personal data; tracking; pattern recognition; biometric data	By the end of this unit students are expected to be able to: - undestand the several ways to perform a web search (voice, keywords, images - differentiate between organic and paid results and be able to criticaly analyse the source of information - kows how to collect digital data using basic tools such as online forms, and present them in an accessible way (e.g. using headers in tables). - undestand how recommendation systems work, its advantages and risks - knows how to identify information sources and verify information accuracy
Communication tools: free/paid tools; advertising; premium features Synchronous and assynchronous communication tools: when and how Characteristics of the digital space: persistance, invisible audiences Setting up communication tools: câmera, microphone, background framing, headphones (for privacy) Using online collobration tools: googledocs, dropbox, whiteboards, polling tools... Communicating online: netiquette, tone, self presentation Online identity: information voluntary provided/information collected by systems and apps; persistence of information, invisible audiences,...	By the end of this unit students are expected to be able to: - criticaly choose between paid and free tools (considering features, safety, ...) - understand when to use synchonous and asynchonous communication tools - successfully set-up a video call - know how to use digital tools and technologies in a remote working context for idea generation and co-creation of digital content (e.g. shared mind maps and whiteboards, polling tools). - undestand the basic principles of netiquette and the use of online communication tools in professional context - undestand the major differences between the physical and the digital world: persistence of data, invisible audiences, content searchability and replicability
Digital content: audio, video, image, text; editable and non-editable digital content Digital content formats: when to use each format (e.g. infographics, text, blog posts, podcasts,...) Copyright and licence: intellectual property, trademarks, licence (e.g. creative commons); public domain databases	By the end of this unit students are expected to be able to: - undestand the difference of editable and non-editable digital content - know when to use different digital content formats - undestand the difference between free and paid content and the different licencing models - identify public domain databases (for images, sound, fonts, videos)
Digital safety: passwords; strong passwords, different passwords for different platforms and services; passwords: dos and dont's; identity theft Protecting digital devices: password, fingerprints Security: keeping OS and apps up-to-date; firewalls; VPN; anti-virus (free vs paid); digital certificates Health and well-being: FOMO, addiction, self-regulation Green behaviours when buying new devices; energy efficiency GDPR	By the end of this unit students are expected to be able to: - create strong passwords - undestand the importance of digital certificates - know how to password protect PDF documents - understand the content of applications "terms of use" - understand the importance of balancing screen and offline time; indentify symptoms of screen additcion - undestand the environmental impact of equipments' planned obsolescence - undestand the main dimensions of the GDRP
Technical problems: internet connection, airplane mode on, internet signal; managing battery time; setting up a VPN The Internet of Things: what is, where can it be seen Apps and digital solutions: machine translation solutions (e.g. Google Translate, DeepL); simultaneous interpretation apps (e.g. iTranslate) Creative using digital technologies: online communities of practice Digital competence gaps: self assessment tools	By the end of this unit students are expected to be able to: - know how to identify and solve minor technical problems (e.g. internet connection, bandwidth) - adjust communication to technical problems (e.g. using voice instead of video when with low bandwidth) - understand what is the IoT and where it can be found in daily equipments - make critical use of machine translation solutions and simultaneous interpretation apps for translating documents or conversations (i.e. be sensitive on when to use it and when the content requires an accurate translation) - identify online learning communities and spaces that resonate their interests - use self assessment tools to assess their digital competencies

Gap between HE and the labor market:
Youth and labor market perspective

METHODOLOGY

- **Initial research** was carried out to identify frameworks of digital skills that would help to identify the most relevant skills, attitudes and tools to the labour market.

- Organisation of **focus groups (FG) discussions**, helded in Spain and Portugal with companies and another one with recent graduates, where were collect examples of their experiences (good and bad) with people looking for job opportunities and prepare an appealing digest with valuable tips (or “do’s and don’ts”) for best-practices.

- Deliver of a **training course** to HE students and recent graduates where was confirmed a certain lack of skills which was alsand o used to gather information, and the conclusions were as the following.

Gap between HE and the labor market: students‘ and recent graduates perspective

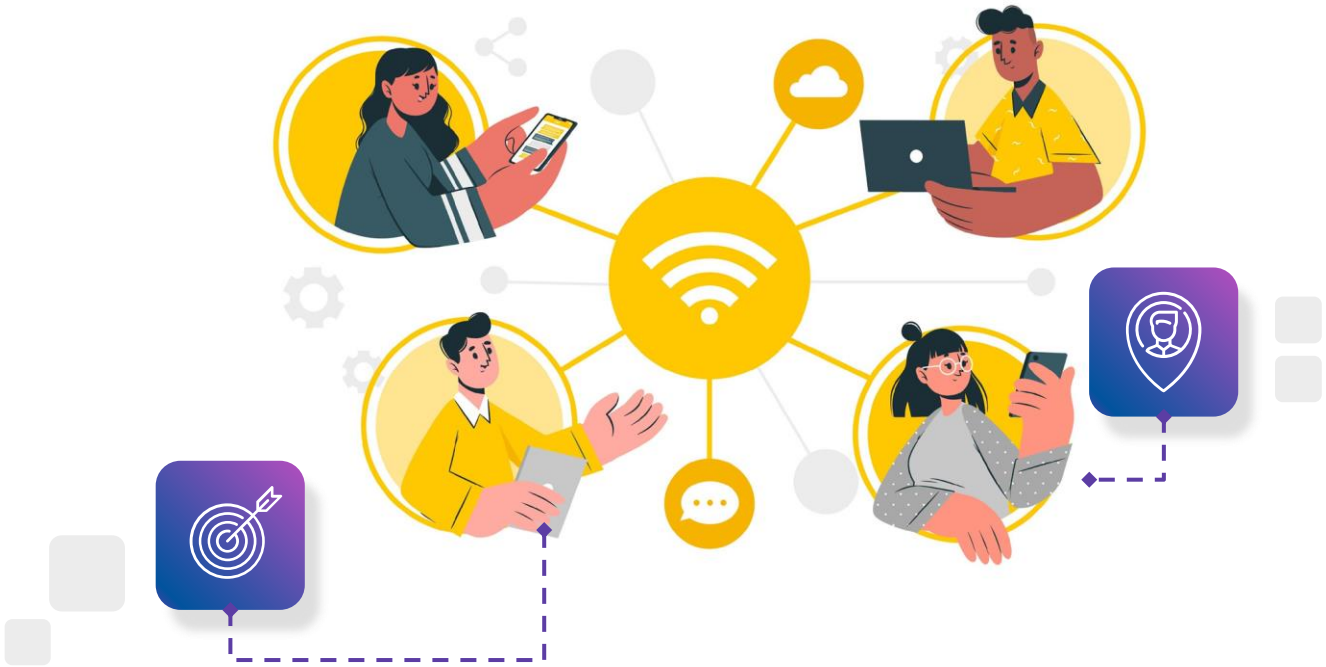


Image by storyset on Freepik

Gap between HE and the labor market: students‘ and recent graduates perspective

RESULTS/ CONCLUSIONS

- The traditional HE **does not prepare** young people for the labor market.
- Some of the skills present after university *“are the result of involvement in other projects, extracurricular activities and personal curiosity rather than of attending the bachelor's and master's degree.”*
- The other most common scenario is that they would **acquire these skills during the employment period** and normally not receiving specific training for the job, but also learning on their own.

FUNDAMENTAL DIGCOMP AREAS AND SKILLS

that the young ones consider to be more important in their job áreas

Information and data literacy

- When I use a search engine, I know which words to use in order to find what I need quickly and I can take advantage of its advanced features.
- I critically check if the information I find online is reliable.

Communication and collaboration

- I know how to use cloud services (e.g. Google Drive, DropBox and OneDrive) to share my files.
- I know how to reference the source of documents (e.g. the author or web address) that I found online.
- I know how to apply for a job using a digital platform (e.g. fill in a form, upload my CV and photo).

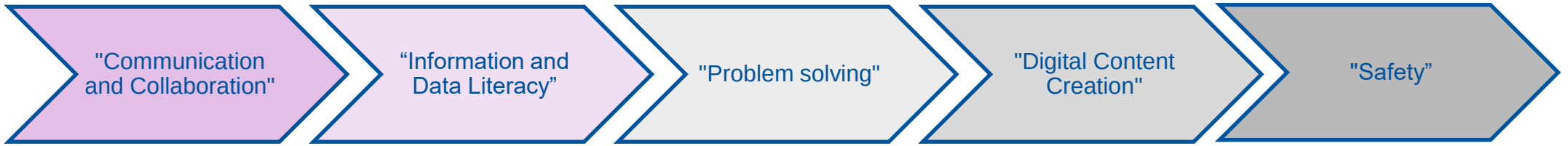
Digital content creation

- I know how to create and edit digital text files (e.g. Word, OpenDocument, Google Docs).
- I know how to produce a multimedia presentation with text, images, audio and video elements.
- I am careful to follow the rules about copyrights and licenses of digital content that I find.

Safety

- I know about the importance of keeping the operating system, antivirus and other software up-to-date in order to prevent security issues.

The recent graduates questioned consider that they have high levels in the five Areas of Digital competence
The area with the most knowledge is “Communication and collaboration” and the less “Safety”



NEEDS IN DIGCOMP AREAS

NEED FOR SKILLS ENHANCEMENT

According to the Back2Basics research, young people feel the need to improve certain skills, which are represented increasingly according to the need for improvement felt

"Protecting Health and wellbeing" → "Information and data literacy" → "Online communication and Etiquette" → "Content Creation" → "Online Security & Data Protection"

NEED FOR SKILLS ENHANCEMENT

"Online Security & Data Protection"

Make secure passwords, avoid hacking, phishing, know more about E-commerce, Coding/Programming, AI Fundamentals, be aware to not leave accounts open on shared devices, to read the privacy policies of digital services and to perform operating system updates.

NEED FOR SKILLS ENHANCEMENT

"Content Creation"

Do a proper document formatting, choose the right type of digital media according to the target audience, create good CVs, in many formats, follow the rules on copyright and licensing of digital content, know programming languages.

NEED FOR SKILLS ENHANCEMENT

"Online communication and Etiquette”

Do a proper formal communication in digital enviroments, be more active in online social or political debate, be prepared to online meetings, interviews.

NEED FOR SKILLS ENHANCEMENT

"Information and data literacy"

Browse, search and filter data, information and digital content, for example for a job-seeking process, get information from credible sources and/or assess the relevance of that information.

NEED FOR SKILLS ENHANCEMENT

"Protecting Health and wellbeing”

Manage emotions in a work context, make a good time management preventing digital addictions, live and consume in a more environmentally friendly way buying and using digital devices.

Do you agree with the students‘ and recent graduates perspective presented about the more important skills? Are these the least developed skills in the HE system?

1st ACTIVITY

→ form groups of 4;

→ reflect, share your opinion on the questions above, justifying it with real examples, then discuss what might be missing in students’ educational pathways (20´);

→ share the general opinion of the group with all the participants (5´ each).

Gap between HE and the labor market:
Labor market perspective

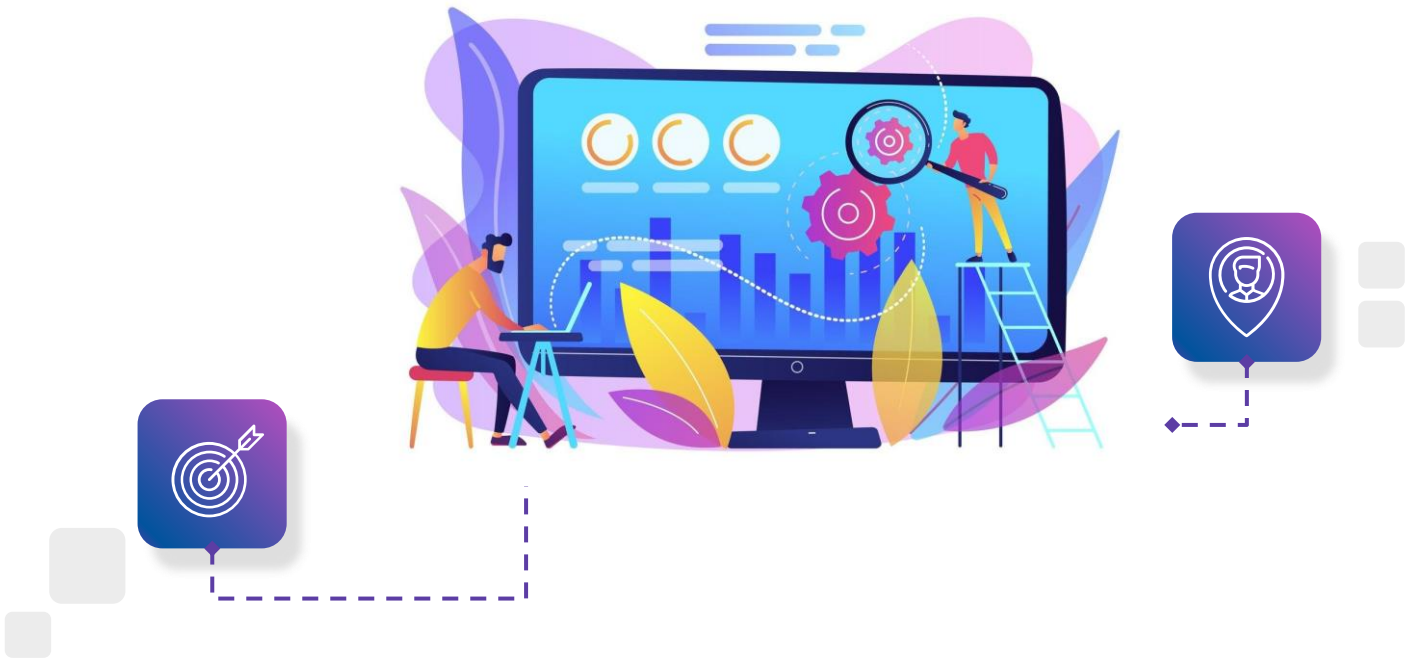


Image by storyset on Freepik

Gap between HE and the labor market: Labor market perspective

RESULTS/ CONCLUSIONS

- The traditional Portuguese education **does not prepare** young people for the labour market.
- There is a **lack of practical cases** discussed in the classroom and there is a great **shortage of pre-labour internships** that increase new graduates' awareness of the business reality.
- Teaching also does not stimulate **critical spirit and autonomy in problem solving** in young people.

Gap between HE and the labor market:
Labor market perspective

Session with a local company representative

THANKS!

Any questions?