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Let's talk about Europe:
- Evaluation of research careers
- Research Competence Framework
Let's talk about you:
- Career development as a researcher

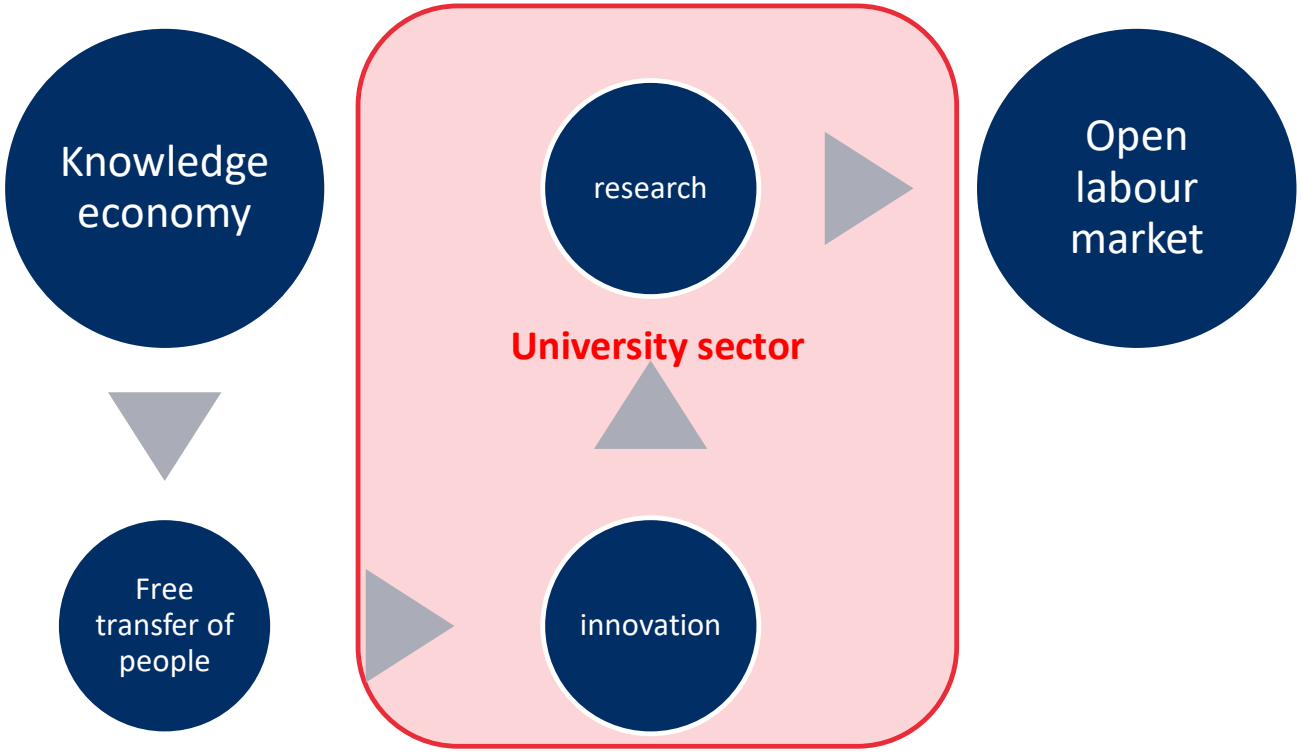
Karen Vandevelde, HR Director, Antwerp University 28/11/2022

Who am I?

What does Europe have to do with your career as a researcher?

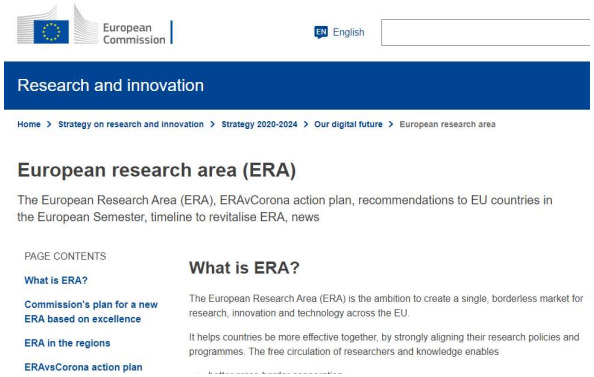
Europe in our university – Our university in Europe

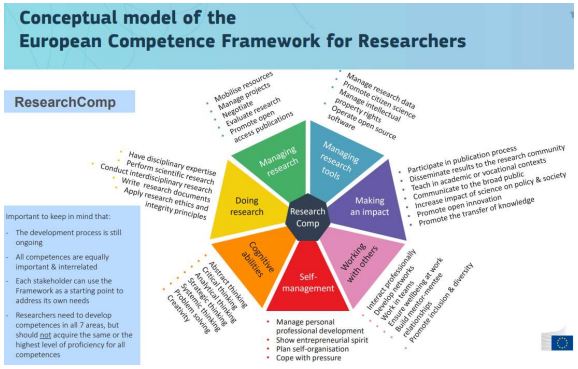
- HR is not a European competency
- Universities are not a European competency
- But economy and competitiveness are important European competencies



Europe in our university – Our university in Europe

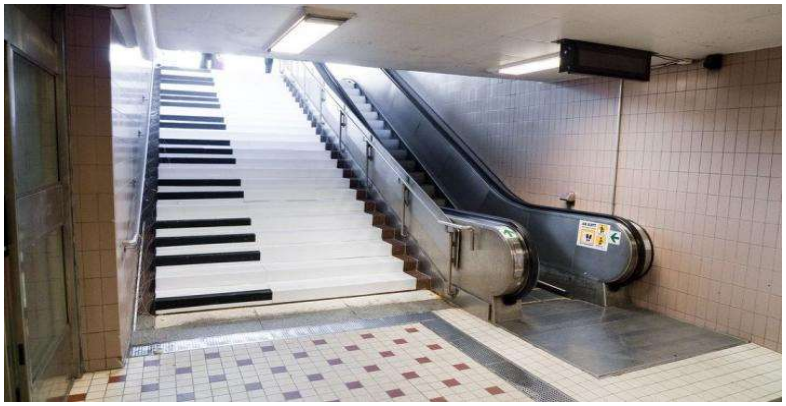
- “Europe” can make legislation in the area of the economy and the labour market (and universities are a part of this)
- “Europe” cannot make legislation for universities, but has a powerful policy impact through attractive funding schemes and “soft policy” tools
  - Funding: H2O2O, MSCA, EUI
  - Policy tools, soft pressure, voluntary commitments from member states & institutions, supporting tools





Europe in our university – Our university in Europe

- How “soft” are “soft policy tools”?



- Money is powerful, but cannot change everything
- Constant struggle for Europe to try and create cohesion and impact (open & attractive labour market for researchers, competitive knowledge economy)
- Choice between “commitment of all members of European Council” (small steps with a big group) versus “coalition of the willing” (big steps with a small group) – or a combination of both

Some examples of European "soft pressure" tools

(Probably a bit boring … let's skip this and if you really really want to, we can come back to this later)

Challenge: an open & competitive labour market should also apply to research

- Common agenda formulated at a European Council Meeting in Lisbon aimed at helping Europe 'to become the most competitive and dynamic knowledge-based economy in the world' by 2010.
- Cornerstone = European Research Area (2000): creation of an area in which research activities at the national and EU level are well integrated and coordinated
- Focus area 3: Open & attractive labour market for researchers
- (HR-relevant) impact :
  - Commitment to raise investment in R&D to 3% of GDP
  - Increase overall number of researchers → invest in PhD positions & training
  - National action plans (2016) in every member state with varying levels of ambition

Challenge: talented researchers do not always find the relevant research jobs

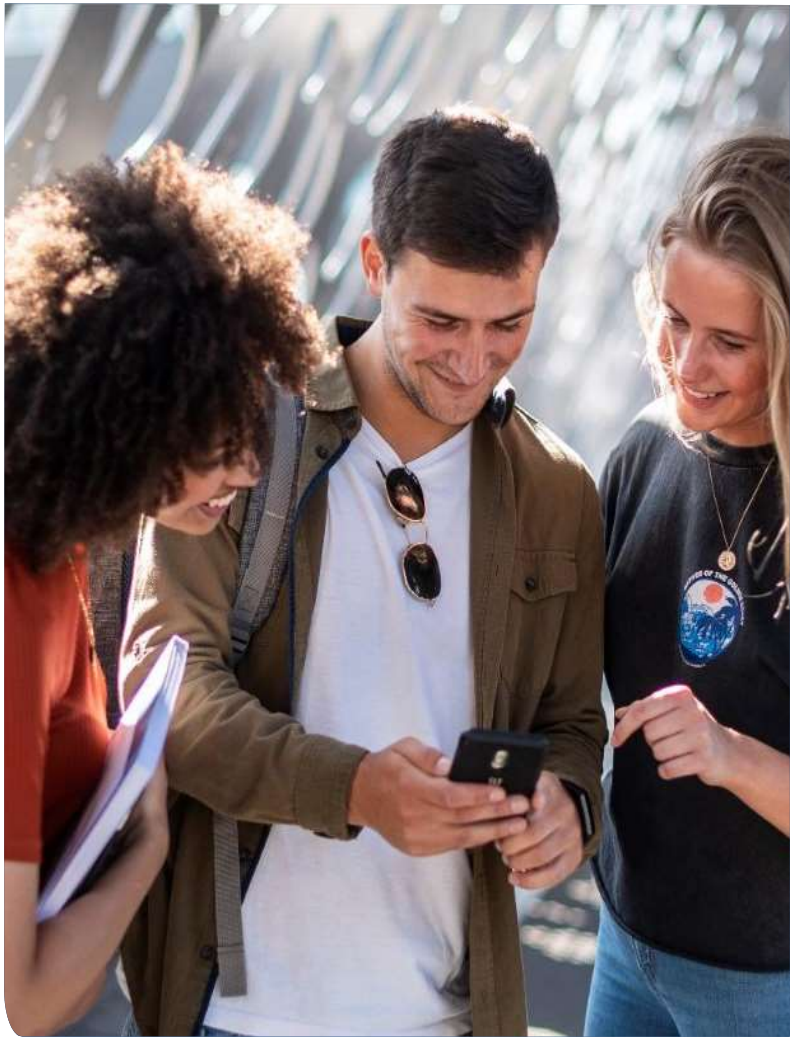
- Creation of Euraxess Job Portal: free to use by researchers and organisations
- Pressure to post H2020 and MSCA-related vacancies on Euraxess
- Direct access to fellowships & vacant research positions in over 40 countries
- Supported by establishment of international network of Euraxess Centres, providing information and support to internationally mobile researchers

Challenge: we assume we share the same values & principles, but do we?

- European Charter for Researchers & Code of Conduct for the Recruitment of Researchers (C&C, 2005)
- 40 Values and principles for organisations funding/employing researchers, and for those carrying out research, under 4 headings:
  - Ethical and professional aspects
  - Recruitment and selection
  - Working conditions and social security
  - Training and development
- Endorsed by >1300 institutions voluntarily
- Pressure on endorsement through MGA H2020, Horizon Europe & MSCA
- Principles now subject to review (long process, many stakeholders)

Challenge: risk of merely paying lip service to C&C

- Introduction of HR Excellence in Research Award (HRS4R), to support institutions implementing C&C (2008, revised 2016, new revision to be expected)
- Initially voluntary committment – now more binding if C&C principles have been endorsed
- Mix of clear targets and flexible implementation, based on gap analysis, action plan, peer review feedback, and cyclical structure of continuous improvement
- *more details available if interested – see additional slides at end of presentation*



Challenge: academic career structures are different in every country

- Create commonly understood terminology for job vacancies, career development, …
- European Commission developed a European Framework for Research Careers (2011)
  - R1 = First Stage Researcher (up to the point of PhD)
  - R2 = Recognised Researcher (PhD holders or equivalent who are not yet fully independent)
  - R3 = Established Researcher (researchers who have developed a level of independence.)
  - R4 = Leading Researcher (researchers leading their research area or field)

= useful when comparing positions across countries, commonly used in “Eurospeak”, at EC debates, in EC policy documents, in Euraxess… but terminology not widely adopted nationally.

Challenge: fair recruitment is the achilles heel in universities in Europe

- European Commission Working group developed report on "Open, Transparent & Merit-Based Recruitment (OTM-R 2015)
- OTM-R was very soon included in HRS4R & ERA national action plans
- The OTM-R checklist helps organisations to identify strengths & weaknesses in their recruitment process
  - "Open" = reach the widest pool of applicants
  - "Transparent"= make sure the process is clear & the selection criteria are known to participants
  - "Merit-based" = make sure that judgment is carried out adequately, and based on a candidate's achievements & potential

Challenge: young mobile researchers usually don’t think about their pension… until it is too late

- European Commission wants to make it easier for researchers to contribute to a 2nd pillar pension through their employment
- Establishment of RESAVER in 2018: a European pension fund
- Difficult to implement, due to differences in national regulation & differences in practice (own contribution vs employer contribution, appointment as civil servant versus appointment under contract, conflict with already existing pension schemes)

Challenge: universities are still not sufficiently gender balanced

- Compulsory submission of an institutional Gender Equality Plan (GEP) in order to qualify for Horizon Europe funding (2021). Action plan can be tailor-made, but must meet a minimum set of criteria:
  - Status as public document
  - Dedicated resources for implementation
  - Data-collection & monitoring for evaluation
  - Supported by training and capacity-building
- Integration of gender dimension into research and innovation as default
- Gender balance in research team is included in scoring

Challenge: the “old” ERA principles need to be revived; we haven’t arrived yet where we should be

- Communication on revitalising the ERA (2020)
- The new ERA will
  1) prioritise investments and reforms in research and innovation
  2) boost market uptake
  3) strengthen mobility of researchers and free flow of knowledge and technology
  4) improve access to excellence
- 20 ERA actions, including the following HR-related topics under (1):
  - Reform the assessment system for research, researchers and institutions
  - Promote attractive research careers, talent circulation and mobility
  - Promote gender equality and foster inclusiveness

  (and in addition a number of actions on academic freedom, open science, citizen science, excellence which also have an HR-component)

Evaluation of Research Careers

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Evaluation of researchers

European Commission publication: Scoping report on research assessment (2021)

- **Method**: “coalition of the willing”
- = European research funders and research performers who agree on a new approach for research assessment, following wide and inclusive consultations at European and international level
- 2-step approach: firstly agree on the principles with all interested stakeholders, secondly sign up formally to commit to implementation

Evaluation of researchers

Establishment of COARA:

"Our vision is that the assessment of research, researchers and research organisations recognises the diverse outputs, practices and activities that maximise the quality and impact of research. This requires basing assessment primarily on qualitative judgement, for which peer review is central, supported by responsible use of quantitative indicators."

Universities have been able to register voluntarily since October 2022

Formal launch of COARA:

Constitutive Assembly on December 1st 2022

Plan: together taking concrete steps towards this vision

COARA principles:

- **(1) Principles for overarching conditions:**
  - Comply with ethics and integrity rules and practices
  - Safeguard freedom of scientific research
  - Respect the autonomy of research organisations
  - Ensure independence and transparency of the data, infrastructure and criteria necessary for research assessment and for determining research impacts

COARA principles:

- **(2) Principles for assessment criteria and processes**

Quality and impact

- Focus research assessment criteria on quality
- Recognise the contributions that advance knowledge and the (potential) impact of research results

Diversity, inclusiveness and collaboration

- Recognise the diversity of research activities and practices, with a diversity of outputs, and reward early sharing and open collaboration… and reward behaviour underpinning principles of Open Science
- Use assessment criteria and processes that respect the variety of scientific disciplines, research types, as well as research career stages
- Acknowledge and valorise the diversity in research roles and careers, including roles outside academia…
- Value the skills, competences, and merits of individual researchers, but also recognise team science and collaboration.
- Ensure gender equality, equal opportunities and inclusiveness.

What does this mean for you?

We don’t fully know yet.

- Has the University of Macerata signed or is planning to sign? → engage in discussion on how research is evaluated
- Will you apply for positions at other universities that have signed?
- Will you apply for ERC / Horizon Europe funding?
- Many existing practices will be challenged over the coming years…

  - *Do you need to publish papers / books in order to be awarded a PhD?*
  - *Does your supervisor only look at your “output” or also at your development as a researcher (skills!)?*
  - *Do you need to have published articles in top journals in order to get a postdoc position?*
  - *Do you feel pressure to adopt scientific practices of the natural sciences in order to be taken seriously as an SSH researcher (multiple article publications instead of a book publication)?*
  - *Does a selection committee for an academic post only look at your publication record or also at other relevant aspects of this academic job?*

Researcher Competency Framework

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Attractive research careers

1. European Commission is broadening Euraxess into an international career development hub, the ERA Talent Platform

- Tools for researchers – focus on training & career development
- Good practice sharing, inspiration & networking for organisations

2. European Commission is planning to address challenges of precarious research careers (to be developed)

- Major challenges at systemic level
- Linked to evaluation practices
- Linked to project-based funding mechanism
- Discussion is already initiated by OECD (see general info & publication on this topic)

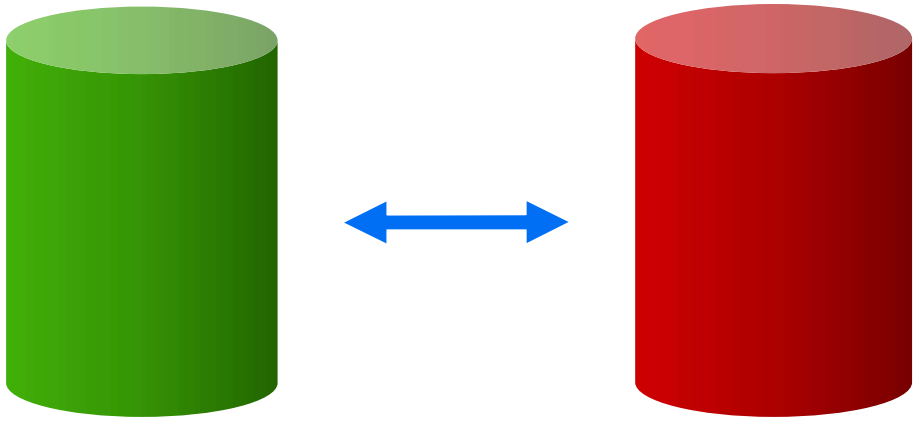
3. European Commission is developing a Competency Framework for Researchers, which is designed to support career development & training, and to support intersectoral mobility

- Building on earlier initiatives, e.g. recommendations and expert studies on intersectoral mobility between academia and industry (2005) and more broadly between different sectors (2016 and 2018)
- Aligning with ESCO classification of jobs and skills

Let’s look at some slides from the EC on this!

(Light blue banner = EC
Red title lay-out = my own story)

A taxonomy of skills and occupations for researchers in ESCO



3 000
Occupations

14 000
Skills + Knowledge

- **Inclusion of new skills and occupations for researchers, and update of some existing ones**
- **Transposition at national level through EURES → all national vacancies will be adapted**
- **Better recognition of the research profession**
- **Researchers understand what skills and competences they need**

ESCO v1.1 – January 2022

European Skills, Occupations and Qualifications

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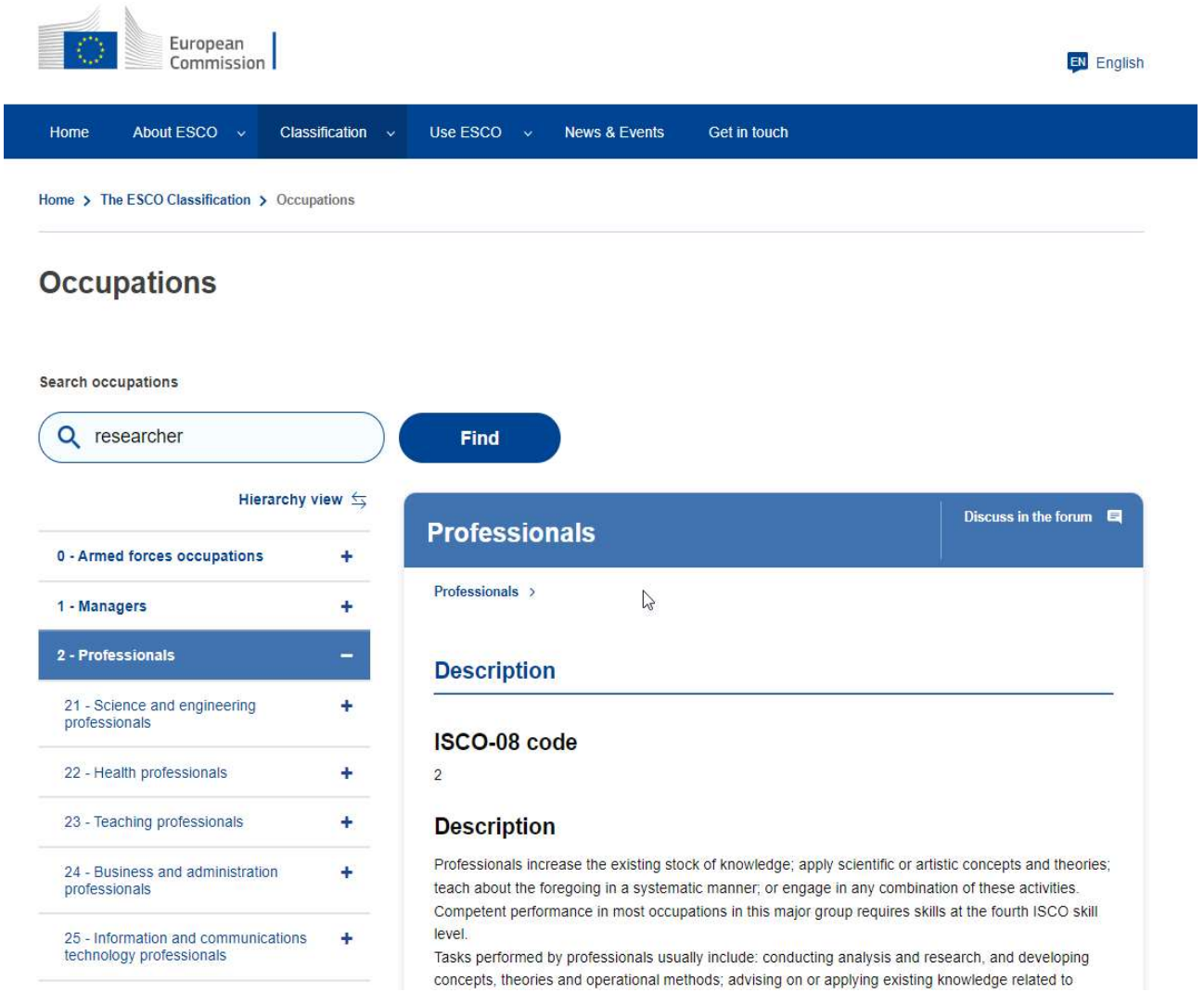
European Commission

ESCO … What? https://esco.ec.europa.eu/en



Example “research skills”

Skills & Compenteces

Search skills

research

Find

Hierarchy view

Search result

- perform field research
- research fragrances
- document seismic research
- carry out strategic research
- conduct background research for plays
- conduct scholarly research
- do historical research
- conduct geochemical research
- identify research topics
- discuss research proposals
- publish academic research
- scientific research methodology
- conduct psychological research
- research welding techniques
- coordinate forestry research
- conduct research on flora

13890

Skills

The ESCO skills pillar distinguishes between i) skill/competence concepts and ii) knowledge concepts by indicating the skill type. There is however no distinction between skills and competences. Each of these concepts comes with one preferred term and a number of non-preferred terms in each of the 27 ESCO languages. Every concept also includes an explanation in the form of description.
The skills pillar of ESCO contains 13,485 concepts structured in a hierarchy which contains four sub-classifications. Each sub-classification targets different types of knowledge and skill/competence concepts:

- **Knowledge**
- **Skills**
- **Attitudes and values**
- **Language skills and knowledge**

In addition to the hierarchy, subsets of skills can be accessed through:

- **A transversal skill hierarchy**
- **A collection of languages**
- **A collection of digital skills**

The ESCO skill hierarchy is in a continuous process of improvement. Please share your feedback regarding the quality of the skills and skill groups through our contact

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conduct scholarly research

Relationships

Broader concepts

conducting academic or market research

Essential for

ICT research manager | university research assistant | computer scientist | librarian | ICT research consultant

Optional for

modern languages lecturer | journalism lecturer | biology lecturer | cartographer | engineering lecturer | art studies lecturer | education studies lecturer | physics lecturer | dentistry lecturer | religious studies lecturer | interpreter | university teaching assistant | philosophy lecturer | law lecturer | business lecturer | economics lecturer | sociology lecturer | social worker | politics lecturer | computer vision engineer | pharmacy lecturer | chemistry lecturer | sign language interpreter | architecture lecturer | computer science lecturer | earth science lecturer | classical languages lecturer | anthropology lecturer | food science lecturer | mathematics lecturer | veterinary medicine lecturer | nursing lecturer | translator | psychology lecturer | history lecturer | medicine lecturer | linguistics lecturer | social work lecturer | space science lecturer | healthcare specialist lecturer | communications lecturer | higher education lecturer | translation agency manager | museum director | archaeology lecturer

Essential Knowledge

scientific research methodology

It’s good that ESCO now recognises “researcher” as a profession and “research” as a skill

But very few universities, employers and researchers use ESCO…

So why not make something that can be more useful ?

Conceptual model of the European Competence Framework for Researchers

ResearchComp

Important to keep in mind that:

- The development process is still ongoing
- All competences are equally important & interrelated
- Each stakeholder can use the Framework as a starting point to address its own needs
- Researchers need to develop competences in all 7 areas, but should not acquire the same or the highest level of proficiency for all competences

European Commission

Research Comp

Competencies unique to doing research

- Mobilise resources
- Manage projects
- Negotiate
- Evaluate research
- Promote open access publications

- Manage research data
- Promote citizen science
- Manage intellectual property rights
- Operate open source software

- Have disciplinary expertise
- Perform scientific research
- Conduct interdisciplinary research
- Write research documents
- Apply research ethics and integrity principles

Research Comp

Competencies related to research / advanced-level knowledge

- Abstract thinking
- Critical thinking
- Analytical thinking
- Strategic thinking
- Systemic thinking
- Problem solving
- Creativity

- Participate in publication process
- Disseminate results to the research community
- Teach in academic or vocational contexts
- Communicate to the broad public
- Increase impact of science on policy & society
- Promote open innovation
- Promote the transfer of knowledge

Research Comp

Competencies essential for any career, including research

- Interact professionally
- Develop networks
- Work in teams
- Ensure wellbeing at work
- Build mentor-mentee relationships
- Promote inclusion & diversity

- Manage personal professional development
- Show entrepreneurial spirit
- Plan self-organisation
- Cope with pressure

ResearchComp - Proficiency levels

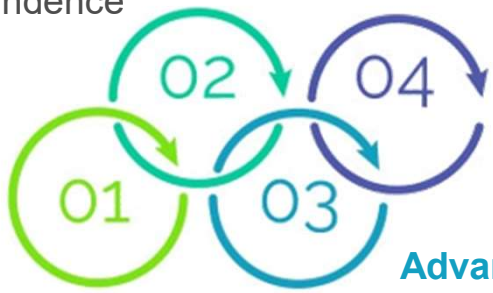
4 proficiency levels

Intermediate

Building independence

Expert

Driving transformation, innovation and growth



Foundational

Developing expertise with guidance

Advanced

Taking responsibility and guiding others

2022

- Development of learning outcomes for each competence and proficiency level
- Final validation workshop with stakeholders
- Roll-out

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European Commission

ResearchComp can be a useful tool

… for you to become more aware of your own skills development

… for your supervisor to give you feedback on broader issues than just the progress of your research

… for doctoral training programmes to focus not only on the production of the PhD dissertation but also on the development as a a researcher

… for universities to develop additional supporting tools

What does this mean for you in your career?

- Lotte De Leeuw, Talent Center, Univ of Antwerp

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The non-academic labour market for PhD holders = one big playing field

So…

What do YOU want to do?
What are YOUR professional goals?
What skills do YOU want to focus on?


Self-reflection
Exploring the labour market
Minding the gap
GOAL SETTING

What are your key employability skills that you want to use and/ or further develop now ànd in the future, on the non-academic labour market as well as within academia?

Self-reflection - what got you here?

"We spend most of our waking lives at work in occupations most often chosen by our inexperienced younger selves. And yet we rarely ask ourselves how we got there or what our jobs mean to us."

→ So: how did you get there? What decisions (either consciously or not) led you to this point? Think about one event that had a big impact; how did/ does it have an impact on you up until this day?

- Alain De Botton, The Pleasures and Sorrows of Work

Self-reflection - what are you good at?

Looking back at your academic career path up until now – what is something that you feel proud of? What (transferable) skill(s) did you use in this specific situation?

Self-reflection - who am I/ what am I good at?

If people could learn something about you that isn't obvious from your current job, it would be that…

- 100 Questions, a Toolkit for Careers, School of Life


Self-reflection
Exploring the labour market
Minding the gap
GOAL SETTING

PhD holders leaving the academic nest

- Data 2017 (Flanders): 88% of doctorate holders eventually leave the academic nest – source: ECOOM
- Data 2020 (UK): 70.1% off UK PhD holders have left the academic sector three-and-a-half years after graduation – source: HEPI

WORLD ECONOMIC FORUM

Top 10 skills of 2025

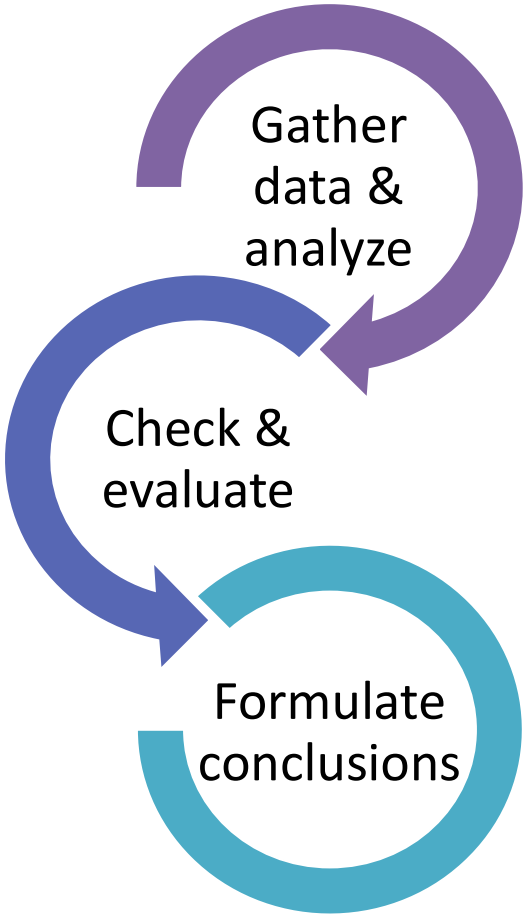
Type of skill

- Problem-solving
- Self-management
- Working with people
- Technology use and development

Source: Future of Jobs Report 2020, World Economic Forum.

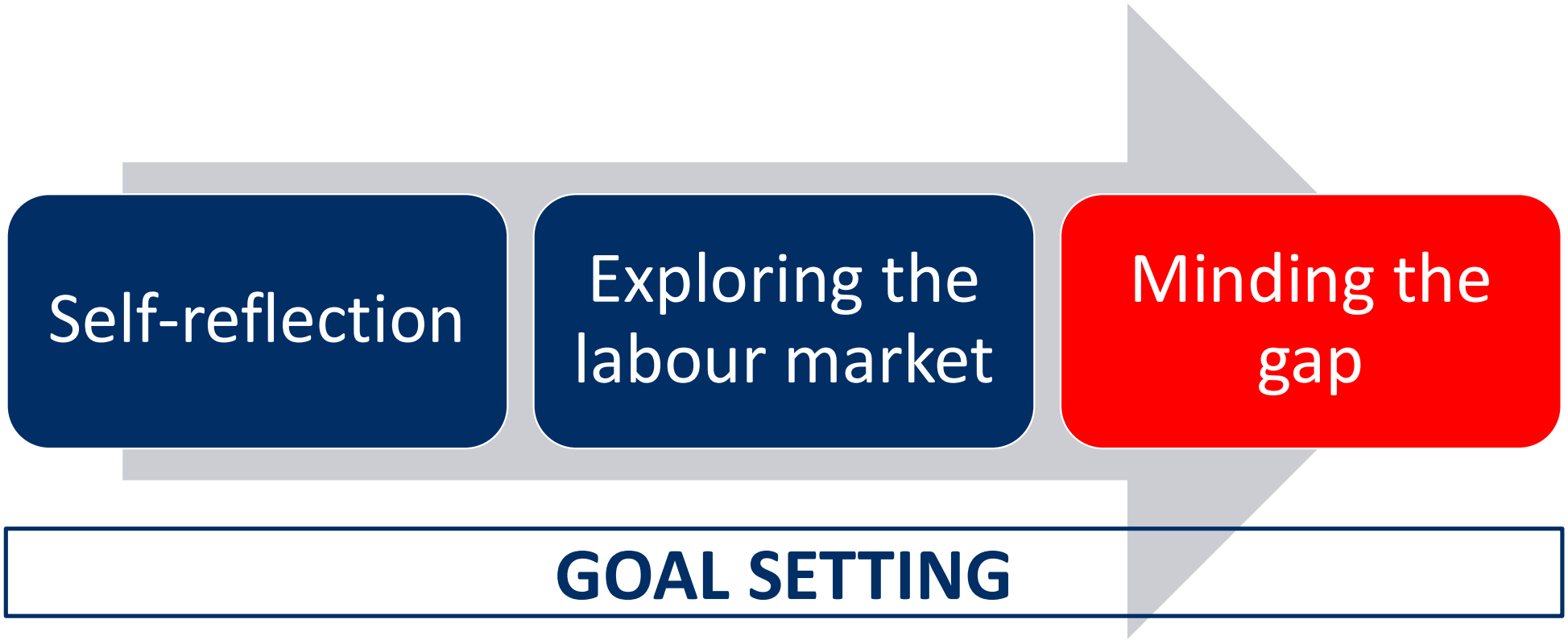
Exploring the labour market

Think of three people that you might want to reach out to, people who are doing something that inspires you or who are working at a company that you like, how can you contact them and what questions would you like to ask them?



Inform yourself via your network, websites, career stories, …

Evaluate your options on the basis of your career values, ambitions & talents


Self-reflection
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GOAL SETTING

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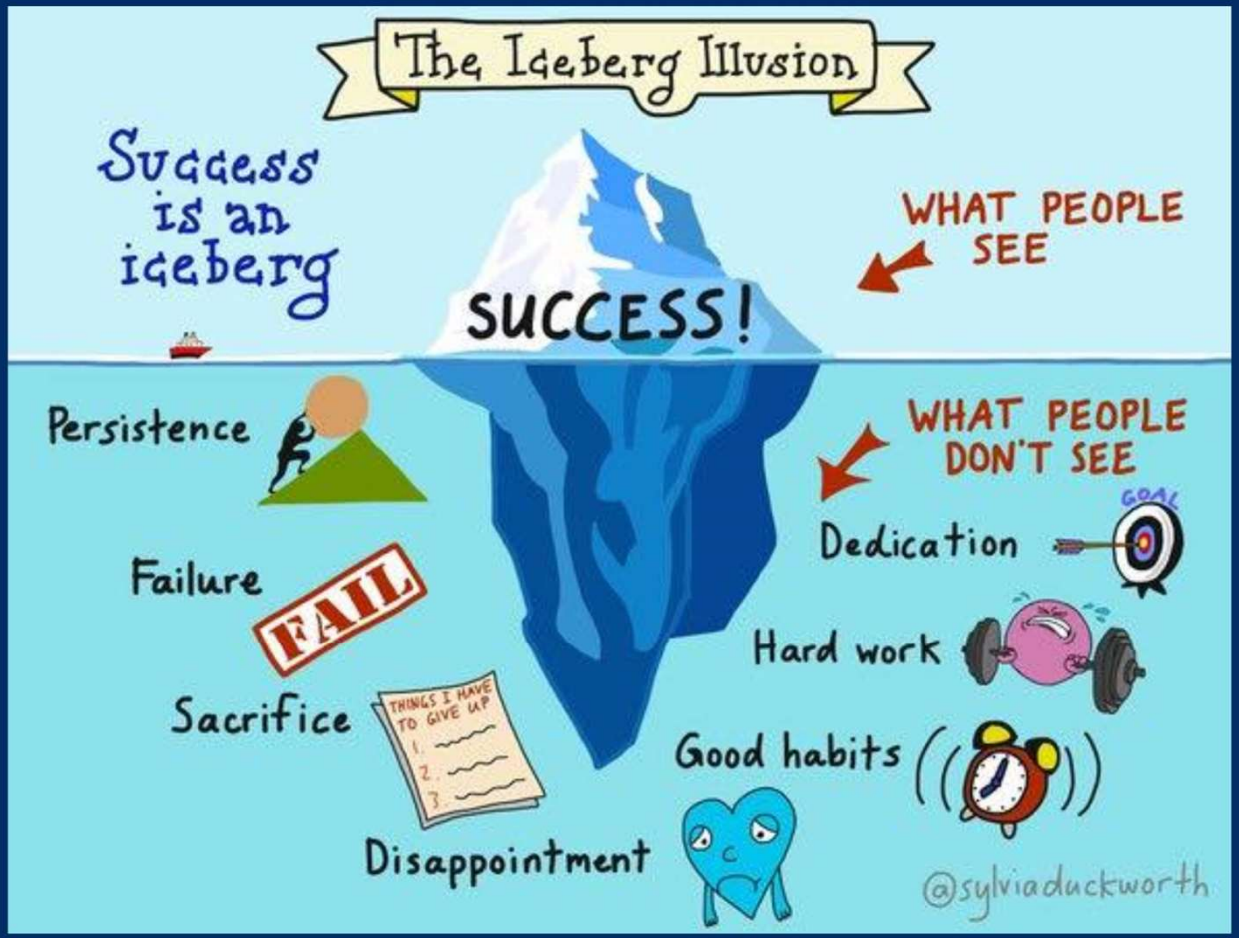
My **P**ersonal **D**evelopment **P**lan - PDP – My concrete development goal

	Name: _____ Date: _____
What is your concrete goal?	Describe as concretely as possible when you consider your development goal reached. Formulated using the SMART-principle?
Action plan	Which actions do I undertake to reach my goal? In case of behavioral change: in which context, situation is this applicable? What am I going to do (differently)? If I ... then I will....
Resources	What do you need to reach this goal? To be able to grow? Which resources and support do you need? Who can support you attaining your goal? In what way?
Frequency/ Dead-line	Does this require a one-shot action? What is the deadline? In case of behavioral change: At what frequency do you take action? Weekly? Bi-weekly? Monthly? At each meeting with person x? Planned in your agenda?
Plan B	What can go wrong and how will you react? Go about it? If I ... then I will...
Possible roadblocks	What keeps you from doing this? What keeps you from taking action? (Competencies - 'can I?', Knowledge? - 'do I know enough?' Motivation - 'do I want to?', Fear? - 'do I dare to?' If I... then I will ....

Crossing the gap

What is one skill that you want to further develop throughout your PhD? How are you going to do this?

Make it specific!


The Iceberg Illusion
Success is an iceberg
WHAT PEOPLE SEE
SUCCESS!
Persistence
WHAT PEOPLE DON'T SEE
GOAL
Dedication
Failure
FAIL
Hard work
Sacrifice
THINGS I HAVE TO GIVE UP
1.
2.
3.
Good habits
Disappointment
@sylviaduckworth

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- PhD career stories: https://www.vitae.ac.uk/researcher-careers/researcher-career-stories)
- Career paths for PhDs: https://www.jobs.ac.uk/media/pdf/careers/resources/10-career-paths-for-phds.pdf
- https://fromphdtolife.com/resources/transition-q-as/
- PhD Career Guide: http://www.phdcareerguide.com/
- PhD's at work: http://phdsatwork.com/
- https://www.jobs.ac.uk/careers-advice/job-profiles
- https://versatilephd.com/
- http://en.phdcentre.eu/inhoud/uploads/2018/02/Which-grass-is-greener-Digital-edition.pdf
- Working Identity: Unconventional Strategies for Reinventing Your Career – Herminia Ibarra
- How to find fulfilling work – Roman Krznaric, The School of Life

Did you like these tips & exercises?

Thank my colleagues at the Antwerp University Talent Centre
Lotte De Leeuw
Nele Goiris

....

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