Good practice example from France: Competences development
in training programs
(a long walk towards learning outcomes…)

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Expert Group meeting on Interregional Credit Transfer Mechanisms and Learning Outcome Systems
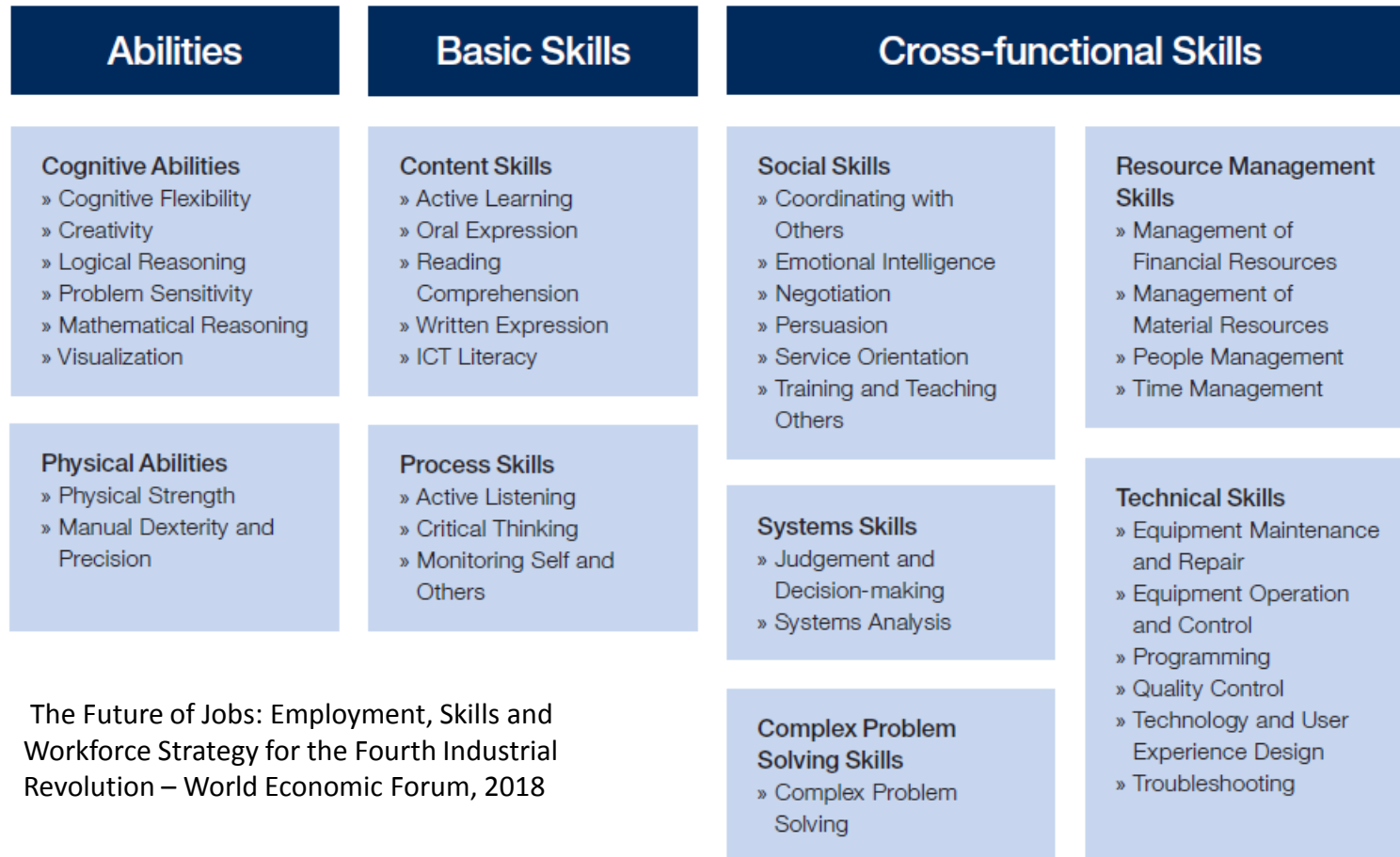November 5th 2019, Lyon, France

Asia-Europe Meeting
ASEM Education

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ELEMENTS OF CONTEXT
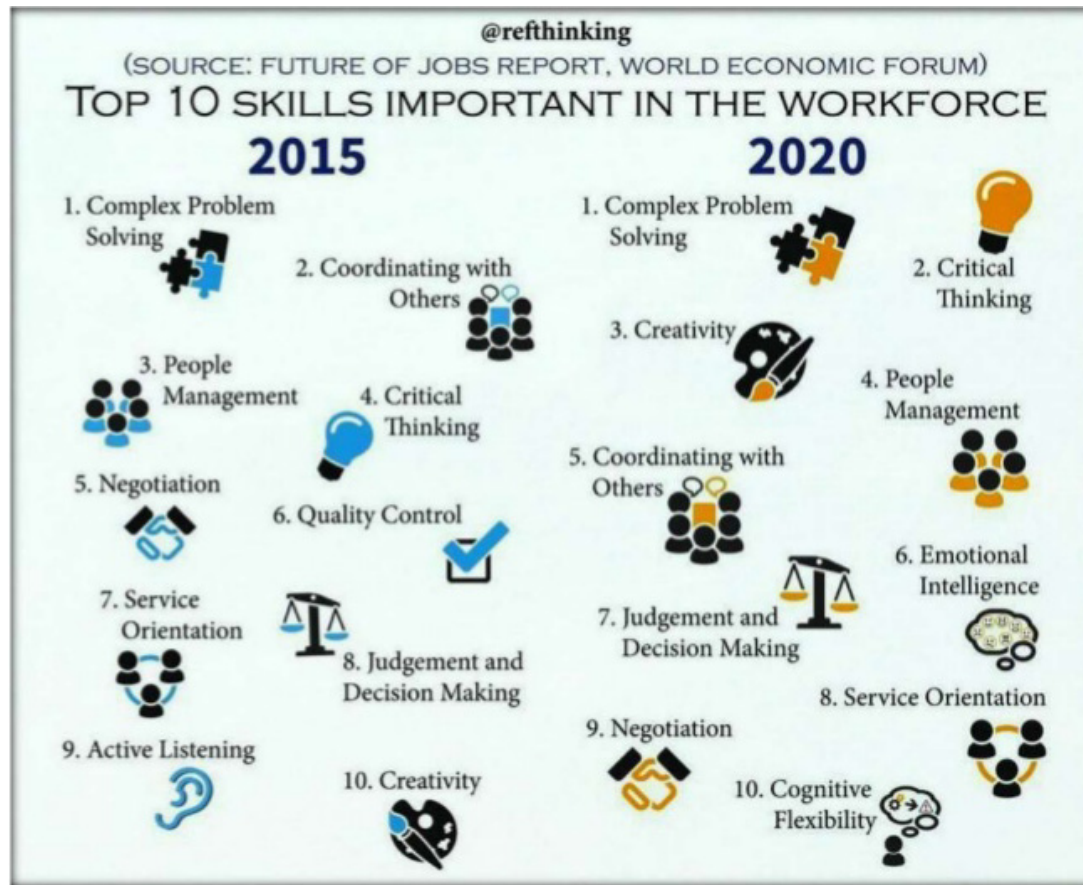
INTERNATIONAL

A period of great transformation

- Digital and technological mutations
- Societal expectations: requirements for performance, speed and adaptability, **responses to increasing unpredictability and uncertainties through flexible work**
- **Massification** of higher education audiences
- Heterogeneity of the public of higher education and heterogeneitly of life courses
- Need to manage his/her employability in the long term : **development of LLL**
- ➔   MAJOR CHANGES IN HIGHER EDUCATION

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ELEMENTS OF CONTEXT : CORE WORK-RELATED SKILLS

Abilities	Basic Skills	Cross-functional Skills	
Cognitive Abilities » Cognitive Flexibility » Creativity » Logical Reasoning » Problem Sensitivity » Mathematical Reasoning » Visualization	**Content Skills** » Active Learning » Oral Expression » Reading Comprehension » Written Expression » ICT Literacy	**Social Skills** » Coordinating with Others » Emotional Intelligence » Negotiation » Persuasion » Service Orientation » Training and Teaching Others	**Resource Management Skills** » Management of Financial Resources » Management of Material Resources » People Management » Time Management
Physical Abilities » Physical Strength » Manual Dexterity and Precision	**Process Skills** » Active Listening » Critical Thinking » Monitoring Self and Others	**Systems Skills** » Judgement and Decision-making » Systems Analysis **Complex Problem Solving Skills** » Complex Problem Solving	**Technical Skills** » Equipment Maintenance and Repair » Equipment Operation and Control » Programming » Quality Control » Technology and User Experience Design » Troubleshooting

The Future of Jobs: Employment, Skills and Workforce Strategy for the Fourth Industrial Revolution – World Economic Forum, 2018

Source: World Economic Forum, based on O*NET Content Model.

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ELEMENTS OF CONTEXT

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EUROPEAN

Bologna process (since 1998) - 48 countries

Quality, readability, attractiveness of higher education

Employability and **mobility** of graduates
- Higher education structured in 3 cycles ; Dublin descriptors in 2002 (concept of competences and Learning Outcomes)
- European qualification framework (EQF) => harmonization of the national qualification frameworks
- Quality agency network: coherence of accreditation practices (References, procedures, guidelines)
  - ➜ **in France:**
- National evaluation committee of scientific, cultural and professional public institutions (1984)
- then Agency for the Evaluation of Research and Higher Education - AERES (2007)
- replaced by the High Council for the Evaluation of Research and Higher Education - Hcéres (2013)

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ELEMENTS OF CONTEXT

NATIONAL : FRANCE

2002 : Decrees implementing the **Bologna Process** (Bachelor, Master and PhD)

2002 : Creation of the National committee for vocational/professional qualifications (**CNCP**) and the **National vocational/professional qualifications register** (RNCP)

2002 : Creation of the **National qualification framework** and the **Validation of Acquired Experience procedure** (VAE)

Competences framework for Bachelors (2006, 2011, **2015**)

Inscription of Bachelors, Masters & Doctorates in the **National vocational/professional qualifications register** (since 2017, in progress)

2017 : Recognition of student commitment in the Equality and Citizenship Act

2018 : New decree regulating the **Bachelor => assessment of knowledge <u>and skills</u>**

2019 : New **National qualification framework**, (EQF-based, with 8 levels)

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SO… IS EVERYTHINK OK IN FRANCE ?

4 « LITTLE » PROBLEMS ….

➢ The students…

➢ The teachers…

➢The (lack of) pedagogical teams

➢The (lack of) recognition

=> **Both teachers and students are very far from Learning outcomes!**

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THE STRATEGY IN FRANCE: A PROACTIVE ORIENTATION TO IMPLEMENT THE COMPETENCES-BASED APPROACH

WHY ?

- To give meaning to learning (value of the task, theories of motivation)
- To enable any student to build a personal and professional development trajectory
- To to progress on the path of learning outcomes!

3 KEY CONCEPTS :

- Memorization is not really a learning process, which leads to real change, which is not forgotten
- Learning is significant if it is deep (not on the surface): it can not be innate
- Motivation is one of the essential conditions for learning

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Classical courses	Competences-based approach
Independent courses from each other	High level of integration between courses
Program by disciplines	Learning activities in relation of continuity and complementarity: contextualisation of activities (value, meaning)
Willingness to be comprehensive in the program to teach	Teachers aim for the plural uses of learning, relevance, rather than quantity
Passive student, « observer »	Active student
Evidence of knowledge acquisition only under the control of the teacher	a documented, well-argued self-evaluation => portfolio approach

adapted from Jacques Tardif

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THE COMPETENCES FRAMEWORKS

Example of a competences framework: Bachelor in Life Sciences

Domain	Competences
Written and oral expression and communication	- Easily use the different types of written and oral expression of the French language. - Communicate verbally and in writing, clearly and unambiguously, in at least one foreign language.
Implementation of methods and tools of the disciplinary field of biology	• Interpret experimental data to consider their modeling. • Validate a model by comparing its predictions to the experimental results and assess its limits of validity. • Identify sources of error for calculating uncertainty on an experimental result. • Exploit data acquisition and analysis software with a critical mind.
Etc.	Etc.

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APPROPRIATE THE COMPETENCES FRAMEWORK

Appropriate the competences framework to build the activities

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APPROPRIATE THE COMPETENCES FRAMEWORK

1. **Define and choose the major competences,** targets of the program (5 or 6 for all the programme, at the heart of the job or the complexity targeted by the disciplinary field) - ALREADY DONE IF A NATIONAL FRAMEWORK EXISTS

2. **Define the essential components of each competence** (knowledge, skills...) **and think about their evaluation => reason in terms of learning outcomes!**

3. **Define learning and / or professional situations that reflect the extent of competence**

4. **Define the evaluable developmental levels of competence** (novice/with help, intermediate/autonomy, competent/evolution, transmission)

5. **Define "critical" learning to reach the level of development targeted at the end of the programme**

6. **Define teaching resources** (useful for critical learning and competences development)

(adapted from Poumay, Tardif, Georges 2017: «Organiser la formation à partir des compétences »)

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SET UP RELEVANT TOOLS

A key concept : the constructive alignment (John Biggs, 1996)
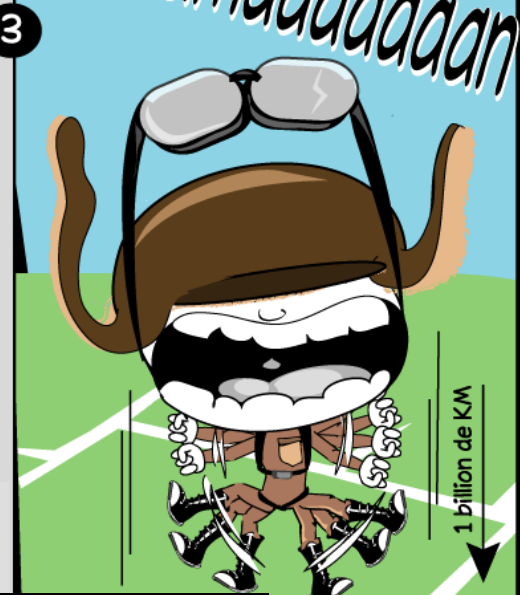
SET UP RELEVANT TOOLS

Perform reliable assessments based on objective criteria

➢ What do we want to assess?

➢ At which level ?

Need to COLLABORATE, to work as an pedagogical team

➢ on the graduate's vision, his/her skills to emerge,

➢ on the progression of learning outcomes and levels,

➢ on the choice of evaluation methods,

➢ on the learning situations to be organized and on the scenarios and pedagogical practices to be put in place to achieve the shared objectives

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SET UP RELEVANT TOOLS

Provide students with e-portfolios

➢ So that students can build their personal development path, store evidence / traces of their skills, can use it as a communication way with peers, teachers, employers, …

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National vocational/professional qualifications register

Competences framework for Bachelors

New decree regulating the Bachelor => assessment of knowledge and skills

Future Investments Program: Calls for projets "New University Curriculum" (Nouveaux Cursus Universitaires) in 2017 and 2018

> ➢ 36 projects selected, 326M€
> ➢ 29/36 : implementation of a competence-based approach

Task force to explain the process in HEIs

National days of pedagogy, theme 2020: *Why and how implement a competences-based approach ?*

Recognition of the involvement in pedagogy

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