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
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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 heterogeneity of life courses
- Need to manage his/her employability in the long term: development of LLL

⇒ MAJOR CHANGES IN HIGHER EDUCATION
### ELEMENTS OF CONTEXT: CORE WORK-RELATED SKILLS

<table>
<thead>
<tr>
<th>Abilities</th>
<th>Basic Skills</th>
<th>Cross-functional Skills</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cognitive Abilities</td>
<td>Content Skills</td>
<td>Social Skills</td>
</tr>
<tr>
<td>» Cognitive Flexibility</td>
<td>» Active Learning</td>
<td>» Coordinating with Others</td>
</tr>
<tr>
<td>» Creativity</td>
<td>» Oral Expression</td>
<td>» Emotional Intelligence</td>
</tr>
<tr>
<td>» Logical Reasoning</td>
<td>» Reading Comprehension</td>
<td>» Negotiation</td>
</tr>
<tr>
<td>» Problem Sensitivity</td>
<td>» Written Expression</td>
<td>» Persuasion</td>
</tr>
<tr>
<td>» Mathematical Reasoning</td>
<td>» ICT Literacy</td>
<td>» Service Orientation</td>
</tr>
<tr>
<td>» Visualization</td>
<td></td>
<td>» Training and Teaching Others</td>
</tr>
<tr>
<td>Physical Abilities</td>
<td>Process Skills</td>
<td>Resource Management Skills</td>
</tr>
<tr>
<td>» Physical Strength</td>
<td>» Active Listening</td>
<td>» Management of Financial Resources</td>
</tr>
<tr>
<td>» Manual Dexterity and</td>
<td>» Critical Thinking</td>
<td>» Management of Material Resources</td>
</tr>
<tr>
<td>Precision</td>
<td>» Monitoring Self and Others</td>
<td>» People Management</td>
</tr>
<tr>
<td></td>
<td></td>
<td>» Time Management</td>
</tr>
</tbody>
</table>

### 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.
ELEMENTS OF CONTEXT: CORE WORK-RELATED SKILLS
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→ MAJOR CHANGES IN HIGHER EDUCATION

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)
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)

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 and skills
2019 : New National qualification framework, (EQF-based, with 8 levels)
SO... IS EVERYTHING 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!
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 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
### THE STRATEGY IN FRANCE: A PROACTIVE ORIENTATION TO IMPLEMENT THE COMPETENCES-BASED APPROACH

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

adapted from Jacques Tardif
# The Competences Frameworks

## Example of a competences framework: Bachelor in Life Sciences

<table>
<thead>
<tr>
<th>Domain</th>
<th>Competences</th>
</tr>
</thead>
<tbody>
<tr>
<td>Written and oral expression and communication</td>
<td>- Easily use the different types of written and oral expression of the French language.</td>
</tr>
<tr>
<td></td>
<td>- Communicate verbally and in writing, clearly and unambiguously, in at least one foreign language.</td>
</tr>
<tr>
<td>Implementation of methods and tools of the disciplinary field of biology</td>
<td>• Interpret experimental data to consider their modeling.</td>
</tr>
<tr>
<td></td>
<td>• Validate a model by comparing its predictions to the experimental results and assess its limits of validity.</td>
</tr>
<tr>
<td></td>
<td>• Identify sources of error for calculating uncertainty on an experimental result.</td>
</tr>
<tr>
<td></td>
<td>• Exploit data acquisition and analysis software with a critical mind.</td>
</tr>
<tr>
<td>Etc.</td>
<td>Etc.</td>
</tr>
</tbody>
</table>
Appropriate the competences framework to build the activities
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 »)
A key concept: the constructive alignment (John Biggs, 1996)

1. Learning Objective: The student will be able to parachute
2. Learning activities: readings on skydiving
3. Assessment strategy: Parachute Jump.

Preserve the life of our students: check our pedagogical alignment!
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
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, ...
THE STRATEGY IN FRANCE: A PROACTIVE ORIENTATION TO IMPLEMENT THE COMPETENCES-BASED APPROACH

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
MERCI DE VOTRE
ATTENTION

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