



Developing future skills in higher education

ET2020 Working Group on Modernisation of Higher Education: Peer Learning Activity (PLA)





Defining, promoting and measuring transferable skills, social and civic competences: trends and challenges in higher education

Introductory considerations

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Outline

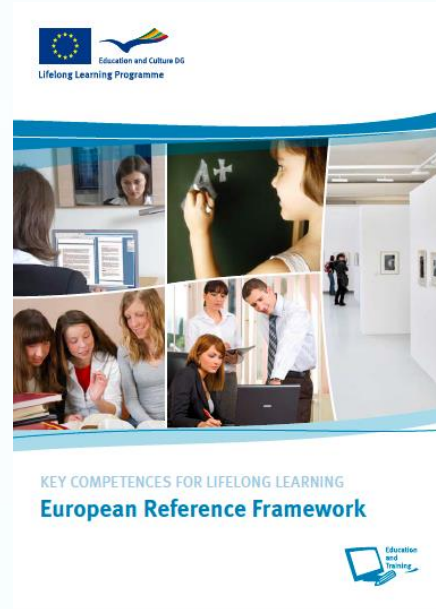
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7. Teaching – Learning – Measuring
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1. Challenging topic

Transferable skills: hot item but

- Since 2000 attention drawn to the importance of generic competences / transferable skills: Lisbon Agenda + Tuning projects + Qualifications frameworks
- 2007: EC – Key competences for Lifelong Learning; European Reference Framework
- New skills for new jobs (2010) , or new jobs for new skills (2015) ?

... have we made *much* progress in implementing these in HE teaching and learning ?



2. Classifying competences and skills

Let's look back (2007):

Key competences

Competences are defined here as a combination of knowledge, skills and attitudes appropriate to the context. Key competences are those which all individuals need for personal fulfilment and development, active citizenship, social inclusion and employment.

The Reference Framework sets out eight key competences:

- 1) Communication in the mother tongue;
- 2) Communication in foreign languages;
- 3) Mathematical competence and basic competences in science and technology;
- 4) Digital competence;
- 5) Learning to learn;
- 6) Social and civic competences;
- 7) Sense of initiative and entrepreneurship;
- 8) Cultural awareness and expression.

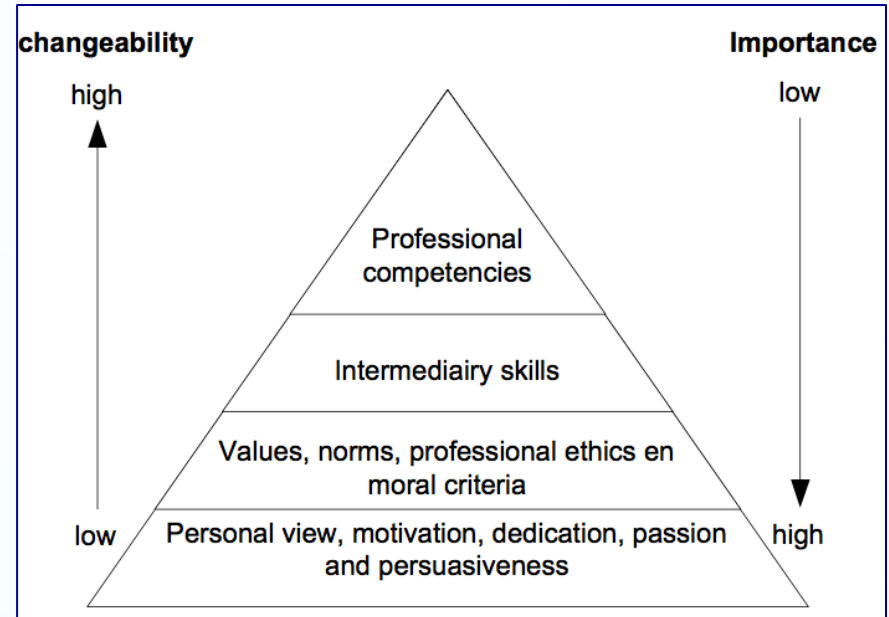
The key competences are all considered equally important, because each of them can contribute to a successful life in a knowledge society. Many of the competences overlap and interlock: aspects essential to one domain will support competence in another. Competence in the fundamental basic skills of language, literacy, numeracy and in information and communication technologies (ICT) is an essential foundation for learning, and learning to learn supports all learning activities. There are a number of themes that are applied throughout the Reference Framework: critical thinking, creativity, initiative, problem-solving, risk assessment, decision-taking, and constructive management of feelings play a role in all eight key competences.

One example of a classification of competences

Classifying competences and skills

Other examples of classifications

- **Functional competences**
- **Generic Management Competences**
- **Social Skills**
- **Cognitive skills**
- **Personal characteristics**



ESCO

**European Classification of
Skills/Competences,
Qualifications and Occupations**

Classifying competences and skills

Ordering of skills and competences:

- *Instrumental*: cognitive, methodological, technological, communication
- *Interpersonal*: individual, social
- *Systemic*: organisation, enterprising spirit, leadership

Cognitive: analytical, critical, reflective, creative

Methodological: time-management, problem-solving, decision making, learning (strategies), planning

Social: interpersonal communication, teamwork, conflict management and negotiation

3. Some definitions

Knowledge – skills – (wider) competences

Competence:

Ability to apply learning outcomes adequately in a defined context (education, work, personal or professional development)

or

Ability to use knowledge, skills and personal, social and/or methodological abilities in work or study situations and in professional and personal development

Comment: competence is not limited to cognitive elements (involving the use of theory, concepts of tacit knowledge); it also encompasses functional aspects (including technical skills) as well as interpersonal attributes (e.g. social or organisational skills) and ethical values.

Skill:

Ability to apply knowledge and use know-how to complete tasks and solve problems

Source: Cedefop; European Parliament and Council of the European Union, 2008

Some definitions

Skills or competences ?

Learning outcomes:

Set of knowledge, skills and/or competences an individual has acquired and/or is able to demonstrate after completion of a learning process, either formal, non-formal or informal

or

Statements of what a learner knows, understands and is able to do on completion of a learning process, which are defined in terms of knowledge, skills and competence

Source: Cedefop; European Parliament and Council of the European Union, 2008

Tuning:

Learning outcomes express a level of competence (Knowledge, skills, attitude, attribute)

4. Which skills should be developed most? A shared understanding?

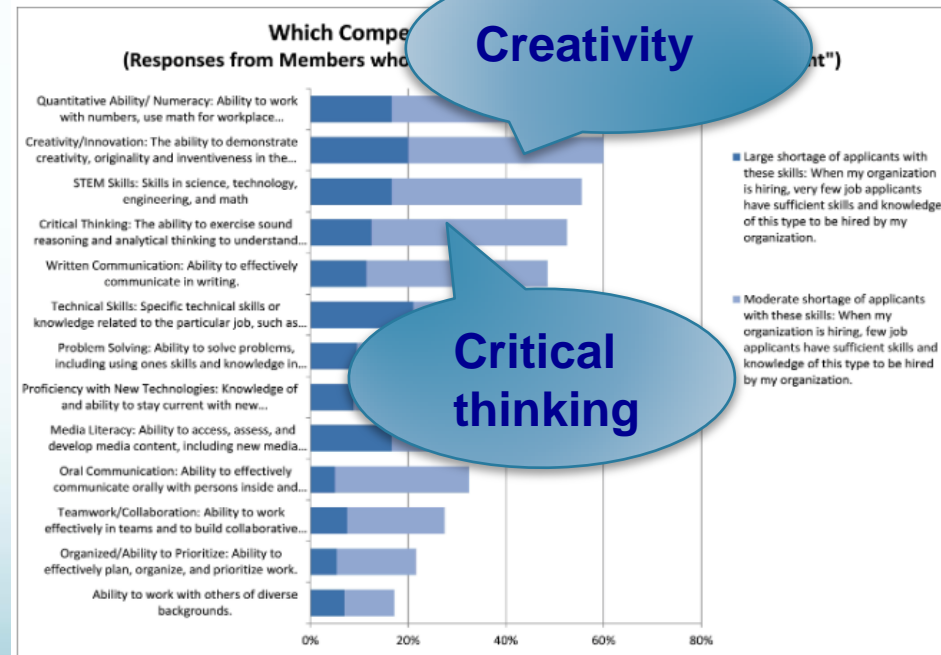
Lots of surveys ; lots of lists

Importance and relevance of a skill is decided by perspective (labour market), social dimension (civic awareness), but also by the disciplinary sector: health care, natural sciences, social sciences, engineering, humanities and arts

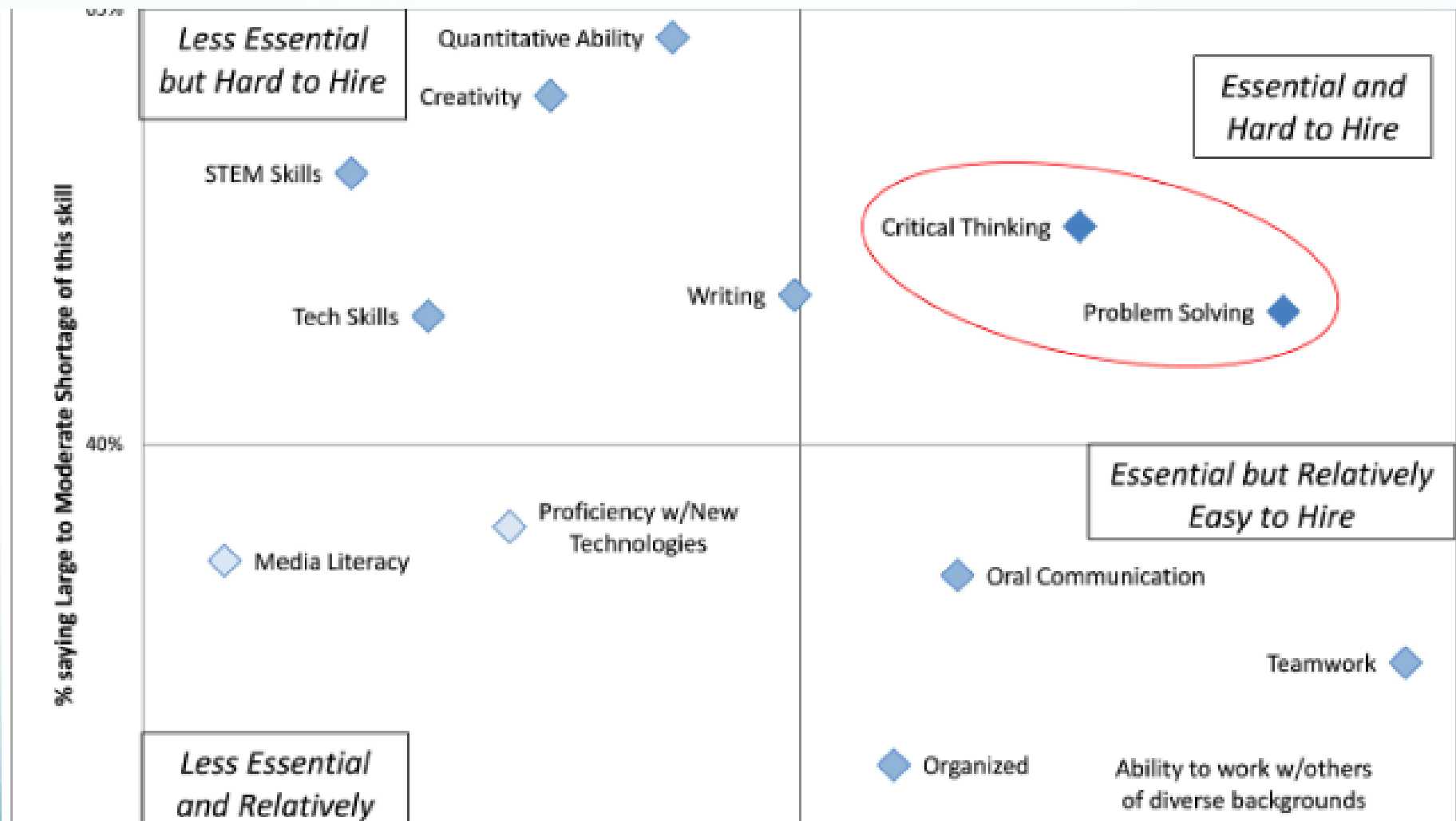
Chart 1



Chart 2



Which skills should be developed most?



Which skills should be developed most?

Based on a number of surveys on the skills required by graduates undertaken by Microsoft, Target Jobs, the BBC, Prospects, NACE and AGR and other organisations, here is our summary of the skills which were most often deemed important.

<u>VERBAL COMMUNICATION</u>	1	Able to express your ideas clearly and confidently in speech
<u>TEAMWORK</u>	2	Work confidently within a group
<u>COMMERCIAL AWARENESS</u>	3	Understand the commercial realities affecting the organisation.
<u>ANALYSING & INVESTIGATING</u>	4	Gather information systematically to establish facts & principles. Problem solving.
<u>INITIATIVE/SELF MOTIVATION</u>	5	Able to act on initiative, identify opportunities & proactive in putting forward ideas & solutions
<u>DRIVE</u>	6	Determination to get things done. Make things happen & constantly looking for better ways of doing things.
<u>WRITTEN COMMUNICATION</u>	7	Able to express yourself clearly in writing
<u>PLANNING & ORGANISING</u>	8	Able to plan activities & carry them through effectively
<u>FLEXIBILITY</u>	9	Adapt successfully to changing situations & environments

Do we develop / train these skills in Higher Education?

Which skills should be developed most?

Which general competences / skills are **most** important for *Society* according to the Tuning consultation process?

Analyzing and
Synthesizing

Applying knowledge
in practice

Entrepreneurial
spirit

Leadership

Working in a
team

Creativity

Learning abilities

Communication
skills

Problem solving

+ Social / civic skills/competences ?

Critical thinking

Which skills should be developed most?

ON TOP

‘New issue’: civic awareness, community engagement, social inclusion / integration

Social and civic competences and skills:

- Intercultural Communication
- Conflict Management and Transformation
- Social Entrepreneurship

Can transferable skills being developed in the context of Higher Education degree programmes. Also ‘civic and social ones’?

Yes they can ! Being not the same as ‘Yes we can’ and Yes we will !

5. Some examples: definitions and indicators

What is required to develop generic skills and competences?

- Clear definitions
- Good understanding why they should be taught: full integration in the field of study (added value)
- Good understanding how they should be taught
- Well defined learning outcomes
- Level indicators (comparable to content related knowledge and skills)

Some examples: definitions and indicators

Intercultural Communication competency is to perceive, be curious about, open to and respectful of cultures including one's own; to be able to understand, express and appreciate different values and norms, ways of thinking, practices, behaviours, and to engage with others by initiating or being receptive to a constructive exchange.

Conflict Management and Transformation is the competency to cope with clashing ideas, emotions and behaviours and to be able to analyse different positions with the aim of finding mutually acceptable and constructive outcomes.

Social Entrepreneurship is the competency to respond to social challenges and create opportunities by undertaking innovative and sustainable projects in collaboration with others.

Source: DARE+ Capacity Building project

6. Adapting degree programmes

How to integrate generic skills and competences in degree programmes ?

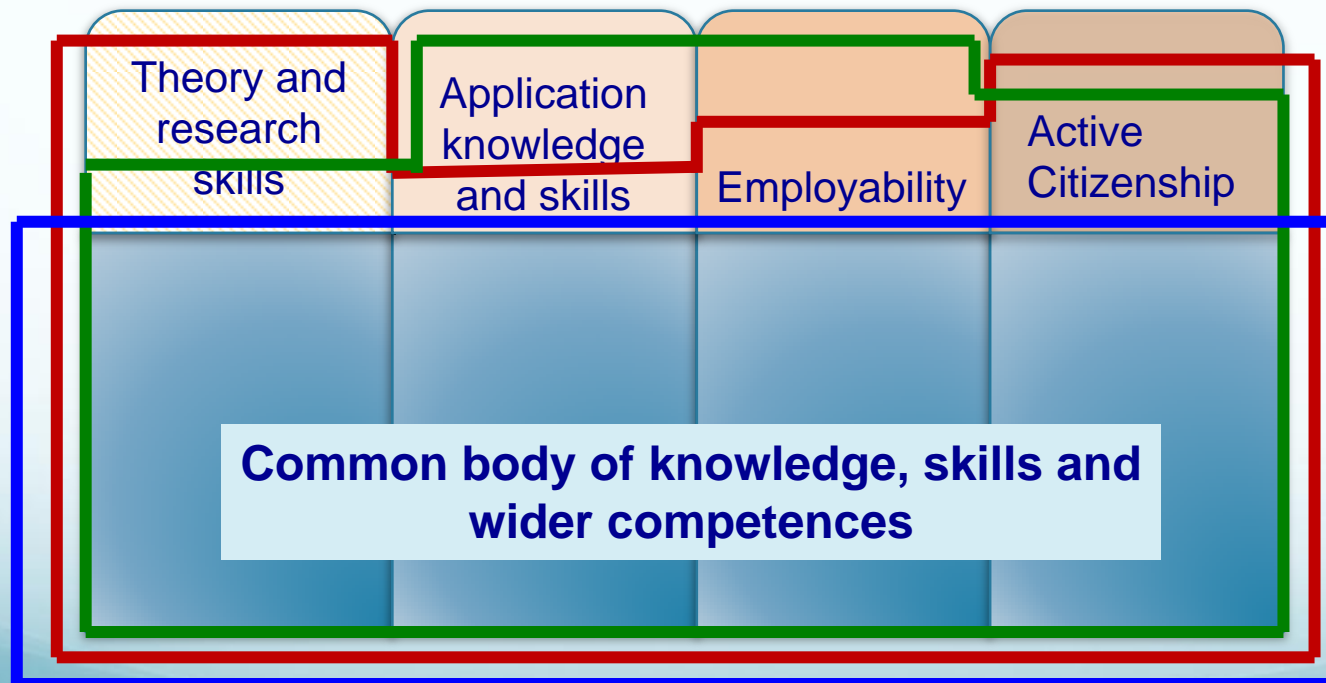
Step by step:

- ◆ Academic staff should identify most appropriate set based on mission programme and 4 features: 1. theory and research skills; 2 application of knowledge and skills; 3. preparation for employability; 4. preparation for active citizenship
- ◆ Decide which modules suit best to develop the identified set of generic competences and skills
- ◆ Decide on progression routes following taxonomies / models to define learning outcomes (level of competence)
- ◆ Decide on teaching, learning and assessment strategies and approaches: identify modes of teaching / learning and measuring /assessment

Adapting degree programmes

MULTI-DIMENSIONAL APPROACH

Base assessment on four parameters / categories:



Example of a **research university**
(based on profile and mission)

Example of a **university of applied sciences**
(based on profile and mission)

Shared body

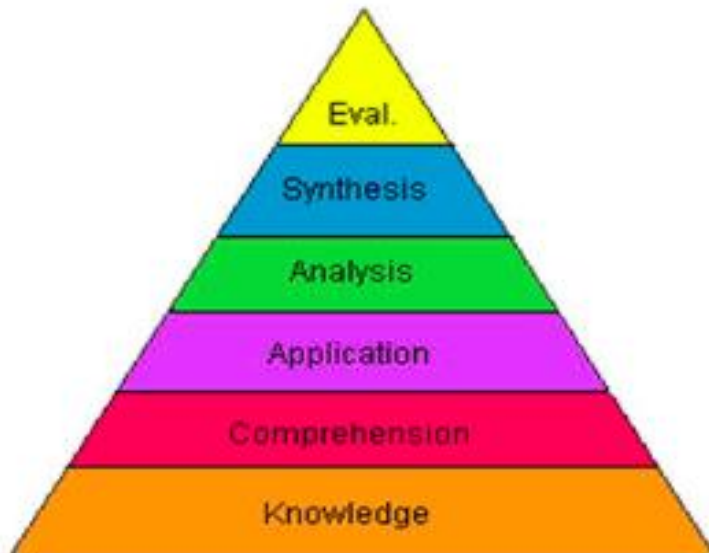
Assessment framework

Adapting degree programmes

Learning Outcomes ? Level indicators ?

Bloom's Taxonomy Updated

Old Version



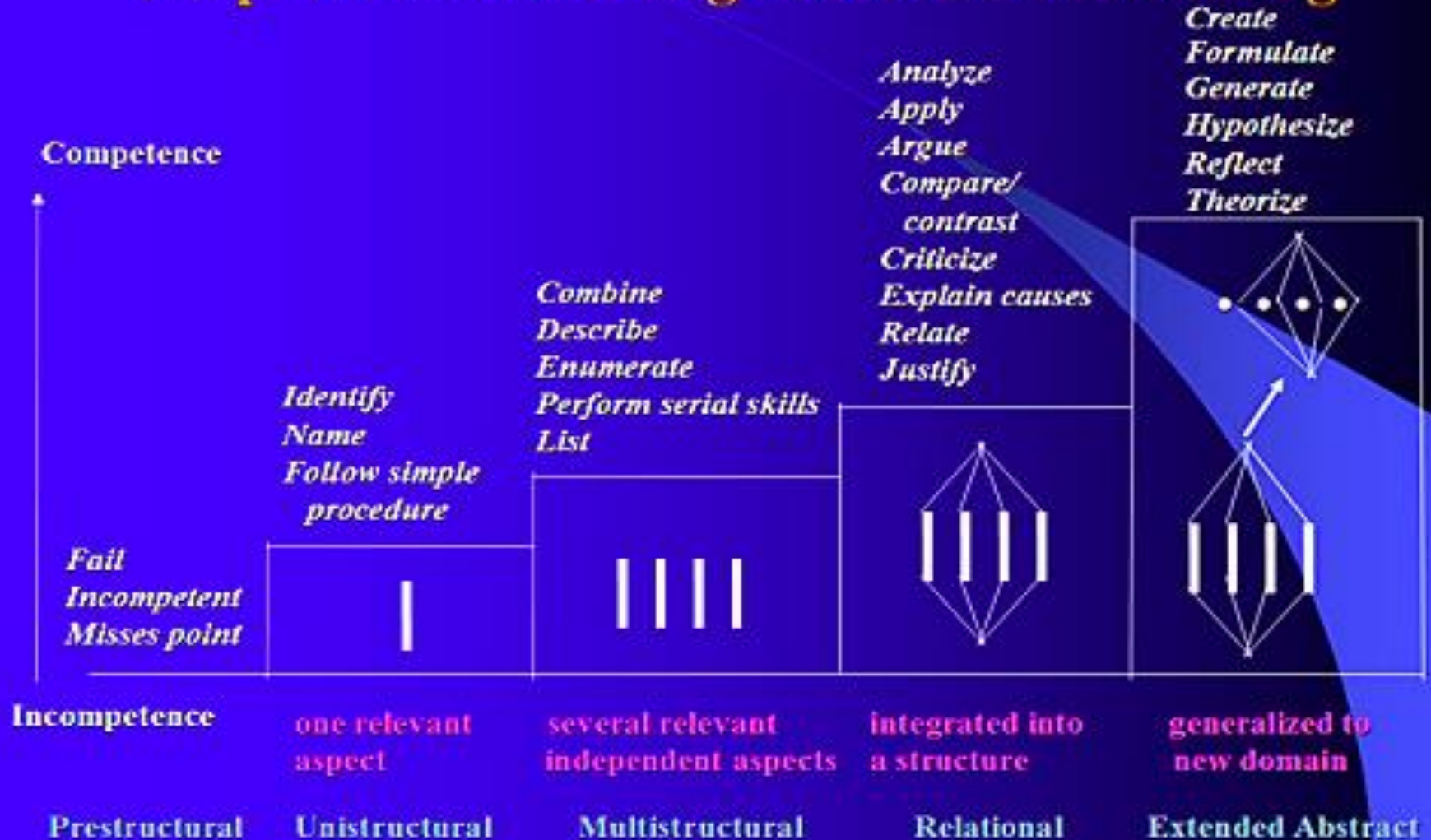
New Version



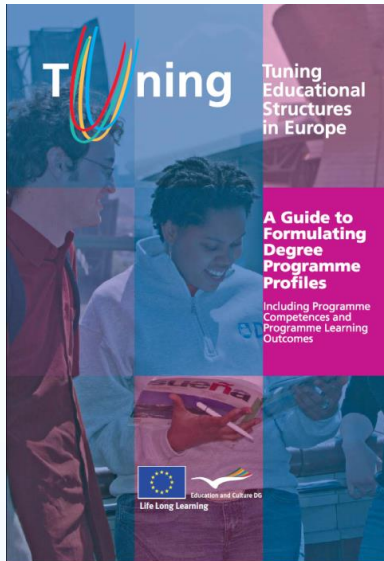
(Overbaugh, 2009)

Adapting degree programmes

The SOLO Taxonomy with sample verbs indicating levels of understanding



Meeting the needs



Degree Programme Learning Outcomes (also applies to units)

The following are characteristics of good verifiable, comprehensible and observable PLOs. They should be:

- **Specific** (giving sufficient detail, written in clear language)
- **Objective** (formulated in a neutral way, avoiding opinions and ambiguities)
- **Achievable** (feasible in the given timeframe and with the resources available)
- **Useful** (they should be perceived as relevant for higher education studies and civil society)
- **Relevant** (should contribute to the aim of the qualification involved)
- **Standard-setting** (indicate the standard to be achieved)

Meeting the needs

**A Learning Outcome contains 5 elements to be ‘measurable’
(the level of competence to be achieved):**

1. An **active verb form**
2. An indication of the **type** of LO: knowledge, cognitive processes, skills, or other competences
3. The **topic** area of the LO: this can be specific or general and refers to the subject matter, field of knowledge or a particular skill
4. An indication of the **standard** or the **level** that is intended / achieved by the LO
5. The **scope** and/or **context** of the LO.

7. Teaching – Learning – Measuring

Example 1:

CONFLICT MANAGEMENT & TRANSFORMATION

Competence indicator	Level 1	Level 2	Level 3
Developing strategies for coping with emotions caused by differences	Tolerates feelings of frustration in interaction with others	Feels at ease with different views and discrepancies	Empathizes with others' views and emotions
Developing strategies for coping with intellectual conflict caused by differences	Tolerates tensions and arguments with others	Accepts different views and discrepancies	Values positively expressions of differences among others
Listening and considering the positions of others in situation of conflicts. Being able to understand own and others' position and the ethical responsibilities	Listens to and understands only the opinions and interests which do not conflict with own position, and gets tense when differences are expressed	Takes the opinions and interests of others into account, recognizing and understanding points of agreement or divergence	Promotes an atmosphere of respect and dialogue where everyone can speak freely and be listened to and comprehends ethical implications of own and others' position, seeing possibilities for reconciliation
Showing assertiveness and strategy when proposing and defending own positions and managing conflict	Expresses own opinions and interests calmly but with firmness and conviction, even though different from those of others. Is open to dialogue, but there is little strategy and defense of own position weakens when a competitive atmosphere arises or the process takes an unexpected direction	Expresses own position and interests with clarity and knows how to defend it in an atmosphere of dialogue. Knows how to plan a strategy and adapts own position to the process with flexibility	Expresses own positions and interests to others, remaining open to dialogue and the possibility of reconsidering own standpoint(s). Analyses and plans the best strategies, responding quickly and with versatility and cooperation in process of negotiation
Seeking acceptable alternatives and solutions for conflicts	After listening, is clearly open to considering others' proposals, and to conceding points in order to reach agreement	Contributes actively to dialogue with proposals to explore possible alternatives and achieve agreements and commitments with others	Tries to reconcile and integrate different postures to reach agreements satisfactory to everyone involved

Teaching – Learning – Measuring

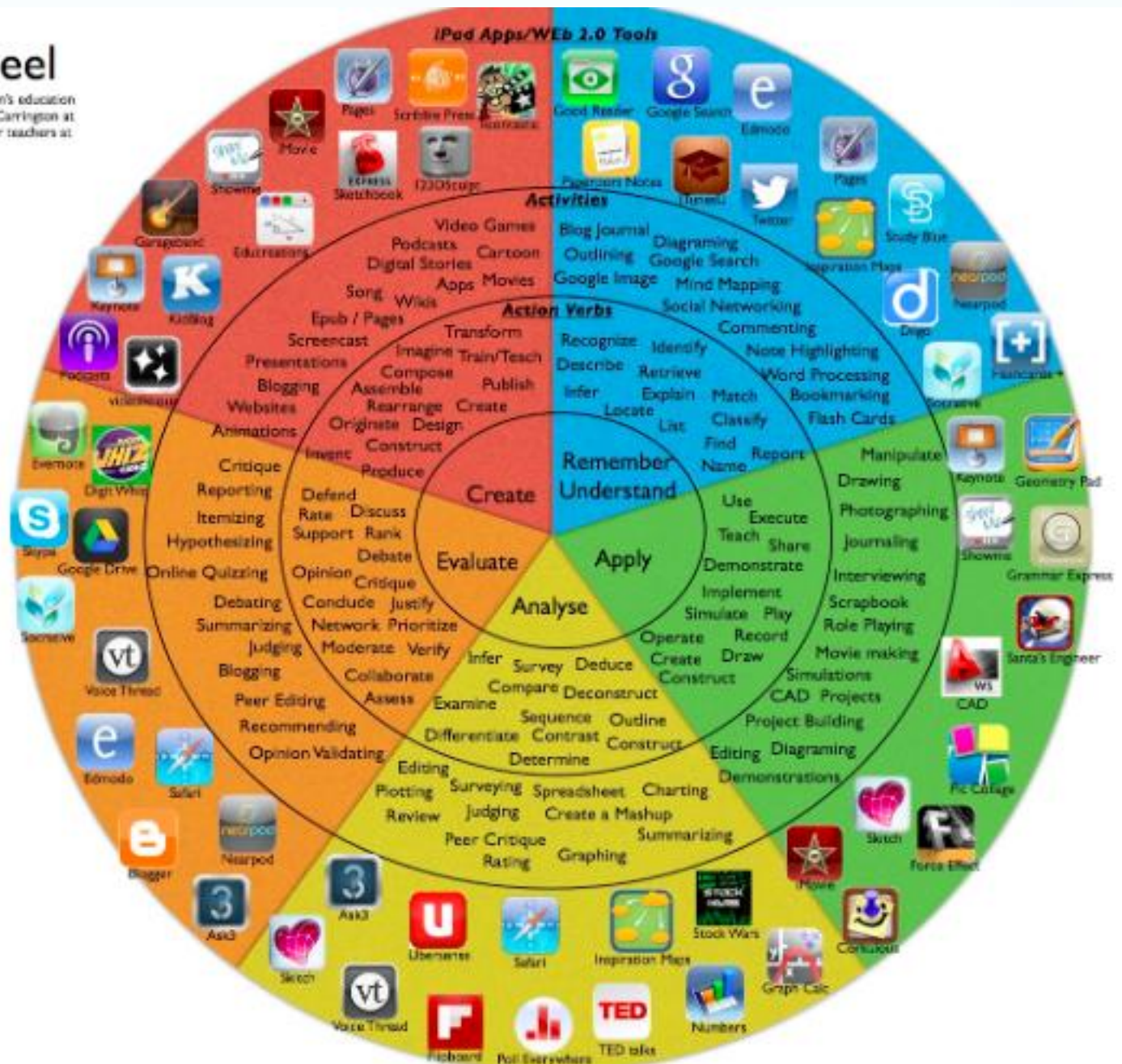
Example 2:

Social Entrepreneurship competence

Competence indicator	Level 1	Level 2	Level 3
Sense of social challenges and proactive approaches	Has a basic sense of social challenges: observes reality and identifies challenges	Sees opportunities for actions and possible approaches; weighing the risks and potentials	Has a capacity and self-esteem to take decisions with inclusion of risks. Develops a plan of actions
Inspiring others to take part in projects with social impact and identification of appropriate resources	Shares knowledge and argues visions with possible partners	Engages individuals and groups to participate in the social initiative. Identifies necessary resources	Develops a business plan to move towards the shared vision. Procures the necessary resources
Undertaking ambitious (complex and challenging) projects that respond to social challenges	Starts a pilot Project	Considers positive and negative feedback from the pilot, demonstrates flexibility necessary to adjust the project to build on its strengths	Develops complex projects and networks to replicate the pilot experience, and is able to turn criticism and failure into success
Application of management skills (financial, personal, organizational...) to guarantee the sustainability of the project	Knows what financial, personal and organizational elements are required for the sustainability of the project	Can identify procurement sources for the necessary elements	Can organize and monitor the three aspects in a way that promises to bring the project to the desired aim and profitability

Originally discovered on the website of Paul Hopkin's education consultancy site mmiweb.org.uk, adopted by Allan Carrington at the University of Adelaide and further modified for teachers at Zealand Public Schools.

Start with
answering the
question how
to assess /
measure
achievement



8. The disconnect: policies versus reality

Major challenges:

- Rhetoric, political ambitions and reality are not aligned
- Modernisation of HE (student centred approach) is not really taking off, although discourse is taking place at different levels: management, academic staff and students
- Most academic staff is driving without a license: not having a toolbox to apply different approaches / methodologies for TLA.
- Key obstacle: no or insufficient staff development / staff training ; lack of informed trainers Europe wide
- Situation is even more critical than described in *Bologna with Student Eyes*

9. Strategies forward

In general, regarding promotion of generic skills/competences:

- More policy making to reform HE will not have effective when not accompanied by concrete incentives
- Invest in staff development and training to make the required paradigm shift in HE a reality
- Invite HE institutions to nurse and disseminate good practices: promote their existence

And with regard to the present social crisis:

- Ask Higher Education Institutions and their staffs and students - in dialogue - to take their social responsibility: in public debate and by reforming the content of their degree programmes
- Invest in active research to influence the present – one liner / rather negative – discourse which is undermining the sustainability and stability of Europe and its nation states