Student Learning Outcomes and the Changing Face of Quality Assurance

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Outline

1. Present day reality

2. Role of Higher Education

3. The global TUNING mission

4. CALOHEE: Measuring and Comparing Achievements of Learning Outcomes in Higher Education in Europe

5. Assessment Frameworks: the CALOHEE model

6. Assessment Frameworks: the practice

1. Present day reality

(High) level of unemployment

Vacancies / job openings: work experience required

Highly flexible labor market: jobs for life exceptional

Individual tolerance and self-confidence under pressure

Social cohesion of societies challenged

Mismatch capacities and needs

What do we expect from Higher Education?

2. Role of Higher Education

What do we expect from Higher Education ?

- **Finding a response to these challenges ?**

- **High quality programs doing justice to the discipline?**

- **Programs preparing well for employability and society?**

- **Do we develop the right set of competences to be well equipped: subject specific and generic ?**

3. The global TUNING mission

Mission of Tuning:
Contributing significantly to the Modernization agenda in Higher Education

Main drivers:

◆ **Realizing a paradigm shift: from expert-driven teaching and learning to student-centered / active learning (input to output)**

◆ **Basing curricula on program and module/unit learning outcomes**

◆ **Preparing graduates for employability and citizenship (developing competency) on the basis of a well defined field of study**

Main contributions:

◆ **Sophisticated methodology to reform Higher Education degree programmes**

◆ **Frameworks or benchmarks of internationally agreed reference points for sectors and subject areas**

4. CALOHEE: WHY ?

Do students enrolled in higher education around Europe develop the competences they need? Are study programs delivering their promises? Can we learn from comparing students' achievements in an (inter)national context in a meaningful way?

Preposition:

If academic experts can agree on the set of learning outcomes, they should also be able to measure performance in comparative perspective in (inter)national contexts!

THE PROOF IS IN THE EATING OF THE PUDDING !

Measuring and Comparing Achievements of Learning Outcomes in HE in Europe

Burning questions

WHAT should be learned?

Why should it be learned?

How should it be learned?

CALOHEE Approach (2)

THE PROOF IS IN THE EATING OF THE PUDDING !

PREPOSITION: COMPARATIVE ASSESSMENTS ARE USEFULL:

➢ To obtain / provide reliable information about **achievements of learning** in (transnational) comparative perspective at **5 levels**:
- ✓ **Individual level**
- ✓ **Program level**
- ✓ **Institutional level**
- ✓ **National level**
- ✓ **International level**

Accountability !

to allow for degree program enhancement focusing on the domain of knowledge taking into account preparation for employment and civic, social and cultural engagement.

Offering main stakeholders reliable information for making informed / evidence based choices!

CALOHEE Project aims

➢ **BENCHMARK 1:**

Develop a **multi-dimensional instrument to measure and compare levels of learning** doing justice to the different missions and profiles of HE institutions

➢ **BENCHMARK 2:**

Develop **transnational sectoral /subject area frameworks**

➢ **BENCHMARK 3:**

Assessment Frameworks for five academic domains and five related disciplines (Civil Engineering, Nursing, History, Education and Physics)

CALOHEE Design (1): Qualifications Frameworks

DQP

Why base CALOHEE on Qualifications Frameworks?

Offer agreed indicators of:
- Level
- Content
- Direction

EQF Descriptors

TUNING Sectoral Reference Points

TUNING Subject Specific Frameworks: Reference Points

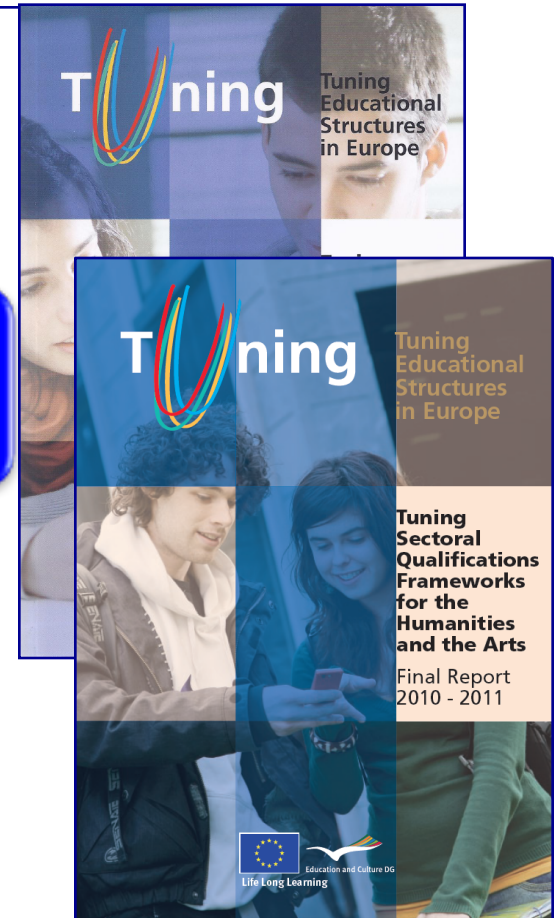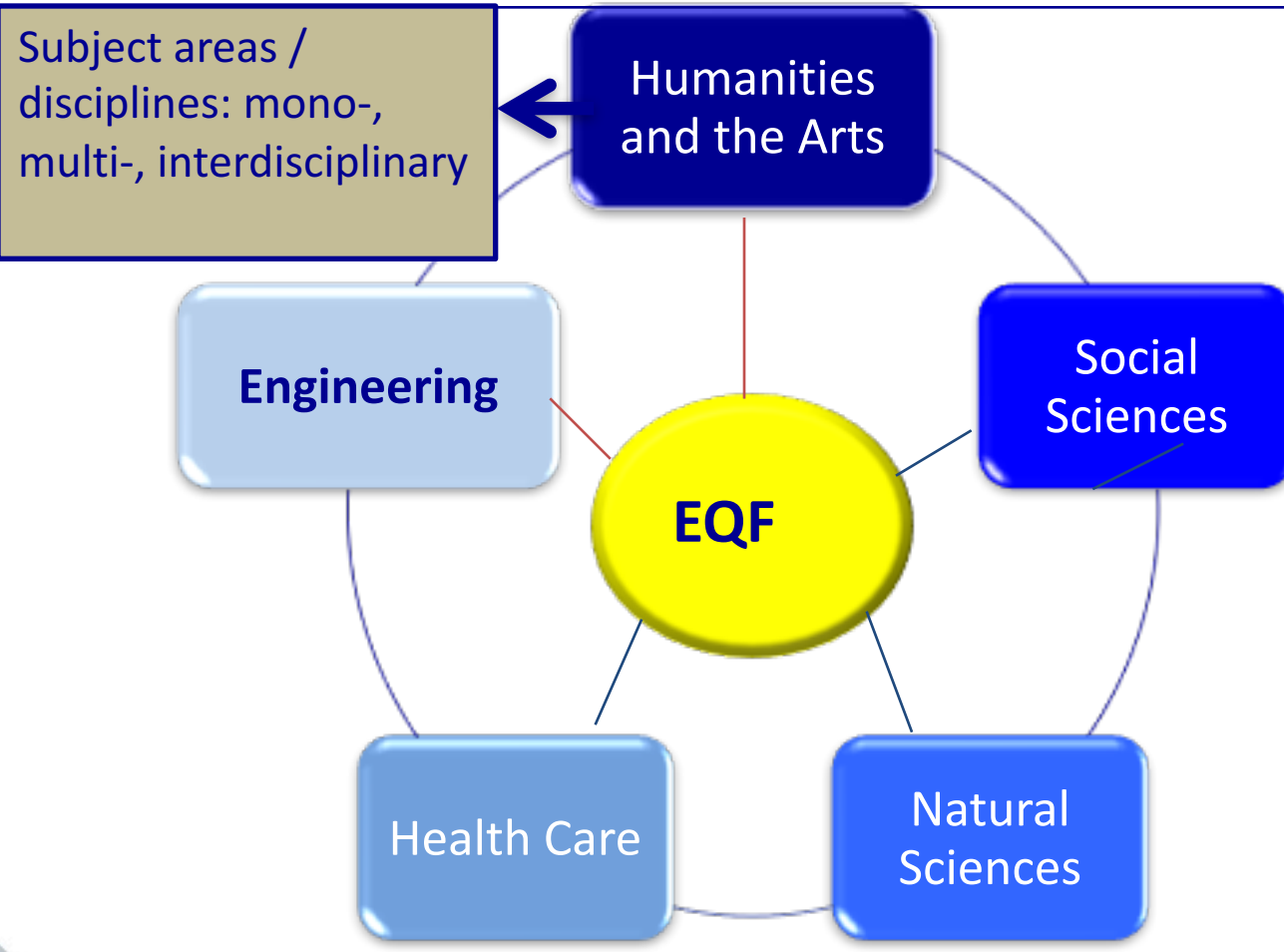**Tuning Sector / Subject Area Based Assessment Frameworks**

Profiles of individual degree programmes

Design (2): Role of Tuning Sectoral Qualifications Frameworks

CALOHEE Design (3) : Integrated approach

**Generic and Subject Specific Competences**

The Tuning experience shows:

- General competences are developed as part of the body of knowledge and skills of a subject area (integrated approach)

- Only a limited number of general competences can be developed / trained, which requires choices

- The core set of general competences partly differs per sector / subject area

- Application of general competences differs between sectors / subject areas: e.g. analyzing and synthesizing, teamwork, communication skills, entrepreneurship, etc.

CALOHEE Design (4): Domain specific dimensions

- ➢ Do justice to the character of specific academic domain
- ➢ Structures sets of learning outcomes in a logical way
- ➢ Allows for combining QF for LLL and QF for the EHEA

Humanities Dimensions	Creative and Performing Disciplines dimensions	Engineering dimensions
The Human Being	Making, Performing, Designing, Conceptualising	Knowledge and Understanding
Cultures and Societies	Re-thinking, Considering and interpreting the Human	Engineering Analysis
Texts and Contexts	Experimenting, innovating & Researching	Engineering Design
Theories and Concepts	Theories, Histories and Cultures	Investigations
Interdisciplinarity	Technical, environmental and Contextual issues	Engineering Practice
Communication	Communication, Collaboration & Interdisciplinarity	Communication and Teamwork
Initiative and Creativity	Initiative & Enterprise	Making Judgements
Professional Development		Lifelong Learning

taken from EUR-ACE
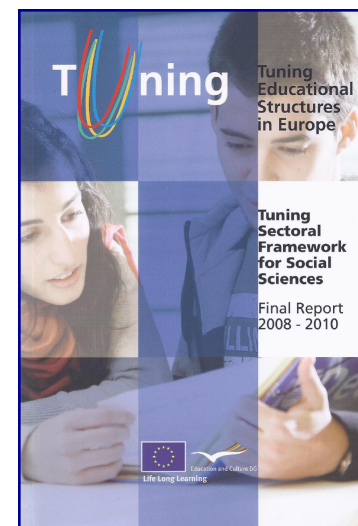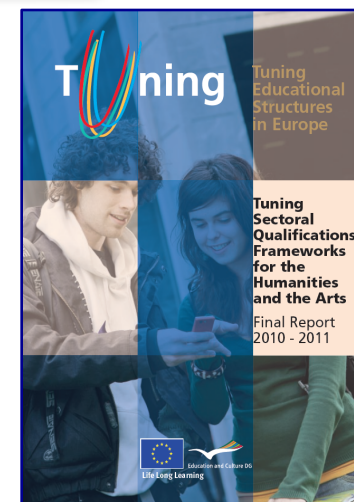
Learning outcomes of the degree programme Euroculture

QF EHEA 2nd cycle descriptors I, III-V	SQF Humanities dimensions Level 7	EQF descriptor knowledge Level 7 *highly specialised knowledge, some of which is at the forefront of knowledge in a field of work or study, as the basis for original thinking and/or research* - *critical awareness of knowledge issues in a field and at the interface between different fields*	EQF descriptor skills Level 7 *Specialised problem-solving skills required in research and/or innovation in order to develop new knowledge and procedures and to integrate knowledge from different fields* **QF EHEA 2nd cycle descriptor: 2.can apply their knowledge and understanding….**	EQF descriptor Wider Competences Level 7 - *Manage and transform work or study contexts that are complex, unpredictable and require* - *Take responsibility for contributing to professional knowledge and practice and/or for reviewing the strategic performance of teams*
Special feature degree programme	a. The Human Being	*Analytical understanding of European identity/is, civil society/ies, the ongoing European unification process in itself, its cultural and social dynamics and the consequences for its citizens and for the wider world*	*Identification and problematisation of what Europe and the EU represents for its citizens and for the wider world*	*Analytical and interpretative skills to engage with current issues, notably the handling of issues related to multicultural society, turning perceived problems into feasible solutions and transferring this knowledge to relevant audiences*
I. have demonstrated knowledge and understanding ….	b. Cultures and Societies c. Texts and Contexts	1. Thorough knowledge and understanding of the phenomena of multiculturalism, national and European identity, political and legal aspects of (European) governance, and evolving social-political processes; 2. Thorough (historical) understanding of the European integration process in a global perspective by having studied the most relevant texts in context;	8. High level analysing and synthesising competency to identify and problematise issues related to inter-, trans- and multiculturalism; 9. Ability to locate, select from a variety of sources and manage information required for addressing problems related to key issues as identity/ies and civil society/ies;	15. Ability to put theoretical knowledge in practice by offering context-based guidance and workable and acceptable approaches with a high awareness of the sensitivity of the issues at stake; 16. Application of appropriate management skills, such as leadership, decision-making, motivation to work effectively in a multicultural / transnational setting;
III. have the ability to integrate knowledge and handle complexity, and formulate judgments …	d. Theories and Concepts e. Initiative and Creativity f. Interdisciplinarity	3. Thorough knowledge and understanding of theoretical and methodological approaches, in particular constructivism and comparativism which allow for independent research in the academic field involved; 4. Thorough knowledge and understanding of different regional and national perceptions of the European integration process from a cultural-social perspective including awareness of the push and pull factors in the process of European identity formation and in relation to third countries; 5. High level of sensitivity, based on knowledge and insight, regarding cultural-social differences and comparabilities at group, local, regional, national, European and global level;	10. Capacity to make judgements by integrating complex (and conflicting and insufficient) data with the intention to identify rational and sustainable solutions for identified problems; 11. Ability to independently prepare and write project applications by identifying the project's contribution to existing knowledge and experience, the most effective approach to and structuring of it, cost effectiveness, and the relevant audiences/project beneficiaries; 12. Ability to Identify topics in the public debate in a reflexive way and with an eye for socio-culturally sensitive matters;	17. Experience in and knowledge of successfully planning, designing and managing complicated medium-term (research) projects in a transnational and multicultural environment; 18. Ability to identify a suitable work placement or research project as a preparation for the occupational field meeting the profile of the programme; outline a related work plan and participate in placement or project successfully; 19. Capability for self-analysis, that is the ability to accept and give critical constructive feedback, on the basis of a well-developed awareness of one's own identity and related norms and values;
IV. can communicate …	g. Communication	6. Performing and presentation of the outcomes (in oral and written form) of independent research by making efficient use of primary and secondary sources (e.g. libraries, computerised material, bibliographical material);	13. Ability to communicate and transfer politicised and sensitive information in oral and written form to different types of addressees/ audiences;	20. Productive participation in group work and taking the lead on occasion, presiding over debates and discussions in an international / multicultural group.
V. have the learning skills …..	h. Professional Development	7. Having insight into one's personal strengths, weaknesses, and abilities, and the capacity to select the learning methods necessary for the chosen profession or range of professions.	14. Ability to apply different methods and strategies of study to different tasks and to undertake independent study.	21. Capability to learn from and respond accurately to unexpected developments, taking these into account to accommodate and develop suitable strategies accordingly.

5. Assessment Frameworks: the CALOHEE model (1)

Subject Area based Assessment Frameworks

1) Definition: what do we mean?
2) Application of Qualifications Frameworks and so-called 'dimensions'
3) Multi-dimensional parameters: Knowledge (theory, methodology), Knowledge and skills application, employability and civic related competences
4) Structure of the framework: topics of assessment and related TLAs

Definition:

1. Table containing the learning outcomes or descriptors defined as part of a Subject Area Qualifications Framework and more precise subsets of each one of them.

2. Subsets, taken together, describes in more detail the key elements and topics covered by a learning outcome statement.

3. Assessment Frameworks offer insight in the most appropriate strategies and approaches to assessing the constituent elements of each learning outcome.

CALOHEE distinguishes parameters – categories - to be assessed:

1) Theory: knowledge and methodology
2) Application of knowledge and skills
3) Preparation for employability
4) Civic, social and cultural engagement (active citizenship)

Doing justice to:

- Profiles of the HE institutions: international, national, regional orientation and player or a combination of these (compare U-multi-rank approach)
- Missions of the Higher Education institutions: ranging from research intensive to applied
- Types of degree programmes: ranging from broad (basis in sector) towards very specialized (in particular at bachelor / first cycle level)
- Components: Minors and electives, differing per degree programme (and related to its profile / set of programme learning outcomes)
- Personal development and preparing for citizenship and employability

Assessment Frameworks: the CALOHEE model (4)

Assessment frameworks based on parameters/dimensions

Assessment framework

6. Assessment Frameworks: the practice

Multi-dimensional

FOUR TYPES of degree programs:
Partially different program learning outcomes

Main subdivision: two types:
- Research intensive orientation
- Applied / professional orientation
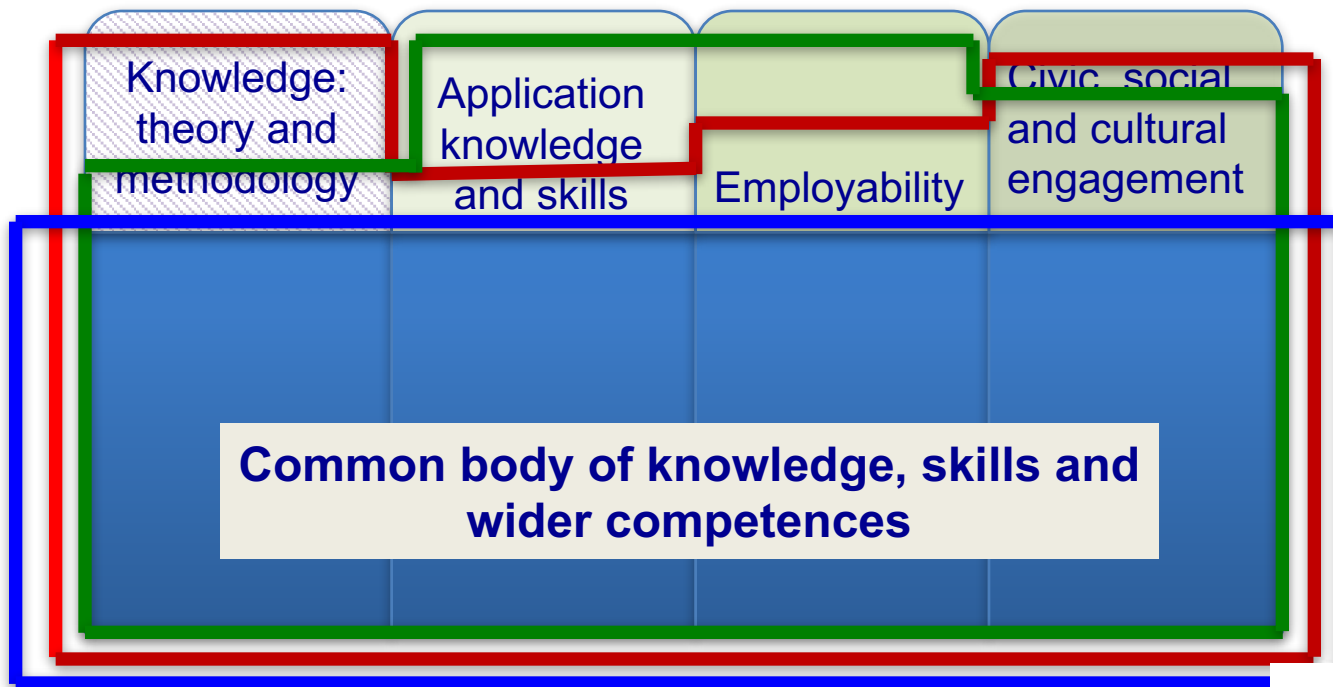
Within subdivision two subtypes: do further justice to mission and character of institution / program

Assessment Framework will indicate optimum achievement level: highest level achievable and feasible for a higher education degree program

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MULTI-DIMENSIONAL APPROACH

Assessment frameworks based on four parameters + subject specific dimensions:

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

Knowledge: theory and methodology	Application knowledge and skills	Employability	Civic, social and cultural engagement

Common body of knowledge, skills and wider competences

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

Shared body

Assessment framework

Basic structure of the Assessment Framework:

Dimension 1	Knowledge descriptor	Skills descriptor	(Wider) Competence descriptor
Dimension 2	Knowledge descriptor	Skills descriptor	(Wider) Competence descriptor
Dimension 3	Knowledge descriptor	Skills descriptor	(Wider) Competence descriptor

Dimension	Knowledge descriptor	Skills descriptor	(Wider) Competence descriptor
1.	Sub-descriptor 1-1	Sub-descriptor 1-2	Sub-descriptor 1-3
2.	Sub-descriptor 2-1	Sub-descriptor 2-2	Sub-descriptor 2-3
3.	Sub-descriptor 3-1	Sub-descriptor 3-2	Sub-descriptor 3-3
4.	Sub-descriptor 4-1	Sub-descriptor 4-2	Sub-descriptor 4-3
5.	Sub-descriptor 5-1	Sub-descriptor 5-2	Sub-descriptor 5-3

Assessment Frameworks the practice (5)
Example of History

Dimension	Knowledge descriptor	Skills descriptor	Wider competence descriptor
'The Human Being'	Ability to demonstrate broad knowledge and a focused and analytical understanding into changes and continuities of the human condition, environment and experience in institutions and specific modes of expression, ideas and values in a diachronic and comparative perspective.	Ability to draw on knowledge and experience of history to identify, define and formulate significant problems and areas of inquiry with respect to social and cultural interaction.	Ability to utilise the critical and practical tools of historical knowledge to illuminate cultural and social phenomena. Ability to contribute to understanding and respect for individuals and groups in their personal, cultural and social dimension.
Sub-descriptor 1	Ability to demonstrate specific knowledge about the phenomenon of migration in a specific time period and the specific conditions that caused it, and its social cultural and economic impact. (social economic reasons, religious and/or cultural aspects, etc).	Ability to divide the topic of migration into different aspects (social, economic, religious, political); be able to describe and analyse the problem; find the correct sources, compare to similar cases in time or in different parts of the world.	Ability to contribute in debate and written word to the understanding and respect for individuals and groups in their personal, cultural, economic and political and social dimension.
Sub-descriptor 2	Ability to demonstrate specific knowledge about science and technology and how this has influenced political, social and economic affairs (for instance the Age of Exploration, or the industrial revolution and the impact on political, cultural, and social conditions and ideas).	Ability to describe, analyse and synthesise how technological advances/ developments have influenced societies, governments, urbanisation, cultural institutions, daily life, and (political) ideas.	Ability to raise understanding of the impact of scientific and technological developments on society at large and ability to apply this to public debate.
Sub-descriptor 3	Ability to demonstrate knowledge about political institutions and conditions: their impact on social strata, the national and international contacts, influence on political ideas and philosophy and on counter movements, and vice versa.	Ability to describe, analyse and synthesise how political institutions have influenced social and cultural interaction both inside the nation and internationally in time; be able to compare the specific political circumstances of a particular institution or state or other institutions in different parts of the world.	Ability to contribute to societal discussions and debates on political affairs in a broad sense; ability to explain the differences between specific political institutions and the role and impact of ideas.

From Sub-descriptor to TLA

Linking Learning, Teaching and Assessment to sets of broken-down Subject Area Competences / Learning Outcomes

Dimension	Knowledge descriptor	Skills descriptor	(Wider) Competence descriptor
1.	Sub-descriptor 1-1	Sub-descriptor 1-2	Sub-descriptor 1-3
1a	Assessment approach	Assessment approach	Assessment approach
1b	Learning approach	Learning approach	Learning approach
1c	Teaching approach	Teaching approach	Teaching approach
2.	Sub-descriptor 2-1	Sub-descriptor 2-2	Sub-descriptor 3-3

Assessment Frameworks (7): in summary

In summary:

Subject Area based Assessment Framework for the Subject Area:

1. Covers first and second cycle (bachelor and master).
2. Based on the dimensions identified, it will Contains 'knowledge descriptors', 'skills descriptors' and 'wider competences descriptors'
3. Main descriptors underpinned by more precise sub-descriptors
4. Each sub-descriptor formulated as a learning outcome covers a core element or topic
5. For each sub-descriptor or combination of sub-descriptors learning, teaching and assessment approaches are identified to allow for the achievement of the learning outcome(s) and be presented as examples of good practice (What, Why, How).

What do the (assessment) frameworks offer the individual student / department and academic staff ?

Insight in:
- internationally agreed reference points (benchmarks) regarding their field of studies
- detail in terms of knowledge, skills and (wider) competences to be learned according to the specific profile of the HE institution and degree program
- what might be expected from their educational program, to be prepared well for:
    - operating as an expert in the chosen discipline
    - working successfully in a related employability field (jobs and tasks expected to perform)
    - acting as an active citizen (taking responsibilities and civic, social and cultural engagement)

In conclusion

Comprehensive Assessment frameworks:

- Promote transparency of what can / should be learned to make a program relevant: *allowing/promoting profiling*
- Instrument for modernising HE programs: *offer guidance*
- Re-positions again academic staff in program quality assurance : *guarantees academic freedom but asking for accountability*
- Important as a reference for internal quality culture and external quality assurance (and accreditation): *diagnostic role – identification of strength and weaknesses*
- Conditional for comparing learning achievements in an (inter) national perspective
- Conditional for the development of a multi-dimensional measurement instrument: *should show what works best*

Thank You!

CALOHEE
Measuring and Comparing Achievements of Learning Outcomes in Higher Education in Europe

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