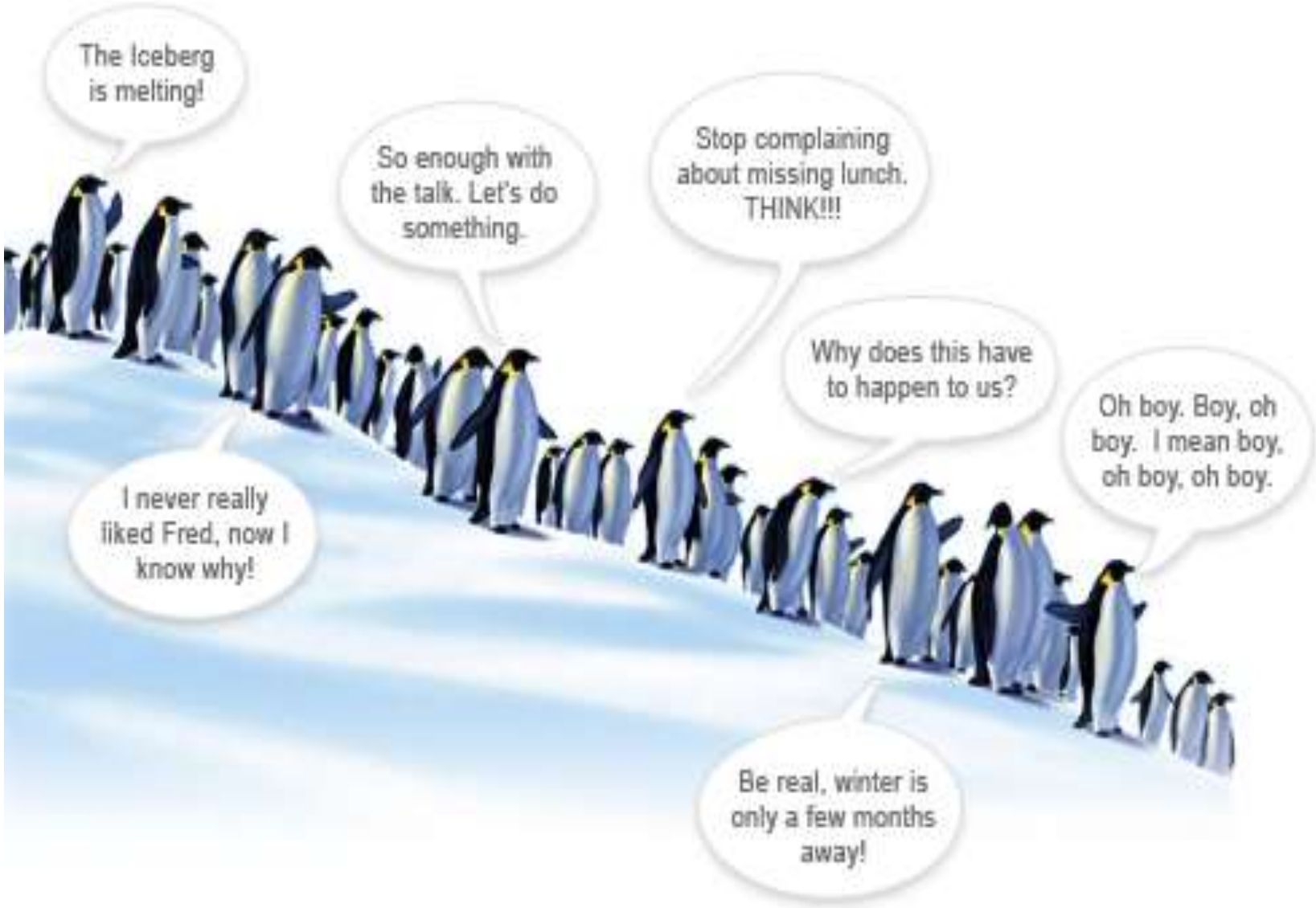
I. TUNING EDUCATION & TRAINING IN EUROPE

THE ISSUE OF EMPLOYABILITY

My hope: Not This



Nor This!

it is possible to put lipstick on a pig – but it stays a pig.
Achieving a common understanding Universities of Applied Sciences is much more than putting on lipstick – and much more than lipservice

PARITY OF ESTEEM

- TECHNICAL & VOCATIONAL EUCATION & TRAINING (TVET) IS ONE PRIORITY SUBSECTOR OF UNESCO (BESIDE LITERACY AND HIGHER EDUCATION) TO FOSTER INCLUSIVE AND EQUITABLE QUALITY EDUCATION AND LIFELONG LEARNING OPPORTUNITIES FOR ALL
- FOCUS: UNLEASH THE POTENTIAL TO MEET SKILLS NEEDS OF INDIVIDUALS, ENTERPRISES AND SOCIETIES (2016-2021 RECOMMENDATION & STRATEGY)

Terms used

Vocation

Originally activities an inidvidual feels to do and go for. Generally a work that requires a particular set of skills acquired through experience or through training but not necessarily depending on a college degree. These would include plumber, electrician, mechanic, etc.

In some countries you need to attend vocational schools (day-release, part-time, full-time, sandwich…), while doing an apprenticeship / training-off-the job – training-on-the job)

Profession

Could be one of the above but generally reference to a doctor, lawyer, nurse or other skilled worker who was required to obtain college/university education&training

Occupation

A person´s job, a regular activity or hobby in which a person has to demonstrate her/his knowledge, skills and competence (authority/responsibility)

APPLIED SCIENCES

GENERAL MISSION

ACADEMIC DISCIPLINES WHICH ORIENT THEIR RESEARCH AND LEARNING/TEACHING ON **SUITABILITY, ACCEPTABILITY, FEASIBILITY AND SUSTAINABILITY** WITH THE INTENTION OF **APPLICATION AND TRANSFER** WITHIN THEIR PRESENT AND ANTICIPATED FUTURE ENVIRONMENT.

APPLIED SCIENCES

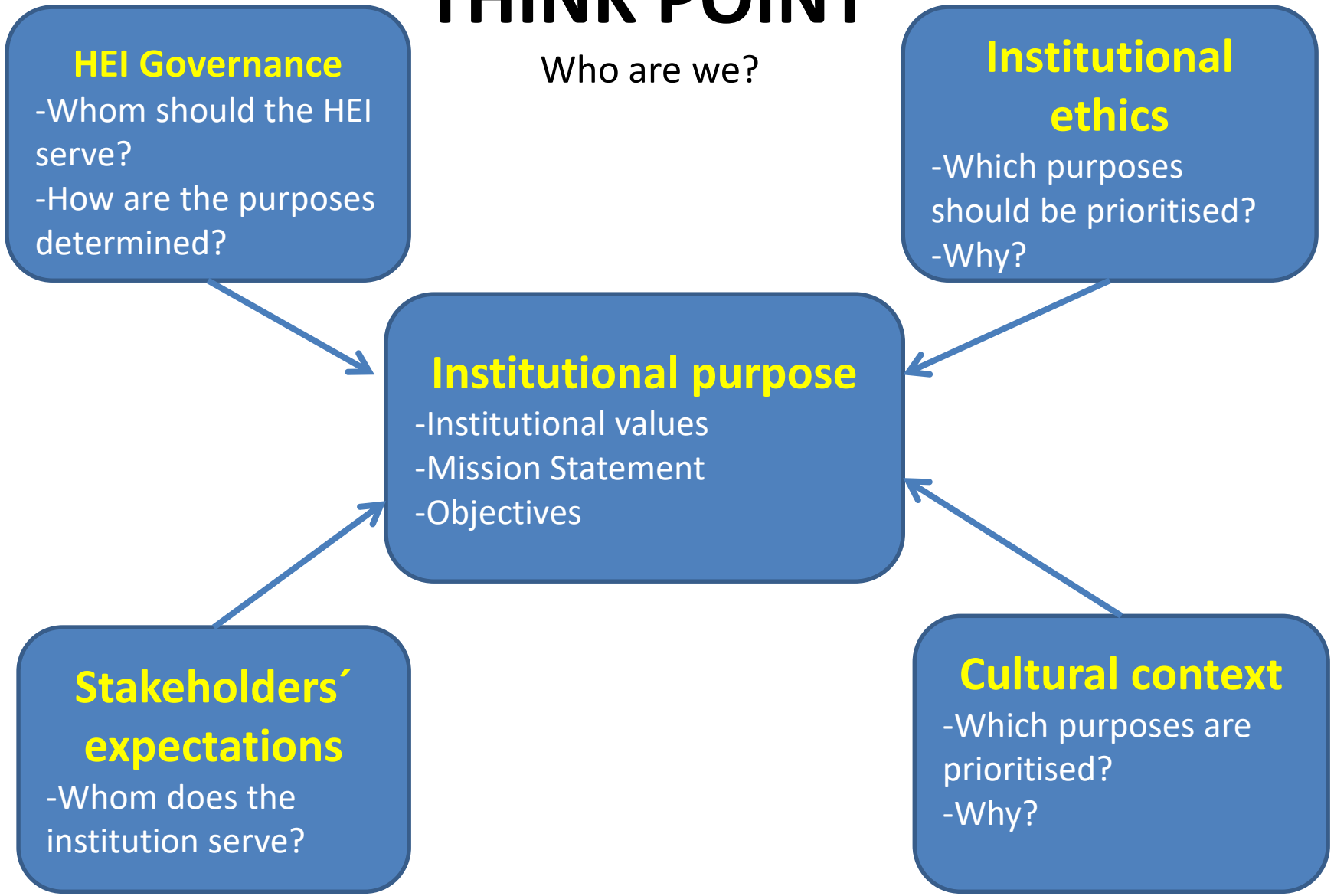
VISION

WITHIN THE NATIONAL MISSION THE IDEA WHERE THE INSTITUTION WANTS TO BE WITHIN THE SCOPE OF AN ACADMIC / ECONOMIC HORIZON


— ARISTOTELES —
BRUNELLO CUCINELLI

THINK POINT

Who are we?



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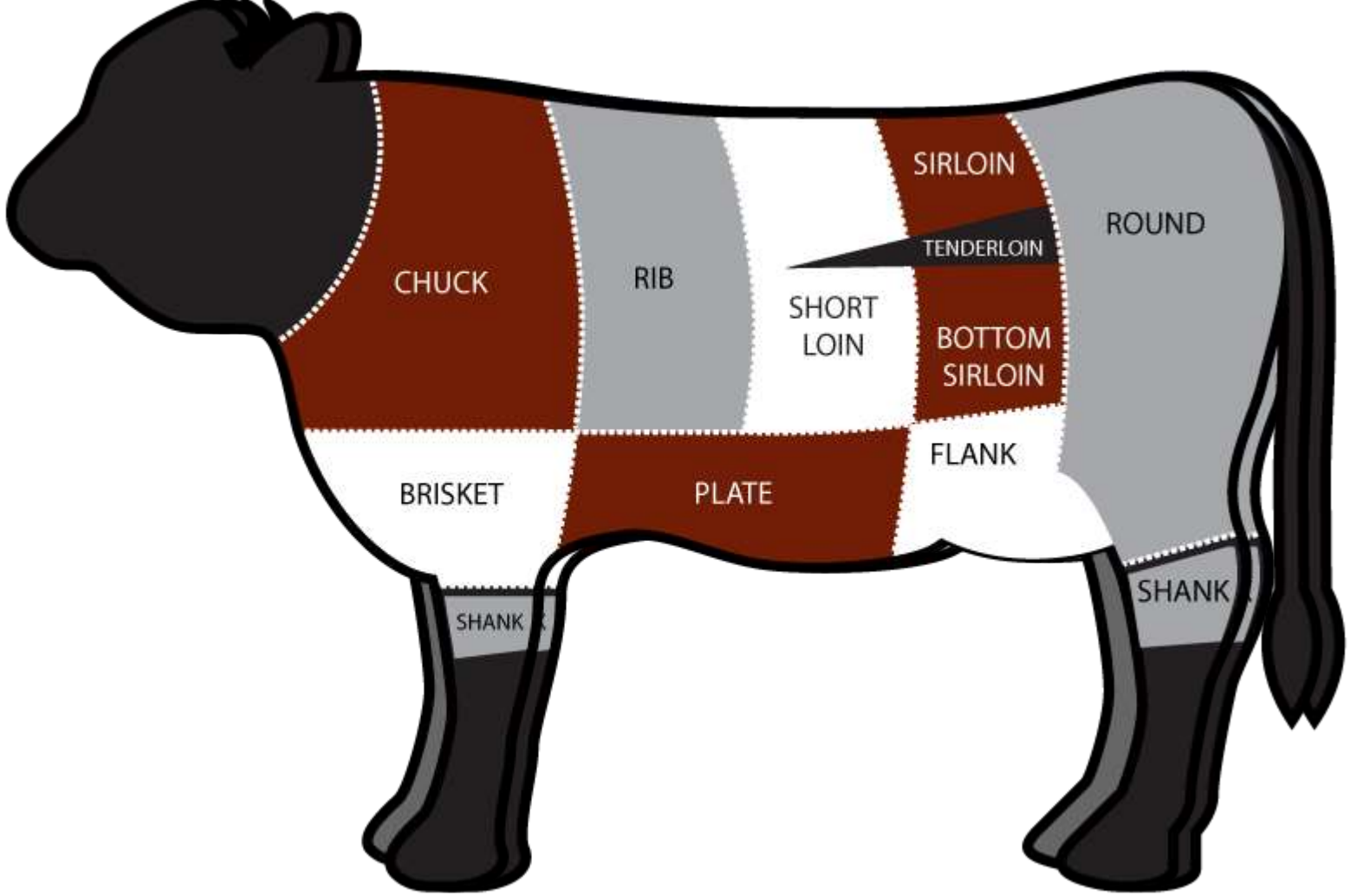


This is an organisational chart that shows the differnt parts of a cow.
In a real cow the parts are not aware that they are parts.
They do not have trouble sharing information. They smoothly and naturally work together, as one unit. As a cow. And you have only one question to answer.
Do you want your organisation to work like a chart? Or a cow?

(Anderson & Lemke, NY, advertisement for SAP, Canada)

Rationale

- What are the characteristics of a bachelor / master / doctorale degree of our institution?
- To which extent do they differ from other institutions or not?
- Why do we do this?

Guiding Thoughts

Answers from the perspective of four key quality characteristics:

- Suitability: Do we address the key issues relating to the opportunities and constraints we face?
- Acceptability: Do we meet the expectation of the stakeholders and the wider society?
- Feasibility: Do our structures and processes work in practice? Are the resources available?
- Sustainability: Can the outcomes sustain? Can the processes in place be repeated? Is it necessary to adapt or develop alternative structures, processes or outcomes?

Guiding Thoughts for monitoring quality

Along three main questions:

Which are the organisational design elements that interlink to support the intended strategy to achieve the SMART objectives? (= structures; tool: 7-S-McKinsey)

Are learning, teaching and assessment processes aligned to correspond to each other to achieve the SMART objectives? (processes; tool: PDCA-Deming Cycle)

How do the outcomes of the SMART objectives look like from various perspectives, i.e. learning, research and resources? (outcomes; tool: Academic Scorecard-Kaplan and Norton)

DIFFERENT PERSPECTIVES

HOW DO ACADEMICS THINK?
LONG TERM – BEST FIT

INTEREST OF STAKEHOLDERS

- ANALYTICAL
- SYNTHETICAL
- EVALUATIVE
- CRITICAL

HOW DO ENTREPRENEURS THINK?
SHORT TERM – BEST FIT

INTEREST OF SHAREHOLDERS

- ANALYTICAL
- SYNTHETICAL
- EVALUATIVE
- CRITICAL

MONTENEGRO

MANY SMES / AGRICULTURAL AREAS

- ONE PUBLIC UNIVERSITY
- ORIENTED TOWARDS SKILL NEEDS IN MONTENEGRO?

SOME MULTINATIONALS / URBAN AREAS

- FEW PRIVATE UNIVERSITIES
- ORIENTED TOWARD SKILL NEEDS IN MONTENEGRO?

WHAT IS A QUALIFICATION?

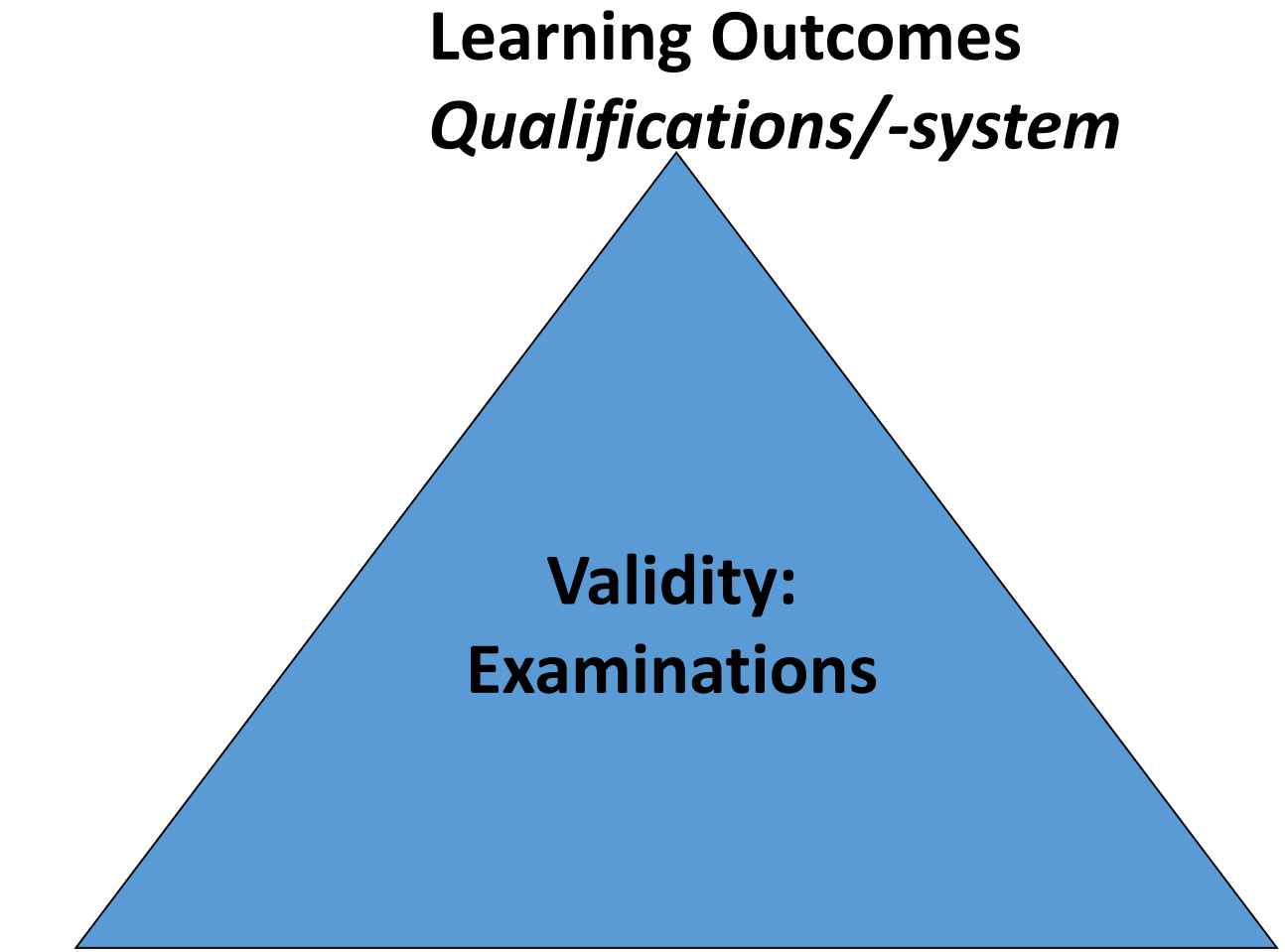
Until recently, a qualification was linked to the successful completion of a given course of study. **ISCED**, the International Standard Classification of Education, developed by UNESCO, was widely used to classify education and training by level. **Success meant** that a student had **completed a course and understood the learning content** required for the qualification.

This is **changing**. In many parts of the world, it is now more important that students show they **master a given set of knowledge, skills and competences than how they have acquired them, and over what duration.** The focus of qualifications has shifted **from the learning process to the assessment of what has been learnt (the learning outcomes).** This change is reflected in the **European Qualification Framework (EQF),** which defines a **qualification as "the formal outcome of an assessment and validation process which is obtained when a competent body determines that an individual has achieved learning outcomes to given standards"**.

Learning Outcomes as Profile of Competences = Qualification

- ***Qualification*** is the formal standard, which is defined as being the „end“ of a learning path.
- It depicts those ***Learning Outcomes*** which have been achieved and assessed on this pathway (formal learning)
- These learning outcomes can be achieved in non-formal and informal ways as well – independent of organisations

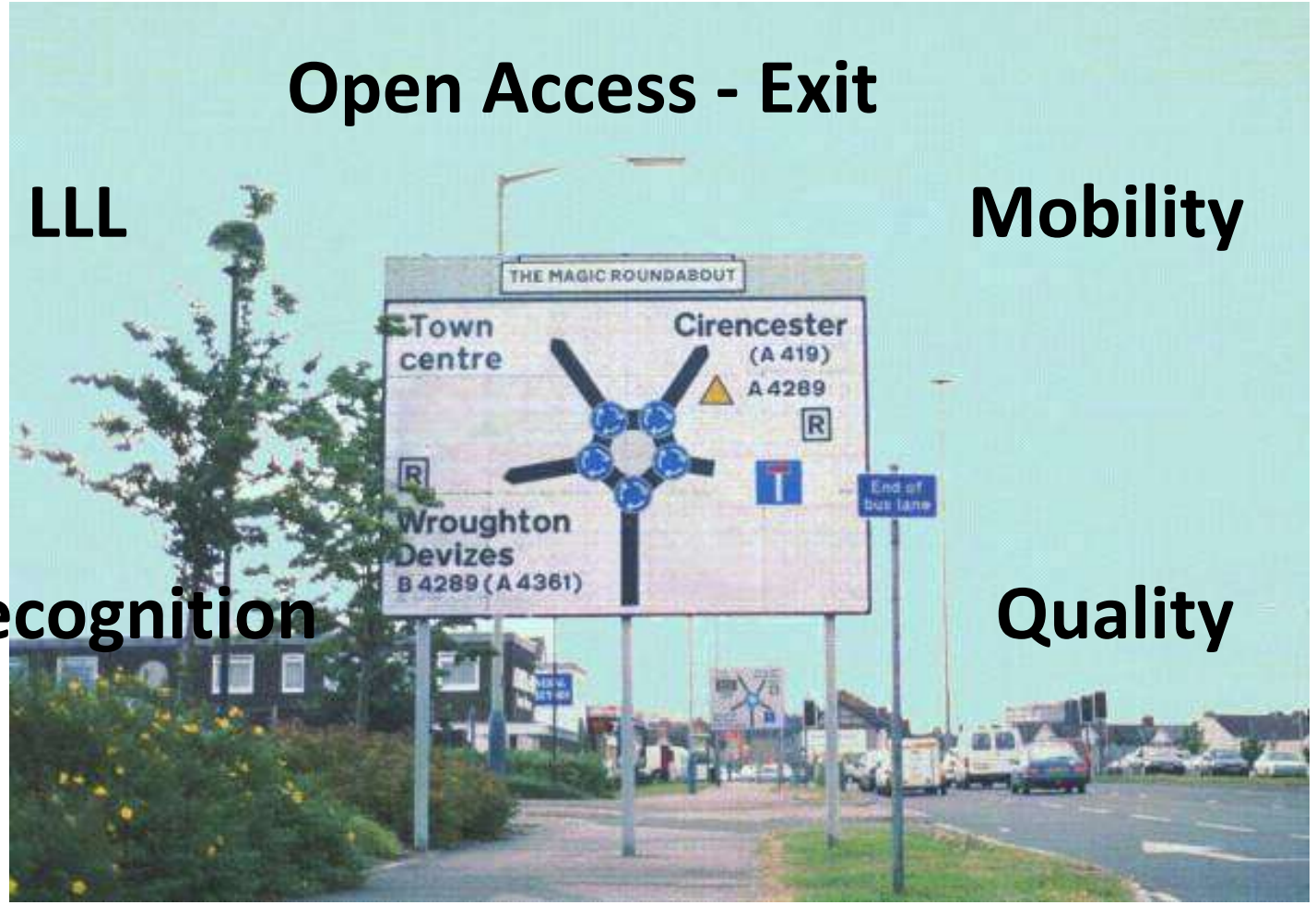
THE BERMUDA TRIANGLE - Constructive Alignment



The Beginning

Any relationship to today´s topic?

Qualifications Framework



Learning Outcomes: Employability

(Driving Licence)

Learning Pathway

ECTS User´s Guide

A route taken by a learner allowing him/her to build knowledge proressively and acquire the desired set of competences.

The learning pathway **may be** signposted…(including the recognition of prior **learning and experience**)

Different pathways may lead to the award of the **same qualification**

It emphasises the choice of the student in reaching the desired educational goals.

EMPLOYABILITY

ABILITY OF A PERSON TO SURVIVE IN A GIVEN LABOUR MARKET

- SELF-EMPLOYED
- EMPLOYED BY OTHERS

Fundamental Importance:

Weighted Ranking of the Most Important Competences (All Subjects)

Graduates	Employers	Academics
1 Capacity for analysis and synthesis	1 Capacity to learn	1 Basic knowledge of the field of study
2 Capacity to learn	2 Capacity to apply knowledge in practice	2 Capacity for analysis and synthesis
3 Capacity to apply knowledge in practice	3 Capacity for analysis and synthesis	3 Capacity to learn
4 Elementary computing skills	4 Capacity to adapt to new situations	4 Capacity for generating new ideas (creativity)
5 Capacity to adapt to new situations	5 Interpersonal skills	5 Capacity to apply knowledge in practice

Fundamental Importance:

Weighted Ranking of the Least Important Competences (All Subjects)

Graduates	Employers	Academics
Knowledge of a second foreign language	Leadership	Ethical commitment
Ability to work in an international context	Knowledge of a second language	Interpersonal skills
Ethical commitment	Ability to work in an international context	Knowledge of a second language
Appreciation of diversity and multiculturalism	Appreciation of diversity and multiculturalism	Elementary computing skills
Understanding of cultures and customs of other countries	Understanding of cultures and customs of other countries	Appreciation of diversity and multiculturalism

POTENTIAL TOOL (S)

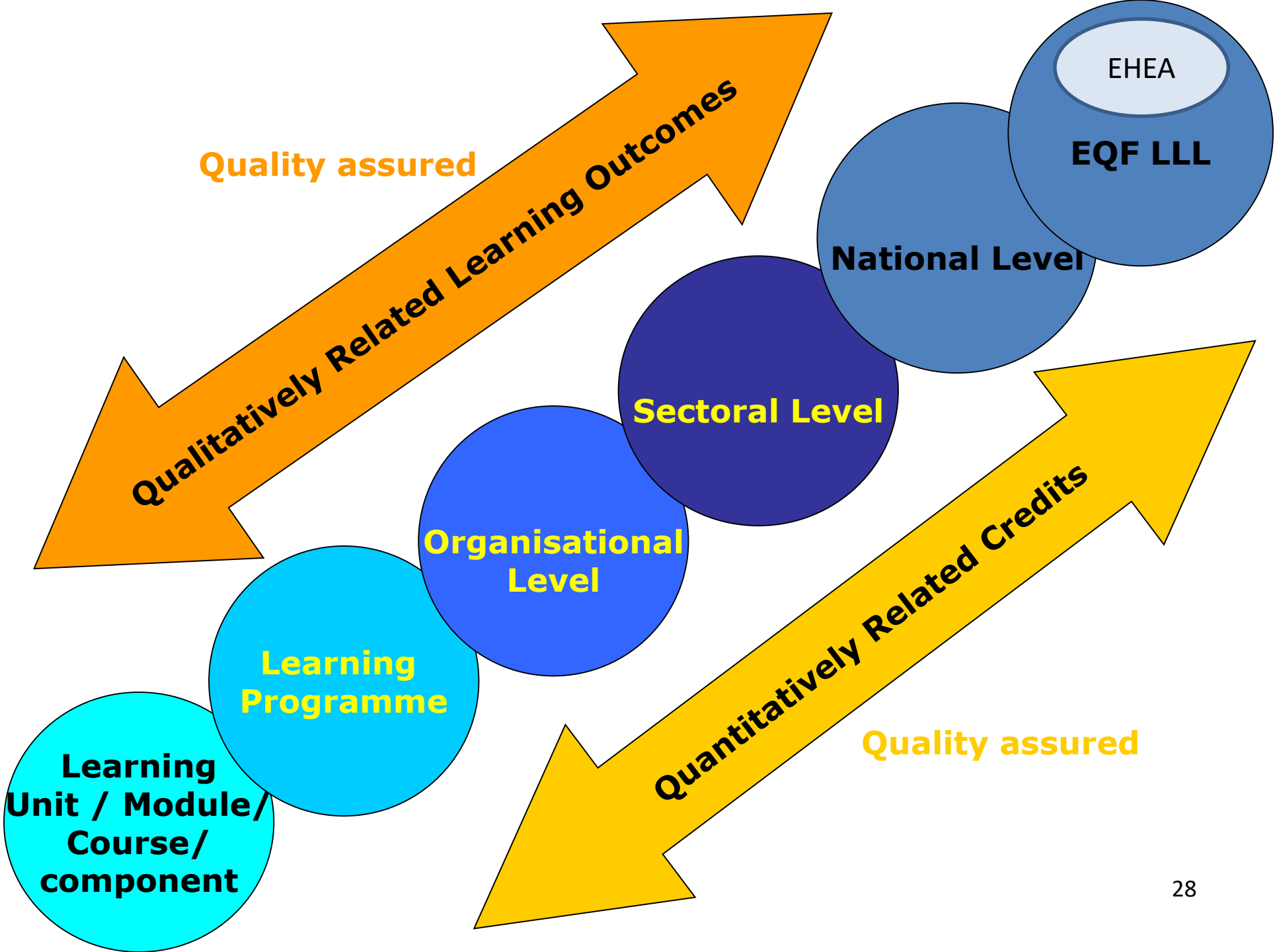
- QUALIFICATIONS FRAMEWORKS

  EU AND NATIONAL

  - LLL
  - HIGHER EDUCATION

  NATIONAL

  - SECTORAL (COULD BE TRANSNATIONAL)
  - INSTITUTIONAL


Quality assured
Qualitatively Related Learning Outcomes
EHEA
EQF LLL
National Level
Sectoral Level
Organisational Level
Learning Programme
Learning Unit / Module/ Course/ component
Quantitatively Related Credits
Quality assured

PARADIGM SHIFT

- LEARNING OUTCOMES AND TOOLS:

  THE LEARNING CHAIN

Guidelines for Learning and Teaching

- ESG (and supplementary recommendations), national laws and regulations
- The ***guiding principles for learning outcomes*** are the

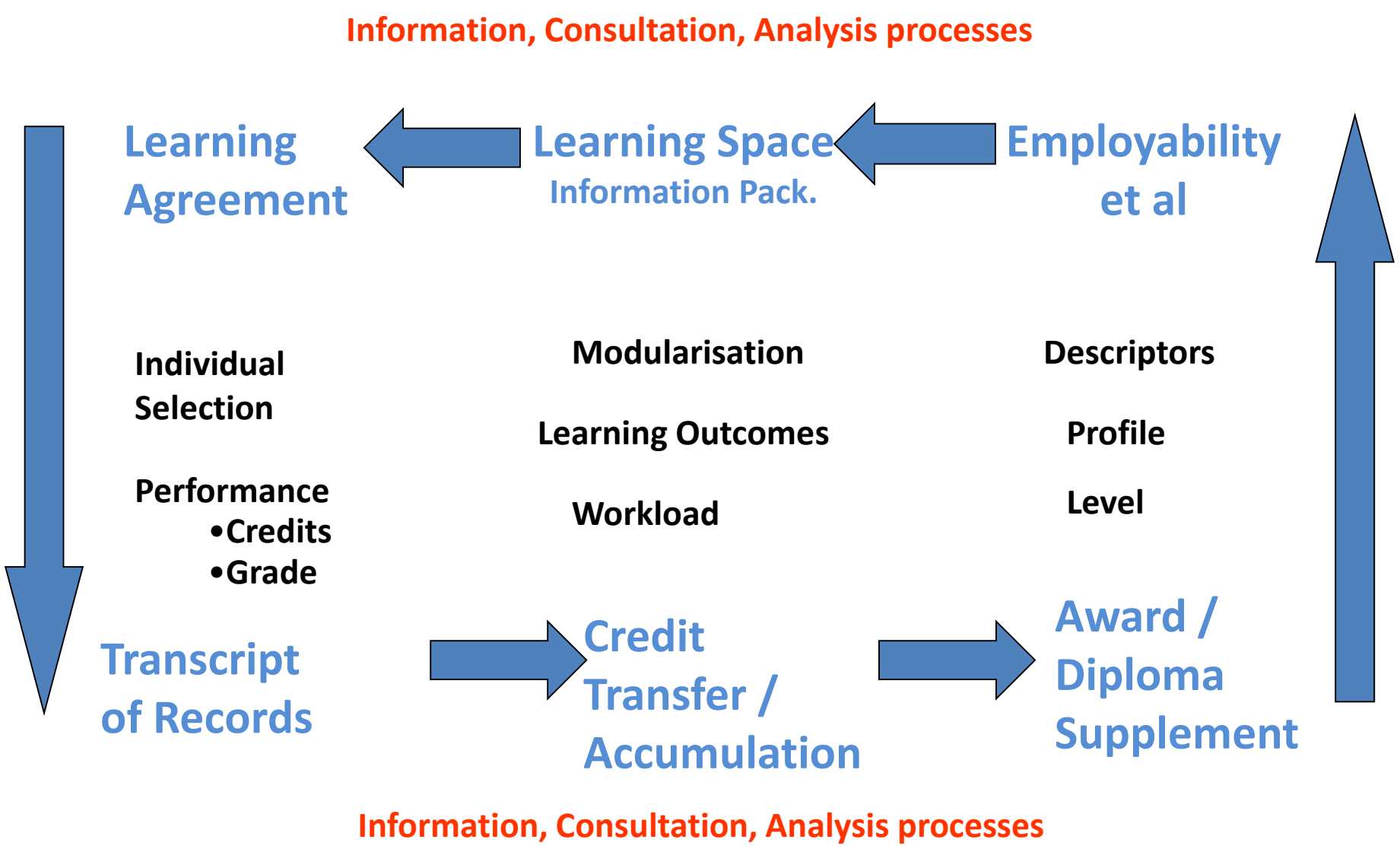
  Qualifications Frameworks,

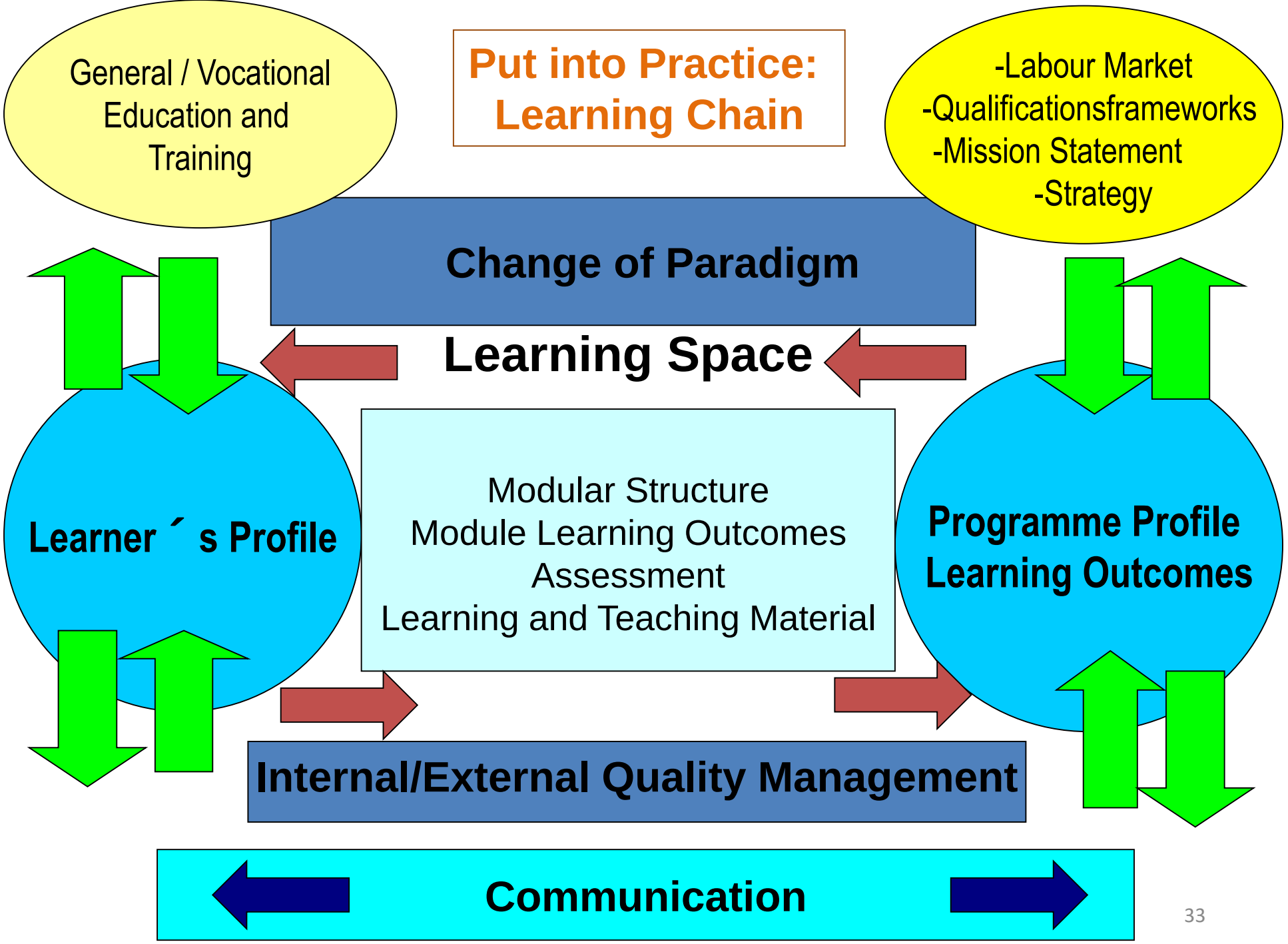
  specified within a ***changing environment*** (PESTEL), the ***capabilities of the learner*** and the ***expectations of the society*** (stakeholders),

  respecting the Lisbon Recognition Convention,
- The description focuses on the key elements of learning, knowledge, skills and competence, adapted according to national interpretation.
- These descriptors establish the standard required for a qualification at a certain level

Goals *Declaration*	Objectives *Measurable*	Tools *User´s friends*	References *Helpers*
Social Dimension Citizen of Europe Employability Lifelong Learning	3 Cycles Learner centred Academic Recognititon Quality Assurance and Enhancement	Qualifications Framework *Learning Outcomes* *Levels, Credits*	EHEA-QFR NQF SQF Institutional QF Module descriptors
		ECTS Diploma Supplement *Credits and Grades* *Common structure*	Key Features National grades Rating Templates
		Standards and Guidelines / Register	Internal / external Evaluation External Accreditation Peer reviews

Principles in Practice




General / Vocational Education and Training
Put into Practice: Learning Chain
-Labour Market
-Qualificationsframeworks
-Mission Statement
-Strategy
Change of Paradigm
Learning Space
Learner ´ s Profile
Modular Structure
Module Learning Outcomes
Assessment
Learning and Teaching Material
Programme Profile Learning Outcomes
Internal/External Quality Management
Communication

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TRAINABILITY

- ABILITY TO LEARN – FROM OTHERS OR BY ONESELF, FORMALLY, NON-FORMALLY AND INFORMALLY
- COMPRISES LEARNING, TEACHING AND TRAINING

TUNING RESULTS OF CURRICULAR COMPARISONS

- BASED ON QUESTIONNAIRES ACROSS EUROPE AT THE BEGINNING

Step 1

Key questions:

1. ***Which syllabi are the essential characteristics of this degree programme?***

Without which module would no one consider this as the identified degree programme?

Conclusion: **Core modules**

Step 2

2. ***Which areas could be identified – vertically, horizontally or laterally – for further useful studies (profiling)?***

(***vertical***: specialisation in a narrow sense = deepening; backward/forward integration;

horizontal: interdisciplinary = enlargement;

lateral: unrelated diversification)

Conclusion: Specialisation modules / major / minor / electives / options

Step 3

3. ***What else is needed to understand issues, identify and to express them in various ways?***

To which extent can a quantitative approach help to explain these issues?

Conclusion: **Support modules**

4. ***How can I learn and organise myself?***

How can I present / express best what I want to say

Conclusion: **Organisation and Communication modules**

Step 4

5. ***How does theory relate to practice?***

How can I relate theory to practice?

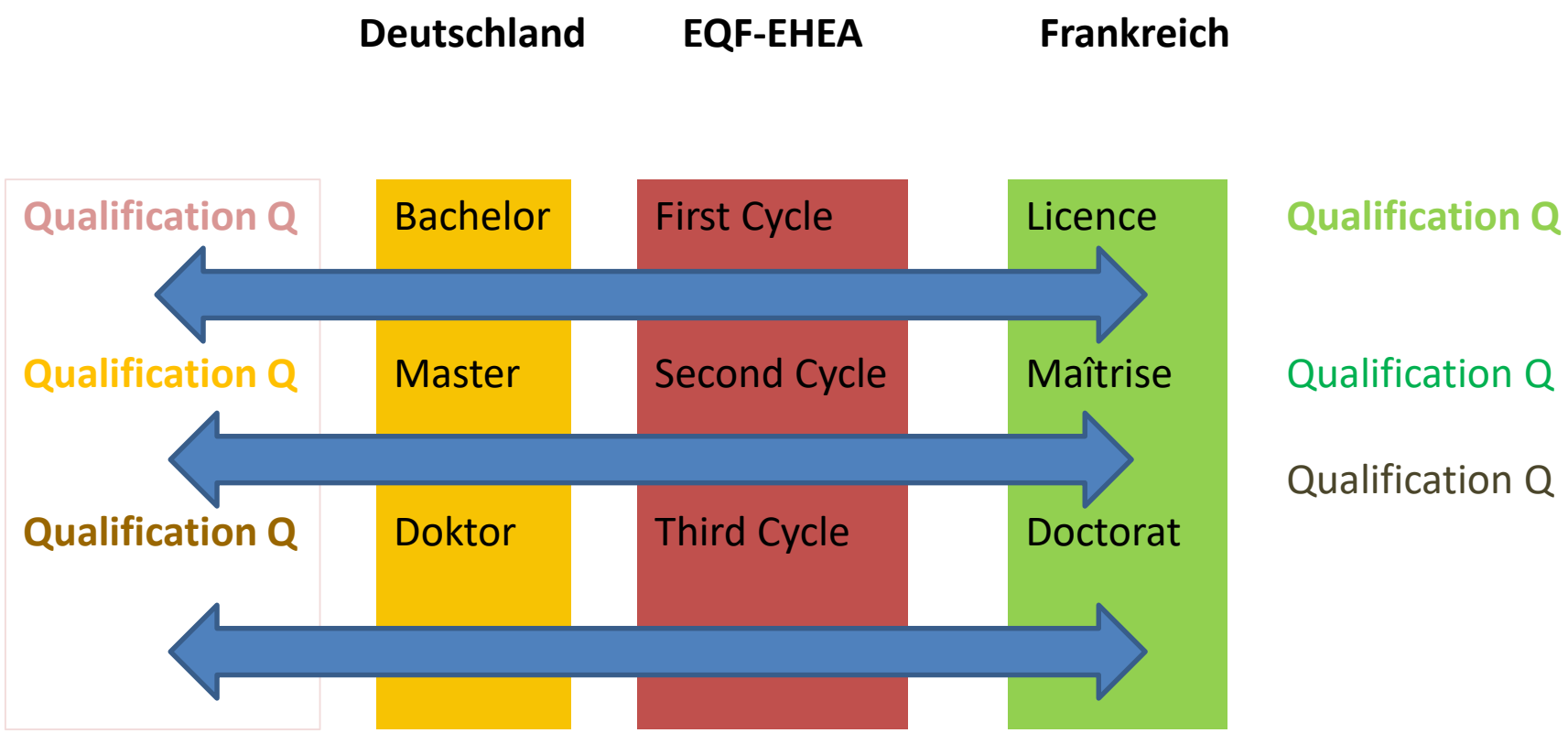
What are the methods?

Conclusion: Transfer modules

FUTURE EXPECTATIONS

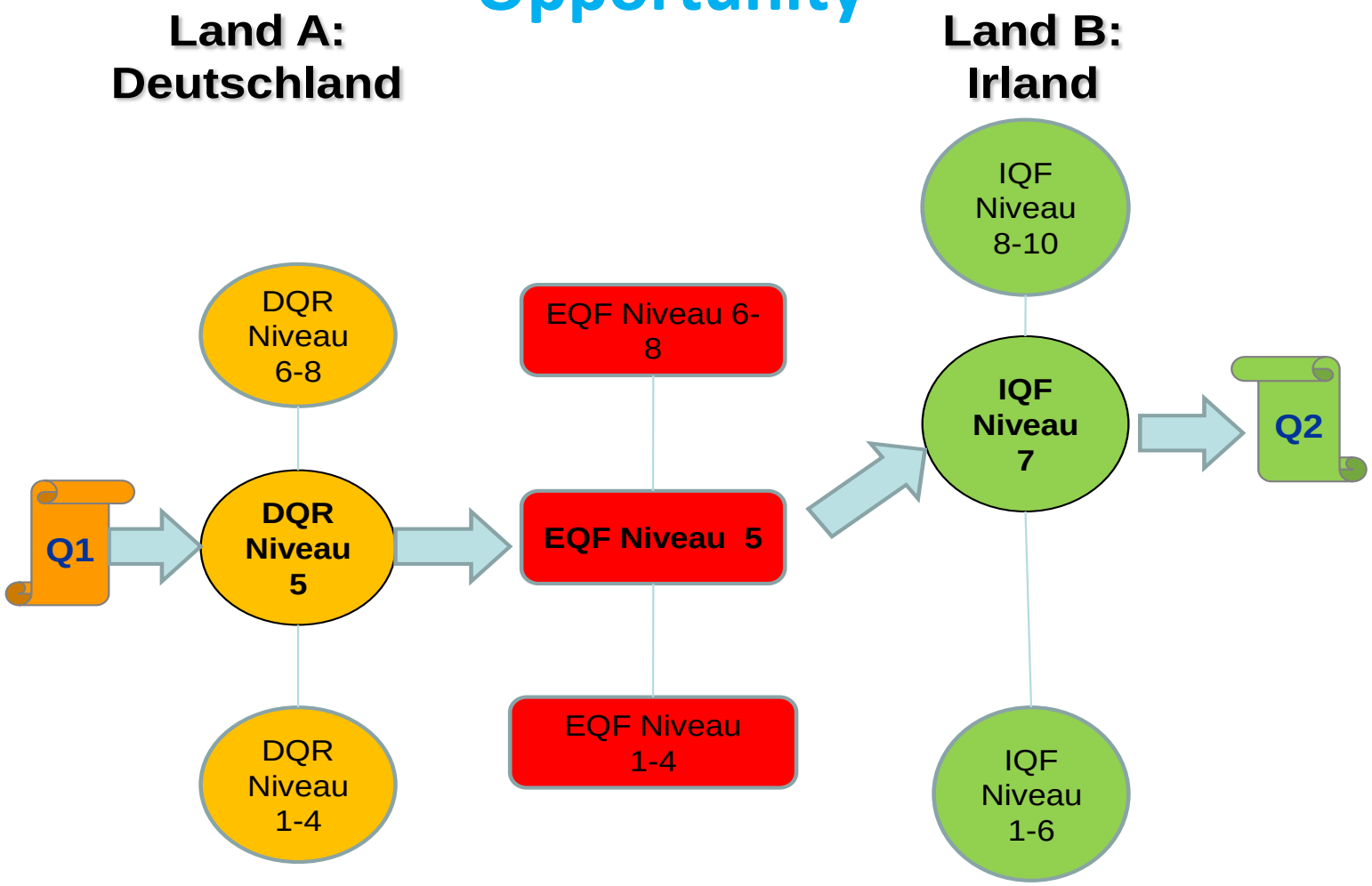
- LLL
- BORDERLESS EDUCATION AND TRAINING - PICTURE: OPTIONS
  - TRANSPARENCY
  - PERMEABILITY
  - MOBILITY
- DIGITALISATION
- CONTINUOUS IMPROVEMENT (QUALITY ASSURANCE AND ENHANCEMENT)

Qualifications

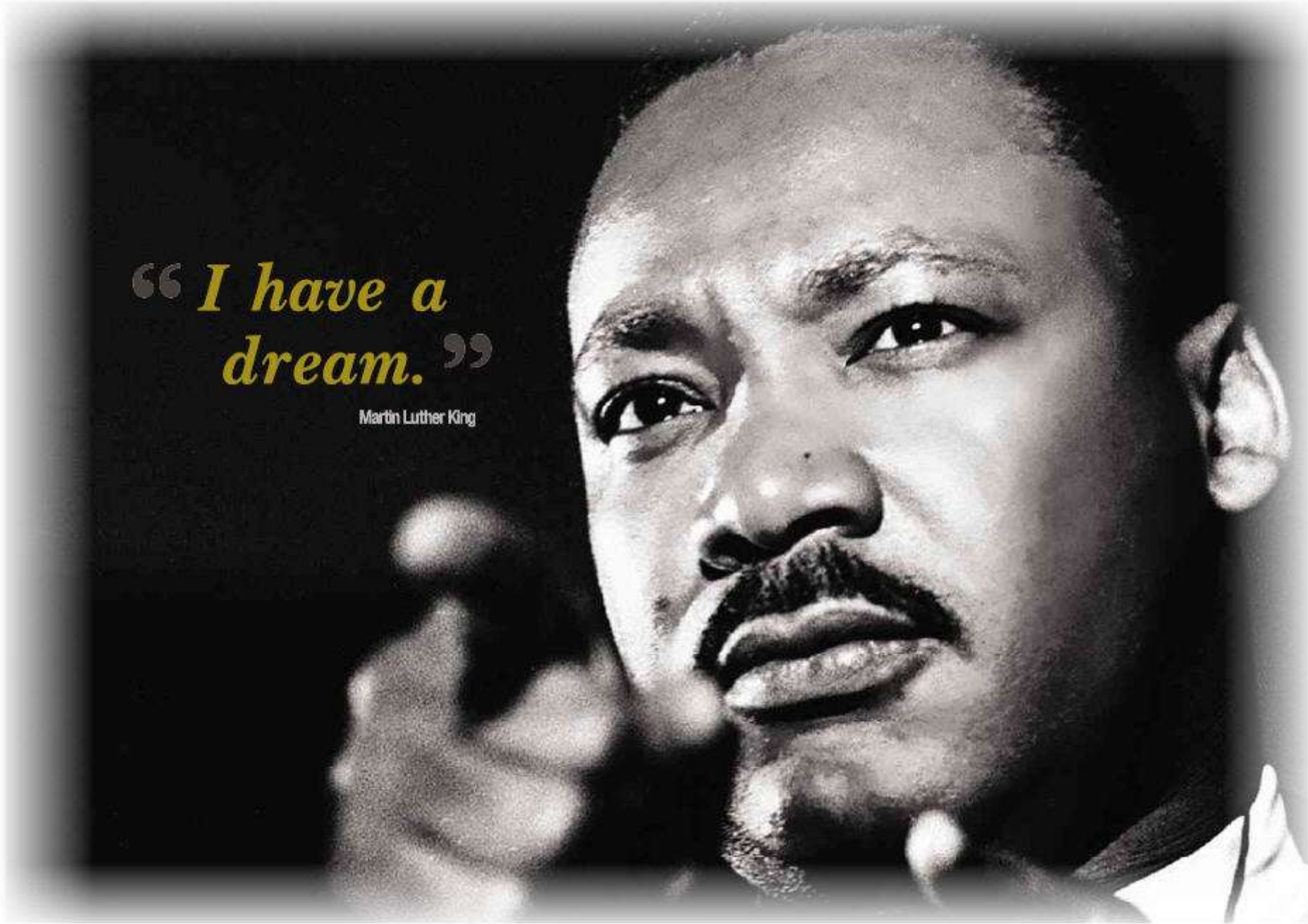


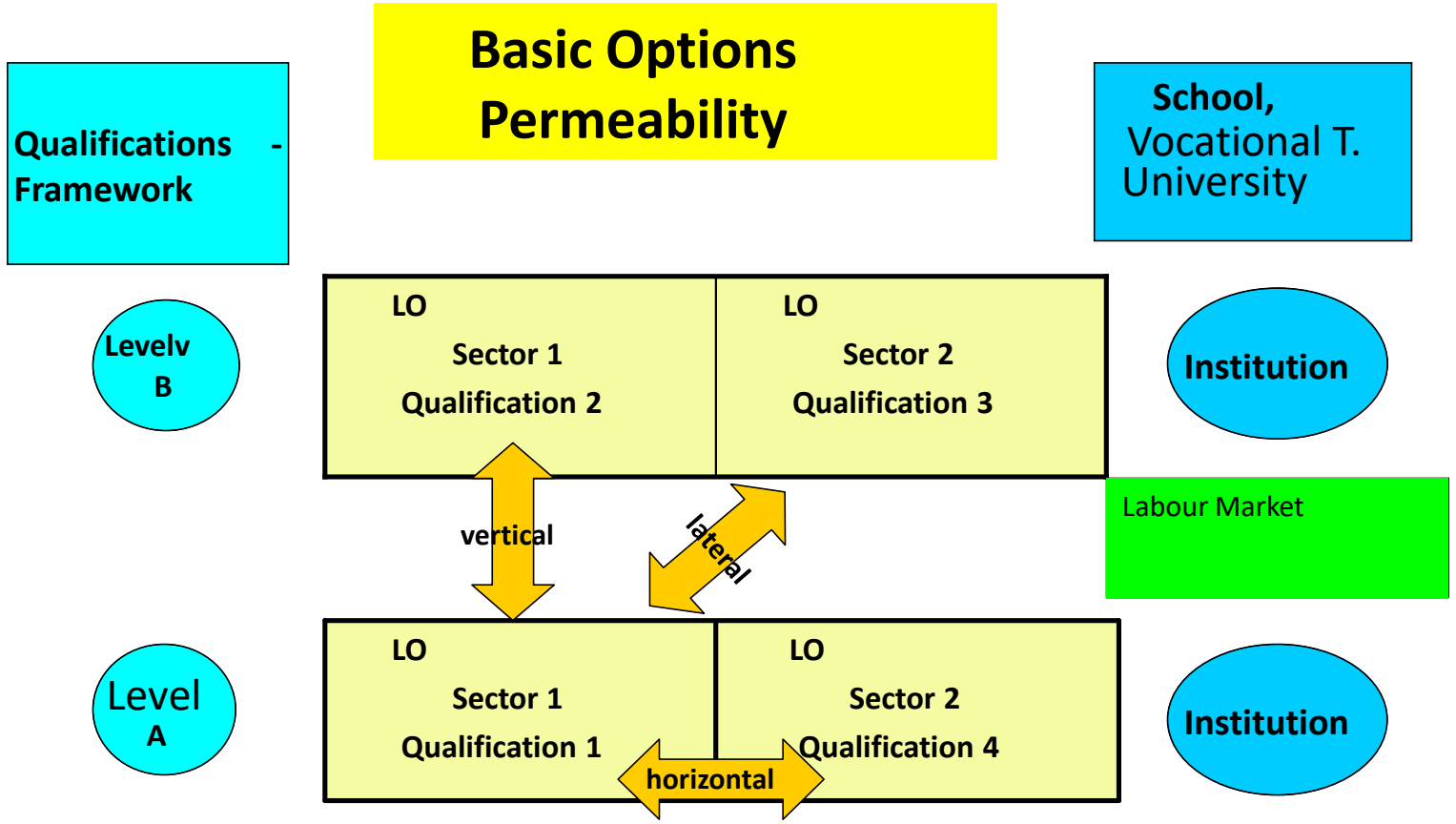
European Qualificationsframework

Opportunity



Translation/Legende: Land = country; Q = Qualification; DQR = German Qualifications Framework; Niveau = level; EQF = European Qualifications Framework


“I have a dream.”
Martin Luther King


Basic Options
Permeability
Qualifications - Framework
School, Vocational T. University
Levelv B
LO
Sector 1
Qualification 2
LO
Sector 2
Qualification 3
Institution
vertical
lateral
Labour Market
Level A
LO
Sector 1
Qualification 1
LO
Sector 2
Qualification 4
horizontal
Institution

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II. LESSONS LEARNED - GERMANY

HISTORY IN A NUTSHELL

- 1971: FOUNDATION OF GERMAN FACHHOCHSCHULEN
  - FORMER INSTITUTIONS
  - NEEDS
  - MISSION
  - NAME (VOCATIONAL CONNOTATION)
  - ENGLISH TRANSLATION (GERMANY: UNIVERSITY OF APPLIED SCIENCES – EU: NON-UNIVERSITY)
  - RECOGNITON: SAME VALUE BUT OF DIFFERENT TYPE: PARITY OF ESTEEM
  - „HOCHSCHULEN“ FÜR ANGEWANDTE WISSENSCHAFTE (MOST COUNTIES – „LÄNDER“)

GERMANY TODAY

- 218 UNIVERSITIES OF APPLIED SCIENCES
- REGIONAL COVERAGE - COVERING ALSO RURAL / NEGLECTED AREAS
- 1,000,000 STUDENTS (TOTAL: 2.9)
- DOUBLED IN 20 YEARS
- GOLDEN TERM: TRANSFER / APPLY
- TODAY: 17% OF LABOUR HAS AN ACADEMIC BACKGROUND
- TRADITIONAL VERSUS UNIVERSITIES OF APPLIED SCIENCES: COMPLEMENTARITY

LESSONS LEARNED

- SKILLS PROJECT OF THE EU
- SECTORAL NEEDS
- INSTITUTIONAL NEEDS
- COOPERATION
- INTERNATIONALISATION
- DIGITALISATION
- PARITY OF ESTEEM
- QUALIFICATIONS FRAMEWORKS

OSNABRUECK UNIVERSITY OF APPLIED SCIENCES

- START WINTER SEMESTER 1971/72 - ADVISORY COUNCIL – EVALUATION
- MISSION & VISION
- ADDITIONAL DISCIPLINE: BUSINESS & MANAGEMENT
- 1975 RESEARCH FOCUS: FOREIGN LANGUAGE NEEDS
- 1977 DAAD: STUDIES ABROAD / EU: JOINT-STUDY-PROGRAMMES / PILOT SCHEME
- 1987 MA MARKETING MANAGEMENT: DISTANCE LEARNING WITH RESIDENTIALS WITH A BRITISH INSTITUTION
- 1995 MBA

OSNABRUECK UNIVERSITY OF APPLIED SCIENCES

- 2002 INSTITUTIONAL CHANGE TO „BOLOGNA“
- INSTITUTIONAL QUALIFICATIONS FRAMEWORK
- LENGTH OF STUDIES
- ECTS - COUNSELLORS
- LEARNING OUTCOMES
- CONSTRUCTIVE ALIGNMENT

OSNABRUECK UNIVERSITY OF APPLIED SCIENCES

- ORIENTATION PHASE
- BLOCK SEMINARS
  - COMPARATIVE / INTERDISCIPLINARY
  - BUSINESS GAMES, SEMINARS (CULTURE / POLITICS), EXCURSIOINS
  - ACROSS SUBJECTS / STUDY-GROUPS / PARTLY ACROSS DISCIPLINES
- LANGUAGE SCHOOL
- YEAR ABROAD
  - STUDY-SEMESTER
  - PLACEMENT SEMESTER
  - THESIS

LESSONS LEARNED: OSNABRUECK TOWS – THINKING AHEAD – MOVING FORWARDS

- CATCH-UP: NOT POLISHING – LIVE IT FRANK SINATRY CASSIUS CLAY CRAWL….ETC MOVING FORWARD
- ROLE OF RESEARCH – BASIC VS APPLIED
- SEPARATE INFRASTRUCTURE – PARTLY SHARED – SMALL GROUPS
- SPECIFIC BACKGROUND OF PROFESSORS: ACADEMIC AND ÓCCUPATIONAL
- RESEARCH VS TEACHING – TEACHING STYLE
- ROLE OF TEACHER SEE ARMENIA N PRESENTATION
- IMPROVE TOOLS

III. PROPOSALS FOR APPLIED SCIENCE EDUCATION IN A SMALL COUNTRY LIKE MONTENEGRO

SOME IDEAS

The challenge

LEARNER CENTRED

OPEN PATHWAYS

REPETITIVE OPPORTUNITIES

NOT PUNISHING BUT: SUPPORTING

LIMITED SELECTION – MOTIVATING

NO PARROTS

INDEPENDENT LEARNING

LEARNING IN GROUPS

STAFF

BACKGROUND

TEACHING EXPERIENCE

NOT POLICEMEN

RESEARCH ON SKILL NEEDS IN MONTENEGRO (DIASPORA)

The role of the teacher

- Change of learning environment: small groups e.g.
- Role of modern technology
- See Bloom´s taxonomy: not a parrot – independent thinking / creative thinking, taking on responsibility, autonomy
- Individualisation
- Facilitating learning in the light of the learning outcomes
- Cafeteria ? Pick-and-mix?
- Guidance / Support / Counselling / Coaching / Mentoring
- No policeman

INFRASTRUCTURE

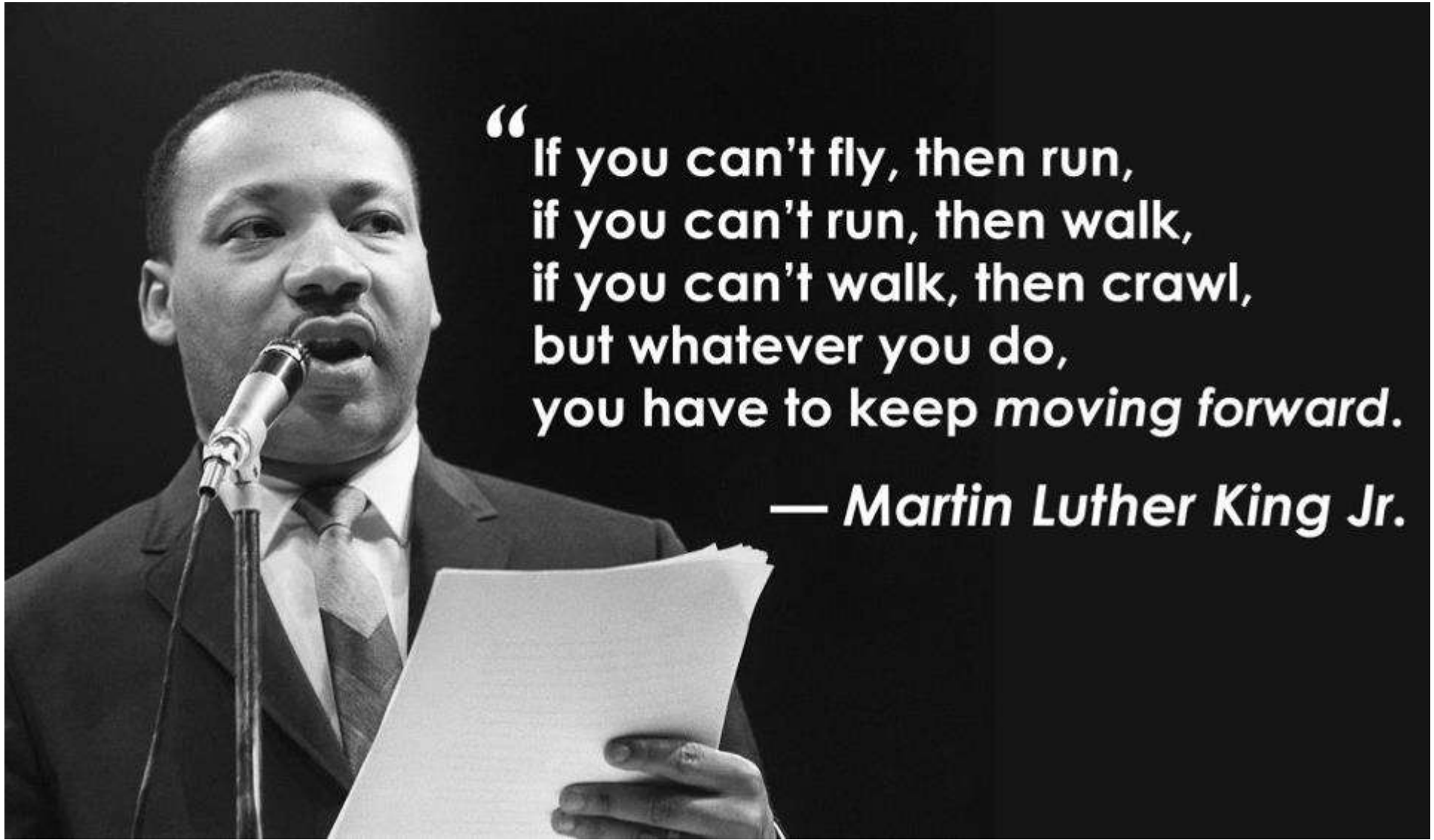
DIGITALISATION

SMALL ROOMS

AREAS FOR INDEPENDENT STUDIES

MENTORING – COACHING

SUPPORTIVE FOR LEARNING CULTURE


“If you can’t fly, then run,
if you can’t run, then walk,
if you can’t walk, then crawl,
but whatever you do,
you have to keep *moving forward*.
— *Martin Luther King Jr.*

According to HEA-QF (Dublin Descriptors):

Knowledge

- ***Layers***

Applying knowledge

- ***Getting into your mouth***

Making judgements

- ***Hmmmmm (?)***

Communicate

- ***Friends…***

Learn to learn

- ***Criteria for (fast)food***

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60

Test: Before your meal

According to EQF (LLL):

Learning Outcomes: Burger

Knowledge

- ***Layers***

Skills

- ***Getting into your mouth***

Competence

- ***Responsibility for your stomach***

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But changing education and training is a slow process! It may take more than a life-time – the Labout Market, however, is changing any time


Zwiebel
Ketchup
250ml
Bärlauch
Ketchup
250ml
Wildkräuter
Ketchup
Ketchup


THE END